



UNIVERSITA DEGLI STUDI DI TORINO



# Public-Private Partnerships and Sustainable Development in the European Union

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Another Reason to Foster the Promotion of PPPs as Viable Alternatives in the Delivery of Public Services and Infrastructure

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*This thesis discusses the ability of Public-Private Partnerships (hereinafter PPPs) to generate socio-environmental benefits, thus, their capability to promote sustainable development goals throughout Europe.*

*In the ongoing process of boosting growth within the European Union, it is crucial to acknowledge that PPPs could be used as effective public delivery means of both economic and socio-environmental gains. Not only the functioning of the Internal Market could be fostered through PPPs, but also other equally important goals of sustainable development could be effectively pursued.*

*This thesis will preliminarily provide an understanding of the PPP phenomenon as a whole, its legal background and implementation in the Member States studied. Then, the relationship between the concept of sustainable development and public procurement will be examined in order to subsequently delve into the study of PPPs' ability to generate socio-environmental benefits. Furthermore, the scope for sustainable development in the European public contracts and concessions law will be outlined so as to identify the possible spaces for sustainability considerations in PPPs' structures. Next, PPPs' potential socio-environmental benefits will be investigated. Then, it will be studied the scope for sustainable development considerations within domestic policies and relevant public contracts and concessions law regimes of the Member States studied. Thereafter, national representative PPP projects will be identified and case studies will be carried out. Such empirical study will highlight, inter alia, the specific socio-environmental benefits delivered as well as the tender and contractual strategies, inherent in the particular structure of the PPPs studied, which allowed the integration and the generation, along with economic gains, of sustainable benefits. Thus, this study will identify the concrete ways through which sustainable development goals were promoted in the PPPs studied. Lastly, an overview of the research carried out and a picture of the acknowledgments and achievements of this thesis, along with concluding findings and remarks, will be provided.*

*Therefore, this study recognises PPPs as key elements, not only for the functioning of the Internal Market, but also for the promotion of sustainable development goals, such as social justice issues and shared environmental policy purposes. These may range from climate change concerns and the promotion of energy savings, to alternative energy sources or from energy and resource efficiency, development and environmental sustainability, to high-quality level of public services and infrastructure.*

*Overall, this thesis argues that, especially in the light of the current European contingencies, the generation of socio-environmental benefits represents another important reason why PPPs should be broadly exploited throughout the European Union as viable alternatives in the delivery of public services and/or infrastructure.*

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All mistakes are mine.

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## LIST OF ABBREVIATIONS

CCR 2016	Concession Contracts Regulations 2016
CJEU	Court of Justice of the European Union
CPN	Competitive Procedure with Negotiation
CPV	Common Procurement Vocabulary
DPA	Dutch Procurement Act
DPS	Dynamic Purchasing System
ECI	Environmental Cost Indicator
EEA	European Economic Area
ELCC	Environmental Life Cycle Costing
ESI	International School of Eindhoven
ESPD	European Single Procurement Document
EU	European Union
EU law	European law
GPA	Government Procurement Agreement
ILO	International Labour Organization
IMF	International Monetary Fund
LCA	Life Cycle Assessment
LCC	Life Cycle Costing
MEAT	Most Economically Advantageous Tender
MIRT	Multiyear Programme for Infrastructure, Spatial Planning and Transport
NL	Netherlands
OJEU	Official Journal of the European Union
PCR 2015	Public Contracts Regulations 2015
PIN	Prior Information Notice
PFI	Private Finance Initiative
PF2	Private Finance 2
PPC	Public-Private Comparator
IPPP	Institutionalised Public-Private Partnerships
PPC	Public-Private Comparator
PPPs	Public-Private Partnerships
PPS	Publiek-Private Samenwerking
PSC	Public Sector Comparator
RWS	Rijkswaterstaat
SME	Small and Medium Size Enterprises
SPV	Special Purpose Vehicle
TFEU	Treaty on the functioning of the European Union
TTIP	Transatlantic Trade and Investment Partnership
VfM	Value for Money
UNICITRAL	United Nations Commission on International Trade law
UK	United Kingdom
US	United States
WTO	World Trade Organization

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# I CHAPTER – INTRODUCTION

## 1. Aim of the study and Research Questions.

The widely accepted statement on the need for economic growth, innovation and sustainable development in the European Union (hereinafter EU) is increasingly driving Member States towards a smarter procurement of public services and infrastructure.<sup>1</sup> Additionally, the evolution towards an innovation model - whereby innovation is the new knowledge for economic and socio-environmental gains - is pushing Member States to endorse and resort to PPP arrangements and transfer private expertise to the public sector. Public-private collaborations, thus, represent a new strategically important tool to target EU productivity and sustainable development goals.<sup>2</sup>

Between the 1970s and the 1980s, various EU jurisdictions began to privatize public companies, driven by efficiency and political concerns.<sup>3</sup> Public services, such as telecommunications, electricity and public health, came first. Then, governments began to be willing to extend the advantages of private sector's participation to areas perceived as difficult to privatize, such as transportation and schools. This evolution led to the development of PPPs: long-term contracts between public authorities and private businesses for the provision of public services and/or infrastructure.<sup>4</sup>

Before the rise of PPPs, States usually provided public infrastructure and/or services on their own. The construction of a project was contracted out to a private firm while the funding came from taxes or public debt. The private company after building the asset received the agreed payment, thereby performing the contract. At that point, a specific public sector department took care of the management and maintenance of the infrastructure.

Under traditional public procurement, splitting the building and operating phases entailed that the planning phase did not adequately incorporate future maintenance and operating costs. In addition, the public sector often preferred to invest in new projects rather than on routine maintenance. Disregard for maintenance led to the worsening of service quality until the contracting authority's decision to respond to local needs through the reconstruction of the infrastructure, albeit, at high costs. PPPs introduced a new approach to public provision: one private company finances

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<sup>1</sup> For instance, see the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Taking Stock of the Europe 2020 Strategy for Smart, Sustainable and Inclusive Growth, Brussels, 19.3.2014, COM (2014) 130 final/2. On December 2014, the United Nations encouraged the engagement in public-private partnerships in order to catalyze global solidarity for sustainable development. United Nations General Assembly, The Road to Dignity by 2030: Ending Poverty, Transforming all Lives and Protecting the Planet - Synthesis Report of the Secretary General on the Post-2015 Sustainable Development Agenda, December 4, 2014, para 81, available at [http://www.un.org/disabilities/documents/reports/SG\\_Synthesis\\_Report\\_Road\\_to\\_Dignity\\_by\\_2030.pdf](http://www.un.org/disabilities/documents/reports/SG_Synthesis_Report_Road_to_Dignity_by_2030.pdf).

<sup>2</sup> In this respect, an important challenge for the EU will be to develop a comprehensive *ad hoc* legal framework that promotes an effective use of PPPs.

<sup>3</sup> See, for instance, E Engel, R D Fischer, A Galetovic, *The Economics of Public-Private Partnerships, A Basic Guide* (Cambridge University Press, 2014), 1.

<sup>4</sup> See, among others, E R Yescombe, *Public-Private Partnerships: Principles of Policy and Finance* (Elsevier, 2007). G C Feroni, *Il Partenariato Pubblico-Privato: Modelli e Strumenti* (Giappichelli, 2011). F Mastragostino, *La collaborazione pubblico-privato e l'ordinamento amministrativo: dinamiche e modelli di partenariato in base alle recenti riforme* (Giappichelli, 2011). R Dipace, *Partenariato Pubblico Privato e Contratti Atipici* (Giuffrè, 2006).

and builds a public infrastructure or delivers a public service. The private party is entrusted also with the operation and maintenance of the asset or service upon performance and availability standards throughout the contract life. Instead, the public sector, once defined the project's objectives in terms of public interest, quality of services and pricing policy, monitors the compliance by the private party with such objectives.

PPPs expanded rapidly over the past two decades. It is a trend that will likely increase, especially during the recovery of developed countries from the 2008 financial crisis, which led to general severe budgetary constraints.

Within this picture, this thesis challenges the understanding of public-private collaborations that does embrace, or better, that does not sufficiently take into consideration the potentialities of PPPs in the generation of also socio-environmental benefits. PPPs are, in fact, generally perceived as positive tools only from an economic and financial point of view. Instead, this thesis recognises and holds that PPPs also have the ability of promoting sustainable development goals through the generation of socio-environmental benefits. Thus, PPPs' structures have to include spaces for sustainable considerations.

In the ongoing process of boosting EU's economic growth and innovation, PPPs should be strategically used in order to endorse socio-environmental considerations along with Internal Market concerns.<sup>5</sup> PPPs have, in fact, high potentialities in the generation of socio-environmental benefits.<sup>6</sup> Thanks to their inherent features, they allow scope for smart and sustainable solutions.<sup>7</sup> The following, non-exhaustive list, indicates the main reasons for this.

- i. All phases of a certain project are awarded to one private contractor. In traditional procurements, each phase is, instead, normally contracted out to a different party. This allows the private party to plan ahead, covering all different aspects of a project, including its management and maintenance.
- ii. The project's costs are pre-determined and normally borne by the private party. Usually, the public sector repays the sums invested through instalments only if the agreed outcomes are delivered. If the private party does not deliver the project as agreed upon, the public sector can withhold part of its payments. For the private sector, this represents a great incentive to deliver high quality assets on time. For the public sector, it is a solution that allows the setting of sustainable and/or innovative goals and a comprehensive view of future expenses (which is very useful in public financial planning).
- iii. Through a smart allocation of tasks and risks, the public and private parties involved have the chance of doing what they are actually best at.
- iv. Given the long duration of such cooperative schemes, the private party has the incentive to invest in new technologies, sustainable and innovative solutions (in order to reduce the project's total costs over the lifetime of the asset delivered).

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<sup>5</sup> See the Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final.

<sup>6</sup> The scope for sustainability considerations in PPPs will be specifically investigated in Chapter III, paragraph 4.

<sup>7</sup> For detailed analyses on public-private schemes, see, among others, the Green Paper on the Modernisation of EU Public Procurement Policy: European Commission, 'Towards a more efficient European Procurement Market', Brussels, 27.1.2011, COM(2011) 15 final. C H Bovis, 'The Notion of Public Concession as a Component of Public Private Partnerships' [2007] EPPPL 12. K Christian, W Julia, 'The Relevance of EC State Aid Control for PPP Infrastructure Funding' [2007] EPPPL, 5, 11.

Thus, the public sector should choose and structure PPPs in the light of their ability to support and promote sustainable solutions. Public authorities are used to undertake projects only under the assumption that a specific investment is economically justified. In order to decide whether to deliver a public service or infrastructure through a classic procurement option or a PPP scheme, costs comparisons at specific standards are normally carried out. Typically, cost-minimisation approaches implicitly consider the socio-environmental benefits related to different delivery models as ultimately the same.<sup>8</sup> However, this is not always the case. In fact, as briefly seen above, the incentives inherent in the particular characteristics of PPP cooperative models are capable of delivering potentially high levels of socio-environmental benefits.<sup>9</sup> This study builds from the assumption that the overall incentives specific to PPP schemes - if actually endorsed in the direction of sustainable development promotion - have the ability of creating actual spaces for sustainability concerns, therefore, fostering sustainable development through the generation of socio-environmental benefits. As mentioned, PPPs have the potential of allowing the private sector to apply innovation at all levels of a project delivery. They have attached a particular set of incentives, which is supported by a composite contract structure where especially the agreed payment mechanism, and related financial arrangements are organised in a way that maximizes the chances for the public service or infrastructure to be delivered in a sustainable way.<sup>10</sup> Therefore, moving from this consideration, the actual potentialities of PPPs in the delivery of socio-environmental benefits will be investigated. The latter will be described as accelerated deliveries, the delivery of services and/or infrastructure with high quality standards and wider beneficial socio-environmental impacts.<sup>11</sup>

This thesis seeks to provide a scientific contribution to the field of PPPs by exploring a specific aspect of such schemes, which is generally overlooked by legal and economic scholars and by public and private actors: their ability to generate also socio-environmental benefits and, thus, their capability to promote sustainable development objectives within the EU. Therefore, this study explores a different understanding of PPPs whereby social and environmental concerns are fully embraced and where sustainable development goals are actually promoted.

To this end, this thesis will study which are the spaces for sustainable development considerations within PPP structures according to EU public contracts and concessions law as well as according to the relevant domestic regimes of the Member States studied. Moreover, this thesis will identify - along with the potential socio-environmental benefits achievable through PPPs - the concrete tender and contractual strategies that may allow the integration of sustainability considerations within PPPs and, thus, the generation of socio-environmental benefits.

Therefore, this thesis seeks to address the following central research questions: can PPPs be considered as public services and infrastructure delivery models actually capable of promoting

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<sup>8</sup> Cost-minimisation approaches may be defined as financial strategies that aim at identifying the most cost-effective way of delivering a good or service with respect to the required level of quality.

<sup>9</sup> The Non-Financial Benefits of PPPs, A Review of Concepts and Methodology, European PPP Expertise Centre, European Investment Bank, June 2011, 5, available at <http://www.eib.org/epec/resources/epec-non-financial-benefits-of-ppps-public.pdf>.

<sup>10</sup> The legal regimes of these arrangements are diverse and display different models of both financing and asset ownership. See, for instance, M Burnett, 'Beyond the New Public Procurement Directive - the Future for Public Private Partnerships' [2005] *Eipascope*, 21, 25.

<sup>11</sup> On PPPs' socio-environmental benefits please refer below to Chapter III, paragraph 5. In this respect, see also, The Non-Financial Benefits of PPPs, A Review of Concepts and Methodology, European PPP Expertise Centre, European Investment Bank, June 2011, available at <http://www.eib.org/epec/resources/epec-non-financial-benefits-of-ppps-public.pdf>.

sustainable development goals through the generation of socio-environmental benefits? Which are the spaces for sustainable development concerns that can be located within PPPs' structures according to EU public contracts and concessions law? Which are the spaces for sustainable development considerations that can be located within PPP schemes according to the public contracts and concessions laws of the Member States studied in this thesis? Through which means (i.e. tender and contractual strategies) public and private actors may actually integrate sustainability concerns within PPPs' structures and, therefore, deliver also socio-environmental benefits? In other words, which is the scope, from a legal point of view, for sustainable development within PPPs? Which are the concrete strategies that may allow public and private actors to implement socio-environmental considerations within PPP structures and, thus, foster sustainable development throughout the EU?

## **2. Definitions and Summary of the Literature Review.**

There is no unique or widely accepted definition of PPPs. There is a large variety of definitions used by academics and practitioners, especially in the fields of economics and law. All around the world 'the public-private association has become a perniciously broad category'.<sup>12</sup>

This thesis will adopt and use as a reference point the definition of PPPs given by the EU Commission in the 2004 Green Paper on PPPs.<sup>13</sup> The term PPP will refer to any form 'of cooperation between public authorities and the world of businesses which aim to ensure the funding, construction, renovation, management or maintenance of infrastructure or the provision of a service.'<sup>14</sup> Therefore, the term PPP will refer to any legal scheme characterised by the following elements:

- i. the long duration of the cooperation arrangement, where the public and the private sectors work together on various aspects of the project;
- ii. the funding method, which mainly comes from the private party and may be completed by public funds;
- iii. the participation of the economic operator at the different phases of the project;
- iv. the definition of the project's objectives in terms of public interest, quality of services and pricing policy by the public party, which then monitors the compliance with the said objectives by the private operator;
- v. the distribution of risks between the public and the private sectors according to their respective abilities to assess, control and deal with them.<sup>15</sup>

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<sup>12</sup> See, J D Donaghue, R Zeckhauser, Collaborative Governance: Private Roles for Public Goals in Turbulent Times, (Princeton University Press, 2011) 259.

<sup>13</sup> Green Paper on Public-Private Partnerships and Community Law on Public Contracts and Concessions, Brussels, 30.4.2004 COM (2004) 327 final.

<sup>14</sup> This is the definition given - in very general terms - by the EU Commission in the Green Paper on Public-Private Partnerships and Community Law on Public Contracts and Concessions, Brussels, 30.4.2004 COM (2004) 327 final, 3.

<sup>15</sup> According to the Commission's view, these elements characterise PPP arrangements. See the Green Paper on Public-Private Partnerships and Community Law on Public Contracts and Concessions, Brussels, 30.4.2004 COM (2004) 327 final, 3.

Given the above, the Table below shows whether the legal schemes indicated in the first column fall or not within the PPP notion adopted by this thesis.

	<b>Cooperation aiming at ensuring the funding, construction, renovation, management or maintenance of infrastructure or the provision of a service</b>	<b>Long duration of the cooperation arrangement</b> (the public and private sectors collaborate on various aspects of the project)	<b>Funding method</b> (mainly from the private party and may be completed by public funds)	<b>Participation of the economic operator at the different phases of the project</b>	<b>Definition of the objectives in terms of public interest, quality of services and pricing policy by the public party</b> (compliance monitoring)	<b>Distribution of risks between the public and the private sectors</b> (according to their respective abilities to assess, control and deal with them)	<b>→ PPP or NO PPP</b>
Service contracts	NO The selected private party performs the contract in accordance with the standards of the service set by the public party	NO Service contracts are short term agreements (< 5 years)	NO The public partner is responsible for every capital investment	NO The private partner only delivers a defined part of the service	YES	NO The public partner bears most of the risks	→ NO PPP
Management contracts	NO The selected private party delivers and manages the service in accordance with the standards of the service set out by the public party	NO Management contracts are medium term agreements (3 to 5 years)	NO The private party provides the working capital (i.e. for daily operations). The public partner finances capital investments	NO The private partner only delivers a defined part of the service	YES	YES	→ NO PPP

Concession contracts	YES	YES Concession contracts are long term contracts (25 to 30 years)	YES The private party is responsible for capital investments (potential public party's support for capital investment costs)	YES	YES	YES	→ PPP
PFI contracts (Private Finance Initiative)	YES	YES PFIs are long term contracts (25 to 30 years)	YES The private party is responsible for capital investments	YES	YES	YES	→ PPP
BOT contracts (Build-Operate Transfer)	YES	YES BOT contracts may be long term contracts (the duration of the contract depends on the time needed to the private party to recover the investments made from end-users)	YES The private party finances the construction (the public partner may commit to a certain level of purchasing in order to guarantee the private partner's operating costs)	YES	YES	YES	→ PPP
DBFM contracts (design, build, finance and maintain contracts)	YES	YES DBFM contracts are long term contracts (25 to 30 years)	YES The private party is responsible for the funding of the project (the public party pays to the private partner fees upon performance and availability standards)	YES	YES	YES	→ PPP

Table 1  
Procurement schemes falling or not within the PPP notion.

Many different definitions and types also characterize the notions of public infrastructure and services<sup>16</sup>. For the purpose of this thesis, the terms public infrastructure and services will be used to refer to any long-lasting investment program for the provision of public infrastructure or services such as a highway, airport, seaport, school, housing scheme or health care institution. An infrastructure or service can be defined as public if it aims at satisfying essential needs of the society and it is subject to a particular regime in light of the importance of the interests pursued. Since there is no agreement on a unique and all-encompassing definition of public infrastructure and services, the latter are generally identified and defined as ‘public’ whenever certain indicators reveal their public nature. These indicators, for the purpose of this thesis, will be: (i) the direct satisfaction by the infrastructure or service considered of needs of general interest (which can be defined as the ‘functional element’); and (ii) the fact that the infrastructure or service is subject to a particular regime because of the social relevance of the interests pursued (which may be defined as the ‘organizational element’). Therefore, regardless of the specific way through which an infrastructure or service is delivered, its public nature derives from the particular regime (i.e. public law regime) to which it is subject to and from the aim pursued (i.e. need of general interest).

Moreover, the terms efficiency, effectiveness, cost effectiveness and economic efficiency, when used in this thesis, will refer to the following concepts.

The term efficiency will indicate the ability of a specific mean or process to produce a certain outcome with a minimum waste of resources, such as physical materials, energy or time, while successfully achieving the desired output. Efficiency is normally a measurable concept that can be determined by the ratio of useful output to total input. Effectiveness, instead, may be expressed quantitatively and will refer to the degree to which objectives are achieved by a mean or a process and to the extent to which targeted problems are tackled. Therefore, whereas efficiency will mean performing or functioning in the best possible manner with the least waste of time and effort, effectiveness will consist in the ability to achieve the desired result or in the suitability of a given process of accomplishing a certain purpose.

Furthermore, the term cost effectiveness will refer to the economic approach that allows to depict the extent to which a process or mean can be considered to represent VfM.<sup>17</sup> Cost-effectiveness analysis may be defined as an economic evaluation technique whereby the choice of a certain mean depends on the nature of the benefits attached to it.<sup>18</sup> In cost-effectiveness analyses, consequences of different processes are measured using a single outcome. Alternative delivery means are then compared in terms of costs per each result achieved. As with all economic evaluation techniques, the aim of cost effectiveness analyses is to maximize the level of benefits with respect to the available resources.

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<sup>16</sup> G Torrisi, “Public infrastructure: definition, classification and measurement issue” [2009] Munich Personal RePEc Archive, 6; F Nicotra, “Nozione di servizio pubblico nel diritto interno e comunitario” [2015] available at <https://www.diritto.it/la-nozione-di-servizio-pubblico-nel-diritto-interno-e-comunitario/>.

<sup>17</sup> Thus, in the field of public procurement, if the same quantity and quality of a service or infrastructure is delivered at a lower overall cost.

<sup>18</sup> On cost effectiveness see also C Phillips, *What is cost effectiveness?*, Health Economics, 2009, available at <http://www.bandolier.org.uk/painres/download/whatis/Cost-effect.pdf>; National Institute for Health and Clinical Excellence, *Guide to the methods of technology appraisal*, 2013, available at <https://www.nice.org.uk/process/pmg9/chapter/foreword>; C McCabe, “What is cost-utility analysis?” [2009], Hayward Medical Communications, available at <http://www.whatisseries.co.uk/what-is-cost-utility-analysis/>.

The term economic efficiency will, instead, refer to the general concept of optimization of resources in order to best serve and reach the desired result while minimizing waste and inefficiency. It is a notion that implies that benefits outweigh losses. There is no specific threshold that determines the economic efficiency of a given process, however, indications in this sense may include, for instance, the fact that goods are produced at the lowest possible cost and labor, being performed with the greatest possible output.

Many definitions then characterise the notion of sustainable development.<sup>19</sup> It is a broad and abstract concept, which brings together various meanings that are often understood differently among individuals, professionals, interest groups, State agencies, political leaders and NGOs. In this thesis, the term sustainable development will refer to a particular vision of growth where social, economic and environmental considerations are integrated with one another as inseparable and interdependent components of human progress. The concept of sustainable development embraced by this thesis will be the following: a development that entails a synergy between the economic, environmental and social dimensions of human life in order to move towards a new and integrated approach of human progress.

Moreover, the term socio-environmental benefit will encompass any and all social and environmental gain enjoyed by end-users, wider society and surrounding territory arising out the operation of a public infrastructure and/or service.<sup>20</sup> Socio-environmental benefits differ from financial ones essentially because they - generally - do not represent cash inflows and/or outflows. They range from social and welfare gains to environmental positive achievements and improvements. Environmental benefits may arise out climate change concerns, the promotion of energy savings, of alternative energy sources or of resource efficiencies. Social benefits may, instead, arise out social and territorial cohesion: such as better connectivity between cities, creation of green areas, promotion of health and safety of communities, social integration and inclusion, social integration of disadvantaged people or persons of vulnerable groups, design for all end-users, accessibility for persons with disabilities, strong community involvement, improvement of local facilities, promotion of cultural heritage, promotion of social and cultural community activities, and improved or high level of education.<sup>21</sup>

With regard to the literature reviewed to draft this thesis, a great variety of pieces coming from different research areas - scientific and non-scientific - was examined. This was because the concept of PPP covers diverse fields of study. Therefore, legal, economic, managerial and sociological academic works, reports, guidelines and studies prepared by practitioners and/or non-governmental bodies were investigated. The literature reviewed has been critically scrutinized and valued according to its source and scientific contribution in light of the scope of this research.

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<sup>19</sup> On the concept of sustainable development, please, refer to Chapter III, paragraph 1.

<sup>20</sup> See below, Chapter III, paragraph 5.

<sup>21</sup> Moreover, social benefits may arise out the promotion of tax compliance, the fight against unfair commercial practices and employment-related considerations. These include matters such as promotion of high-employment, employment of disadvantaged categories, gender equality and equal opportunities, non-discrimination, exclusion of child labour, minimum labour conditions, compliance with ILO and human rights conventions, workplace safety and health, and traineeships. Moreover, social benefits may also arise out certain social and labour conditions within the supply-chain: such as fair-trade conditions of the goods, works or services purchased (e.g. purchase of products from small-scale producers in developing countries at favourable trading standards, ethical production methods) measures aiming at the protection of the health of the staff involved in the performance of the contract, fair wages of persons involved in the procurement process.

Legal literature on PPPs is limited because of the absence of a specific legal framework regulating them.<sup>22</sup> At a European level, the Treaty principles and the EU public contracts and concessions regime represent the PPP legal reference point. While the Treaty principles apply to any PPP arrangement, EU public contracts and concessions rules apply differently according to the specific legal scheme used to carry out the public-private cooperation, e.g. concession contract, project financing or joint venture. At a national level, there is generally no regulation of the PPP category as a whole.<sup>23</sup> Usually, only certain legal types of PPPs are specifically regulated.<sup>24</sup> Additionally, national rules may vary from jurisdiction to jurisdiction.

Furthermore, legal literature on PPPs appears to be weak on the study of PPPs' capability to integrate socio-environmental considerations and, thus, on their ability to promote sustainable development goals. Whereas, especially sociological and managerial works and studies prepared by practitioners and/or non-governmental bodies provide significant in-puts on the issue.<sup>25</sup> Hence, in order to fill in this gap, this thesis will carry out a new and different study of PPPs, which investigates their ability to integrate socio-environmental concerns within their structures in order to foster sustainable development. While most legal and economic scholars' efforts are concentrated on PPPs' economic benefits and drawbacks,<sup>26</sup> less, or better, very little attention, is put on the study of PPPs as effective delivery means of sustainable public services and/or infrastructure.<sup>27</sup> For this reason, the aim of this thesis will be to open a new discussion on PPPs, which explores their actual ability to generate socio-environmental benefits and, hence, to promote sustainable development goals.

Scientific theoretical approaches to PPPs generally focus exclusively on their economic feasibility and start from the premise that they are economically beneficial means, without, however, taking into account their capability to deliver also socio-environmental sustainability.<sup>28</sup> For instance, PPPs are generally praised because they enable off-budget funding of infrastructure and/or service projects and attract foreign investments by taking advantage of the private sector's expertise and skills. The large majority of the existing scientific literature on PPPs focuses on the related financial and/or non-financial risks and on the protection of private sector's investments.<sup>29</sup> The broader social and environmental context and gains are normally overlooked. Few works deal

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<sup>22</sup> See below, Chapter II, paragraph 4.

<sup>23</sup> Except for Italy, see below Chapter IV.

<sup>24</sup> For instance, concession contracts.

<sup>25</sup> T De Lemos, L Almeida, M Betts, D Eaton, 'An Examination on the Sustainable Competitive Advantage of Private Finance Initiative Projects' [2003] *Construction Innovation, Information, Process, Management*, 249, 259. N Wang, R Ding, M Radosavljevic, H Sun, 'Practicing Sustainability in PFI Project Management' [2011] *Technology Management Conference, IEEE International*, 717, 722.

<sup>26</sup> Among others, see, B Li, A Akintoye, P J Edwards, C Hardcastle, 'Perceptions of Positive and Negative Factors Influencing the Attractiveness of PPP/PFI Procurement for Construction Projects in the UK' [2005] *Engineering, Construction and Architectural Management*, 125, 148. R Osei-Kyei, A P C Chan, 'Review of Studies on the Critical Success Factors for Public-Private Partnership (PPP) Projects from 1990 to 2013' [2015] *International Journal of Project Management*, 1335, 1346. H Smyth, A Edkins, 'Relationship Management in the Management of PFI/PPP Projects in the UK' [2007] *International Journal of Project Management*, 232, 240. Broadbent, R Laughlin, 'The Role of PFI in the UK Government's Modernization Agenda' [2005] *Financial Accountability and Management*, 721, 746.

<sup>27</sup> See, *inter alia*, R Garwood, 'Sustainability Lessons from Private Finance and Similar Private Initiatives' [2002] *Information Paper, BRE*. L Zhou, R Keivani, E Kurul, 'Sustainability Performance Measurement Framework for PFI projects in the UK' [2013] *Journal of Financial Management of Property and Construction*, 232, 250. J Hill, J Collins, 'PFI: Meeting the Sustainability Challenge' [2004] *Green Alliance, London*.

<sup>28</sup> J Sussex, *The Economics of the Private Finance Initiative in the NHS*, (Office of Health Care Economics, 2001).

<sup>29</sup> See, Li Bing, A Akintoye, P J Edwards, C Hardcastle, 'The Allocation of Risk in PPP/PFI Construction Projects in the UK' [2005] *International Journal of Project Management*, 25, 35. J Froud, 'The Private Finance Initiative Risk, Uncertainty and the State' [2003] *Accounting, Organizations and Society*, 567, 89.

with the potential environmental and social sustainability of PPP schemes in the delivery of infrastructure and/or service projects.<sup>30</sup>

The most comprehensive study on this issue concludes that traditional PPP arrangements do not sufficiently address environmental and social considerations.<sup>31</sup> It further recommends how to improve PPPs' sustainability at a legislative and institutional level and during the various phases of a PPP scheme. Other authors highlight inconsistencies in the way PPP's stakeholders address sustainability issues in PPP projects.<sup>32</sup> Another recent work concludes that PPP arrangements have failed to embrace an inclusive approach.<sup>33</sup>

Therefore, a review of the actual understanding of PPPs had to be carried out in order to put society and the environment as major stakeholders in their implementation. In this respect, industrial organization and policy literature indicate that public-private cooperation, where the public and private sectors work together for the delivery of public infrastructure and/or services, generate great outcomes in terms of socio-environmental quality.<sup>34</sup> Moreover, they argue that complementarities between collaborating partners deliver more effective results.<sup>35</sup>

Furthermore, hardly any case study showing the tender and contractual strategies that allow PPP projects to generate socio-environmental benefits were found. As said, the economic and financial feasibility of PPPs is normally the only lens through which these legal schemes are addressed.

Hence, the aim of this thesis will be to change the perspective in the study of PPPs and to fill in the gap related to the consideration of socio-environmental concerns in their design and implementation. This, by investigating the actual ability of PPPs to embed socio-environmental considerations in their structure and, thus, to promote sustainable development goals.

### 3. Methodology and Structure.

In order to discuss the actual capability of PPPs to generate socio-environmental benefits and, thus, their ability to promote sustainable development throughout the EU, a multi-disciplinary and heuristic approach will be adopted. The chosen methodology will combine real-world evidence with the existing literature on PPPs, including policy, social, environmental legal and economic perspectives. The study will, in fact, be an interplay between academic literature and PPPs' practical experiences. This thesis will use a deductive top-down methodology to investigate the

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<sup>30</sup> For instance, see, Public-Private Partnerships and Sustainable Principles Guiding Legislation and Current Practice, B Ryan, Dublin Institute of Technology, 2004, available at

<http://arrow.dit.ie/cgi/viewcontent.cgi?article=1007&context=futuresacrep>. S Ng, J M Wong, K Wong, A Public Private People Partnerships (P4) Process Framework for Infrastructure Development in Hong Kong, Department of Civil Engineering, the University of Hong Kong, available at

<http://isiarticles.com/bundles/Article/pre/pdf/3618.pdf>. P Rwelamila, P Fewings, C Henjewe, Addressing the Missing Link in PPP Projects: What Constitutes the Public? [2015] J. Manage. Eng., 56, 75.

<sup>31</sup> Harnessing the Power of Public-Private Partnerships: the Role of Hybrid Financing Strategies in Sustainable Development, International Institute for Sustainable Development, Colverson, Perera, available at

[http://www.iisd.org/pdf/2012/harnessing\\_ppp.pdf](http://www.iisd.org/pdf/2012/harnessing_ppp.pdf).

<sup>32</sup> Public-Private Partnerships and Sustainable Principles Guiding Legislation and Current Practice, B Ryan, Dublin Institute of Technology, *op. cit.*.

<sup>33</sup> P Rwelamila, P Fewings, C Henjewe, 'Addressing the Missing Link in PPP Projects: What Constitutes the Public?' *op. cit.*.

<sup>34</sup> See, among others, R De Bondt, 'Spillovers and Innovative Activities' [1997] International Journal of Industrial Organization, 1, 28.

<sup>35</sup> *Ibid.*.

ability of PPPs to embed socio-environmental considerations within their structure and, thus, to promote sustainable development throughout Europe. A normative analysis will serve to delve into such discussion.

The study of the PPP phenomenon and the review of the legal framework applicable to it will represent the necessary starting point, without being the objective, of this thesis. As mentioned, PPPs cannot rely on an *ad hoc* regulation specifically dedicated to them, neither at EU nor at an International level. Therefore, Chapter II will serve the purpose of identifying the International and EU legal regime governing PPPs. At the same time, it will highlight the set of rules that will have to be analysed in order to explore the actual spaces for sustainable development considerations within these kind of complex public contracts. PPPs' current theoretical understanding focused on their acknowledgment foremost as economically beneficial means will be, furthermore, challenged and critically examined in the light of the assumption according to which also socio-environmental goals can be effectively promoted by PPPs through an inclusive approach. To this end, Chapters III and IV will investigate the actual spaces for sustainable development considerations within PPPs according to EU and considered national public contracts and concessions laws. Finally, Chapter IV will carry out an empirical study of representative PPP projects in the Member States studied, which will identify, along with the specific socio-environmental benefits delivered, the tender and contractual strategies, inherent in the particular structure of the PPP projects studied, which allowed the integration of sustainability concerns within their structure and, thus, the generation of socio-environmental benefits. The case studies will serve as practical assessment of the actual ability of PPPs to deliver socio-environmental benefits and, thus, to promote sustainable development. The specific strategies - used in the PPPs studied - through which sustainable development goals were promoted will be presented in Chapter IV. These cannot *per se* be generalised as they pertain and are tailored to the specific characteristics of the projects studied. However, a comparative analysis of such strategies - disengaged as much as possible from the specific context of the projects in which they were used - will allow the identification of general key tender and contractual strategies. The latter will aim at serving as guidelines or as reference models for public and private actors in the award, structure and management of PPPs capable of promoting sustainable development objectives.

Therefore, and more in detail, this thesis will be structured as follows. Firstly, an overview of the PPP phenomenon as understood at an International and European level will be provided. PPPs' goals and International and EU legal background will be then identified. As mentioned, this preliminary focus will be necessary to identify the actual rules governing public-private collaborations in the light of the absence of an *ad hoc* regulation of PPPs at an International and EU level. It will then follow an overview of the implementation of the PPP phenomenon in the Member States studied: the United Kingdom, the Netherlands and Italy. These three jurisdictions were chosen because of the following reasons. The United Kingdom's experience is of key importance in the study of PPPs. The United Kingdom (hereinafter UK) is, in fact, the country where modern PPPs were born, at least in the EU context. Indirect evidence of this is, for instance, the global use of the English language to describe PPP's legal aspects and processes.<sup>36</sup> The Netherlands (hereinafter NL) represent, instead, an interesting case study because of the high level of PPPs' arrangements carried out if compared to the geographical dimensions of the country. In the NL, PPP

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<sup>36</sup> By way of example, the English terms 'output' and 'value for money' that are widely used throughout Europe in the PPP context.

schemes were largely exploited in the last decades, specifically in order to enhance local and central infrastructure projects. Finally, Italy represents an example of an EU civil law system highly affected by the international economic crisis, which nonetheless - and remarkably - was capable of redirecting its energies towards the use of PPPs to boost its economic growth. For each jurisdiction, the following aspects will be highlighted: (i) the Government support in the promotion of PPPs, (ii) the PPP types more commonly used and the sectors where they advanced, (iii) the relevant national legal framework and (iv) the main criticalities connected to the use of PPPs.

The mentioned diversity of these Member States' experience with PPPs represents an enriching element for this research. In fact, even with different cultural, legal and policy backgrounds, one common denominator emerged: the need - stressed especially at the European level<sup>37</sup> - of developing a true strategy for smart, sustainable and inclusive growth, the promotion of a more resource-efficient, greener and competitive economy capable of fostering high-employment, social and territorial cohesion.<sup>38</sup> It is precisely within this picture that PPPs developed in the considered Member States as important market-based instruments for the achievement of the stated objectives.

Furthermore, Chapter III will explore the concept of sustainable development and its relationship with public procurement. Following the understanding of such relationship, Chapter III will explore the scope for sustainable development considerations within EU public contracts and concessions law in order to identify the potential spaces for sustainability considerations within PPPs, which are a kind of complex public contracts.

Later on, Chapter III will identify PPPs' potential socio-environmental benefits. Specifically, it will be shown how they may present themselves. The large majority of public authorities usually refers to economic analysis in order to evaluate whether to deliver an investment through a PPP or a traditional procurement model. This means that *ex-ante* feasibility analyses are normally carried out. These, however, focus mainly on the financial costs inherent in the different delivery models with outputs that are considered to be equivalent. Nonetheless, if there are reasons to believe that the socio-environmental benefits related to a delivery under a PPP will be larger than under a classic

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<sup>37</sup> As mentioned, Europe 2020 is a ten-year growth and job strategy launched in 2010 by the EU. It is a project that aims at overcoming the crisis from which Member States' economies are gradually recovering. It tackles the downsides of domestic growth-models through the establishment of conditions for a smart, sustainable and inclusive growth. The EU set out five objectives to be reached by 2020. These are: (i) achieving 75% employment of 20-64 year-olds; (ii) ensuring 3% of the EU's GDP invested in research and development; (iii) reducing greenhouse gas emissions by 20% or even 30% compared to 1990 levels, generating 20% of energy needs from renewables and enhancing our energy efficiency by 20%; (iv) reducing school dropout rates to below 10%, with at least 40% of 30-34 year-olds completing tertiary education; (v) guaranteeing 20 million fewer people at risk of poverty or social exclusion. Each Member State adopted national targets for each of the above-mentioned objectives. An agreement was reached on a number of concrete actions to be carried out both at EU and domestic levels. The most important areas of action, which are believed to be the new drivers of growth, and jobs boost, were identified. For further details, see, for instance, The EU explained, Europe 2020: Europe's growth strategy, Growing to a sustainable and job-rich future, 2012, available at [http://ec.europa.eu/europe2020/pdf/europe\\_2020\\_explained.pdf](http://ec.europa.eu/europe2020/pdf/europe_2020_explained.pdf).

<sup>38</sup> This need could be easily addressed by PPPs because of the following reasons. As it will be seen, the planning in advance of all project's phases and the long duration of PPP contracts allow, on the one hand, the incorporation of future maintenance and operating costs and, on the other hand, investments in innovative and sustainable solutions. In addition, PPPs' funding and payment mechanisms allow the public sector to set high quality targets and the private sector to deliver them in the best way. Moreover, a smart allocation of risks and tasks between the private and public sectors allows the delivery of better outcomes.

procurement, public authorities should take this into consideration.<sup>39</sup> PPPs do have the potential to provide to society environmental improvements, jobs growth and high quality standards, which by the way represent some of the main objectives of Europe's 2020 program.<sup>40</sup>

Moreover, Chapter IV will investigate the scope for sustainability considerations within the relevant policies and legal regimes of the Member States studied in order to identify the actual spaces for sustainable development considerations within PPPs. An empirical analysis will be then carried out. National representative PPP case studies - in terms of their ability to integrate socio-environmental considerations - will be undertaken. This empirical study will be carried out:

- (i) as hardly any case study identifying the concrete strategies through which public and private actors can integrate sustainability concerns within PPPs and, thus, promote sustainable development goals, was found;
- (ii) in order to examine whether a theoretical and academic discourse could be validated also on practical grounds; therefore, to investigate if, in the every-day practice, PPPs are actually capable of promoting sustainable development considerations through the integration of sustainability concerns.

Therefore, the empirical study of Chapter IV will highlight - in addition to the specific socio-environmental benefits delivered by each PPP project - the tender and contractual strategies that allowed the integration of sustainability concerns within the PPPs studied and, thus, the generation of socio-environmental gains.

Eventually, this thesis will provide an overview of the research carried out and a picture of the acknowledgments and achievements obtained through this study along with concluding findings and remarks. Specifically, it will highlight, *inter alia*, which are the strategies that may be overall used by public and private actors to shape PPP arrangements that promote also sustainable development goals. These generally applicable strategies will aim at serving as guidelines or as reference models for public and private actors in the award, structure and management of PPPs capable of promoting sustainable development objectives.

#### **4. Delimitation of the study: exclusions and limitations.**

This thesis will approach PPPs exclusively from the perspective of sustainable development promotion. Therefore, it will be investigated only the ability of PPPs to generate socio-environmental benefits and, thus, their capability to promote sustainable development objectives.

The strategic relevance given by EU institutions to PPP models, the need for economic growth within the Internal Market along with the need to promote sustainable development goals, justify such a focus. As mentioned, academics and practitioners have thoughtfully covered the study of PPPs' economic feasibility, potential financial risks and shortfalls.<sup>41</sup> Little attention has been,

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<sup>39</sup> See, for instance, The Non-Financial Benefits of PPPs, A Review of Concepts and Methodology, European PPP Expertise Centre, European Investment Bank, June 2011, available at <http://www.eib.org/epec/resources/epec-non-financial-benefits-of-ppps-public.pdf>.

<sup>40</sup> Communication from the Commission, Europe 2020, A strategy for smart, sustainable and inclusive growth, European Commission, Brussels, 3.3.2010, COM (2010) 2020 final.

<sup>41</sup> The study of PPPs' economic feasibility, financial risks and potential shortfalls will be out of the scope of this research. For an in depth review in this regard, see, among others, J Guasch, J L Laffont, S Straub, "Concessions of infrastructure in Latin America: Government-led renegotiation" [2007] *Journal of Applied Econometrics*, 22(7), 1267,

instead, put on the ability of PPPs to promote environmental and social sustainability when providing public infrastructure and/or service projects. Therefore, this thesis - bearing in mind the possible drawbacks of PPPs as highlighted by practitioners and scholars<sup>42</sup> - will focus the attention on a different and specific aspect of PPPs, which has not been yet delved into: their ability to generate socio-environmental benefits and, thus, their capability to promote sustainable development.

This work is, thus, intentionally and inevitably not all encompassing. It does not aim at exploring the existing differences between traditional public procurement means and PPPs. It builds from the critical assessment and the existing approach to public provision through PPPs to carry out a study of such complex public contracts under a different light. It is a thesis that aims at opening up the way to a new theoretical understanding of PPPs, supported by empirical findings, whereby PPPs are considered as viable alternatives in the delivery of public services and infrastructure because of their ability to promote sustainable development objectives. This thesis uses an approach to critical issues that departs from the actual state of circumstances in order to generate new knowledge and understanding. In particular, this thesis seeks to explore the ways through which PPPs can actually integrate sustainable considerations within their structure, thus, promoting sustainable development goals. This, with the overall aim of creating a progressive theory secured by empirical evidence.

Therefore, without ignoring the possible PPPs' drawbacks - on the contrary being well aware of the fact that PPPs do not represent the solution to every problem - this study will be carried out in the light of its specific objective: the investigation of PPPs' ability to generate socio-environmental benefits and, thus, to promote sustainable development within the EU. This entails that this study

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1294. E Maskin, J Tirole, "Public-private partnerships and government spending limits" [2008] *International Journal of Industrial Organization*, 26(2), 412, 420. D Heald, G Georgiou, "The Substance of Accounting for Public- Private Partnerships" [2011] *Financial Accountability & Management*, 27(2), 217, 247. R Ball, M Heafey, D Kin, "The Private Finance Initiative in the UK" [2007] *Public Management Review*, 9(2), 289, 310. J Broadbent, J Gill, R Laughlin, "Identifying and controlling risk: The problem of uncertainty in the private finance initiative in the UK's National Health Service" [2008] *Critical Perspectives on Accounting*, 19(1), 40, 78. D Grimsey, M Lewis, "Public private partnerships and public procurement" [2007] *Agenda: A Journal of Policy Analysis and Reform*, 14(2), 2007, 171, 188. A Ng, M Loosemore, "Risk allocation in the private provision of public infrastructure" [2007] *International Journal of Project Management*, 25(1), 66, 76. J Broadbent, J Gill, R Laughlin, "Identifying and controlling risk: The problem of uncertainty in the private finance initiative in the UK's National Health Service" [2008] *Critical Perspectives on Accounting*, 19(1), 40, 78. J Shaoul, "A critical financial analysis of the Private Finance Initiative: selecting a financing method or allocating economic wealth?" [2005] *Critical Perspectives on Accounting*, 16(4), 441, 471. R Ball, H Maryanne, D King, "The Private Finance Initiative in the UK" [2007] *Public Management Review*, 9(2), 289, 310. M Pollitt, "The Declining Role of the State in Infrastructure Investment in the UK" in S V Berg (ed), *Private Initiatives in Infrastructure: Priorities, Incentives and Performance* (Aldershot, Edward Elgar, 2002). Klijn, "Institutional and strategic barriers to public-private partnerships: an analysis of the Dutch case" [2003] *Public Money & Management*, 23(3), 137, 146.

<sup>42</sup> See also, D Heald, "Value for money tests and accounting treatment in PFI schemes" [2003] *Accounting, Auditing & Accountability Journal*, 16(3), 342, 371. F Blanc-Brude, H Goldsmith, T Valila, *Ex-Ante Construction Costs in the European Road Sector: A Comparison of Public-Private Partnerships and Traditional Public Procurement*, European Investment Bank, European and Financial Report, 2006/01, available at [http://www.eib.org/attachments/efs/efr\\_2006\\_v01\\_en.pdf](http://www.eib.org/attachments/efs/efr_2006_v01_en.pdf). J L Guasch Laffont, S Straub, "Concessions of infrastructure in Latin America: Government-led renegotiation" [2007] *Journal of Applied Econometrics*, 22(7), 1267, 1294. S P Ho, L Y Liu, "Analytical model for analyzing construction claims and opportunistic bidding" [2004] *Journal of construction engineering and management*, 130(1), 94, 104. J L Guasch, *Renegotiation of concession contracts in Latin America*, World Bank Publications, 2003. E Chong, F Huet, S Saussier, F Steiner, "Public-private partnerships and prices: Evidence from water distribution in France" [2006] *Review of Industrial Organization*, 29(1-2), 149, 169. D Parker, K Hartley, "Transaction costs, relational contracting and public private partnerships: a case study of UK defence" [2003] *Journal of Purchasing and Supply Management*, 9(3), 97, 108. S P Ho, L Y Liu, "Analytical model for analyzing construction claims and opportunistic bidding" [2004] *Journal of construction engineering and management*, 130(1), 94, 104.

will be entirely carried out within this specific scope, moving from the assumption that PPPs have the potentialities of being effective delivery means also of socio-environmental benefits and, thus, that they should be structured through an inclusive approach.

Consequently, EU public contracts and concessions law - as well as the relevant legal regimes of the Member States studied - will be analysed with the specific purpose of identifying the spaces for sustainable development considerations within PPPs.

Along the same lines, the case studies discussed in Chapter IV will aim at investigating the socio-environmental benefits delivered and the concrete ways through which the studied PPP projects integrated sustainability concerns within their structure, thus, promoting sustainable development goals. Therefore, the PPP projects presented in Chapter IV have been chosen according to the following criteria:

- i. operational PPPs carried out in the UK, the NL and Italy.  
The generation of socio-environmental benefits through PPPs can be investigated only if the considered PPP projects are in the operation and maintenance phase.<sup>43</sup>  
Given that the PPPs studied in this thesis had not yet reached the end of the operation and maintenance phase, the end of life of such contracts is out of the scope of this research.
- ii. PPPs that promote sustainable development objectives or that implemented sustainability considerations in some or all projects' phases. In order to study how PPP arrangements can integrate sustainability concerns within their structures and, thus, how they can deliver socio-environmental benefits, PPPs promoting sustainable development goals or implementing sustainability considerations in some or all projects' phases, had to be chosen.

Therefore, the case studies that will be presented in Chapter IV seek to enhance the theoretical discussion on the ability of PPPs to foster sustainable development goals when delivering public services and/or infrastructure. It is, in fact, believed that, if PPPs' typical incentives are actually endorsed, PPP arrangements may effectively deliver socio-environmental benefits, thereby promoting sustainable development goals. Undertaking an empirical investigation in this field was deemed as crucial in order to verify how, in practice, socio-environmental benefits can be concretely generated by public-private collaborations, driving the choice for PPPs as effective means of public services and/or infrastructure delivery also in this respect. In this regard, by looking at the best overall quality of projects, the best sustainable public delivery model can be chosen. The case studies that will be described in Chapter IV will show that public authorities may indeed achieve sustainable objectives through the use of PPPs.

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<sup>43</sup> PPPs' phases are the following: planning phase, tender or procurement phase, realisation phase, operation and maintenance phase.

## 5. 'Brexit' and its possible implications on the UK's public procurement market and legal regime.

When drafting this thesis two main events occurred. First, the transposition by Member States of the 2014 EU public procurement Directives into their national legal systems. This meant that this research - upon a previous knowledge of the 2004 EU public procurement Directives - covered the 2014 Directives as well as their implementation in the Member States studied, which occurred by April 18, 2016. Secondly, on June 23, 2016, the 'Brexit' referendum took place. It asked UK's people whether they wanted the country to continue to be part of the EU. The result was an overall vote to leave the EU.

The extent to which the latter event will affect the UK's public procurement market and legal regime will depend on the future relationship between the UK and the rest of the EU. In fact, the UK - by leaving the EU - would not be any more part also of the WTO GPA, to which the UK is legally bound only as part of the EU as a whole. EU public procurement rules are coordinated with GPA obligations and, hence, compliance with such international rules would allow the UK to keep access to both the EU and GPA markets. Anyway, if the UK decides to rely only on the GPA, it would have to negotiate its membership, without having in the meanwhile access to the relevant market. Moreover, the UK would have to define its commitments towards the EU and other GPA members. In this respect, the UK would likely face pressures to accept stricter obligations than those already existing between the EU and the rest of GPA parties.

Furthermore, the UK - by withdrawing from the EU - will no longer be part of the European Economic Area (hereinafter EEA). However, if the UK obtains an EEA membership in its own right, it would maintain access to the Internal and GPA markets with no considerable changes on the state of art. The EU public procurement Directives are, in fact, legislative texts with EEA relevance and, thus, EEA members must comply with them. If, instead, the UK decides to design its relationship with the EU upon an *ad hoc* trade agreement it may still keep access to the Internal Market. Nonetheless, the EU would probably stand firm for the UK's maintenance of its existing public procurement law regime, which closely follows EU Directives.

If the relationship between the UK and the EU is not to be based on the UK's membership to the GPA or the EEA and no trade agreement is signed, the UK will lose access to both the Internal and worldwide markets. This would be detrimental to the UK's public procurement system. It would negatively affect the public sector and the business world, especially those companies relying on cross-border procurement trades. In addition, relying on the possibility of creating a new UK's public procurement model would be likely to have negative effects. Transactions costs are higher for companies working in markets where different procurement regimes are in place. British undertakings would have difficulties to export to the EU if they need to apply different regulatory systems. Thus, EU importing companies could buy goods from UK's companies and then sell them to the public sector in the rest of the EU. A new UK public procurement model, which differs from the EU current regime, would also not ease cross-border collaborations with public authorities across the EU and the rest of the world. Additionally, non-UK public and private actors would have to verify that the new system complies with their requirements, thereby slowing down cross-border procurement related trades. Finally, yet importantly, in the transposition of the 2014 EU public procurement Directives, the UK did not demonstrate a high level of creativity. Therefore, it is likely that no clear strategy or direction for the development of a new public procurement regime has been

developed yet. The Transatlantic Trade and Investment Partnership (hereinafter TTIP) may be mentioned as well. Even though TTIP negotiations seem to be failing, by withdrawing from the EU, the UK would also lose access to an extended US-EU market specifically foreseen under this agreement. Such a market would probably not be accessible by the UK on its own.

Therefore, in order to reduce as much as possible post-Brexit negative effects on the UK's public procurement market, the UK should - at least in the short term - maintain a broad continuity with the existing EU-based legal model. It should keep its system coordinated with the EU public contracts and concessions regime, maintaining as much as possible the *status quo ante* 'Brexit'. This would, mainly, preserve the possibility (i) of promoting sustainable development concerns through public procurement means; and the chances (ii) of cross-border procurement related trades, without disrupting investments, infrastructure and/or service projects.

## II CHAPTER - PUBLIC-PRIVATE PARTNERSHIPS

### 1. Introduction.

All forms of collaboration between the public and the private sectors which lead to normally complex transactions, long term and high-value contracts in high profile fields, generally fall within the broad notion of PPPs.<sup>1</sup> PPPs are overall understood as cooperation arrangements undertaken by public authorities and private operators aiming at the funding, construction, renovation, management and maintenance of a public infrastructure and/or service.<sup>2</sup>

The Efficiency Unit of Honk Kong,<sup>3</sup> a unit of the Chief Secretary for Administration Office established in 1992,<sup>4</sup> provided a noteworthy description of PPPs identifying six different PPPs' model types. These, can be summarized as follows:

- a. The creation of wider markets where assets in terms of skills and funding from the private and the public sectors are used.
- b. The Private Finance Initiative where the public party purchases quality services and the private sector constructs and maintains the relevant infrastructure. The private actor delivers the design, building, funding and bears the relevant costs through charges on end-users.
- c. The joint venture structure where the private and public sectors put together their assets, finance and expertise under a joint management.
- d. Partnerships companies, which bring private sector's ownership into State-owned businesses by means of legislation, regulation, partnership agreements or holding of a specific government share.
- e. Partnership investments where the public sector shares the returns of investments made by the private sector.
- f. Arrangements whereby the private sector pays a fee during the concession period awarded by the public authority according to the revenues that the service generates.

PPPs are one of the most studied topics within the so-called *nouvelle vague* of European public law.<sup>5</sup> Undoubtedly, they are one of the most fascinating fields. They represent the emerging and merging point of classical legal types of administrative law (e.g. concessions), fundamental principles of EU law (e.g. free competition), comparative issues (e.g. the French *service public*),

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<sup>1</sup> As the International Monetary Fund stated, there is no real agreement or consensus on a unique definition of PPPs. See, for instance, B Craig, C Wilson, 'PPPs in the European Union' in N Avery (ed), *Public-Private Partnerships: A Practical Analysis* (Globe Business Publishing, 2010) 257. G R Teisman, E H Klijn, 'Public-Private Partnerships in the European Union: Officially Suspect' in S P Osborne (ed), *Public-Private Partnerships: Theory and Practice in International Perspective* (Routledge, 2000) 165.

<sup>2</sup> See the European Commission statement in the Green Paper on Public-Private Partnerships and Community Law on Public Contracts and Concessions, COM (2994) 327 final.

<sup>3</sup> Further data available at <http://www.eu.gov.hk/en/index.html>.

<sup>4</sup> The mission of this Unit is to provide departments with high quality management consultancy services and promote the provision of world-class public services to the people of Honk Kong.

<sup>5</sup> In this respect, see, for instance, G C Feroni, *Il Partenariato Pubblico-Privato: Modelli e Strumenti* (Giappichelli, 2011) 23.

critical rethinking of consolidated legal categories (e.g. the distinction between private and public law) and interpretative criteria of EU law provisions, which are often the result of Member States' legal categories (e.g. the EU notion of service concession that comes from the French experience).

From another perspective, PPPs are considered as effective tools of economic policy choice and, especially in circumstances of serious budget restraints and financial crisis, they are seen as essential tools. In a situation of crisis, as the one that we have been experiencing since 2008, PPPs are normally engaged for the realization of public infrastructure and/or service projects, to promote and boost the economic development of a country. In this regard, the European Commission expressed itself in its Communication of 2009<sup>6</sup> meaningfully entitled 'Mobilising private and public investment for recovery and long term structural change: developing Public-Private Partnerships.' PPPs are, in fact, cooperation arrangements that allow normally large financial resources to be directed towards the funding of public infrastructure and/or services, key elements in the long-term growth of any economy and, in the European context, of the Internal Market.<sup>7</sup> In fact, overall, society's prosperity and well-being depends on infrastructure projects, such as ports, highways, water systems, pipelines, hospital and schools.<sup>8</sup> They assure transportation, facilitate communication, deliver energy and water, promote health-care and education allowing the whole economy of a concerned area to flourish. Indeed, infrastructure costs are high, but the costs of failing to invest on them are even higher.<sup>9</sup> It is within this picture that public-private collaborations slowly re-emerged and became crucial in the provision of public infrastructure and services. PPPs are conceived as economically effective alternatives in the delivery of complex capital projects, which need a considerable on-going maintenance. Yet, up to now few Member States have fully discovered and exploited PPPs. Most of them have still little experience in the use of this multi-faceted legal category.<sup>10</sup>

While market and policy makers' attention on PPP projects is fairly recent,<sup>11</sup> private investments in public infrastructure is an old phenomenon. Already back in the eighteenth century, European countries were experiencing the participation of private investors in the provision of public infrastructure and/or services. For instance, in France, a concession contract delivered

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<sup>6</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 'Mobilising private and public investment for recovery and long-term structural change: developing Public Private Partnerships', Brussels, 19.11.2009, COM (2009) 615 final.

<sup>7</sup> See, What Makes Public-Private Partnerships Work? An Economic Analysis, J Bensaid, F Marty, Prisme, n. 27, Cournot Centre, 2014, available at

<http://www.osservatorioappalti.unitn.it/content.jsp?id=31>. S E Pommer, 'Public-Private Partnerships' in M Trybus, R Caranta, G Edelstam (eds), *EU Public Contract Law, Public Procurement and Beyond*, (Bruylant, 2014) 285 et ss.. N Budina, H P Brix, T Irwin, *Public Private Partnerships in the New EU Member States: Managing Financial Risks* (World Bank Working Papers, 2007).

<sup>8</sup> See, A Akintoye, E Chinyio, 'Private Finance Initiative in the Healthcare Sector: Trends and Risk Assessment' [2005] *Engineering Construction and Architectural Management*, 601, 616.

<sup>9</sup> In this respect, see the World Economic Forum, *Global Agenda Council on Infrastructure 2012-2014*, available at <https://www.weforum.org/reports/global-agenda-council-infrastructure-2012-2014/>.

<sup>10</sup> T M Nisar, 'Implementation Constraints in Social Enterprise and Community Public-Private Partnerships' [2013] *International Journal of Project Management*, Elsevier, 638, 651.

<sup>11</sup> At the earliest in the 90s in the UK.

drinking water to Paris.<sup>12</sup> In the nineteenth century, similar cases were found - outside Europe<sup>13</sup> - in American and Asian countries.<sup>14</sup>

Traditionally, States have had three main alternatives to procure or develop their public infrastructure or provide public services. First, construction on their own of the relevant facilities and the provision of public goods or services by means of their own powers, and so an in-house or direct public sector provision. Second, the use of the private market productive forces through traditional public sector procurement, and so public work or service contracts. Third, the handing over<sup>15</sup> to the private sector - for instance by means of PPP arrangements - of the general responsibility of both the planning of the project, the construction of the infrastructure and/or provision of the service. Thus, PPPs represent one of the three main alternatives through which public authorities can deliver public services and/or infrastructure.

Due to States' lack of budgetary funds and technical expertise, this third way is increasingly taken. PPP contracts are getting used to tackle States' shortfalls because they allow private sector's funding, managerial and technical know-how to fill in the actual deficiencies of the public sector abilities.<sup>16</sup> Therefore, PPP schemes generally emerge when:

- States are dysfunctional and under oppressive fiscal constraints, incapable - also with regard to technical skills - of fulfilling their public duties; and
- there is a pressing need for new high quality public works and/or services delivery.

PPPs have the potential to effectively address and reduce such tension by means of public goods or service provision that includes private sector's expertise and funds.

Internationally, the attention is kept on actions capable of addressing the need for public infrastructure and/or service provision. Substantial reinvestments are needed, for instance, in ageing infrastructure in order to deal with - especially in developing countries - population growth, increasing urbanization and policies that are driving a strong demand for new infrastructural spending. This trend, along with the actual financial conditions - which are worldwide severely constraining public budgets - is leading to a wide gap of almost \$2 trillion annually between demand and investment in infrastructure for the next 20 years.<sup>17</sup> Studies have shown that \$57 trillion infrastructure investments should be carried out before 2030, meaning an increase of 60% compared to the equivalent period until today.<sup>18</sup> Moreover, according to the World Economic Forum findings,<sup>19</sup> there is a need for infrastructure projects for almost the 15% of GDP in order to

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<sup>12</sup> L Y Tang, Q Shen, E W L Cheng, 'A review of Studies on Public-Private Partnerships Projects in the Construction Industry' [2010] *International Journal of Project Management*, Elsevier, 683, 694.

<sup>13</sup> For instance, the Suez Canal and the Trans-Siberian Railway, but also canals, turnpikes and railroads throughout Europe.

<sup>14</sup> In the United States, China and Japan. See M M Kumaraswamy, D A Morris, 'Build-Operate-Transfer Type Procurement in Asian Megaprojects' [2002] *Journal of Construction Engineering and Management*, 93, 102.

<sup>15</sup> Typical outsourcing contracts are DB (Design, Build); DBO (Design, Build, Operate); DBFO (Design, Build, Finance, Operate); BOO (Build, Own Operate); BOOT (Build, Own, Operate, Transfer).

<sup>16</sup> J Kitsos, 'Construction Investments in Public Works through Public Private Partnerships' [2014] *EPPPL*, 202, 208.

<sup>17</sup> For further data, see the World Economic Forum, *Global Agenda Council on Infrastructure 2012-2014*, *op. cit.*

<sup>18</sup> As noted, for instance, D Podhraški, 'Real Options in Public-Private Partnerships' [2014] *EPPPL*, 164, 173.

<sup>19</sup> The World Economic Forum periodically publishes comprehensive series of reports, which examine in detail a broad range of global issues addressing them with the relevant stakeholders.

attain the 7% annual growth required to meet the Millennium Development Goals of Africa.<sup>20</sup> The 2030 Agenda - comprising 17 new Sustainable Development Goals - replaced on September 2015 the mentioned Millennium Development Goals, which in September 2000 gathered the world around a common 15-year agenda to tackle the indignity of poverty. The objective of the new Sustainable Development Goals is to produce a set of universally applicable goals to balance the three dimensions of sustainable development: environmental, social and economic. In this respect, PPPs indeed have the capabilities to enter into the scene and work as effective tools capable of dealing with today's lack of public funding and need for economic and sustainable growth.<sup>21</sup>

In the European Union, the PPP phenomenon fits within the process of public sector regulation. Its re-emergence and application is clearly changing public services and especially the way in which they are organised, financed and delivered to end-users. This is because PPPs' approach entails involving the private sector as a strategic and innovative planner, investor, financier, constructor, manager and direct deliverer of services and/or infrastructures that aim at fulfilling the public interest.

## 2. The Public-Private Partnership Phenomenon.

Figure 1 shows how the private sector's involvement can concretely present itself: through either outsourcing or PPP schemes, which in turn can be of various forms and types.

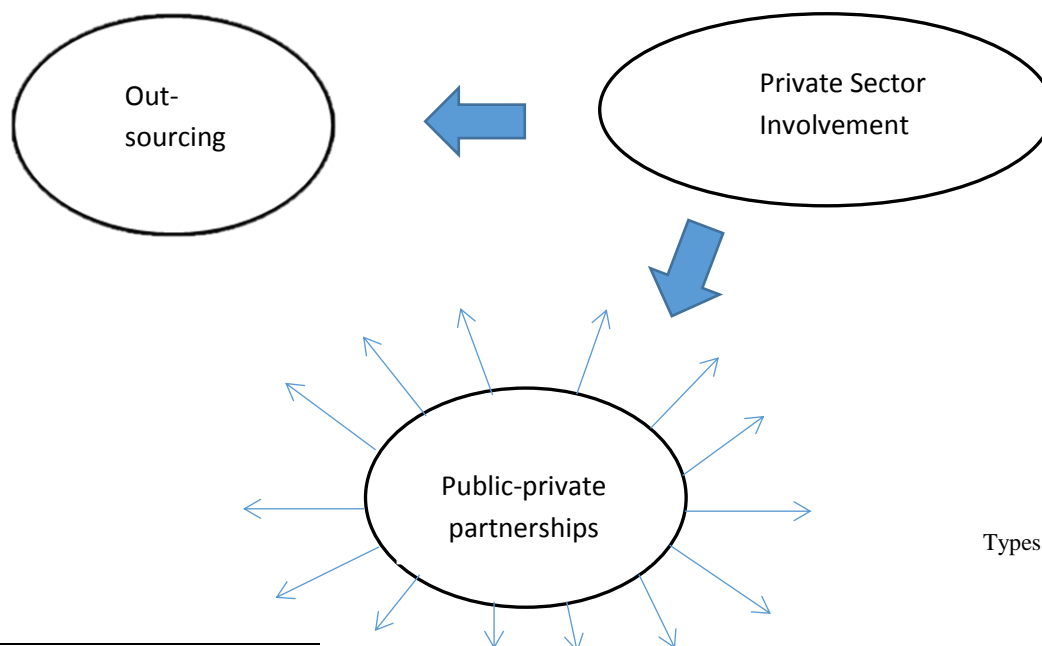


Fig. 1  
Types of private sector's involvement.

<sup>20</sup> On September 25, 2015, at the United Nations of New York, the 2030 Agenda for Sustainable Development was adopted. This ambitious agenda on Sustainable Development Goals (SDGs) was agreed by 193 countries in September 2015. The 2030 Agenda comprises 17 new SDGs, or Global Goals, which will guide policy and funding for the next 15 years. The concept of the SDGs originated at the United Nations Conference on Sustainable Development, Rio+20, in 2012. The objective was to develop a set of universally applicable goals that balanced the three dimensions of sustainable development: environmental, social, and economic. The Global Goals replaced the Millennium Development Goals (MDGs), which in September 2000 gathered the world around a common 15-year agenda to tackle the indignity of poverty. The MDGs established measurable, universally agreed objectives (considered as development imperatives). The MDGs drove progress in several important areas with a shift on a sustainable path. The new development agenda applies to all countries, aims at promoting peaceful and inclusive societies, creating better jobs, tackling environmental challenges, particularly climate change.

<sup>21</sup> See, Meeting the Infrastructure Challenge with Public-Private Partnerships: Bridging the Gap, M Airoidi, J Chua, P Gerbet et al (eds), The Boston Consulting Group, 2013, available at <http://www.bcg.de/documents/file128534.pdf>.

The PPP phenomenon is a form of outsourcing with its own peculiarities and specific features.<sup>22</sup> Both outsourcing and PPPs entail a strategic use of private resources to perform activities traditionally handled by the public sector. However, PPPs differ from general outsourcing arrangements mainly in terms of goals and governance.

In terms of goals, outsourcing is foremost directed towards efficiency gains. Outsourcing, in fact, allows the public sector to be more efficient, while generally reducing costs. The public sector identifies a problem, defines the solution and selects a private company that can achieve that result in a cost-efficient way.<sup>23</sup> Hence, outsourcing benefits regard efficiency aspects, such as delivery of an asset in a quicker and cheaper way. PPPs are, instead, mainly aimed towards the improvement of effectiveness.<sup>24</sup> PPPs' objective is to increase effectiveness through a public-private synergy that delivers an enriched output.

In terms of governance, outsourcing is characterised by a principal-agent relationship. A principal-agent relationship comes into existence whenever one party engages another to perform certain aspects of a work for a consideration and a contractual arrangement manages their relation. Between the outsourcer and the provider, there is a principal-agent relationship regulated by the relevant contract.<sup>25</sup> The latter sets clear goals and well-defined project specifications. PPPs' governance involves, instead, a joint decisions-making process and a relationship that last throughout the entire life of the contract.<sup>26</sup> Mutual trust usually characterises PPPs' relationships and each party maintains its own interests, ways of working, accountability and financing principles.

Traditionally, public entities have counted more on internal delivery. Thus, on in-house service provision in support of public sector's functions<sup>27</sup> delivered directly to the public.<sup>28</sup> The public sector employed its own construction and maintenance teams, especially for routine or minor works. Over the last twenty years, the balance, however, shifted towards the external provision - outsourcing and PPP arrangements - of public services and goods thanks also to the support of central government's policies and legislative measures.<sup>29</sup>

Undoubtedly, outsourcing in general has a range of positive advantages. First of all, it may be used as a strategic alternative when there are services that are not the public sector's core business

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<sup>22</sup> In the United Kingdom practitioners and academics commonly use the terms outsourcing, contracting out and public-private partnership as synonymies. Outsourcing entails normally short-term contracts where only some components of a public service are bought in the market (e.g. the hiring of a cleaning company). With PPPs, some components of a public service (e.g. the construction of the infrastructure needed for service provision), or the whole public service, are contracted out to a private operator through medium or long-term contracts with the public sector monitoring the service provision.

<sup>23</sup> In fact, some of the main advantages brought by outsourcing are staff flexibility, knowledge transfer to permanent staff and the possibility to free internal resources for other purposes. The term cost-efficiency generally refers to the act of saving money by performing an activity in the best way.

<sup>24</sup> See M Walther, *Partnering Capacity in White-Collar Public-private Partnerships*, 2009, University of St. Gallen, 26, available at [http://www1.unisg.ch/www/edis.nsf/SysLkpByIdentifier/3580/\\$FILE/dis3580.pdf](http://www1.unisg.ch/www/edis.nsf/SysLkpByIdentifier/3580/$FILE/dis3580.pdf).

<sup>25</sup> Keys to success are clear definitions of goals, rules on tendering, selection and delivery.

<sup>26</sup> For instance, goals, funding schemes, realization and utilization are subject to joint decision-making in PPPs. Key characteristics of PPPs are interconnected goals, rules on ongoing cooperation and suitable assignments along with joint efforts and delivery commitments.

<sup>27</sup> Such as accounting and office cleaning.

<sup>28</sup> Such as, for instance, paying benefits, refuse collection, street cleaning and healthcare.

<sup>29</sup> At the European level, see, for all, Sue Arrowsmith, *The Law of Public and Utilities Procurement, Regulation in the EU and UK* (Sweet & Maxwell, 2014).

or expertise. In fact, normally the most required and outsourced services are non-core public services. Thus, services usually not related to the fundamental policy-making functions of the public sector and not crucially important in service-delivery terms. In this case, the public sector is interested in concentrating its efforts on other provisions.<sup>30</sup> Outsourcing these kinds of services allows the public sector to focus on its core tasks of general policy development, education and healthcare service delivery. Therefore, it can be argued that outsourcing well fits within a working and developed market.

Secondly, economic efficiency reasons support outsourcing mechanisms. Economic efficiency reasons are key drivers of contracting out policies and the main goals of today's large majority of public authorities. In this regard, several indicators are proving that the private sector is more economic-efficient.<sup>31</sup> For instance, the competition incentive and the profit-motive driver. Moreover, the private sector is believed to be normally faster in implementing operational changes in order to meet developing demands. The private sector is also usually considered capable of providing better productivity through innovation and investment in technology.<sup>32</sup>

Furthermore, outsourcing may provide quality improvements because it entails a careful definition of service specifications leading to a greater attention in the formulation and monitoring of quality standards. The latter have to be normally met by external and internal providers while the monitoring is typically carried out by the contracting authority or by an external body. Nonetheless, there are still elements that hinder the realisation of the full potentials of contracting out schemes. Difficulties may arise in the monitoring and enforcement phase of complex arrangements, thereby challenging the provision of adequate quality standards. Moreover, if the public service's aim is not adequately pursued - and it is replaced by a profit motive - a tendency towards lower quality services' provision may rise. Furthermore, preserving competition might be difficult if private bidders submit low bids to hinder in-house capability to provide services. Thus, the initial savings would not reflect the efficiency gains. In addition, if the public sector loses its in-house capacity it becomes reliant on private operators for the provision of services and/or infrastructures, exposing itself to the risk of market failures. Finally, difficulties for outsourcing options may arise from private companies' inexperience in certain new public provisions, if they bid too low or were too ambitious. These concerns are still open issues in today's designing of appropriate contracting out policies and hence also in the structuring of well-functioning PPP schemes.

## **2.1. Public-Private Partnership's Definition at an International Level.**

At an International level, there is no unique or widely accepted definition of PPPs.<sup>33</sup> There are, instead, a number of commonly acknowledged features pertaining to the PPP category as a whole. First of all, it is recognized that the term PPP encompasses a variety of types of legal forms of collaboration between the private and the public sectors for the realization of activities that pursue the public interest. As a result, PPPs have in practice different levels of formalizations. Moreover, it

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<sup>30</sup> Services that are often outsourced are, for instance, back-office administrative services, facility management activities such as maintenance, cleaning and catering. See, among others, R Mclvor, *The Outsourcing Process, Strategies for Evaluation and Management*, (Cambridge University Press, 2005) 7 et ss..

<sup>31</sup> In this respect, see Sue Arrowsmith, *The Law of Public and Utilities Procurement, Regulation in the EU and UK*, *op. cit.*.

<sup>32</sup> *Ibid.*.

<sup>33</sup> The term PPP is undoubtedly and clearly vague. It is believed that the elusive nature of such a term leaves room for negotiation of rules and practices applicable to partnerships.

is agreed that the objective of a public-private cooperation is in general terms the creation of a partnership between the public and private sectors in order to deliver infrastructure and/or services to the public. In this respect, the degree of involvement of the private partner - attaining foremost to financing aspects and expertise - depends on the specific features of the PPP project. Given that PPPs are complex transactions leading to long duration,<sup>34</sup> high-value contracts in high profile sectors, an adequate length of time is usually foreseen to ensure investment and profit recovery. In addition, it is generally understood that the typical long term commitments of these programs to which contracting authorities are normally bound according to PPP contracts, usually represent for the public sector an incentive to choose and invest in more rational and long-term projects and, for the private partner, another reason to plan and deliver more coherent public investment programs.

Thus, even though at an international level there is no consensus on a unique definition of PPPs, it is widely acknowledged that this legal category implies various ideological and managerial choices that are firmly connected to the relationship established between the private and public actors involved and the costs and benefits of the different public-private solutions.<sup>35</sup>

When discussing the PPP notion, it has been argued that:

*'the greatest divide seems to be between researchers who view public-private partnerships as a tool of governance and those who think of it as a language game.'*<sup>36</sup>

At a supranational level, PPPs are often used to serve specific strategies and/or agendas such as privatization or the promotion of private suppliers of public goods and/or services on behalf of the public sector. In this regard, terms such as alternative delivery systems or PPPs, push private entities to participate to the market share of public services and infrastructure provision.<sup>37</sup> Under the language game perspective, the focus shifts, instead, on public policy analyses. Hence, on how public authorities intentionally modify policies in order to obtain the necessary political support. Language games are a key discourse in public policy debates and if applied to the PPP context, they allow public authorities of different States and jurisdictions to conceive PPPs in different ways.

Moreover, when PPPs are perceived as organizational and financial arrangements, the benefits enjoyed by the private and public sectors are regarded as central. Given that both sides have specific skills and capabilities, whenever these are combined it is believed that there is potential for an overall improved outcome. Hence, cooperation and allocation of risks are the main reasons why public and private actors get involved in a PPP.<sup>38</sup>

According to certain literature, PPPs if seen under the said light are:

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<sup>34</sup> Medium term PPPs last less than 25 years, long term PPPs even over 30 years.

<sup>35</sup> See, S H Linder, P Vaillancourt Rosenau, 'Mapping the Terrain of the Public-Private Policy Partnership' in P. Vaillancourt Rosenau (ed), *Public-Private Policy Partnerships* (MIT Press, 2000), 1, 18.

<sup>36</sup> See G Teiseman, E H Klijn, 'Partnerships Agreements: Governmental Rhetoric or Governance Scheme?' [2002] *Public Administration Review*, v. 62, n. 2, 197, 205. G A Hodge, C Greve, 'Public-Private Partnerships: an International Review' [2007] *Public Administration Reviews*, 33, 39, available at [https://www.researchgate.net/publication/227691342\\_Public-Private\\_Partnerships\\_An\\_International\\_Review](https://www.researchgate.net/publication/227691342_Public-Private_Partnerships_An_International_Review).

<sup>37</sup> E S Savas, *Privatization and Public-Private Partnerships*, (Seven Bridges Press, 2000).

<sup>38</sup> See, S H Linder, P Vaillancourt Rosenau, 'Mapping the Terrain of the Public-Private Policy Partnership' *op. cit.* 1, 18.

*‘a cooperation of some sort of durability between public and private actors in which they jointly develop products and services and share risks, costs, and resources which are connected with these products.’<sup>39</sup>*

From this definition, PPPs’ key features emerge: enduring duration, risk sharing and cooperation between the private and public sectors aiming at obtaining benefits from mutual efforts. During the last decade, the PPP phenomenon globally expanded in many fields falling within the public sector’s scope. Among all, the infrastructure sector is the field where PPPs schemes mostly developed.

In this regard, PPPs are defined as:

*‘arrangements where the government states its need for capital-intensive, long-lived infrastructure and the desired facility is built using a complex combination of government and (mostly) private financing and then operated by a private entity under a long-term franchise, contract or lease.’<sup>40</sup>*

Internationally, in the infrastructure sector, PPPs are seen as advanced alternative forms of public delivery. Private sector’s contractors are increasingly providing States’ public infrastructure. They undertake the project’s financing<sup>41</sup> and entrepreneurial risk, during the entire contract life, which is of normally 25-30 years. The private party is repaid of its investment, either directly from the contracting authority upon an availability and/or performance basis,<sup>42</sup> or indirectly from end-users through fees or tolls. Otherwise, there is a combination of both paying mechanisms. Moreover, the State may retain property rights on the constructed infrastructure, but can also explicitly grant to the private contractor rights for its operation, management and commercial exploitation.<sup>43</sup> A contractor consortium may be formed by the private sector in order to claim the award of a specific public work, the so-called Special Purpose Vehicle (hereinafter SPV) that will carry out the project.

PPPs, as known today, are believed to be the result of a three-generation process.<sup>44</sup> The first generation was characterised by several mistakes in the use of PPPs because of the lack of expertise of the public and private sectors involved and of their respective consultants. The second generation of PPPs saw big development companies focused on specialized PPP growth projects and on their management on behalf of the public party. The third generation of PPPs arose after social

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<sup>39</sup> H Van Ham, J Koppenjan, ‘Building Public-Private Partnerships: Assessing and managing risks in port development’ [2001] *Public Management Review*, 3 (4) 598.

<sup>40</sup> E S Savas, *Privatization and Public-Private Partnerships*, *op. cit.*, 7.

<sup>41</sup> See, E R Yescombe, *Public Private Partnerships: Principles of Policy and Finance* (Elsevier, 2007);

<sup>42</sup> Being this the English Private Finance Initiative model. See below paragraph 5.1.1. for further details.

<sup>43</sup> N Stern, H P Lankers, Making the Most of Markets: the Role of IFIs, in *International Financial Institutions in the 21st century*, European Investment Bank Papers, Vol. 3, n. 2, 1998, 102, 114, available at [http://www.eib.org/attachments/efs/eibpapers/eibpapers\\_1998\\_v03\\_n02\\_en.pdf](http://www.eib.org/attachments/efs/eibpapers/eibpapers_1998_v03_n02_en.pdf).

<sup>44</sup> L B Sagalyn, ‘Public Private Development: Lessons from History, Research and Practice’ [2007] *Journal of the American Planning Association*, vol. 73, (1), 7, 22.

development.<sup>45</sup> In this phase, PPPs began to be used by social developers in search of private sector's involvement. Today, we are assisting to an expansion of this latter generation.

As already mentioned, at an International level there have been attempts at defining the PPP phenomenon. For instance, the World Bank provided its own PPP's definition by holding that it consists of a:

*'a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance.'*<sup>46</sup>

Worth mentioning is another enriching attempt at defining the PPP phenomenon carried out by the United Nations Development Programme. The latter, when focusing on PPPs for the Urban Environment, highlighted that the definition of PPPs should be broad enough to include also informal dialogues between government officials and local community-based organizations, which remarkably are considered essential for effective PPPs.<sup>47</sup>

Furthermore, the OECD considers PPPs as:

*'long-term contractual arrangements between the government and a private partner whereby the latter delivers and funds public services using a capital asset, sharing the associated risks.'*<sup>48</sup>

Therefore, as already mentioned, at an International level there is no real agreement on a unique definition of PPPs. This is mainly because of the different legal traditions existing throughout the world. A wider consensus, instead, surrounds PPPs' features and goals. The rise of PPPs, in fact, occurred after a global policy change, namely the shift of the role played by the public sector. States began stepping back from the typical sectors where they once exercised and imposed their sovereignty, often through the creation of monopolies. PPPs entered into the scene when States became service purchasers, while once being service providers.

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<sup>45</sup> Social development may be described as a process of change from a traditional way of living of rural communities to progressive ways of living. It is a process where people are assisted in the development of themselves, of their own capacities and resources. Social development is concerned with the investment on human beings, education, health, social welfare, etc. Social development is directed towards the global development of people. It is an inter-sectorial, inter-regional and inter-disciplinary process aiming at institutional and structural reforms that can provide greater social justice.

<sup>46</sup> Asian Development Bank, Inter-American Development Bank, World Bank Group, Public-Private Infrastructure Advisory Facility, Public-Private Partnerships Reference Guide: Version 2.0, second edition, July 2014, 14. Full text available at <https://ppp.worldbank.org/public-private-partnership/library/public-private-partnerships-reference-guide-version-20>.

<sup>47</sup> E Bennett, P Grohmann, B Gentry, United Nations Development Programme (UNDP), Yale University and PPPUE, Public-Private Partnerships for the Urban Environment, Options and Issues, New York, 1999, Working Paper Series Volume I, available at [http://www.ucl.ac.uk/dpu-projects/drivers\\_urb\\_change/urb\\_infrastructure/pdf\\_public\\_private\\_services/UNDP\\_PPPUE\\_Joint%20Venture\\_1.pdf](http://www.ucl.ac.uk/dpu-projects/drivers_urb_change/urb_infrastructure/pdf_public_private_services/UNDP_PPPUE_Joint%20Venture_1.pdf).

<sup>48</sup> OECD, Recommendation of the Council on Principles for Public Governance of Public-Private Partnerships, 2012 available at <https://www.oecd.org/governance/budgeting/PPP-Recommendation.pdf>.

## 2.2. The Definition of Public-Private Partnerships at the European Level.

Also at a European level the term PPP has not been defined. Comparative analyses on the implementation of PPPs in various Member States display a heterogeneous and complex universe where a vast variety of definitions, categories and models fall within the notion of PPP. The term PPP is, in fact, broadly used to describe different types of contractual arrangements.<sup>49</sup> It is understood in different ways according to the Member State, the country context, the sector, the different legal, regulatory and investment considerations involved, the specific market structure, industry, organization and project-related features. Hence, in Europe, PPPs come in a wide variety of models and legal types ranging, for instance, from concession contracts to joint ventures.

Remarkably, the 2004 Green Paper on Public-Private Partnerships<sup>50</sup> (hereinafter the Green Paper) did not lay down a legal definition of PPPs, but the essential traits that the formulas through which PPPs present themselves should have. In addition, it anticipated the critical issues related to their application. According to the European Commission, PPPs are characterized by the following elements:

- i. a long lasting relationship that involves cooperation between a public and a private partner on various aspects of a planned project. The long duration of a PPP is primarily due to the fact that the private sector needs to repay its investments.
- ii. the funding of the project, which normally comes from the private sector and is usually the result of complex arrangements between various stakeholders. Public funding - which in some cases is quite significant - may be provided in addition to private funds;
- iii. the vital role of the economic operator that participates at various stages of the project: designing, construction, management and maintenance. The role of the public sector is, instead, the identification of the goals to be achieved in the light of the public interest and the quality of the service to be provided. In addition, the public sector identifies the pricing policy and monitors the compliance with the set goals;
- iv. the allocation of risks between the public and the private sector. Risks are allocated to the partner who is better capable of bearing them. This means that the private partner does not necessarily take all risks. Their precise distribution is decided on a case-by-case basis depending on the parties' ability to assess, control and deal with them.

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<sup>49</sup> For instance, the BOT (Build-Own-Transfer) and BOOT (Build-Own-Operate-Transfer) contracts where the only difference is the management of the infrastructure before the transfer back to the public sector. According to the BOOT scheme the private actor builds the infrastructure, operates it during the concession period and, at the end, it transfers it to the public party without consideration. Moreover, reference can be made to sale and lease back agreements under which local public bodies sell buildings and then rent them back through a 20-30 year contract from a financial entity. G Hodge, C Greve, 'Public-Private Partnerships: an International Review' [2007] *Public Administration Review*, 546.

<sup>50</sup> Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final.

The picture of the PPP phenomenon that arises out the Green Paper's considerations is broken into two different legal categories: contractual and institutionalised PPPs. This distinction reflects two different types of PPPs where the inner criticalities are often the same and related to the application of EU public contracts and concessions law.<sup>51</sup> The first type of PPPs are partnerships based merely on contractual relations linking together the different actors involved. This type of PPPs can be set-up in various ways, all characterised by the fact that one or more tasks are allocated to the private sector. These, can include the design, funding, execution, renovation or exploitation of a work or of a service. Overall, it is the case of public works and services concessions, which today can count on an EU regulation thanks to the enactment of Directive 2014/23/EU.<sup>52</sup> According to the Commission, concession schemes are characterized by a direct relationship between the private partner and end-users. The private operator provides a service to the public on behalf of - but under the control of - the public partner. Another characterizing element is the private sector's compensation that comes from end-users, combined, if needed, with public funds.<sup>53</sup> In addition, the Commission remarked that the private partner's selection procedure cannot limit the principle of free competition or assure the project promoter a competitive hedge that may affect bidders' equal treatment. At the same time, it highlighted that the principles of equal treatment between economic operators and the principle of transparency have to be respected also after the contractual award, hence in the phase of construction and management of the service.<sup>54</sup>

Other levels of formalization of contractual PPPs are those where the private actor builds and manages infrastructure or provides a service for the public sector, e.g. a school, a hospital, a prison or a transport facility. The Private Finance Initiative (hereinafter PFI) model is an example of this kind of purely contractual PPP. In this case, the private sector's remuneration is based on the public sector's regular payments, which can be either fixed or calculated in an adjustable way, according, for instance, to the availability of the work or service provided or to the usage-level of the work or service.

The term institutionalised PPPs (hereinafter IPPPs) refers, instead, to the creation of an entity jointly held by the private and public partner, namely a SPV, which provides a service or an infrastructure to the benefit of the public.<sup>55</sup> This PPP type allows the public and private sectors to cooperate within an entity that has a legal personality, thus enabling the public sector - thanks to its presence in the body of shareholders and in the decision-making structure - to have quite a high degree of control in the development of the PPP project. This may ease contract changes that might become necessary during the project evolution.<sup>56</sup> It can also allow the public sector to acquire its

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<sup>51</sup> See below Chapter II, paragraph 4.2..

<sup>52</sup> Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the award of concession contracts, 28.3.2014, Official Journal of the European Union L 94/1. See below Chapter II, paragraph 4.2.4.2..

<sup>53</sup> Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final, point 22.

<sup>54</sup> Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final, points 42 and following.

<sup>55</sup> Still few Member States use this kind of PPP model to provide infrastructures at a local level, as in the case of water supply services or waste collection services Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final, 18.

<sup>56</sup> It must be borne in mind that EU public procurement Directives limit contract changes by indicating the extent to which they can be modified.

own managing expertise through the day-to-day collaboration with the private partner. Finally, IPPPs may also be set-up with the private sector taking control of a public company.

Thus, also at a European level the term PPP has not been yet defined. As seen, characterising indicators and two macro legal categories have been identified, leaving to each Member State the precise definition and regulation of the different legal formalizations.

### 3. Public-Private Partnerships' Goals.

In terms of objectives pursued, PPPs are first of all perceived as legal tools capable of delivering public infrastructure and/or services through an enhanced partnership between the public and the private sectors.<sup>57</sup> PPPs, in fact, aim at obtaining an effective risk management<sup>58</sup> of a project and a clear prior identification of critical success factors,<sup>59</sup> along with an adequate financial analysis according to the specific public asset and/or service that has to be delivered.<sup>60</sup> One of the central goals of PPPs is to save resources and to use those available in an efficient manner. This is done in different ways. For instance, the public sector concentrates on its best skills without using its resources for the realization of projects where it has no expertise.<sup>61</sup> Public assets are efficiently used and public services and/or infrastructures are delivered with a final improved overall quality.<sup>62</sup> In addition, it is believed that a smart use of private sector's skills, expertise, funding, technology and innovation can support the achievement of high quality standards. Risk sharing at various stages of a project entails less risk of cost overruns and project's delays.<sup>63</sup>

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<sup>57</sup> X Q Zhang, M M Kumaraswamy, 'Hong Kong experience in managing BOT projects' [2001] *Journal of Construction Engineering and Management*, 154, 162. A Erridge, J Greer, 'Partnerships and public procurement: building social capital through supply relations' [2002] *Public Administration*, 503, 522. X Q Zhang, M M Kumaraswamy, W Zheng, E Palaneeswaran, 'Concessionaire selection for build-operate-transfer tunnel projects in Hong Kong' [2002] *Journal of Construction Engineering and Management*, 155, 163. X Q Zhang, 'Improving concessionaire selection protocols in public-private partnered infrastructure projects' [2004] *Journal of Construction Engineering and Management*, 670, 679. X Q Zhang, 'Concessionaire selection: methods and criteria' [2004] *Journal of Construction Engineering and Management*, 235, 244. T Ysa, 'Governance forms in urban public-private partnerships' [2007] *International Public Management Journal*, 35, 57.

<sup>58</sup> D Grimsey, M K Lewis, 'Evaluating the risks of public-private partnerships for infrastructure projects' [2002] *International Journal of project Management*, 107, 118. B Li, A Akintoye, P J Edwards, C Hardcastle, 'The allocation of risk in PPP/PFI construction projects in the UK' [2005] *International Journal of project Management*, 25, 35. L Y Shen, A Platten, X Deng, 'Role of public-private partnerships to manage risks in public sector projects in Hong Kong' [2006] *International Journal of project Management*, 587, 594.

<sup>59</sup> B Li, A Akintoye, P J Edwards, C Hardcastle, 'Critical success factors for PPP/PFI projects in the UK construction industry' [2005] *Construction Management and Economics*, 459, 47.

<sup>60</sup> A Saunders, 'Aspects of funding for BOO projects' [1998] *Engineering, Construction and Architectural Management* 22, 30. S R Norwood, N R Mansfield, 'Joint venture issues concerning European and Asian construction markets of the 1990's' [1999] *International Journal of Project Management*, 89, 93. A Akintoye, M Beck, C Hardcastle, 'Introduction: public-private partnerships in infrastructure development' in A Akintoye, M Beck, C Hardcastle (eds), *Public-private partnerships: managing Risks and Opportunities*, (Blackwell Science Ltd, 2003) xix-xxiv. A Akintoye, M Beck, C Hardcastle, 'Achieving best value in private finance initiative project procurement' [2003] *Construction Management and Economics*, 461, 470. Y L Huang, S P Chou, 'Valuation of the minimum revenue guarantee and the option to abandon in BOT infrastructure projects' [2006] *Construction Management and Economics*, 379, 389.

<sup>61</sup> D Cumming, 'Government policy towards entrepreneurial finance, Innovation investment funds' [2007] *Journal of Business Venturing*, 193, 235.

<sup>62</sup> A J Edkins, H J Smith, 'Contractual management in PPP projects: evaluation of legal versus relational contracting for service delivery' [2006] *Journal of Professional Issues in Engineering Education and Practice*, 82, 93.

<sup>63</sup> B Li, A Akintoye, 'An overview of Public-Private Partnerships' in A Akintoye, M Beck, C Hardcastle (eds), *Public-private partnerships: managing Risks and Opportunities*, *op. cit.*. S P Ho, 'Model for Financial renegotiation in Public-private partnerships projects and its policy implications: game theoretic view' [2006] *Journal of Construction Engineering and Management*, 678, 688.

Under this perspective, PPP cooperation arrangements present themselves as public service instruments.<sup>64</sup> By choosing the PPP option, States choose to externalise the provision of a public service and the PPP inherent risk-transfer mechanism allows them to act differently in the public sector's management, as enablers and facilitator agents. At the same time, the vital role of the private sector in the funding and provision of infrastructure or service - through its input in the different project's phases - requires a continuous relationship between the private and public actors. The use of PPPs as public service instruments affects also the legal configuration of risks' allocation between the public and the private parties. Different kinds of risks need, in fact, to be adequately considered and distributed:

- (i) the construction or project's risk, which is related to designing and building's costs overruns and/or to the project's delays;
- (ii) the financial risk that arises from the inconstancy of interest rates, exchange rates or other factors that distress financing costs;
- (iii) the performance risk, meaning the availability of an asset or the stability and quality of a certain service provided;
- (iv) the demand risk that refers to the on-going needs of the service provision and of end-users; and
- (v) the remaining risk value, which is related to the future market price of an asset or service provision.

Moreover, PPPs are conceived as investment instruments for the provision of public infrastructure and/or services. The funding schemes of projects delivered through PPPs can take different forms. It can be used as a stand-alone arrangement which means that the collected funding is intended specifically for the PPP project. Otherwise, a SPV may be used as a borrowing entity.<sup>65</sup> Thus, an independent legal subject is specifically established to collect and manage the necessary funds to carry out the project. Or else, it can use a high ratio of debt by means of gearing or leverage. In this case, the project company normally has the minimum equity necessary to issue debt at an adequate cost. Moreover, a funding scheme could entail private lending, which normally depends on the project's specific cash flow and not on corporate balance sheets. Furthermore, there may be different kinds of financial guarantees - generally limited to equity contributions - given to lenders by the private sector involved in the PPP. The public actor normally does not provide for financial guarantees. The latter allow lenders to receive their repayment from the project's income or directly from the public actor.<sup>66</sup>

Finally yet importantly, PPPs are - even if so far not sufficiently - considered as growth instruments. At international level, the UN announced its commitment to fill in the gap between the poorest countries and the industrialised ones by agreeing on the UN Millennium Declaration according to which its members are devoted to a new global partnership.<sup>67</sup> Remarkably, the stress

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<sup>64</sup> C H Bovis, 'Efficiency and Effectiveness in Public Sector Management: the Regulation of Public Markets and Public-Private Partnerships and its Impact on Contemporary Theories of Public Administration' [2013] EPPPL, 186, 199.

<sup>65</sup> In Europe, this is the case for IPPPs.

<sup>66</sup> Financial guarantees can cover the failure of the public partner to meet its obligations under a PPP.

<sup>67</sup> Please refer to the latest report on The Millennium Development Goals, 2015, available at [http://www.un.org/millenniumgoals/2015\\_MDG\\_Report/pdf/MDG%202015%20rev%20\(July%201\).pdf](http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20(July%201).pdf).

has been put on the potential of PPPs in attaining the United Nations Millennium Development Goals.<sup>68</sup> At the European level, there is an emblematic initiative for growth, the so-called 2020 Growth Strategy<sup>69</sup> that motivated the European Council to approve several measures aiming at increasing investment, for instance, in the infrastructure of the Trans-European Transport Networks (TENs),<sup>70</sup> as well as in research, innovation, development and delivery of services of general economic interest.<sup>71</sup> In this respect, the PPP phenomenon is about providing incentives and attracting resources in an environment which naturally does not call for them, but that without them would not be capable of delivering goods or services. Under this perspective, it is believed that including a private interest in a public context, and/or *vice versa*, can be an effective way to create better opportunities, carry out and facilitate effective, innovative and sustainable projects.

#### **4. Public-Private Partnerships' Legal Background.**

##### **4.1. International Level: best practices.**

At supra-national level, the PPPs' legal background mainly consists of best practices. The term best practices refers to a set of guidelines, techniques, methodologies, ethics or ideas that, through experience and research, have proven to be the most efficient or the prudent course of action in order to achieve a desired result. A commitment to use best practices in any field is a commitment to use all the knowledge and technology at one's disposal to ensure the success of a certain asset. Best practices are normally laid down by international and/or non-governmental organizations and can be defined as soft law, non or quasi-legal instruments. This because they do not have legally binding force.

Best practices in the field of PPPs' arose with the spread of globalisation. Internationally active organisations<sup>72</sup> were looking for a uniform set of standards of construction, business and management practice, especially for large investment projects, independent of countries and governments. Clearly defined, well-known and globally agreed upon best practices can recognise standards capable of reducing project's costs developing a predictable legal and business environment for the global construction and business industry. Thus, the creation of best practices in the PPPs' context emerged with the need of relying on international business standards, commercial relationships and professional communities with the additional aim of spreading ideas, networking, gathering and exchanging valuable contacts. It is within this picture that international

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<sup>68</sup> The eight Millennium Development Goals - which range from fighting extreme poverty to blocking the spread of HIV and globally provide primary education - form a plan agreed by all the world's countries and world's leading development institutions. As already mentioned, world leaders gathered on September 25, 2015, at the United Nations in New York to adopt the 2030 Agenda for Sustainable Development agreed upon by 193 countries. The 2030 Agenda set out 17 new Sustainable Development Goals or Global Goals, which will guide policy and funding for the next 15 years. The objective was to lay down a set of universally applicable goals that balanced the three dimensions of sustainable development: environmental, social, and economic. The Global Goals replace the Millennium Development Goals.

<sup>69</sup> Communication from the Commission, Europe 2020, A strategy for smart, sustainable and inclusive growth, European Commission, Brussels, 3.3.2010, COM (2010) 2020 final, 21.

<sup>70</sup> Details available at [http://ec.europa.eu/transport/themes/infrastructure/index\\_en.htm](http://ec.europa.eu/transport/themes/infrastructure/index_en.htm).

<sup>71</sup> C H Bovis, 'Efficiency and Effectiveness in Public Sector Management: the Regulation of Public Markets and Public-Private Partnerships and its Impact on Contemporary Theories of Public Administration' [2013] EPPPL, 186, 199.

<sup>72</sup> It is noteworthy to highlight that such organizations are mainly Multilateral Development Banks. For instance, The World Bank, European Bank for Reconstruction and Development, the Inter-American Development Bank, the African Development Bank, the Islamic Development Bank.

organizations began to lay down guidebooks,<sup>73</sup> guidelines<sup>74</sup> and standardised contracts<sup>75</sup> in order to improve the awareness, capacity and skills of the public and private sectors in the development of successful PPP projects.

With regard to best practices models, it is worthwhile mentioning that the United Nations Commission on International Trade Law (hereinafter UNICITRAL) adopted the UNICITRAL Legislative Guide to Privately Financed Infrastructure Projects<sup>76</sup> in 2001 and the UNICITRAL Model Legislative Provisions on Privately Financed Infrastructure Projects<sup>77</sup> in 2003. At an international level, these documents provide an important legal reference framework when engaging in PPP projects. The Legislative Guide to Privately Financed Infrastructure Projects includes seventy-one recommended legislative principles that aim at supporting the creation of a PPP legislative framework. Explanatory notes, including an analytical description of the financial, regulatory, general legal and policy issues relevant to the PPP field, follow these recommendations. The Guide aims at providing reliable data in order to support the drafting of national PPP laws and regulations. Two years later, the Model Legislative Provisions on Privately Financed Infrastructure Projects rewrote the advice of the Legislative Guide to Privately Financed Infrastructure Projects in legislative terms laying down fifty-one provisions. The Legislative Guide to Privately Financed Infrastructure Projects and the Model Legislative Provisions on Privately Financed Infrastructure Projects highly affected the drafting of following best practices elaborated by international organizations: the Bank for Reconstruction and Development's Core Principles of 2006<sup>78</sup> and the Recommendation of the Council on Principles for Public Governance of Public-Private Partnerships of 2012.<sup>79</sup>

Moreover, PPP-related educational and training materials, conferences and workshops were prepared.<sup>80</sup> In addition, networks and centres of excellence in the PPP field began to be established in order to implement work programmes on PPPs.<sup>81</sup> Expert Centres were set up all around the world to identify excellence, elaborate best practices' guides and assist governments in building their capabilities to develop successful PPP schemes. Expert Centres' main tasks normally include the conducting of research within a certain PPP sector, the dissemination of PPPs' best practices in that sector, the development of sector specific capability and growth strategies for governments and the

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<sup>73</sup> For instance, the Guidebook on Public-Private Partnership in Infrastructure, Economic and Social Commission for Asia and the Pacific, 2011, available at [http://www.unescap.org/sites/default/files/ppp\\_guidebook.pdf](http://www.unescap.org/sites/default/files/ppp_guidebook.pdf).

<sup>74</sup> See, for instance, the PPIRC, World Bank guidelines available at <http://ppp.worldbank.org/public-private-partnership/overview/practical-tools/procurement-bidding/standardized-guidelines>. The PPIRC provides sample PPP agreements and concessions, checklists and sample clauses, terms of reference, risk matrices, standard bidding documents developed by government agencies and sample PPP and sector legislation and regulation. These were designed for government officials, project managers and lawyers involved in PPP projects in developing countries. They provide international experience and precedents to help the development of well-functioning PPPs.

<sup>75</sup> As in the case of FIDIC which laid down the most common form of model contracts used in large construction projects. FIDIC is the International Federation of Consulting Engineers. Its members are national associations of consulting engineers.

<sup>76</sup> Available at <https://www.uncitral.org/pdf/english/texts/procurem/pfip/guide/pfip-e.pdf>.

<sup>77</sup> Available at [https://www.uncitral.org/pdf/english/texts/procurem/pfip/model/03-90621\\_Ebook.pdf](https://www.uncitral.org/pdf/english/texts/procurem/pfip/model/03-90621_Ebook.pdf).

<sup>78</sup> Available at <http://www.ebrd.com/downloads/legal/concessions/coreprin.pdf>.

<sup>79</sup> Available at <http://www.oecd.org/governance/budgeting/PPP-Recommendation.pdf>.

<sup>80</sup> For instance, refer to the United Nations Economic Commission for Europe, Guidebook on Promoting Good Governance in Public-Private Partnerships, New York and Geneva, 2008, available at <https://www.unece.org/fileadmin/DAM/ceci/publications/ppp.pdf>.

<sup>81</sup> As a way of example, the Committee on Innovation, Competitiveness and Public-Private Partnerships may be mentioned. It was specifically established in order to promote a policy, financial and regulatory environment leading to economic growth, innovative development and higher competitiveness, focusing mainly on countries with economies in transition. More details are available at <http://www.unece.org/eci.html>.

provision of specialised training on PPP schemes. In fulfilling these tasks, a large number of expert Centres are supported by a coordinating hub at the United Nations Economic Commission for Europe Secretariat.<sup>82</sup> The latter provides assistance in some of the most important PPP sectors. Furthermore, it established an International PPP Centre of Excellence in order to support governments in the structuring of effective PPPs, addressing many of the most demanding problems.<sup>83</sup> These embrace the issue of greening the economy and the effects of climate change. Moreover, the aim of this Centre is to discover which PPP scheme constitutes an effective model and have the most beneficial impact on development. Along the same lines, the European Investment Bank, the European Commission, EU Member States and candidate countries created the European PPP Expertise Centre.<sup>84</sup> The main objective of this Centre is again to enhance the public sector's skills when involved in PPP arrangements, thereby allowing EU Member States' PPP taskforces to share the knowledge gained in the PPPs' field. Remarkably, the Centre has recently published an interesting work entitled *The Guide to Guidance*.<sup>85</sup> This guide highlights the best worldwide available guidelines on the implementation of PPP arrangements and seeks to support the public sector in the use of PPPs by easing the understanding of the related key issues and procedures involved in procurement goods and/or services through PPPs.

## **4.2. European Level.**

### **4.2.1 The absence of a uniform regulation: PPPs governed by the Treaty principles and EU public contracts and concessions law.**

At a European level, there is no uniform regulation of PPPs. However, this does not mean that there are no general principles capable of integrating the regulation of each legal category falling within the notion of PPPs. There are the Treaty principles,<sup>86</sup> which form - at European level - the first and main regulating legal framework of the PPP phenomenon.<sup>87</sup> Even if of a general nature, the Treaty principles govern PPPs by adapting themselves to their distinctive features. They are, in fact, fundamental values and criteria that characterize and integrate a still missing uniform PPP regulation.

The same EU Institutions that highlighted the absence of a uniform regulation of PPPs indicated, as a logical consequence, that the PPP phenomenon, and in particular each legal category falling within the PPP notion, is subject to EU law.<sup>88</sup> EU Institutions specifically recalled the fundamental criterion under which any act, unilateral or bilateral,<sup>89</sup> through which a contracting authority 'entrusts the provision of an economic activity to a third party must be examined in the

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<sup>82</sup> UNECE stands for United Nations Economic Commission for Europe. The latter created a Secretariat aimed at supporting national expert centres. Further details are available at <http://www.unece.org/index.php?id=32394>.

<sup>83</sup> Further data is available at

<http://www.unece.org/ceci-welcome/areas-of-work/public-private-partnerships-ppp/icoeppp.html>.

<sup>84</sup> Further details are available at <http://www.eib.org/epec/>.

<sup>85</sup> The Guide is of 2011 and it is available at <http://www.eib.org/epec/resources/guide-to-guidance-en.pdf>.

<sup>86</sup> Reference is made to the EC Treaty. Footnotes will indicate the respective TFEU provisions.

<sup>87</sup> Specifically, the principles of freedom of establishment and of service provision and, more generally, all those ensuring the principle of free competition. See the Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final, point 8. See also below Chapter II, paragraph 4.2.2..

<sup>88</sup> See below Chapter II, par. 4.2.1..

<sup>89</sup> See note 52 of the Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final.

light of the rules and principles resulting from the Treaty.<sup>90</sup> This criterion defines the applicability of EU law and - with regard to PPPs - represents the first and general relevant applicable principle. Thus, whenever a legal category falls within the PPP *genus* and implies entrusting to a private operator an economic activity, the Treaty principles and provisions do apply.

EU Institutions also specified that ‘under Community law, public authorities are free to pursue economic activities themselves or to assign them to third parties, such as mixed capital entities founded in the context of a PPP. However, if public bodies decide to involve third parties in economic activities and if this involvement qualifies as a public contract or a concession, the Community provisions for public procurement and concessions must be complied with.’<sup>91</sup> Reference is made to what is usually called EU public contracts and concessions law, which consists of the principles of the Treaty, and in certain cases, of the provisions of the Directives on the coordination of awarding procedures.<sup>92</sup> In this regard, it was highlighted that - by recalling the CJEU case law on in-house providing<sup>93</sup> - ‘the fact that a private party and a contracting entity cooperate within a public-private entity, cannot serve as justification for the contracting entity not having to comply with the legal provisions on public contracts and concessions.’<sup>94</sup>

Before delving into each Treaty principle relevant in the field of public-private collaborations, it is worthwhile mentioning the existence of a particular cross-reference relationship between the principles and the provisions of the Treaty and between each principle. The following extracts show how this cross-reference relationship works. The chosen extracts come from the Commission’s Interpretative Communication on the Application of Community Law on Public Procurement and Concessions to Institutionalised PPP,<sup>95</sup> the Green Paper<sup>96</sup> and the CJEU judgement in *Sea S.r.l. v Comune di Ponte Nossa*.<sup>97</sup> They state that:

A. *‘in the field of public procurement and concessions, the principle of equal treatment and the specific expressions of that principle, namely the prohibition of discrimination on the grounds of nationality and Articles 43 EC on freedom of establishment and 49 EC on freedom to provide services, are to be applied in cases where a public authority entrusts the supply of economic activities to a third party. More specifically, the principles arising from Article 43 EC and Article 49 EC include not only non-discrimination*

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<sup>90</sup> See point 8 and note 7 of the Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final.

<sup>91</sup> Par. 1 of the Commission Interpretative Communication on the application of Community law on Public Procurement and Concessions to Institutionalised Public-Private Partnerships (IPPP), Brussels, 05.02.2008, C (2007) 6661.

<sup>92</sup> See point 57 of the Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final. See also par. 2.1 of the Commission Interpretative Communication on the application of Community law on Public Procurement and Concessions to Institutionalised Public-Private Partnerships (IPPP), Brussels, 05.02.2008, C (2007) 6661.

<sup>93</sup> Para 49, C-26/03, *Stadt Halle*, ECR [2005], I-1. Paragraphs 30 et ss., C-410/04, *ANAV*, ECR [2006], I-3303.

<sup>94</sup> Par. 2.1 of the Commission Interpretative Communication on the application of Community law on Public Procurement and Concessions to Institutionalised Public-Private Partnerships (IPPP), Brussels, 05.02.2008, C (2007) 6661.

<sup>95</sup> *Ibid.*

<sup>96</sup> Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final.

<sup>97</sup> Points 37 and 40, C-573/07, *Sea Srl v Comune di Ponte Nossa*, 2009 I-08127.

*and equality of treatment, but also transparency, mutual recognition and proportionality.*<sup>98</sup>

B. *'the provisions on freedom of establishment require compliance with the principles of transparency and equality of treatment'*<sup>99</sup>

C. *'That case-law is relevant for the interpretation of both Directive 2004/18 and Articles 12 EC, 43 EC, and 49 EC, and also of the general principles of which the latter are the specific expression.'*<sup>100</sup>

Extracts A. and B. show that Articles 18, 49 and 56 of the TFEU are 'specific expressions' of one (equal treatment, extract A) or more principles (extract C), but at the same time that they 'include' (extract A) - in the sense that they appear to be sources of - other principles (e.g. principles of transparency, mutual recognition and proportionality). Thus, the relationship between the Treaty principles and provisions can be defined as bi-directional, meaning from the principles to the provisions and from the provisions to the principles.<sup>101</sup> With regard to the relationship between principles, in extract A., the principle of freedom of establishment is considered as a 'specific expression' of the principle of equal treatment. In extract B., the provisions on freedom of establishment impose the respect of the principle of equal treatment. Hence, also the relationship between principles could be conceived as bi-directional, meaning from the principle *a* to the principle *b*, and from the latter to the former. The mentioned bi-directionality shows the tight connection between all the elements forming the general legal framework of the PPP category. Both if the principles are expressly mentioned in the Treaty or if they are implicitly inferable from - as a pre-requisite or a result of - its provisions.

#### **4.2.2 The Treaty principles.**

This paragraph provides an overview of the relevant Treaty principles in the field of PPPs.<sup>102</sup> First of all, the principle of free competition has to be mentioned (Articles 101 et ss. TFEU). In public contracts and concessions law, this principle implies that the awarding - in the case of PPPs, the selection of the private partner - must be carried out through a competitive procedure. According to the CJEU case law, specific provisions and other principles of the Treaty safeguard this principle. For instance, 'it follows from Article 106, para 1, TFEU, that Member States must not maintain in force national legislation which permits the award of public service concessions without their being

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<sup>98</sup> Paragraph 2.1 of the Commission interpretative communication on the application of Community law on Public Procurement and Concessions to institutionalised PPP (IPPP) (2008/C 91/02).

<sup>99</sup> Point 68 of the Green paper on public-private partnerships and community law on public contracts and concessions, Brussels, 30.4.2004 COM (2004) 327 final.

<sup>100</sup> Point 37, C-573/07, C-573/07, *Sea Srl v Comune di Ponte Nossa*, [2009] I-08127.

<sup>101</sup> In this respect, see G Scialoja, 'Le dinamiche collaborative tra pubblico e privato ed i principi generali di riferimento' in F Mastragostino (ed), *La collaborazione pubblico-privato e l'ordinamento amministrativo, Dinamiche e modelli di partenariato in base alle recenti riforme* (Giappichelli, 2011) 28.

<sup>102</sup> In this respect, among others, C H Bovis, *EU public procurement law* (Edward Elgar, 2007). R Caranta, 'The Borders of EU Public Procurement Law' in R Caranta, D Dragos (eds), *Outside the EU Procurement Directives - Inside the Treaty?* (DJØF, 2012) 25 et ss.. Sue Arrowsmith, *The Law of Public and Utilities Procurement: Regulation in the EU and UK*, op. cit.. C Risvig Hamer, *Contracts not covered or not fully covered by the Public Sector Directive* (DJØF, 2012). - A Semple, *A Practical Guide to Public Procurement*, (Oxford University Press, 2015) 35 et ss..

put out to competition, since such an award infringes Articles 49 and 56 TFEU or the principles of equal treatment, non-discrimination and transparency.<sup>103</sup> The logical primacy of the principle of free competition that arises out this statement ends up giving relevance to the meaning and implication of other principles.

Among the latter, there are the principles of equal treatment and of non-discrimination upon nationality (Articles 18, but also 49 and 56<sup>104</sup> TFEU). These principles are often mentioned together in the CJEU's case law<sup>105</sup> and secondary EU law.<sup>106</sup> Sometimes they are considered as interchangeable notions,<sup>107</sup> at other times - and in certain fields - they are distinctively considered, but still linked to each other. For instance, in the context of public procurement, the principle of non-discrimination is mentioned with regard to the formulation of award criteria. Instead, the principle of equal treatment is referred to when explaining the application of the said award criteria.<sup>108</sup> The principle of non-discrimination presents itself as a specific expression of the principle of equality (in the sense of prohibition of different treatment for identical situations and identical treatment of different situations).<sup>109</sup> Therefore, there is the possibility of a wider application of the principle of equal treatment with respect to the principle of non-discrimination (e.g. equality of treatment of operators also of the same nationality).<sup>110</sup> Anyway, these principles are both characterised by the aim of guaranteeing 'competition within the internal market' (Article 101, TFEU). From the CJEU application of the principle of equal treatment in the field of public contracts (in particular when stating the need to have offers that comply with tender conditions in order to allow a comparison between them<sup>111</sup>) it is possible to state that - along the same lines as that held by the Commission with regard to concessions in EU law<sup>112</sup> - in the field of PPPs the principle of equal treatment requires that the selection of the private partner must be carried out in compliance with the procedural rules and requirements initially established.<sup>113</sup> In any case, the selection must be carried out upon objective criteria. Moreover, the potential technical improvements proposed by tenderers - based on the solutions originally foreseen by the contracting authority - cannot concern the essential elements of the project. If, initially, the public sector did not

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<sup>103</sup> Point 50, C C-196/08, *Acoset SpA v Conferenza Sindaci e Presidenza Prov. Reg. ATO Idrico Ragusa and Others*, [2009] I-09913. Point 23, C-410/04, *ANAV v Comune di Bari and AMTAB Servizio SpA*, [2006] I-03303. Points 51 et ss., C-458/03, *Parking Brixen GmbH v Gemeinde Brixen and Stadtwerke Brixen AG*, [2005] I-08585.

<sup>104</sup> Articles 49 and 56 are considered by the CJEU expression of the principle of equal treatment. In this regard, see C-330/91, *The Queen v Inland Revenue Commissioners, ex parte Commerzbank AG*, [1993] I-04017.

<sup>105</sup> For instance, see point 32, C-454/06, *Pressetext Nachrichtenagentur GmbH v Republik Österreich (Bund)*, [2008] I-04401. Point 39, C-573/07, *Sea Srl v Comune di Ponte Nossola*, [2009] I-08127.

<sup>106</sup> For instance, Article 2 of Directive 2004/18/EC of the European parliament and of the council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts.

<sup>107</sup> See, by way of example, C-422/02 P, *Europe Chemi-Con (Deutschland) GmbH v Council of the European Union*, [2005] I-00791, where the principle of equal treatment is also called of non-discrimination.

<sup>108</sup> In this regard see A Massera, 'I Principi Generali' in M P Chiti, G Corso (eds), *Trattato di Diritto Amministrativo Europeo* (Giuffrè, 2007) 339.

<sup>109</sup> Point 16, C-810/79, *Peter Überschär v Bundesversicherungsanstalt für Angestellte*, [1980] I-02747. See also A Massera, 'I Principi Generali' *op. cit.*, 341.

<sup>110</sup> Point 20, C-410/04, *ANAV v Comune di Bari and AMTAB Servizio SpA*, [2006] I-03303. Point 48, C-196/08, *Acoset SpA v Conferenza Sindaci e Presidenza Prov. Reg. ATO Idrico Ragusa and Others*, [2009] I-09913.

<sup>111</sup> Point 37, C-243/89, *Commission of the European Communities v Kingdom of Denmark*, [1993] I-03353.

<sup>112</sup> Commission Interpretative Communication on Concessions under Community Law (2000/C 121/02) para 3.1.1.. This Communication is explicitly referred to by the Commission Interpretative Communication on the application of Community law on Public Procurement and Concessions to Institutionalised Public-Private Partnerships (IPPP), Brussels, 05.02.2008, C (2007) 6661, para 2.1, note 10.

<sup>113</sup> See below paragraph 4.2.4.1. on public contracts' award procedures and relevant 2014 innovations.

specifically define its technical needs, any tenderer must have the possibility to propose different technical solutions.<sup>114</sup>

Furthermore, the principles of transparency<sup>115</sup> and publicity<sup>116</sup> derive from the principles of equal treatment and of non-discrimination. The relationship between these two principles is structured upon logical implications: the ‘obligation of transparency [...] consists in ensuring, for the benefit of any potential tenderer, a degree of advertising sufficient to enable the services market to be opened up to competition and the impartiality of procurement procedures to be reviewed.’<sup>117</sup> A specific application of the principle of transparency concerns tender documents. For instance, in the context of IPPPs, the principle of transparency entails the clear indication of the optional renewals or modifications of the public contract or concession initially awarded to an entity publicly and privately held.<sup>118</sup>

Other relevant principles in the field of PPPs are the principles of mutual recognition and proportionality.<sup>119</sup> The former principle<sup>120</sup> applies with regard to the free movement of goods, people and services and, in general terms, expresses Member States’ obligation to allow goods and services, legally produced and marketed in other Member States, to circulate and be placed on their markets.<sup>121</sup> In the field of PPPs, the principle of mutual recognition requires Member States to consider meeting the requirements (e.g. technical specifications, titles, qualifications) that they expect from the potential private partner, to the extent that such requirements are recognized as equivalent according to the law of the country of origin of the concerned operator.<sup>122</sup> The principle of proportionality requires that public authorities’ actions, such as the imposition of obligations or restrictions on a bidder’s freedom, have to be adequate and necessary in relation to the public interest’s objectives pursued.<sup>123</sup> In the PPP context, the principle of proportionality prohibits contracting authorities from requiring - during the private partner selection - technical, professional

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<sup>114</sup> Commission Interpretative Communication on Concessions under Community Law (2000/C 121/02 para 3.1.1..

<sup>115</sup> Para 2.3.5. of the Commission Interpretative Communication on the application of Community law on Public Procurement and Concessions to Institutionalised Public-Private Partnerships (IPPP), Brussels, 05.02.2008, C (2007) 6661. See also point 49, C-458/03, *Parking Brixen GmbH v Gemeinde Brixen and Stadtwerke Brixen AG*, [2005] I-08585.

<sup>116</sup> Point 39, C-573/07, *Sea Srl v Comune di Ponte Nossa*, [2009] I-08127. Point 32, C-454/06, *Pressetext Nachrichtenagentur GmbH v Republik Österreich (Bund)*, [2008] I-04401. See also M P Chiti, ‘I Principi’ in M A Sandulli, R De Nictolis, R Garofoli (eds), *Trattato sui contratti pubblici* (Giuffrè, 2008) 164.

<sup>117</sup> Point 62, C-324/98, *Telaustria Verlags GmbH and Telefonadress GmbH v Telekom Austria AG*, [2000] I-10745. See also point 21, C-410/04, *ANAV v Comune di Bari and AMTAB Servizio SpA*, [2006] I-03303. Point 49, C-196/08, *Acoset SpA v Conferenza Sindaci e Presidenza Prov. Reg. ATO Idrico Ragusa and Others*, [2009] I-09913. The said statement comes from point 29 of the Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final. Point 49, C-458/03, *Parking Brixen GmbH v Gemeinde Brixen and Stadtwerke Brixen AG*, [2005] I-08585.

<sup>118</sup> Para 2.3.5 of the Commission Interpretative Communication on the application of Community law on Public Procurement and Concessions to Institutionalised Public-Private Partnerships (IPPP), Brussels, 05.02.2008, C (2007) 6661.

<sup>119</sup> Para 3.1.4 of the Commission Interpretative Communication on Concessions under Community Law (2000/C 121/02).

<sup>120</sup> For an analysis on the principle, see G Tesauro, *Diritto dell’Unione Europea*, (6th ed, Cedam, 2010) 438 et ss..

<sup>121</sup> The principle of free movement of goods was stated by the CJEU in C-120/78, *Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein*, [1979] 00649. The principle of freedom of establishment was stated in C-340/89, *Irène Vlassopoulou v Ministerium für Justiz, Bundes- und Europaangelegenheiten Baden-Württemberg*, [1991] I-02357. The principle of free movement of services was stated in C-76/90, *Manfred Säger v Dennemeyer & Co. Ltd.*, [1991] I-04221.

<sup>122</sup> Commission Interpretative Communication on Concessions under Community Law (2000/C 121/02) para 3.1.4..

<sup>123</sup> M P Chiti, ‘I Principi’ in M A Sandulli, R De Nictolis, R Garofoli (eds), *Trattato sui contratti pubblici* (Giuffrè, 2008) 163.

or financial skills not proportionate to the object of the partnership. At the same time, whenever a PPP leads to a long lasting relationship, the principle of proportionality requires that its duration does not restrict or distort competition more than what is needed in order to allow the identified private operator to recover its investments and obtain a reasonable remuneration.<sup>124</sup>

An effective synthesis of how the Treaty principles generally work can be found in the following extract. ‘The rules resulting from the relevant provisions of the Treaty can be summed up in the following obligations: fixing of the rules applicable to the selection of the private partner, adequate advertising of the intention to award a concession and of the rules governing the selection in order to be able to monitor impartiality throughout the procedure, introduction of genuine competition between operators with a potential interest and/or who can guarantee completion of the tasks in question, compliance with the principle of equality of treatment of all participants throughout the procedure, selection on the basis of objective, non-discriminatory criteria.’<sup>125</sup>

To conclude, it can be recalled a general reference criterion pertaining, not to the PPP category as a whole, but to only one of its types, the IPPP. It is a concrete application of the fundamental principle of free competition and it is understood - in PPP terms - as a principle of competitive procedure. It is the principle related to the need to avoid a double tender. It offers an answer to the issue of whether or not it is necessary to carry out a tender procedure for the award of a public contract or concession to a jointly held company, when the contracting authority has already selected the private partner through a competitive procedure. The Commission Interpretative Communication on IPPPs provided a practical solution to the issue by stating that there has to be one unique competitive procedure with two objectives. On the one hand, the public contract or concession to award and, on the other hand, the private partner’s operational contribution to the project in relation to the performance of the tasks of the jointly held company, or even just its contribution to the management of the entity.<sup>126</sup> The Advocate General’s conclusion in the *Acoset* case - sharing the Commission’s view - showed that the choice of the private partner is carried out ‘indirectly through the selection of the industrial participant.’<sup>127</sup> The CJEU set out a clear point on the issue by stating that if a ‘private participant [...] is selected by means of a public and open procedure after verification of the financial, technical, operational and management requirements specific to the service to be performed and of the characteristics of the tender with regard to the service to be delivered, provided that the tendering procedure in question is consistent with the principles of free competition, transparency and equal treatment laid down by the Treaty with regard to concessions,’ EU law<sup>128</sup> ‘does not preclude the direct award’ of a public service to a jointly held company specifically established ‘for the purpose of providing that service and possessing a single corporate purpose.’<sup>129</sup> The central point of the CJEU reasoning is the following. If the selection criteria refer not only to its capital contribution, but also to its technical skills and to

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<sup>124</sup> In this regard see for instance, para 3.1.3 of the Commission Interpretative Communication on Concessions under Community Law (2000/C 121/02).

<sup>125</sup> Point 30 of the Green Paper on Public-Private Partnerships and Community Law on Public Contracts and Concessions, Brussels, 30.4.2004 COM (2004) 327 final.

<sup>126</sup> Para 2.2 of the Commission Interpretative Communication on the application of Community law on Public Procurement and Concessions to Institutionalised Public-Private Partnerships (IPPP), Brussels, 05.02.2008, C (2007) 6661.

<sup>127</sup> Point 89 of the Opinion of the Advocate General Ruiz-Jarabo Colomer delivered on June 2, 2009 1(1) in C-196/08, *Acoset SpA v Conferenza Sindaci e Presidenza Prov. Reg. ATO Idrico Ragusa and Others*, [2009] I-09913.

<sup>128</sup> Specifically, Articles 49, 56 and 106 TFEU.

<sup>129</sup> Point 63, C-196/08, *Acoset SpA v Conferenza Sindaci e Presidenza Prov. Reg. ATO Idrico Ragusa and Others*, [2009] I-09913.

the characteristics of its tender - and the private operator is entrusted with the operation of the service in question - 'the selection of the concessionaire can be regarded as an indirect result of the selection of that participant.'<sup>130</sup> Therefore, it is the application of the principle of free competition - referred to the private party's selection - that allows a direct awarding of a service to a jointly held company. Thus, whenever the object of a public and open procedure covers also the private operator's characteristics - as it is the party to whom the operational activity of the jointly held company is entrusted - the choice of the partner also logically and legally implies the choice of the mixed entity to which the operational activity is formally awarded.

#### **4.2.3 EU Soft Law: Interpretative Communications, Resolutions and Green Papers.**

EU soft law builds on the assumption that there is no uniform regulation of the PPP phenomenon. Specifically, the Commission's 2004 Green Paper<sup>131</sup> indicates that 'Community law does not lay down any special rules covering the PPP category'.<sup>132</sup> Moreover, the Commission in its Communication of 2005 acknowledged that the consultations following the 2004 Green Paper showed 'stakeholder opposition to a regulatory regime covering all contractual PPPs.' In addition, and consequently, the Commission stated that it did 'not envisage making them subject to identical award arrangements.'<sup>133</sup> Then, the European Parliament in its 2006 Resolution held that it opposed 'the creation of a separate legal regime for PPPs.'<sup>134</sup> Eventually, the Commission, in its Interpretative Communication of 2008 reaffirmed that 'at Community level there are no specific rules governing the founding of IPPP.'<sup>135</sup>

Notwithstanding the above, the legal background of PPPs was defined and developed by, *inter alia*, an intense elaboration undertaken by the European Commission. The latter, in fact, enacted a large number of non-binding legal instruments in the field of PPPs.<sup>136</sup> Pursuant to the Commission's view,<sup>137</sup> the PPP phenomenon should reflect each Member State's experience, acknowledging that the public sector has abandoned its intervening role and is now an actor,

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<sup>130</sup> Point 60, C-196/08, *Acoset SpA v Conferenza Sindaci e Presidenza Prov. Reg. ATO Idrico Ragusa and Others*, [2009] I-09913.

<sup>131</sup> Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final.

<sup>132</sup> Point 8 of the Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final.

<sup>133</sup> Para 2.3.1. of the Communication from the Commission to the European parliament, the council, the European economic and social committee and the committee of the regions on Public-Private Partnerships and Community Law on Public Procurement and Concessions, Brussels, 15.11.2005 COM(2005) 569 final.

<sup>134</sup> Point 2 of the European Parliament Resolution on Public-Private Partnerships and Community law on Public Procurement and Concessions (2006/2043(INI)).

<sup>135</sup> Para 2.1. of the Commission Interpretative Communication on the application of Community law on Public Procurement and Concessions to Institutionalised Public-Private Partnerships (IPPP), Brussels, 05.02.2008, C (2007) 6661.

<sup>136</sup> For instance, see Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final. Communication from the Commission to the European parliament, the council, the European economic and social committee and the committee of the regions on Public-Private Partnerships and Community Law on Public Procurement and Concessions, Brussels, 15.11.2005 COM (2005) 569 final. Commission Interpretative Communication on the application of Community law on Public Procurement and Concessions to Institutionalised Public-Private Partnerships (IPPP), Brussels, 05.02.2008, C (2007) 6661. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 'Mobilizing private and public investment for recovery and long-term structural change: developing Public Private Partnerships', Brussels, 19.11.2009, COM (2009) 615 final.

<sup>137</sup> Initially laid down in the mentioned Green Paper on Public-Private Partnerships and Community law on Public Contracts and Concessions, COM (2004) 327 final.

organizer and controller. The Commission held that the choice for a public-private cooperation scheme should be justified upon ascertained micro-economic advantages and that the peculiar contractual relationship between the public partner and the private operator should be structured in order not to elude public policies of financial restriction.<sup>138</sup> Moreover, the Commission considered it important to preserve the differences between PPPs and other legal categories not falling within this notion. Furthermore, the Commission highlighted that, in case of IPPPs, critical aspects concern their compatibility with EU public contracts law - specifically with regard to selection criteria - the ways of entrustment of the relevant activity and the principles guiding its execution.<sup>139</sup>

As indicated above, these issues have been analysed by the same Commission in its Communication of 2008.<sup>140</sup> In this document, the EU's executive body stated that the private actor has to participate to the activity carried out by the jointly held entity, not by merely providing funds, but by actively participating in the execution of the entity's functions or management. Moreover, the Commission held that the private partner must be selected through a procedure that focuses both on the contract and on the active participation of the private partner in the execution and management of the entity. Otherwise, a second tender procedure would be needed for the award of the concession.

Considering the current state of the art and, specifically, the numerous legal categories falling within the PPP category, the above-mentioned European Institutions' positions do not seem to be that questionable. What should instead be questioned is whether or not there is a need for a uniform EU regulation of PPPs. The Commission's negative answer was given because of (i) the specificities of each legal category falling within the broad notion of PPPs and (ii) the need to encourage the creation of new legal categories of PPPs, in accordance with the on-going socio-economic developments. A different question is also whether certain legal categories falling within the PPP umbrella should or should not be regulated by specific EU law regulation.<sup>141</sup>

#### **4.2.4 EU Directives.**

The EU Directives in the field of public contracts do not provide for a specific regulation of PPPs.<sup>142</sup> Nonetheless, PPP arrangements do fall within the scope of the EU public procurement Directives<sup>143</sup> as they represent a particular category<sup>144</sup> of public contracts.<sup>144</sup> In fact, and as it has been

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<sup>138</sup> As recalled also in the Communication from the Commission to the European parliament, the council, the European economic and social committee and the committee of the regions on Public-Private Partnerships and Community Law on Public Procurement and Concessions, Brussels, 15.11.2005 COM (2005) 569 final.

<sup>139</sup> Points 53 et ss. of the Green Paper on Public-Private Partnerships and Community law on public contracts and concessions, COM (2004) 327 final.

<sup>140</sup> Commission Interpretative Communication on the application of Community law on Public Procurement and Concessions to Institutionalised Public-Private Partnerships (IPPP), Brussels, 05.02.2008, C (2007) 6661.

<sup>141</sup> As it happened with concession contracts that have been regulated by Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the award of concession contracts. See below Chapter II, paragraph 4.2.4.2..

<sup>142</sup> See European Parliament Resolution on Public-Private Partnerships and Community law on Public Procurement and Concessions (2006/2043(INI)) where it is stated that there is no intention to create a legal regime specific for PPPs (point 2 of the General Observations).

<sup>143</sup> Which today are the following. Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC. Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC. Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the award of concession contracts. In this respect see, *inter alia*, M Burnett, 'The New

mentioned before, public authorities can carry out economic activities on their own or assign them to third parties, including recurring to PPP schemes. Whenever they decide to include third parties in the provision of public services and/or infrastructure - and this inclusion takes the shape of either a public contract or a concession - then EU public contracts and concessions law applies. The latter guarantees to all interested economic operators the right to tender for public contracts and concessions in an equal and transparent way. In this way, reducing projects' costs through greater competition while, at the same time, promoting the functioning of the Internal Market.

Thus, PPPs fall within the scope of EU public procurement Directives. However, no Directive specifically regulates such a legal category. Hence, different rules apply according to the PPP scheme chosen and implemented. In the case of PPPs taking the form of concessions, there is a specific Directive dedicated to these legal options. On March 28, 2014, a new Directive, 2014/23/EU,<sup>145</sup> on the award of concession contracts was published in the Official Journal of the European Union (hereinafter OJEU), as part of a legislative package reforming EU procurement rules.<sup>146</sup> PPPs taking, instead, other legal forms have to be awarded according to the full EU public procurement regime. The identification and application of the right and/or adequate procedural procurement rule is, however, not always straightforward. This is because of the complexity of PPP projects, the long-term nature of these contracts, the length and related high costs of bidding and award procedures. In addition, in PPPs, *consortia* generally submit bids and private funding involves banks and funds in the procurement process. These elements increase the complexity of the whole arrangement and lead to a number of difficulties that may range from costs complaints to unexpected delays and legal uncertainties on how to carry out PPPs under EU public contracts rules. As of today, in the EU, many practical difficulties have been overcome through the day-to-day practice, the increased standardisation of contract-terms for certain PPPs models and a more harmonised approach to this kind of contracting. Nonetheless, the use of PPPs still remains quite complex, with a large potential for legal mistakes in terms of costs and delays.

Before 2004, the legal regime governing public contracts' awards - generally defined by EU public procurement Directives - was considered not adequate for PPPs.<sup>147</sup> Specifically, it was believed that the traditional open and restricted procedures were not flexible enough, but also that - as the European Commission held - the more flexible negotiated procedure with notice was not available for many PPP contracts.<sup>148</sup> Hence, in 2004 a new procedure was created, the competitive dialogue procedure. The latter was introduced by the so-called public sector Directive<sup>149</sup> which was the public contracts' fundamental Directive providing for a method of contract awarding. Today,

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European Directive on the Award of Concession Contracts, Promoting Value for Money in PPP Contracts?' [2014] EPPPL, 86, 103.

<sup>144</sup> J Kitsos, 'Construction Investments in Public Works through Public Private Partnerships' [2014] EPPPL, 202, 208.

<sup>145</sup> The deadline for its transposition by EU Member States into national law was April 18, 2016.

<sup>146</sup> On the same day, Directives 2014/24/EU and 2014/25/EU, relating to procurement by public sector contracting authorities and utilities entities replacing the EU procurement directives of 2004, were also published.

<sup>147</sup> See for instance, S Arrowsmith, 'The European Procurement Rules and Public-Private Partnerships: EU Policies in Conflict?' [2000] CML Rev, 709. P Braun, 'Strict Compliance versus Commercial Reality: the Practical application of EC Public Procurement Law to the UK's Private Finance Initiative' [2003] ELJ 575. P Braun, 'Selection of Bidders and Contract Award Criteria: the Compatibility of Practice in PFI Procurement with European Law' [2001] PPLR 1.

<sup>148</sup> See, among others, S Arrowsmith, *The Law of Public and Utilities Procurement, Regulation in the EU and UK* (Sweet & Maxwell, 2014).

<sup>149</sup> Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts, Official Journal L 134, 30/04/2004, 0114, 0240.

the 2014 Directive on public procurement repealed the 2004 public sector Directive.<sup>150</sup> The exact content and relevance of this Directive for PPPs will be now discussed.

#### **4.2.4.1 Public contracts' award procedures and relevant 2014 changes: general overview.**

The use of specific procedures for the award of public contracts characterizes the procurement regulated under the EU Directives.<sup>151</sup> Coordination of procedures under the Directives aims at harmonizing the different national and organizational practices. The 2014 reform of the public procurement legislative regime introduced two new procedures<sup>152</sup> and a certain number of changes to the five existing ones.<sup>153</sup> The declared intention was to streamline procedures and provide greater flexibility for both contracting authorities and economic operators.<sup>154</sup> For PPP contracts, both objectives are potentially beneficial. On the one hand, smoother procedures may counteract the complexity of PPP contracts encouraging the awarding of such arrangements. On the other hand, a higher degree of flexibility throughout the process may allow the award of better functioning PPP contracts. This paragraph will provide an overview of the reformed public contracts' award procedures<sup>155</sup> with a highlight on their relevance and suitability for PPP contracts' awards.

Following the 2014 reform, contracting authorities may resort to any of the procurement procedures indicated in the Table below, provided that the conditions for their application are met. The choice of the most adequate procedure is a central and strategic question for the public sector.

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<sup>150</sup> Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on Public Procurement and repealing Directive 2004/18/EC Text with EEA relevance [2014] OJ L 94 (Directive 2014/24/EU). On December 2011 the European Commission published proposals to revise and update the public sector and utilities Directives (2004/18/EC and 2004/17/EC respectively) along with a proposed new directive on the award of concession contracts. Following negotiations between Member States, three new texts were agreed upon and came into force on April 2014. Member States had to transpose them into their national legal systems within 24 months from that date. The new EU rules provide for a more modern, flexible and commercial approach compared to the previous regime. New aspects have been introduced to consolidate and modernize public procurement. Contracting authorities should be now able to run procurement procedures faster, with more focus on getting the right supplier and best tender. For suppliers, the tender process should be quicker, less costly, and less bureaucratic, allowing them to compete more effectively.

<sup>151</sup> Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC. Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC. Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the award of concession contracts.

<sup>152</sup> The competitive procedure with negotiation and the innovation partnership procedure.

<sup>153</sup> Namely, the open and restricted procedures, the competitive dialogue procedure, the negotiated procedure without prior publication and design contest.

<sup>154</sup> Under the 2014 Directives, for the first time, Member States had to transpose into their domestic legislation all procedures, with the exclusion of the negotiated procedure without prior publication.

<sup>155</sup> As set out in the 2014 Directives.

Procedure	Public sectors' limitation on use	Limitation on use (Utilities)
Open	None	None
Restricted	None	None
Competitive procedure with negotiation	Must justify	None
Competitive dialogue	Must justify	None
Innovation partnership	None <sup>i</sup>	None <sup>i</sup>
Negotiated procedure without prior publication	Exceptional	Exceptional
Design contest	None	None

<sup>i</sup> There are no explicit restrictions on innovation partnerships. However, such a procedure can be used when contracting authorities' needs cannot be satisfied by solutions already present on the market (Article 31 of Directive 2014/24/EU, Article 49 of Directive 2014/25/EU).

Table 2  
Procedures available.

As it will be seen, the new competitive procedure with negotiation and the competitive dialogue appear to be the most suitable procedures for the award of PPP contracts. In fact, the justification grounds for the use of such procedures - especially conditions (iii) and (iv) mentioned below - normally arise frequently in the context of PPPs. Article 26, Directive 2014/24/EU, specifically states that contracting authorities can turn to either procedure if one of the alternative conditions below are satisfied.<sup>156</sup>

- ‘(i) the needs of the contracting authority cannot be met without adaptation of readily available solutions; or
- (ii) they include design or innovative solutions; or
- (iii) the contract cannot be awarded without prior negotiations because of specific circumstances related to the nature, the complexity or the legal and financial make-up or because of the risks attaching to them; or
- (iv) the technical specifications cannot be established with sufficient precision by the contracting authority with reference to a standard, European Technical Assessment,<sup>157</sup> common technical specification or technical reference within the meaning of points 2 to 5 of Annex VII; or
- (v) in response to an open or a restricted procedure, only irregular or unacceptable tenders are submitted.’<sup>158</sup>

<sup>156</sup> See, J Davey, ‘Procedures Involving Negotiation in the New Public Procurement Directive: Key Reforms to Grounds of Use and the Procedural Rules’ [2014] PPLR 103, 111. M Burnett, ‘The New Rules for Competitive Dialogue and the Competitive Procedure with Negotiation in Directive 2014/24 - What Might They Mean for PPP?’ [2015] EPPPL, 62, 71.

<sup>157</sup> The European Technical Assessment is a document providing for information about the performance of a construction product, to be declared in relation to its essential characteristics. In this respect, see the Construction Products Regulation (EU) No 305/2011.

<sup>158</sup> The Directives provide examples of what may represent an irregular or unacceptable tender, e.g. tenders which do not comply with the procurement documents or which are received late. If only irregular or unacceptable tenders are submitted, the contracting authority can enter into negotiations/dialogue without publishing a further notice only (i) with bidders who have met the exclusion and selection criteria of the original procedure, and their tenders are ‘in

### **a) Pre-procurement.**

EU Directives do not specifically regulate pre-procurement. Nonetheless, it is worthwhile mentioning it because of its potential beneficial impact in the award of PPP contracts: market engagement at an earlier stage, which allows more focused and effective procedures. Procedures, specifications and award criteria promise to be better identified with a prior and deeper understanding of market capacity. Moreover, through pre-procurement, private operators have the possibility to plan ahead the beginning of formal competitions. Thus, pre-procurement could be highly beneficial for the award of PPP contracts. The latter, in fact, need the identification of the best technical specifications and award criteria according to the specific project that has to be delivered, which could be effectively defined during the pre-procurement phase where an effective market engagement took place. As of today, pre-procurement has the potential of expanding its importance. Most procedures have, in fact, to be carried out within tight time limits and full procurement documents have to be published at the beginning of procedures.<sup>159</sup> Thus, pre-procurement could be used to prepare in advance for formal competitions. Clearly, pre-procurement positive benefits highly depend on the public sector's ability to manage such a phase and on the willingness of private operators to take advantage of it. Critical aspects are related to the possible unfair advantages that private operators, participating in the pre-procurement phase, may enjoy. Article 41, Directive 2014/24/EU, specifically considers this possibility.<sup>160</sup> If the involvement of a private operator in a pre-procurement phase distorts competition, and there is no other measure that can guarantee equal treatment among participants, than that economic operator will be excluded from the competition.<sup>161</sup> Therefore, pre-procurement promises to be useful in cases of first-time procurements or innovative or complex contracts, such as PPPs. Anyway, it has to be considered that the value of this phase may be hindered by a poor coordination within the public sector and the exclusion of pre-procurement from the Directives.<sup>162</sup>

### **b) Open Procedure.**

The open procedure allows any interested operator to submit a tender without having to prove in advance its capability. The existence of exclusion grounds - financial, professional and technical

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accordance with the formal requirements of the tender procedure; and (ii) if it invites them all to participate. It is not clear if a new competition has to be carried out in cases where only tenderers which submitted their offers late or which did not somehow comply with the procurement documents were submitted. See P Telles, Luke R A Butler, 'Public Award Procedures in Directive 2014/24/EU' in F Lichère, R Caranta, S Treumer (eds), *Modernising Public Procurement: the New Directive*, (DJØF, 2014) 131.

<sup>159</sup> In this respect, see Article 53, Directive 2014/24/EU.

<sup>160</sup> As a result of certain CJEU cases in which the issue of exclusion of such tenderers arose. See, C-21/03 and C-34/03, *Fabricom SA v Belgian State*, [2005] I-01559 and case T-345/03, *Evropaiki Dynamiki v Commission*, [2008] II-00341.

<sup>161</sup> There is anyway provided a right of objection to such exclusion. An alternative means could be sharing information (exchanged during the pre-procurement phase) and allowing a proportionate amount of time to all tenderers to modify accordingly their submissions. Another pre-procurement aspect - relevant in the context of PPPs' awarding - is the confidentiality issue and information disclosure. Data indicated as confidential by economic operators or contracting authorities should not be revealed, being this anyway subject to national legislation on access to information and to all the specific disclosure requirements set out in the Directives. For instance, the obligation to notify candidates and tenderers of the evaluation results and the publication of contracts' award notices. See Article 21, Directive 2014/24/EU, Article 39, Directive 2014/25/EU and Article 28, Directive 2014/23/EU. The latter Article also provides that confidentiality 'shall not prevent public disclosure of non-confidential parts of concluded contracts, including any subsequent changes'.

<sup>162</sup> In this respect, see A Semple, *A Practical Guide to Public Procurement* (Oxford University Press, 2015) 72.

‘eligibility’ of tenderers - can, in fact, be assessed after the substantive evaluation of tenders against contract award criteria.<sup>163</sup> The specific order and the way in which tenders are evaluated varies. The precise structure of the procedure normally varies according to the number of bids submitted and the nature of the evaluation criteria. Usually, a large number of tenders are received and assessed. However, these are submitted for low average contract values. Thus, the open procedure does not represent a suitable awarding procedure for PPP contracts being, instead, adequate for the procurement of low value and straightforward goods and services.

### **c) Restricted procedure.**

The restricted procedure entails a discrete selection phase that allows a larger control over the dimension and nature of the competition. Candidates are selected and evaluated upon qualitative criteria. Selection criteria are weighed and scored.<sup>164</sup> Then, normally a minimum of five candidates are invited to tender.<sup>165</sup> Following the 2014 reform, upon publication of the notice, full procurement documents have to be electronically available. This is in order to promote transparency of tender procedures and limit costs related to submissions of expressions of interest, which end up being not relevant after a deeper investigation.<sup>166</sup> However, given the improved flexibility and higher availability of other multi-phase procedures,<sup>167</sup> it is expected that the frequency with which the restricted procedure will be used - especially for the award of long term and complex contracts such as PPPs - will be low.

### **d) Competitive Procedure with Negotiation.**

The competitive procedure with negotiation (hereinafter CPN) represents, together with the revised competitive dialogue, the most suitable procedure for the award of PPP contracts. The CPN replaces the negotiated procedure with prior publication<sup>168</sup> and its main characteristic<sup>169</sup> is its increased accessibility for contracting authorities. In fact, the 2014 reform mitigated the doubts surrounding the possibility for the public sector to negotiate contracts, which is a crucially important aspect especially in the award of PPPs, given their legal, technical and financial complexity. In the CPN, negotiations take place only at certain and specific stages. The Table below shows how the CPN is structured.

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<sup>163</sup> Article 56, para 2, Directive 2014/24/EU and Article 76, para 7, Directive 2014/25/EU. Member States may decide to limit this option when implementing the Directives.

<sup>164</sup> In the open procedure eligibility can be instead assessed on a pass or fail basis. Article 65, Directive 2014/24/EU.

<sup>165</sup> See, P Telles, Luke R A Butler, ‘Public Award Procedures in Directive 2014/24/EU’, *op. cit.*, 140. The minimum number of candidates that will be invited to tender is indicated in the contract notice. This indication is anyway subject to the availability of a sufficient number of adequate candidates. There is also the possibility to indicate a maximum number. However, if there are two or more candidates that obtain the same score after the qualitative selection, all of them are invited to tender unless an objective and non-discriminatory selective rule for such event was previously set out. Short time periods are also envisaged.

<sup>166</sup> However, this change was not explicitly acknowledged in the recitals to the Directives. See, A Semple, *A Practical Guide to Public Procurement*, *op. cit.*, 74.

<sup>167</sup> Competitive dialogue and competitive procedure with negotiation.

<sup>168</sup> The negotiated procedure with prior publication still applies in the utilities sector. See, T Kotsonis, ‘The 2014 Utilities Directive of the EU: Codification, Flexibilisation and Other Misdemeanours’ [2014] PPLR, 174.

<sup>169</sup> That differentiates such a procedure from the old negotiated procedure. See J Davey, ‘Procedures Involving Negotiation in the New Public Procurement Directive: Key Reforms to Grounds of Use and the Procedural Rules’, *op. cit.*, 103.

<b>1. Selection phase</b>	a. Call for tender and publication of documents (including award criteria, specifications and minimum requirements).	b. Selection of operators upon selection criteria. (minimum of 3, unless fewer qualified candidates).
<b>2. Tender phase</b>	a. Invitation to tender and submission of one or more series of tenders and negotiations. Possibility to award the contract without negotiations.	b. Optional reduction of tenderers (through the application of award criteria).
<b>3. Award phase</b>	a. Notification of conclusion of negotiations to tenderers. Identification of the deadline for the submission of the final tenders.	b. Evaluation of the final tenders according to the award criteria. Confirmation of the eligibility and award of the contract without additional negotiations.

Table 3  
Competitive procedure with negotiation.

The CPN differs from the competitive dialogue mainly because the contracting authority sets out, before the invitation to tender, its requirements and specifications, upon which negotiations will later take place.<sup>170</sup> As it will be seen, in the competitive dialogue, descriptive documents may indicate only the public sector's needs without identifying the nature or features of the solutions to be offered. The latter are progressively identified. Therefore, it is believed that the CPN represents an appropriate procedure whenever innovative or complex needs have to be dealt with, such as in the case of PPP arrangements. It may also be useful when there are specific commercial or technical characteristics, which are difficult to obtain without a dialogue with tenderers.<sup>171</sup> In addition, as provided by Article 26, para 4, (iii), Directive 2014/24/EU, the use of the CPN may be justified in 'circumstances related to the nature, the complexity or the legal and financial make-up or because of the risks attaching to them', which is the typical context within which PPP contracts are awarded.

Overall, the CPN procedural rules laid down in Directive 2014/24/EU differ considerably from those applicable to the negotiated procedure with notice set out in Article 30, Directive 2004/18/EC. The main rules provided by Article 29, Directive 2014/24/EU, can be summarized as follows.

- In the CPN, any private operator can respond to a call for competition by providing the information requested for the qualitative selection. In the procurement documents, the contracting authority defines the subject matter of the procurement, describing its needs, requirements and award criteria. This information must allow private operators to understand the nature, scope of the procurement and decide whether to participate or not.

<sup>170</sup> Article 29, para 1, Directive 2014/24/EU.

<sup>171</sup> However, the CPN does not entail the same level of relationship with the preferred tenderer as the competitive dialogue does. For instance, the competitive dialogue allows the definition and optimization of the final tender. See J Davey, 'Procedures Involving Negotiation in the New Public Procurement Directive: Key Reforms to Grounds of Use and the Procedural Rules', *op. cit.*, 107.

- Economic operators invited (after the evaluation of the submitted information) can present an initial tender. The following negotiations are based on such tender.<sup>172</sup>
- Unless otherwise provided in para 4, contracting authorities have to negotiate initial and all following tenders to refine their content, with the exception of final tenders according to para 7. Minimum requirements and award criteria cannot be negotiated. If specified in the contract notice or invitation to confirm interest, contracting authorities can award contracts based on initial tenders, without carrying out any negotiation.
- Contracting authorities have to guarantee - while negotiating - equal treatment of tenderers. With this aim, they cannot offer information in a discriminatory way.<sup>173</sup> They must inform non-excluded tenderers in writing of any modification of technical specifications or other procurement documents (with the exclusions of changes on minimum requirements).<sup>174</sup>
- CPN may be carried out in successive phases in order to limit the number of tenders to be negotiated (through the application of the award criteria indicated in the contract notice).<sup>175</sup>
- The conclusion of negotiations must be communicated to the remaining tenderers.<sup>176</sup> The contracting authority controls the compliance of final tenders with the minimum requirements. Then it verifies the conformity with Article 56, para 1, evaluates the final tenders against the award criteria and awards the contract, as provided by Articles 66 to 69.

#### e) Competitive dialogue.

The competitive dialogue was introduced in 2004 for the public sector as an alternative to the restricted and negotiated procedure with prior publication specifically for the award of complex contracts involving, for instance, an element of private finance, as in the case of PPPs.<sup>177</sup> Its use can, in fact, be justified in circumstances of ‘particularly complex contracts’.<sup>178</sup> Key feature of the

<sup>172</sup> Contracting authorities can reduce the number of participants in accordance with Article 65.

<sup>173</sup> See, P Telles, L Butler, ‘Public Award Procedures in Directive 2014/24/EU’, *op. cit.*, 147. Both the CPN and the competitive dialogue stress the need to guarantee equal treatment of tenderers and availability of information among bidders in non-discriminatory way. As already mentioned, the latter aspect is subject to the confidentiality requirements set out in the 2014 Directives allowing limited possibilities for the public sector or private operator to refuse disclosure of information even if indicated as confidential. Article 21, Directive 2014/24/EU, Article 39, Directive 2014/25/EU and Article 28, Directive 2014/23/EU.

<sup>174</sup> In such a case, contracting authorities have to foresee an adequate amount of time for the non-excluded tenderers to change and re-submit their tenders accordingly. See M Burnett, ‘The New Rules for Competitive Dialogue and the Competitive Procedure with Negotiation in Directive 2014/24 - What Might They Mean for PPP?’, *op. cit.*, 66, 67.

<sup>175</sup> The contracting authority has to state in advance whether it will do so. See Article 29, para 6, Directive 2014/24/EU and A Semple, *A Practical Guide to Public Procurement*, *op. cit.*, 75.

<sup>176</sup> In addition, the contracting authority indicates when any new or modified tenders can be submitted. See P Telles, Luke R A Butler, ‘Public Award Procedures in Directive 2014/24/EU’, *op. cit.*, 153.

<sup>177</sup> In this respect, see point 26, Green Paper on Public-Private Partnerships and Community Law on Public Contracts and Concessions Brussels, 30.4.2004 COM (2004) 327 final. ‘The competitive dialogue procedure should provide the necessary flexibility in the discussions with the candidates on all aspects of the contract during the set-up phase, while ensuring that these discussions are conducted in compliance with the principles of transparency and equality of treatment, and do not endanger the rights which the Treaty confers on economic operators.’ The competitive dialogue is today foreseen also in the utilities Directive. Formally, the competitive dialogue was not envisaged in the old utilities Directive 2004/17/EC. There was no provision for the competitive dialogue. Nonetheless, contracting authorities could use it as a kind of negotiated procedure, which they could - and still can - apply without justification. Contracting authorities could unrestrictedly use the negotiated procedure with a prior call for competition. Article 1, para 9, letter c) and Article 40, Directive 2004/17/EC. See, T Kotsonis, ‘The 2014 Utilities Directive of the EU: Codification, Flexibilisation and Other Misdemeanours’, *op. cit.*, 175.

<sup>178</sup> 24 Member States implemented this procedure. The UK and France are the two countries that advertised the majority of competitive dialogues in the OJEU between 2006 and 2011. See A Semple, *A Practical Guide to Public*

competitive dialogue is the possibility to engage in effective rounds of dialogue with candidates prior to the preferred tenderer stage, and to do so in a structured way.<sup>179</sup> It is a procedure that lies somehow between pure negotiations and the limitations of the open and restricted procedures. In general terms, it keeps alive a competitive tension while technical and commercial features of a tender are formulated. The value of contracts awarded through the competitive dialogue procedure is normally high if compared to contracts' value awarded via open and restricted procedures. Among the 2014 changes, the possibility to 'fine-tune' tenders<sup>180</sup> was replaced with the ability to 'optimize' them. This was most likely done with the aim of creating greater flexibility.<sup>181</sup> Criticalities of the procedure may be related to its potential misuse and long duration.<sup>182</sup> Thus, skills, time and resource commitment are important for the competitive dialogue to work effectively. It is too soon to predict the impact on its use after the 2014 introduction of two new procedures.<sup>183</sup> Nonetheless, even if the competitive dialogue does not represent anymore the exceptional procedure through which greater engagement with tenderers is allowed, it still offers an important balance between negotiation and structured competition. At the most, it allows contracting authorities to clarify their requirements after targeted interactions with potential contractors. In this regard, following the 2014 Directives, negotiations with the preferred bidder can now be carried out in order to:

'confirm financial commitments or other terms contained in the tender by finalising the terms of the contract provided this does not have the effect of materially modifying essential aspects of the tender or of the public procurement, including the needs and requirements set out in the contract notice or in the descriptive document and does not risk distorting competition or causing discrimination.'<sup>184</sup>

This provision takes into consideration the possibility that not all aspects of a tender may be agreed upon during the dialogue. Thus, it aims at rendering the procedure more effective by being closer to the reality of public procurement. As it was already provided, contracts awarded with the competitive dialogue have to consider qualitative aspects as part of award criteria and, hence, cannot be awarded based on only the lowest price or cost. In addition, at least 3 candidates must be

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*Procurement, op. cit.*, 77. In the UK, the competitive dialogue is highly used because of the low rate application of the negotiated procedure compared to other Member States and the greater use of large scale out-sourcing and private finance initiative contracts. Also in the Netherlands, the competitive dialogue procedure is highly applied. In this latter respect see, M Nagelkerke, J Muntz-Beekhuis, 'Competitive Dialogue in the Netherlands' in S Arrowsmith, S. Treumer (eds), *Competitive Dialogue in EU Procurement*, (Cambridge University Press, 2012) 491, 526.

<sup>179</sup> See below Table 4.

<sup>180</sup> Several authors studied and explored the competitive dialogue and, particularly, the somehow ambiguous provision of Article 29, Directive 2004/18/EC within which tenders could be 'clarified, specified and fine-tuned' after their submission, only if this did not 'involve changes to the basic features of the tender or the call for tender'. See, among others, S Arrowsmith, S Treumer, *Competitive Dialogue in EU Procurement*, (Cambridge University Press, 2012) and C Kennedy-Loest, 'What can be done at the Preferred Bidder Stage in Competitive Dialogue?' [2006] PPLR 316.

<sup>181</sup> It is not clear whether tenders may be downgraded or merely upgraded. Some authors, considered 'optimize' as a term implying more flexibility than 'fine-tune'. See T Kotsonis, 'The 2014 Utilities Directive of the EU: Codification, Flexibilisation and Other Misdemeanours', *op. cit.*, 176.

<sup>182</sup> With regard to the duration of the competitive dialogue, it is now mandatory to have an 'indicative timeline' in the notice or tender documents. However, it is still uncertain whether this requirement refers to the dialogue or the contract. See A Semple, *A Practical Guide to Public Procurement, op. cit.*, 76.

<sup>183</sup> The CPN and the innovation partnership.

<sup>184</sup> Article 30, para 7, Directive 2014/24/EU.

invited to the dialogue and the number invited to deliver final tenders has to create ‘genuine competition in so far as there are enough tenders, solutions or qualified candidates’. By referring to the award criteria set out at the begging of the procedure - in the procurement documents - the number of tenders to be negotiated, or solutions to be discussed, can be reduced.<sup>185</sup> The Table below shows how the procedure is structured.

<b>1. Selection phase</b>	a. Call for competition and publication of detailed documents identifying needs and award criteria, indicative time line.	b. Selection of operators upon selection criteria. (minimum of 3 unless fewer qualified candidates).	
<b>2. Tender phase</b>	a. One or more rounds of tender submissions and dialogue with the selected candidates.	b. Optional reduction of number of tenderers applying award criteria.	c. End of dialogues, deadline for final tenders.
<b>3. Award phase</b>	a. Definition, specification and optimization of tenders.	b. Evaluation and selection of the preferred tenderer.	c. Optional negotiations with the preferred tenderer to confirm financial and other commitments leading to the award of the contract.

Table 4  
Competitive dialogue procedure.

The most relevant changes of Article 30, Directive 2014/24/EU, to the procedural rules set out in Article 29, Directive 2004/18/EC, can be identified as follows.

- Article 30, para 1, provides as an award basis the ‘best price-quality ratio’. Directive 2004/18/EC, instead, indicated the ‘most economically advantageous tender’. This change reflects the definition of Article 67, para 2, Directive 2014/24/EU.
- Article 30, para 2, states that contracting authorities should foresee an indicative time line for the award procedure.
- Article 30, para 3, states that any agreement on the sharing of solutions or confidential information may not ‘take the form of a general waiver but shall be given with reference to the intended communication of specific information’.<sup>186</sup>
- Article 30, para 6, states that tenders can be ‘clarified, specified and optimised’ by contracting authorities. Article 29, para 6, Directive 2004/18/EC, instead, used the words ‘clarified, specified and fine-tuned’.
- ‘Negotiations’, ‘financial commitments’, ‘finalising the term of the contract’ and ‘materially modifying’, represent probably the most relevant - especially with respect to the award of PPP contracts - changes of Article 30 if compared to Article 29, para 7, Directive 2004/18/EC. The term ‘negotiations’ replaced the previous wording

<sup>185</sup> Article 66, Directive 2014/24/EU.

<sup>186</sup> This provision promises to have an important impact in the award of PPP contracts. See M Burnett, ‘The New European Directive on the Award of Concession Contracts, Promoting Value for Money in PPP Contracts?’, *op. cit.*, 67.

‘clarifying aspects of the tender or confirming commitments’. Moreover, specifically mentioned are now ‘financial commitments’. The scope of the negotiation is then indicated as the need to finalize the contract. In addition, the objective of negotiations in Article 30, para 7, is qualified by referring to ‘material modification’, instead, of ‘modification’.<sup>187</sup>

Overall, the new provisions of the competitive dialogue and the CPN increased the suitability of such procedures for the award of PPP contracts. This is mainly because contracting authorities can now count on wider justification grounds for the use of such multi-phase and flexible procedures. For instance, for the use of either procedure:

- a contract no longer has to be ‘particularly complex’, as it was envisaged by Directive 2004/18/EC, and
- there is no reference to ‘exceptional cases’, as in the negotiated procedure with notice.

Moreover, Directive 2014/24/EU does not illustrate the conditions that justify the use of the competitive dialogue and the CPN. Specifically,

- the meaning of a ‘readily available solution’,
- the extent to which a solution has to be ‘innovative’,
- what aspects or degree of complexity or risks have to be considered, and
- to what extent the condition on ‘technical specifications’ that ‘cannot be established with sufficient precision by the contracting authority’ must be interpreted.

Recital 43, Directive 2014/24/EU, foresees only one limit: ‘in respect of off-the-shelf services or supplies that can be provided by many different operators on the market, the competitive procedure with negotiation and competitive dialogue should not be used.’ Therefore, it is believed that after the transposition of the 2014 Directives, PPP contracts will keep being awarded through the competitive dialogue. The CPN is also expected to have a high degree of application. In this regard, it will have to be considered whether the lack of procedural rules under Directive 2014/23/EU will have an impact on the awarding of PPP contracts.<sup>188</sup> In other words, it remains to be seen whether

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<sup>187</sup> Article 29, para 7, Directive 2004/18/EC. Especially the modifications set out in Article 30, paras 6 and 7, Directive 2014/24/EU, are likely to positively support the use of such a procedure for the award of long-term, high value and complex contracts such as PPPs. *Ibid*, 68.

<sup>188</sup> On Directive 2014/23/EU see below, para 4.2.4.2. In brief, according to Directive 2014/23/EU, contracting authorities are free to organise the procedure as they prefer. There are few procedural rules. There is no indication on whether the award procedure should be carried out in one or more phases. Selection criteria, and the kind of evidence that should support them, are not defined. Article 38 only states that participation conditions have to be included in the concession notice and must allow the performance, by the economic operator, of the concession. Participation conditions must refer to the professional, technical and economic capability of the private party. Evidence for qualification criteria has to be based on ‘self-declarations’ and ‘references’. The award criteria are not identified. Article 41 merely states that they have to be objective and compliant with the principles of transparency, non-discrimination, equality of treatment and proportionality. In addition, awarding criteria must confirm the recognition of the economic advantage for the contracting authority. They have to relate to the subject-matter of the concession, they cannot guarantee to the contracting authority an unlimited discretionary power of choice and can cover environmental, social or innovative criteria. The order of importance of award criteria is not set, but has to be indicated. It can be changed if there are tender submissions entailing innovative solutions with an unforeseeable and exceptional level of performance.

this will lead to increased legal challenges that will hinder - in the long term - the award of PPPs, which take the form of concessions.

**f) Innovation Partnership.**

In general, contracts for research and development services are excluded from the scope of the Directives. There is an exception for the case in which benefits of this kind of services are reserved exclusively to the public sector, which also entirely pays for them.<sup>189</sup> Nevertheless, this exception does not cover the purchase on a commercial scale of the resulting goods or services. In order to fill in this gap the innovation partnership was introduced. The objective of an innovation partnership is the development and following acquisition of innovative products, services or works ‘provided that they correspond to the performance levels and maximum costs agreed between the contracting authorities and the participants’.<sup>190</sup> Thus, the innovation partnership covers the early research and development phases and the final purchase on a commercial scale. Such a procedure allows the public sector to implement research and development activity benefits - publicly funded or co-financed - in its own operations. The innovation partnership differs from the other procedures because it can end with the award of a contract to either one or more economic operators. Thus, it can be considered as an application of the CPN aiming at creating a partnership with one or several partners. However, the innovation partnership can count on additional rules on structure and contracts’ stages. Partnerships must be progressively structured, with halfway targets and payments through instalments. Selection criteria have to deal with participants’ ability in the research and development field.<sup>191</sup> The actual procedure differs from the Commissions’ original scheme. It is more flexible as it eliminated the requirement of guaranteeing an ‘adequate profit’ for the private operator.<sup>192</sup> The Table below shows how the innovation partnership procedure may present itself.

<b>1. Selection phase</b>	a. Call for competition and publication of descriptive documents. Submission of requests to participate in response to contract notice.	b. Negotiations with candidates, which may take place in successive stages. Selection of candidates particularly by applying criteria concerning candidates’ capacities in the fields of research and development and implementation of innovative solutions.
<b>2. Tender phase</b>	a. The economic operators invited by the contracting authority submit research and innovation projects.	

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See M Burnett, ‘The New European Directive on the Award of Concession Contracts, Promoting Value for Money in PPP Contracts?’ [2014] EPPPL, 86, 103.

<sup>189</sup> Article 14, Directive 2014/24/EU and Article 32, Directive 2014/25/EU.

<sup>190</sup> Article 31, para 2, Directive 2014/24/EU.

<sup>191</sup> Procurement documents must cover intellectual property arrangements and the various activities to be carried out for the development of innovative solutions. In this respect, it can be difficult to foresee appropriate requirements and select adequate partners at the beginning of the procedure. See P Cerqueira Gomes, ‘The Innovative Innovation Partnerships Under the 2014 Public Procurement Directive’ [2014] PPLR, 211, 218.

<sup>192</sup> Proposal for a Directive of the European Parliament and of the Council on Public Procurement, Brussels, 20.12.2011, COM (2011) 896 final, 2011/0438 (COD) 60. In addition, the aim was to avoid as much as possible potential State aid implications.

<b>3. Award phase</b>	<p>a. Award of the contract to one or more economic operators.</p> <p>b. Definition of the structure of the partnership in phases reflecting the degree of innovation of the proposed solution and the sequence of the research and innovation activities required for the development of the innovative solution.</p>
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Table 5  
Innovation partnership procedure.

The innovation partnership could be used as an adequate awarding procedure for PPP contracts. It is, in fact, suitable in cases of long-term projects, which include the possibility of eventual commercial acquisitions. Moreover, innovation partnerships are structured in order to reduce some of the risks related to innovation procurement through a progressive interaction with suppliers and the possibility of terminating one or more contracts at the end of each stage. As of today, with a potential positive benefit for PPP arrangements, Horizon 2020 and other EU projects are supporting the public sector's innovation procurement in different sectors, e.g. health, construction, IT services and equipment.<sup>193</sup>

**g) Negotiated Procedure without Prior Publication.**

The negotiated procedure without prior publication of a notice can be used by contracting authorities only in exceptional cases, which do not usually occur in the context of PPPs' awards. For instance, Article 32, Directive 2014/24/EU, sets out that the use of such a procedure may be justified in cases of 'extreme urgency brought about by events unforeseeable by the contracting authority.'<sup>194</sup> It can be also used if 'no tenders or no suitable tenders or no requests to participate or no suitable requests to participate have been submitted in response to an open procedure or a restricted procedure'.<sup>195</sup>

**h) Design Contests.**

A design contest allows the identification by a jury of a winning plan and/or design, after a competition. Design contests are usually used in the architecture field. However, following the 2014 reform, they can also cover engineering, data processing or 'financial engineering' plans.<sup>196</sup> Design

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<sup>193</sup> Initiatives and programmes can be found at <https://ec.europa.eu/programmes/horizon2020/>.

<sup>194</sup> Article 32, para 2, let. c), Directive 2014/24/EU.

<sup>195</sup> Article 32, para 2, let. a), Directive 2014/24/EU. A tender is considered unsuitable if it is 'irrelevant to the contract, being manifestly incapable, without substantial changes, of meeting the contracting authority's needs and requirements as specified in the procurement documents'. Article 32, para 2, let. a), second period, Directive 2014/24/EU. Article 32, para 3, let. b), Directive 2014/24/EU, provides for similar circumstances compared to those already foreseen in Article 31, para 2, let. b) and para 4, Directive 2014/18/EC. The possibility of awarding additional services or works (essential because of unforeseen events and up to 50% of the original contract value) has been instead eliminated.

<sup>196</sup> Recital 120, Directive 2014/24/EU. Reference is made to the development of EU funded SME support programmes. In this respect, see, M Trybus, 'The Promotion of Small and Medium Sized Enterprises in Public Procurement: a Strategic Objective of the New Public Sector Directive?' in F Lichère, R Caranta, S Treumer (eds), *Modernising Public Procurement: the New Directive*, (DJØF, 2014) 255.

contests can be used as a preliminary phase before the awarding of a public service contract and/or the award of prizes or payments to competitors. A specific notice details the procedure to be followed, the selection, award criteria and whether the contracting authority is bound by the jury's decision. Article 80, Directive 2014/24/EU, states that procedures can be tailored to the needs of each contest. If there is a selection phase, selection criteria have to be clear, non-discriminatory and the identified number of participants must be sufficient to allow competition.<sup>197</sup> There is little space for redefinition of plans when discussing with contestants. Therefore, design contests are usually not appropriate for the award of PPP contracts being, instead, suitable for projects where the value and quality of plans can be easily evaluated upon initial submissions. In the case of public contracts that include a complex design, the competitive dialogue procedure, the innovation partnership or the CPN may be more adequate. The Table below shows how the design contest procedure may present itself.

<b>1. First stage</b>	a. Contracting authorities that intend to carry out a design contest express their intention by means of a contest notice.	b. Candidates submit requests to participate in response to the contest notice. Selection of candidates.
<b>2. Second Stage</b>	a. Selected economic operators submit their plans or designs.	b. Examination of the jury of plans and designs submitted.
<b>3. Third Stage</b>	a. Identification of the winning plan or design.	b. Notification of the results of the contest.

Table 6  
Design contest procedure.

#### 4.2.4.2 The 2014 Concessions Directive.

As mentioned, the 2014/23/EU Directive (or Concessions Directive) is particularly important for PPP schemes as concession contracts are one of the main legal types through which PPPs may take form. This paragraph provides a general overview of the essential reasons that led to the enactment of the 2014 Concessions Directive<sup>198</sup> in order to then highlight its essential characteristics.

It has to be preliminarily recalled that concessions are characterised by the way through which concessionaires recover their costs and profits. The supplier, or better the concessionaire, obtains a reward for the investment made in the construction of infrastructure or in the provision of a service

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<sup>197</sup> Members of the jury are independent and act independently in their decisions and assessments. In case there is a member of a certain profession who must compete, a least a third of the jury has to be of that profession. Moreover, during evaluation, contestants are anonymous and the jury records its assessments, comments or clarifications. See A Semple, *A Practical Guide to Public Procurement*, *op. cit.*, 84.

<sup>198</sup> Directive 2014/23/EU. Persuasive reasons were put forward for a legislative initiative on concessions. These were, mainly, the need to assure greater legal certainty and value for money for long term contracts with a high level of investment of the private business world and a significant financial commitment by public authorities to develop Europe's and domestic infrastructures.

with the right to exploit this infrastructure or service. A straightforward example of this is a toll road where the concessionaire's remuneration arises out the tolls paid by road users. Since concessions are large-scale contracts requiring long-term financial commitments and a high level of investment, legal certainty is a priority.<sup>199</sup> The 2014 Concession Directive on the award of concession contracts aimed especially at ensuring the latter.

The historical differences between Member States in the approach to concessions explain in part why only in 2014 legislative action was taken in this field.<sup>200</sup> Work and service concessions were, in fact, excluded from the scope of Directive 2004/17/EC.<sup>201</sup> Moreover, Directive 2004/18/EC regulated only certain public work concessions through a limited set of rules.<sup>202</sup> In spite of these exclusions, concessions with a sufficient cross-border interest were awarded in compliance with the EU principles of equal treatment, non-discrimination and transparency. Nonetheless, a high degree of legal uncertainty impaired the use of concessions schemes as the Treaty principles did not provide sufficient guidance on how award procedures had to be carried out.<sup>203</sup> Therefore, the European Commission - acknowledging these difficulties - decided to take action<sup>204</sup> mainly in order to avoid legal uncertainty hindering the functioning of the four freedoms and, hence, of the Internal Market. Thus, with the goal of addressing the need for greater legal certainty in this field and an actual regulation of the concession contracts' category, Directive 2014/23/EU was published on March 28, 2014, entering into force 20 days later pursuant to Article 52.<sup>205</sup> The concession

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<sup>199</sup> Especially in terms of clarification of definitions and EU rules. See the Report on the Public Consultation on the Green Paper on Public-Private Partnerships and Community Law on Public Contracts and Concessions, Commission Staff Working Paper, SEC (2005) 629.

<sup>200</sup> Reference is made to disparity of definitions and regimes in Member States, defective application of the principles of transparency, equal treatment and non-discrimination and insufficient legal certainty arising out CJEU case law. See the Communication from the Commission to the European parliament, the council, the European economic and social committee and the committee of the regions on Public-Private Partnerships and Community Law on Public Procurement and Concessions, Brussels, 15.11.2005 COM (2005) 569 final, 8. Moreover, insufficient legal protection of bidders. In fact, in the case of concessions not covered by the Directives, private operators could not refer to the provisions of the Remedies Directive. Directive 2007/66/EC of the European Parliament and of the Council of 11 December 2007 amending Council Directives 89/665/EEC and 92/13/EEC with regard to the improvement of the effectiveness of review procedures concerning the award of public contracts.

<sup>201</sup> Article 18, Directive 2004/17/EC. See, S Arrowsmith, *The Law of Public and Utilities Procurement, Regulation in the EU and UK* (Sweet & Maxwell, 2014) 427. Sue Arrowsmith holds that, according to the CJEU in the *Teleaustria* judgement, the Commission's original proposals on the coordination of procedures on the award of public service contracts (which resulted in Directive 92/50) expressly included provisions on concessions' regulation. However, the Council deleted them. Concessions were excluded from the Services Directive because the differences between Member States in the use of concessions would have brought a situation of 'great imbalance' in regulation. Concessions were then excluded also from the Utilities Directive because concessions existed only in one Member State and further investigation was needed. According to Sue Arrowsmith, in the legal systems of some Member States concessions are not considered as ordinary procurement, but as a different type of legal relationship and have not been regulated by public procurement law, but by separate rules covering the award and operations of such schemes.

<sup>202</sup> For instance, see Articles 56 to 61 of Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts regulating advertising issues and time limits.

<sup>203</sup> See M Burnett, 'The New European Directive on the Award of Concession Contracts, Promoting Value for Money in PPP Contracts?', *op. cit.*, 98.

<sup>204</sup> See, for instance, Recital 1 of the Concessions Directive.

<sup>205</sup> The deadline for the transposition by EU Member States of the Concessions Directive into national legal systems was April 18, 2016. In principle, the provisions of the Concessions Directive are not binding prior to the date of transposition. Before that date, the award of services concessions is nevertheless subject to the general principles set out by the CJEU in its case law and the award of works concessions falls under the directive 2004/18/EC.

Directive is now the key reference point for the award of public and utility contracts that take the form of concessions.<sup>206</sup>

Directive 2014/23/EU replicates several provisions of the 2014 public sector and utilities Directives.<sup>207</sup> Many provisions and definitions are, in fact, the same in all three Directives.<sup>208</sup> For instance, the innovative solution of the so-called light touch regime for social, health and other specific services provided for under the EU's new public sector Directive can be found also in the Concessions Directive.<sup>209</sup> The Concessions Directive is applicable to works and services concessions<sup>210</sup> equal to and above specific financial reference standards set out in Articles 8 and 9.<sup>211</sup> The calculation of the value of complex, long-term concession contracts entails the consideration of many aspects. Therefore, Directive 2014/23/EU sets out a transparent and objective approach - to be reproduced in the concession documents - that guides such evaluation. Directive 2014/23/EU provides for a detailed definition of the term concession, which comes from the CJEU case law and stresses the right of exploitation and the transfer of the economic risk.<sup>212</sup> Article 5, para 1, Directive 2014/23/EU, remarks that the consideration for the execution of the work or provision or management of the service consists of 'either solely in the right to exploit [the works or services] or in that right together with payment.' Article 5, para 1, further states that the definition of concession should embrace a transfer of operating risk to the concessionaire. Such transfer is considered sufficient when there are no guarantees that the concessionaire will regain its investment. Directive 2014/23/EU highlights that operating risks are risks outside parties' control, such as the exposure to market uncertainties.<sup>213</sup> Thus, the risk that has to be transferred must be a risk of loss, the assessment of which has to be carried out taking into account the net present value of all investments, costs and revenues.<sup>214</sup> Hence, an arrangement preventing an economic operator to make losses would not involve the required transfer of operating risk.<sup>215</sup> Once an operating risk is transferred, it is not relevant - for the identification of a concession contract - where the remuneration comes from. The remuneration has to be in any case based exclusively on the demand for the supply of the considered service or infrastructure delivered. Moreover, the entire operating risk does not have to be necessarily transferred in order to have a concession contract.<sup>216</sup> Lastly, the

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<sup>206</sup> Service concessions in the public contract sector and both works and services in the utilities sector. Article 1, Directive 2004/23/EU.

<sup>207</sup> Such as those on exclusions, reserved concessions, modifications and termination, compliance by economic operators and sub-contractors with environmental, social and labour obligations. See Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement repealing Directive 2004/18/EC OJ L 4/65. Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors repealing Directive 2004/17/EC, OJ L 94.

<sup>208</sup> For instance, the new provisions on the concept of 'economic operator'.

<sup>209</sup> See Article 19, Directive 2014/23/EU.

<sup>210</sup> The Concessions Directive does not cover supplies because they do not entail exploitation of risk.

<sup>211</sup> The actual threshold is of 5.186.000 Euros. Such a value should reflect the clear cross-border interest of concessions for economic operators located in Member States other than that of the contracting authority or contracting entity. Recital 23, Concessions Directive.

<sup>212</sup> See, *inter alia*, AG Fennelly in C-324/98, *Telaustria Verlags GmbH and Telefonadress GmbH v Telekom Austria AG*, [2000] I-10745. AG Pergola in C-360/96, *Gemeente Arnhem v BFI Holding BV*, [1998] I-06821. C-231/03, *Consorzio Aziende Metano v Comune di Cingia de' Botti*, [2005] I-07287. C C-458/03, *Parking Brixen GmbH v Gemeinde Brixen and Stadtwerke Brixen AG*, [2005] I-08585.

<sup>213</sup> See Recital 20, Concessions Directive.

<sup>214</sup> See Recital 20, Concessions Directive.

<sup>215</sup> See Recital 18, Concessions Directive.

<sup>216</sup> See Recital 18, Concessions Directive.

risk does not have to be substantial, as it was indicated in the first wording of the draft Concession Directive.<sup>217</sup>

Directive 2014/23/EU keeps alive the distinction between concession contracts and other public and utility contracts. In this regard, it should be borne in mind that there is no real economic justification behind the distinction between concessions and other regulated public contracts.<sup>218</sup> The original call was for an alternative and more radical approach and implied the creation of a separate Directive covering complex contracts, including concessions and PPPs.<sup>219</sup> The idea for such a legislative instrument was to deal with long-term contracts, entailing negotiations, lengthy and costly procurement procedures, *consortia* bidders and private finance. Instead, it was enacted the 2014 Concessions Directive. Anyway, the latter aimed at enhancing legal certainty, confirmed the CJEU case law and provided certain details on specific aspects.<sup>220</sup>

Not only the definition of concession, but also the set of rules regulating concessions' awards recalls the CJEU line of thinking. These rules require, in fact, the application, by contracting authorities, of the EU general principles of equal treatment, non-discrimination, transparency and proportionality.<sup>221</sup> However, they do not provide for a specific award procedure. They merely outline a relatively broad awarding process, which includes rules on the initial publication of a concession notice in the OJEU.<sup>222</sup> No indications are provided on whether the procedure should be carried out in one or more phases.<sup>223</sup> In addition, selection criteria are not identified. Article 38, Directive 2014/23/EU, merely states that participating conditions have to be included in the concession notice. They have to relate the concessionaire's performance, its professional and economic capability. Award criteria are also not defined. Article 41, Directive 2014/23/EU, only provides that they must be based on objective criteria, comply with the principles of transparency, non-discrimination, equality, proportionality and guarantee an effective competition.<sup>224</sup> Recital 73, Directive 2014/23/EU, states that they must allow the identification of the tender that offers an overall economic advantage to the contracting authority. Furthermore, award criteria must be linked to the subject matter of the concession and cannot allow unlimited discretion to contracting authorities. It can be anticipated that award criteria may be environmental, social or innovation related.<sup>225</sup> They must come along with information requirements allowing the verification of the submitted data. The order of importance of award criteria has to be set out by each contracting authority and may be revised in case of innovative tenders with an unforeseen and exceptional level

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<sup>217</sup> For an analysis of the concept of operating risk in concession contracts, as defined by the CJEU, see below paragraph 4.2.4.3.

<sup>218</sup> See, for instance, R Craven, 'The EU's 2014 Concessions Directive' [2014] PPLR, 197.

<sup>219</sup> European Commission, Evaluation Report: Impact and Effectiveness of EU Public Procurement Legislation (Commission Staff Working Paper) SEC (2011) 853 final.

<sup>220</sup> Such as the tender selection and award criteria.

<sup>221</sup> See Articles 3 and 30, Concessions Directive.

<sup>222</sup> Article 3, para 1 of the 2014/23/EU Directive. The concession notice has to include participating conditions (which have to relate, and be proportionate, to the performance of the economic operator, its technical and financial capability and its economic characteristics).

<sup>223</sup> Anyway, procedural rules cannot compensate for other necessary elements such as good governance, effective competition and anti-corruption law, effective audit, political, medial and civil society control, judicial support, transparency and accountability in public finance, ethical guidelines for the public and private sectors, control of lobbyists, effective whistleblowing protection and contract management. On the key relevance of the latter aspect see, M Burnett, 'PPP contract management-Still in Need of More Attention?' [2013] EPPPL 217, 230.

<sup>224</sup> Article 82, Directive 2014/25/EU.

<sup>225</sup> See Article 41, para 2, Directive 2014/23/EU.

of functional performance.<sup>226</sup> Thus, overall, the rules regulating tenders' assessment are significantly fewer if compared to those of Directives 2014/24/EU and 2014/25/EU.<sup>227</sup> All three 2014 Directives provide, instead, for similar rules on contract performance after the awarding phase. These cover sub-contracting, contract modification, termination, monitoring and reporting.<sup>228</sup>

As final remark, it can be stated that the 2014/23/EU Directive - envisaged since 2004 - overall represents an important achievement. However, only little steps forward have been taken.<sup>229</sup> Because of the disputed nature of EU public contracts law in this area,<sup>230</sup> most of the steps taken represent an endorsement of the CJEU case law. Thus, on the one hand, the Concessions Directive achieved its goal by providing a somehow clearer legal framework that allows flexibility for awarding bodies. Remarkably, and given the scope of this thesis, it clearly expresses the possibility of having environmental, social and/or innovative-related award criteria. On the other hand, this separate Directive that differentiates concessions from other complex public contracts may likely lead to an over-burocratization and less accessible EU public contracts' regime.<sup>231</sup>

#### 4.2.4.3 Concessions, operating risk and CJEU case law.

The key relevance of the concept of operating risk in the notion of 'concession' has been well clarified by the CJEU in several decisions. This paragraph examines only those that can be considered milestones in the understating of this concept.

First of all, the *Parking Brixen* case.<sup>232</sup> In this case, the Municipality of Brixen directly awarded, without an open and competitive procedure, the management of two car parks to a jointly held company. The qualification of the relationship as a public contract or as a concession was at the centre of the first question brought before the CJEU. The Advocate General, recalling the *Telaustria* case,<sup>233</sup> the mentioned Commission's Interpretative Communication on concessions<sup>234</sup> and Directive 2004/18/EC, stated that 'unlike a public service contract, a service concession is characterised by the fact that, in consideration for the service in question, the service provider obtains from the contracting authority the right to exploit for payment its own service.'<sup>235</sup> In other words, 'where a contracting authority assigns the management of a public car park to an undertaking which may charge a fee for the use of the car park and, in return, undertakes to pay annual compensation to the contracting authority does not constitute a public service contract [...]

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<sup>226</sup> Article 41, para 3, Directive 2014/23/EU.

<sup>227</sup> For instance, see Article 41, Directive 2014/23/EU and Article 67, Directive 2014/24/EU.

<sup>228</sup> See Articles 42, 43, 44 and 45, Directive 2014/23/EU.

<sup>229</sup> In this respect, see for instance, A Sanchez Graells, 'The Continuing Relevance of the General Principles of EU Public Procurement Law after the Adoption of the 2014 Concessions Directive' University of Leicester School of Law, Research Paper n. 15-12, 2015, available at SSRN, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2581683](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2581683).

<sup>230</sup> There has been a disparity of views between Member States on concessions since the 1990s. At that time, directives on the award of public works contracts, with limited procedural rules on works concessions (Directive 93/37/EEC), and on public service contracts, with no mention of service concessions (Directive 92/50/EEC), were adopted. See, M Burnett, 'PPP contract management-Still in Need of More Attention?', *op. cit.*, 86.

<sup>231</sup> See M Burnett, 'PPP contract management-Still in Need of More Attention?', *op. cit.*, 98.

<sup>232</sup> C-458/03, *Parking Brixen GmbH v Gemeinde Brixen and Stadtwerke Brixen AG*, [2005] I-08585.

<sup>233</sup> Paras 57 and 58, C-324/98, *Telaustria Verlags GmbH and Telefonadress GmbH v Telekom Austria AG*, [2000] I-10745.

<sup>234</sup> Commission Interpretative Communication on Concessions under Community Law (2000/C 121/02).

<sup>235</sup> Point 29 of the Opinion of the Advocate General Kokott, delivered on 1 March 2005, C-458/03, *Parking Brixen GmbH v Gemeinde Brixen and Stadtwerke Brixen AG*, [2005] I-08585.

but a service concession [...].<sup>236</sup> Along the same lines went the decision of the CJEU. It moved from the definition provided by Directive 2004/18/CE and remarked that the existence of an operating risk allows the qualification of a relationship between a contracting authority and a private operator as a concession.<sup>237</sup>

The judgement of the CJEU in the Case 437/07 is also worth mentioning.<sup>238</sup> Here, the Municipality of the city of L'Aquila qualified and awarded a concession for the planning and realization of a road tram vehicle for public transportation. In this case, the concessionaire had to undertake the construction of the vehicle and, in return, it would have received, as compensation, a sum equal to a percentage of the realization costs (60%) and a predetermined annual sum paid by the local public transport entity, who would have in the end managed the public transportation service.<sup>239</sup> The CJEU clearly held that there can be a service concession contract if the agreed remuneration consists of the right of the concessionaire to exploit the service or asset delivered. In addition, the concession holder must assume the operating risk of the service in question.<sup>240</sup> Therefore, failing to transfer to the concessionaire the risks linked to the provision of the service, the transaction constitutes a public service contract and not a public service concession.<sup>241</sup> Upon these considerations, the CJEU re-qualified the contract as a public service contract highlighting that, in the case at stake, the assumed 'concessionaire' would have not managed the asset, which was instead entrusted to the local public transportation entity. Hence, the concessionaire would have not borne any operating risk. This is also the case if it is considered that the private party's compensation was pre-determined.<sup>242</sup>

The centrality of the operating risk element emerged also in the CJEU judgment on the use of urban waste in Sicily.<sup>243</sup> In this case, the Court firmly excluded that the compensation means provided by the contested agreements implied an operating risk borne by the private operator. In fact, 'not only is the operator essentially remunerated by the Commissioner by means of a fixed royalty per tonne of waste transferred to it [...], but [...] under the agreements at issue, the Commissioner undertakes, first, that all the municipalities concerned will transfer all of the remaining part of their waste to the operator and, secondly, that a minimum annual quantity of waste will be transferred to it. The agreements at issue provide, moreover, for the adjustment of the amount of the royalty if the annual quantity of waste actually transferred falls below 95% or exceeds 115% of the guaranteed minimum quantity, in order to ensure the economic and financial equilibrium of the operator. They also provide for the annual adjustment of the royalty in the light of trends in the costs of staff, raw materials and maintenance work, and of an economic index. The agreements provide moreover for a renegotiation of the royalty if, owing to a change to the

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<sup>236</sup> Point 33 of the Opinion of the Advocate General Kokott, delivered on 1 March 2005, C-458/03, *Parking Brixen GmbH v Gemeinde Brixen and Stadtwerke Brixen AG*, [2005] I-08585.

<sup>237</sup> Point 40, C-458/03, *Parking Brixen GmbH v Gemeinde Brixen and Stadtwerke Brixen AG*, [2005] I-08585.

<sup>238</sup> C-437/07, *Commission of the European Communities v Italian Republic*, [2008] I-00153.

<sup>239</sup> In this regard, see point 33, C-437/07, *Commission of the European Communities v Italian Republic*, [2008] I-00153.

<sup>240</sup> Point 29, C-437/07, *Commission of the European Communities v Italian Republic*, [2008] I-00153. It is thereby cited point 34, C-382/05, *Commission of the European Communities v Italian Republic*, [2007] I-06657.

<sup>241</sup> Point 30, C-437/07, *Commission of the European Communities v Italian Republic*, [2008] I-00153. The following cases are cited: point 22, C-234/03, *Contse SA, Vivisol Srl and Oxigen Salud SA v Instituto Nacional de Gestión Sanitaria (Ingesa), formerly Instituto Nacional de la Salud*, [2005] I-09315 and points 35 and 37, C-382/05, *Commission of the European Communities v Italian Republic*, [2007] I-06657.

<sup>242</sup> Points 32 et ss., C-437/07, *Commission of the European Communities v Italian Republic*, [2008] I-00153.

<sup>243</sup> C-382/05, *Commission of the European Communities v Italian Republic*, [2007] I-06657.

legislative framework, the operator is faced with investment above a certain level in order to comply with the new legislation.<sup>244</sup>

More recently, the CJEU seemed to have somehow reduced the emphasis on the operating risk that has to be borne by the concessionaire. The leading case can be considered *Eurawasser*.<sup>245</sup> This case concerned the awarding of the water system by a number of German Municipalities. The issue regarded the fact that the risk entrusted to the private operator was very little. Users had, in fact, to be attached to the watering network and, in addition, there were charges fixed by the concessionaire in compliance with the existing laws. The CJEU once again remarked that the key feature of a concession contract is the concessionaire's remuneration, which consists of the right to manage the service in question.<sup>246</sup> Therefore, the fact that 'the service provider is remunerated by payments from third parties, in this case from users of the service in question, is one means of exercising the right, granted to the provider, to exploit the service.'<sup>247</sup> By recalling the above-mentioned *Parking Brixen* case, the CJEU held that the right to manage implies that the concessionaire 'takes the risk of operating the services in question.'<sup>248</sup> According to the Court's view, in certain sectors, because of the relevant public legal framework, the risk may be limited. Nonetheless, 'even if the risk run by the contracting authority is very limited, it is necessary that the contracting authority transfers to the concession holder all, or at least a significant share, of the operating risk which it faces, in order for a service concession to be found to exist.'<sup>249</sup>

In the *Acoset* case, the CJEU reaffirmed the same considerations.<sup>250</sup> That case concerned the award of the integrated water service management to an established 'semi- public company with share capital [...] predominantly publicly owned.'<sup>251</sup>

Furthermore, the CJEU returned again on the issue in the *Stadler* case.<sup>252</sup> This case regarded the award by a *consortium* of German Municipalities of the emergency ambulance service. The remuneration was agreed between the selected service provider and the social security institution.<sup>253</sup> It was potentially re-adjustable if it *ex post* revealed to be insufficient. In addition, privately insured and uninsured persons were obliged to pay the same usage fee as persons insured under the

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<sup>244</sup> Point 36, C-382/05, *Commission of the European Communities v Italian Republic*, [2007] I-06657.

<sup>245</sup> C-206/08, *Wasser und Abwasserzweckverband Gotha und Landkreisgemeinden (WAZV Gotha) v Eurawasser Aufbereitungs und Entsorgungsgesellschaft mbH*, [2009] I-08377.

<sup>246</sup> Points 50 et ss., C-206/08, *Wasser und Abwasserzweckverband Gotha und Landkreisgemeinden (WAZV Gotha) v Eurawasser Aufbereitungs und Entsorgungsgesellschaft mbH*, [2009] I-08377.

<sup>247</sup> Point 53, C-206/08, *Wasser und Abwasserzweckverband Gotha und Landkreisgemeinden (WAZV Gotha) v Eurawasser Aufbereitungs und Entsorgungsgesellschaft mbH*, [2009] I-08377.

<sup>248</sup> Point 59, C-206/08, *Wasser und Abwasserzweckverband Gotha und Landkreisgemeinden (WAZV Gotha) v Eurawasser Aufbereitungs und Entsorgungsgesellschaft mbH*, [2009] I-08377.

<sup>249</sup> Point 77, C-206/08, *Wasser und Abwasserzweckverband Gotha und Landkreisgemeinden (WAZV Gotha) v Eurawasser Aufbereitungs und Entsorgungsgesellschaft mbH*, [2009] I-08377. In this respect, see also point 31, C-138/11, *Compass-Datenbank GmbH v Republik Österreich*, published in the *electronic Reports of Cases* (Court Reports - general), where the contract at stake was qualified as a concession because the concession holder was found to bear the 'commercial' risk of the service provision.

<sup>250</sup> See, for instance, point 39, C-196/08, *Acoset SpA v Conferenza Sindaci e Presidenza Prov. Reg. ATO Idrico Ragusa and Others*, [2009] I-09913.

<sup>251</sup> Point 17, C-196/08, *Acoset SpA v Conferenza Sindaci e Presidenza Prov. Reg. ATO Idrico Ragusa and Others*, [2009] I-09913.

<sup>252</sup> C-274/09, *Privater Rettungsdienst und Krankentransport Stadler v Zweckverband für Rettungsdienst und Feuerwehralarmierung Passau*, [2011] I-01335.

<sup>253</sup> Point 12 C-274/09, *Privater Rettungsdienst und Krankentransport Stadler v Zweckverband für Rettungsdienst und Feuerwehralarmierung Passau*, [2011] I-01335.

compulsory statutory scheme.<sup>254</sup> The CJEU recalled the usual distinctive criterion between concessions and public contracts and insisted that the supplier is entitled to collect its payment from third parties as long as it bears the operating risk of the service in question.<sup>255</sup> Thus, the Court considered that even if the remuneration comes from third parties - which do not have to necessarily be the service's users - the requirement of the right to manage is satisfied.<sup>256</sup> For what concerns the operating risk, the CJEU reproduced the *Eurawasser* formula.<sup>257</sup> Thus, 'while that risk may, at the outset, be very limited, it is necessary for classification as a service concession that the contracting authority transfer to the concession holder all or, at least, a significant share of the risk which it faces.'<sup>258</sup> The operating risk may be, therefore, limited only by the existing legal framework and not by contracting authorities.<sup>259</sup> The Court further provided some important points clarifying the essential elements of the economic operating risk. First of all, such a risk must be understood as 'the risk of exposure to the vagaries of the market, which may consist in

- (i) the risk of competition from other operators,
- (ii) the risk that the supply of the services will not match demand,
- (iii) the risk that those liable will be unable to pay for the services provided,
- (iv) the risk that the costs of operating the service will not fully be met by revenue or
- (v) for example also the risk of liability for harm or damage resulting from an inadequacy of the service.'<sup>260</sup>

The Court then stated that, on the contrary, 'risks such as those linked to bad management or errors of judgment by the economic operator are not decisive for the purposes of classification as a public service contract or a service concession, since those risks are inherent in every contract, whether it be a public service contract or a service concession.'<sup>261</sup> Clearly, the CJEU requires that the concessionaire must bear market risks arising out of competition and, in any case, market variations.<sup>262</sup> In the case at stake, the Bavarian regime provided for the possibility of awarding an emergency service to competing private operators. Moreover, the system of fixing charges through

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<sup>254</sup> Point 14, C-274/09, *Privater Rettungsdienst und Krankentransport Stadler v Zweckverband für Rettungsdienst und Feuerwehralarmierung Passau*, [2011] I-01335.

<sup>255</sup> Points 24 et ss., C-274/09, *Privater Rettungsdienst und Krankentransport Stadler v Zweckverband für Rettungsdienst und Feuerwehralarmierung Passau*, [2011] I-01335. Point 25 of the same judgment states that the fact that the supplier is not remunerated directly by the contracting authority, but is entitled to collect payment from third parties, meets the requirement of consideration laid down in Article 1, para 4, Directive 2004/18. However, point 26 specifies that it is also necessary that the service supplier takes the risk of operating the services in question.

<sup>256</sup> Point 28, C-274/09, *Privater Rettungsdienst und Krankentransport Stadler v Zweckverband für Rettungsdienst und Feuerwehralarmierung Passau*, [2011] I-01335.

<sup>257</sup> See the *Eurawasser* judgement, paragraphs 77 and 80.

<sup>258</sup> Point 29, C-274/09, *Privater Rettungsdienst und Krankentransport Stadler v Zweckverband für Rettungsdienst und Feuerwehralarmierung Passau*, [2011] I-01335.

<sup>259</sup> See points 34 et ss., C-274/09, *Privater Rettungsdienst und Krankentransport Stadler v Zweckverband für Rettungsdienst und Feuerwehralarmierung Passau*, [2011] I-01335.

<sup>260</sup> See point 37, C-274/09, *Privater Rettungsdienst und Krankentransport Stadler v Zweckverband für Rettungsdienst und Feuerwehralarmierung Passau*, [2011] I-01335. In the same respect, see also point 48, C-348/10, *Norma-A SIA and Dekom SIA v Latgales plānošanas Reģions*, [2011] I-10983.

<sup>261</sup> Point 38, C-274/09, *Privater Rettungsdienst und Krankentransport Stadler v Zweckverband für Rettungsdienst und Feuerwehralarmierung Passau*, [2011] I-01335.

<sup>262</sup> Different kind of risk is the regulatory risk, which is not linked to the management. See, for instance, C-451/08, *Helmut Müller GmbH v Bundesanstalt für Immobilienaufgaben*, [2010] I-02673.

negotiations led to low remuneration, which risked being not sufficient to cover all costs. In addition, Bavarian law did not guarantee full coverage of the operator's costs.<sup>263</sup> Furthermore, the selected service provider was exposed to the risk of default of those liable for the usage fees.<sup>264</sup>

Overall, it can, thus, be held that the operating risk in the *Stadler* case was not precisely minimum. It was in any case higher than the one of the *Eurawasser* and *Acoset* cases. Anyhow, the CJEU seems now to be ready to accept a limited risk if such limitation arises out market conditions and not out contracting authorities' choices.

Notwithstanding the above, if there is no risk at all - because of an over-compensation of the concessionaire - the relationship must be qualified as a public contract and, as it was noticed, there could be an issue of illegal State aid.<sup>265</sup> This, especially, if the award did not fully comply with a competitive procedure.<sup>266</sup>

Therefore, concessions normally, but not necessarily, have a triangular structure where the involved end-users reimburse at least part of the costs borne by the concessionaire. However, not every triangular relationship is a concession. This depends on the existence of an operating risk.<sup>267</sup> The fundamental and distinctive criterion between public contracts and concession contracts is, in fact, the existence of an operating risk transferred to the concession holder.<sup>268</sup>

To conclude, it can be mentioned the Eurostat decision entitled 'Treatment of public-private partnerships.'<sup>269</sup> This decision provides for specific indications on PPPs' accounting treatment where the public sector is the main service purchaser. In order to define public debt, the registration of assets delivered through these transactions is off public budget only if there is a substantial transfer of risk to the private partner. This occurs only if the concessionaire bears the construction risk and at least one of the following risks: the availability or demand risk.<sup>270</sup>

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<sup>263</sup> Point 42, C-274/09, *Privater Rettungsdienst und Krankentransport Stadler v Zweckverband für Rettungsdienst und Feuerwehralarmierung Passau*, [2011] I-01335.

<sup>264</sup> Point 46, C-274/09, *Privater Rettungsdienst und Krankentransport Stadler v Zweckverband für Rettungsdienst und Feuerwehralarmierung Passau*, [2011] I-01335.

<sup>265</sup> C H Bovis, 'Financing services of general interest, public procurement and State aids: the delimitation between market forces and protection' [2005] *European L Journ*, 7 et ss. C H Bovis, 'Developing Public Procurement Regulation: Jurisprudence and its Influence on Law Making' [2006] *Common Market L Rev* 481 et ss..

<sup>266</sup> See point 95, C-280/00, *Altmark Trans GmbH and Regierungspräsidium Magdeburg v Nahverkehrsgesellschaft Altmark GmbH, and Oberbundesanwalt beim Bundesverwaltungsgericht*, [2003] I-07747. M E Comba, 'L'esecuzione delle opere pubbliche, con cenni di diritto comparato' in F G Scoca, F A Roversi Monaco, G Morbidelli (eds), *Sistema del diritto Amministrativo Italiano*, (Giappichelli, 2011) 7 et ss..

<sup>267</sup> See point 27 of the Opinion of Advocate General Szpunar delivered on 11 June 2015, C-552/13, *Grupo Hospitalario Quirón SA v Departamento de Sanidad del Gobierno Vasco and Instituto de Religiosas Siervas de Jesús de la Caridad*, not yet published (Court Reports - general). In this case, the selected economic operator collected its compensation directly from the contracting authority. However, it did not bear a substantial part of the operating risk related to the provision of the service in question. Thus, the contractual relationship had to be qualified as public contract.

<sup>268</sup> In this respect, see point 27, C-221/12, *Belgacom NV v Interkommunale voor Teledistributie van het Gewest Antwerpen (INTEGAN) and others*, published in the electronic Reports of Cases (Court Reports - general).

<sup>269</sup> Decision of February 11, 2004. In this respect, see Eurostat Treatment of Public-Private Partnerships Purposes, Methodology and Recent Trends, European PPP Expertise Centre, European Investment Bank, 2010, available at <http://www.eib.org/eppec/resources/eppec-eurostat-statistical-treatment-of-ppps.pdf>.

<sup>270</sup> The construction risk refers to events that may arise out the projecting and realization phases; the availability risk refers to the ability of providing the service in accordance with the agreed terms and quality standards; the demand risk refers to the variability of the demand and it is not linked to the quality of the provided service. See, among others, the *Unità Tecnica Finanza di Progetto, Partenariato Pubblico-Privato per la realizzazione di opere pubbliche: impatto sulla contabilità nazionale e sul debito pubblico*, Rome, June 30, 2001, 7 et ss.. Eurostat decisions have a binding nature after the so-called third amendment introduced by the Legislative Decree n. 152/2008 to Article 3, para 15-ter of the former Code of Public Contracts.

## 5. Public-Private Partnerships in the selected Member States.

### 5.1. Introduction.

The following paragraphs will provide a general overview of the PPP phenomenon as implemented in the Member States studied, namely the United Kingdom, the Netherlands and Italy, middle-high income and developed countries with a sufficiently established institutional set-up.

#### 5.1.1 The United Kingdom: general overview.

The English Conservative Government of the early 1980s began to rethink the traditional in-house practice - especially at a central level - seeking to foster competition and promote efficiency in the delivery of public services and/or assets. Thus, a number of activities began to be privatised through the selling of Government businesses' shares while others were handed to independent Government agencies. Then, several services and works started to be contracted out. With regard to the activities still under the responsibility of the Government - or of Government agencies - it had to be previously verified whether they had to be carried out in-house or if it was better to contract them out to external suppliers. This control, referred to as 'market testing,' was normally undertaken through tendering procedures where the in-house bidder competed along with the private sector.<sup>271</sup> Such a policy was later implemented at the central Government level by means of guidelines and administrative indications. At a local level, it became mandatory by law. The so-called Compulsory Competitive Tendering<sup>272</sup> allowed local authorities to keep specific activities in-house exclusively when the in-house bidder won the bid by competing with other private bidders. In addition, this policy was further supported by the Deregulation and Contracting-out Act of 1994, which stated that specific Government functions could be transferred to private contracting parties.

In 1992, the then Chancellor of the Exchequer made an announcement on the 'ways to increase the scope for private financing of capital projects.'<sup>273</sup> This marked the beginning of what became known as the Private Finance Initiative (hereinafter PFI), under which private operators manage the design, build, finance and operation of public services and/or infrastructure. Besides the PFI scheme, the English Government developed other forms of private sector involvement in the delivery of public services and/or infrastructure generally referred to with the broader term of PPPs, which includes, *inter alia*, the PFI model. PPP is, in fact, an umbrella notion identifying several types of public-private cooperation schemes of public service and/or infrastructure delivery. The notion of PPPs includes, among others, the PFI, the creation of joint ventures established to carry out a certain service provision, the undertaking by private companies of development and regeneration projects and any kind of cooperative arrangement.

Since its introduction in 1992, the PFI became an important source of investment for the support of major capital project developments by various Government departments and local

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<sup>271</sup> See, *inter alia*, S Arrowsmith, *The Law of Public and Utilities Procurement: Regulation in the EU and UK* (Sweet & Maxwell, 2014) 32.

<sup>272</sup> For an analysis of the so-called CCT refer, among others, to J Wilson, 'Compulsory Competitive Tendering And Local Government Financial Services: An Analysis Of The Views Of Local Government Accountants In The North West Of England' [1999] *Public Administration*, Blackwell, 541, 563.

<sup>273</sup> Chancellor of the Exchequer Norman Lamont. See for instance, the House of Commons Treasury Committee' Report on Private Finance Initiative, Seventeenth Session 2010–12 available at <http://www.publications.parliament.uk/pa/cm201012/cmselect/cmtreasy/1146/1146.pdf>.

authorities<sup>274</sup> and expanded significantly, especially under the 1997 Labour Government. However, this Government followed a less dogmatic approach. It did not *a priori* prefer the public or private service provision. It supported the contracting out policy only when it allowed the achievement of better VfM.<sup>275</sup> The choice between the two models was, thus, made according to the delivery method that provided the same quantity and quality of a service or infrastructure at a lower overall cost. For instance, at a central level the contracting out policy was supported on a case-by-case basis, and specifically, if it was efficient, provided that an *a priori* investigation of the various options of service provision was carried out.<sup>276</sup>

Thus, since 1997 the PPP approach has been largely used in the UK.<sup>277</sup> Private companies began to be broadly involved in public facilities' developments, including their designing, financing, construction, ownership and/or operation. At a local level, the best value approach made its way. On a case-by-case basis, local authorities had the possibility to choose the appropriate means of service provision. The Coalition Government that entered into power in 2010 upheld the PPP policy. Even though at a central level there were no rules such as the ones on the best value, Government departments and agencies were anyway expected to implement them.<sup>278</sup>

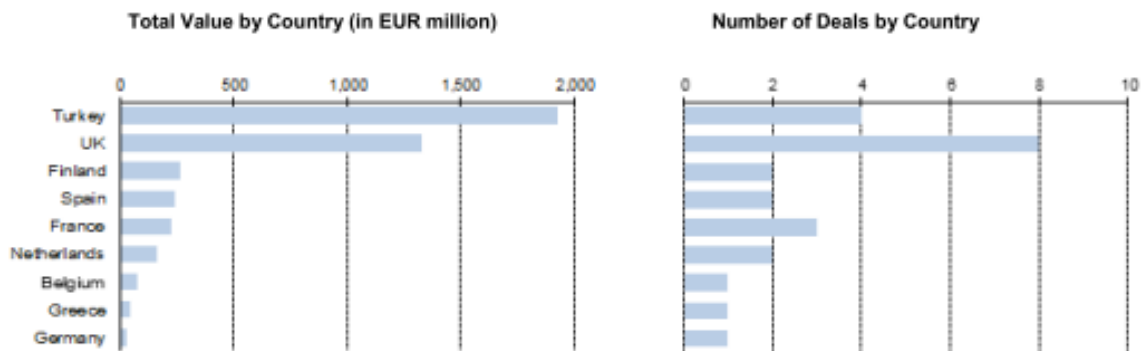


Fig. 2 Country breakdown by value and number of transactions.

The period of reference is the first half of 2015. With 8 deals closed, the UK was the most active market by number of transactions. This is, however, less than the number of deals closed in the country over the same period in the previous 3 years (11, 12 and 16 in 2014, 2013 and 2012 respectively). In terms of numbers of deals, Turkey and France followed the UK.

Source EIB.<sup>279</sup>

<sup>274</sup> T M Nisar, 'Implementation Constraints in Social Enterprise and Community Public-Private Partnerships' [2013] *International Journal of Project Management*, 638, 651.

<sup>275</sup> Value for money (VfM) can be defined as the optimum combination and balance of cost and quality that meets clients' needs. It is evaluated by comparing two or more alternatives for potential or actual results. HM Treasury, *Value for money and the valuation of public sector assets*, 2008, available at [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/191488/Green\\_book\\_supplementary\\_guidance\\_asset\\_valuation.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/191488/Green_book_supplementary_guidance_asset_valuation.pdf).

<sup>276</sup> See, *inter alia*, the *Better Quality Services: Guidance for Senior Managers*, TSO, 1998. *Better Quality Services, A Handbook on Creating Public/Private Partnerships through Market Testing and Contracting Out*, Cabinet Office, HM Government, 1998.

<sup>277</sup> See G M Winch, 'Institutional Reform in British construction: partnering and private finance' [2000] *Building Research and Information*, 141, 155.

<sup>278</sup> See the *Best Value Statutory Guidance*, Department for Communities and Local Government, 2011, available at [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/5945/1976926.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/5945/1976926.pdf).

<sup>279</sup> The study conducted is available at [http://www.eib.org/epcc/resources/publications/epcc\\_market\\_update\\_2015\\_h1\\_en.pdf](http://www.eib.org/epcc/resources/publications/epcc_market_update_2015_h1_en.pdf).

Overall, the most important UK's outsourcing method and public-private arrangement is represented by the PFI scheme, introduced in the early 1990s by the Conservative Government. The reasons lying behind its introduction are the ambition for VfM in capital investment projects and the provision of public infrastructures maintaining a tight fiscal stance without raising taxes. PFIs allow costs to be spread over the life of the contract, instead, of being paid upfront. They also enable alternative sources of funds to be tapped.<sup>280</sup> As already anticipated, the PFI is a way of outsourcing the provision of asset-intensive services.<sup>281</sup> Specifically, PFI arrangements are long-term contracts under which the private party - normally a consortium of construction companies and funding entities - designs and builds infrastructure or provides a service, gets the needed funds, and then operates it<sup>282</sup> over a period of time sufficient to recoup the costs of funding. This period is of usually of 25-30 years. During the entire contract life, the procuring public sector pays to the private party fees, thereby distributing its expenses over the entire service provision period. At times, the private party - in order to recover costs - obtains income, partially or entirely, from service end users.

PFI schemes were considered to have, in addition to the normal potential benefits of any other outsourcing method, areas of inherent advantages perceived as particularly important. These being, for instance, savings arising out one unique construction and operation phase, high opportunities for innovation in service delivery given that the private party is responsible for all the various stages of the project and great possibilities of allocating risks to the party better equipped to handle them. Moreover, the avoidance of waste, for instance in terms of spare asset capacity, was considered another potential benefit of the PFI scheme. In fact, the public party may not be able to effectively exploit them due to existing legal restrictions or practical limitations, such as lack of experience in that specific field. However, as in any contracting out method, attaining benefits is challenging and downsides are around the corner. For instance, the public sector borrowing is normally cheaper than the private sector's one.<sup>283</sup> Therefore, PFI schemes had to outweigh the high financing costs borne by the private sector, recovering the investments made in order to obtain VfM.

As anticipated, the Labour Government from 1997 onwards supported the PFI policy, renamed as PPP policy. Later in 2010, with the Labour administration in power, PFI activities significantly increased if one considers the total level of investment, the amount of contracts procured and their overall value.<sup>284</sup> This holds true even though in 2008, the financial crisis drastically reduced the approval of funding and related procurements.<sup>285</sup> The central Government procured many PPP contracts and funded administrations in order to have them doing the same.

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<sup>280</sup> See, *inter alia*, Treasury Taskforce, Partnerships for Prosperity, The Private Finance Initiative, November 1997. Public-Private Partnerships: the Government's Approach, March 2000. HM Treasury, PFI: Meeting the Investment Challenge, July 2003, providing the Government's policy on the use of PFI available at [http://webarchive.nationalarchives.gov.uk/20130129110402/http://www.hm-treasury.gov.uk/media/F/7/PFI\\_604a.pdf](http://webarchive.nationalarchives.gov.uk/20130129110402/http://www.hm-treasury.gov.uk/media/F/7/PFI_604a.pdf).

<sup>281</sup> These is public infrastructure such as schools, hospitals, housing, roads, transports, prisons and waste disposals.

<sup>282</sup> This contract type is the so-called DBFO, design-build-fund and operate contract.

<sup>283</sup> M A Abramson, R S Harris, *The Procurement Revolution* (Rowman & Littlefield, 2003) 242. M Klein, *Risk, Taxpayers and the Role of the Government in Project Finance* (The World Bank, Private Sector Development Department, 1996) 3. H M Coombs, D E Jenkins, *Public Sector Financial Management* (Thomson, 2002) 194.

<sup>284</sup> See, *inter alia*, S Arrowsmith, *The Law of Public and Utilities Procurement, Regulation in the EU and UK* (Sweet & Maxwell, 2014) 41.

<sup>285</sup> See N Timmins, PFI Projects seek Partners, Financial Times, 2009, available at <https://www.ft.com/content/efe3c052-01e2-11de-8199-000077b07658>.

Thus, in many cases the PPP scheme became the only way to assure large investments in the delivery of public services and/or infrastructures.<sup>286</sup>

Nonetheless, in the UK there has been a large disagreement on the use and efficiency of PPP models. Several reports focusing on the PPP/PFI's trend were prepared directly by the Government or commissioned by it.<sup>287</sup> For instance, the report of the House of Lords, Economic Affairs Committee, of March 2010<sup>288</sup> positively remarked that PFI/PPP arrangements were normally more efficient than traditional procurement schemes in terms of on-time and on-budget delivery. Moreover, it highlighted that PPPs actually guaranteed VfM and overcame high financial costs. Nevertheless, it noted that more transparency in reporting public sector PPP liabilities was needed. In addition, improved commercial skills within the public sector were perceived as desirable in order to develop contract management abilities. Likewise, reliable data on whole life-cycle costs were needed to support a comparative and comprehensive investigation of the best risk allocation. In this respect, in the last years, the UK Government's goal has been to decrease public expenditure through the reduction of funding to its decentralized administrations for investment and infrastructure projects.<sup>289</sup>

Taking into account all the above considerations, on December 2012, the UK Government published a policy document entitled 'New Approach to Public Private Partnerships' (hereinafter 'the new approach'). The new approach represents the conclusions of the Government's 'Call for Evidence and review of PFI' and contains a revised version of the PFI scheme, the Private Finance 2 (hereinafter PF2).<sup>290</sup> In this respect, the relevant HM Treasury publication highlighted that the Government

*'[...] remains committed to private sector involvement in delivering infrastructure and services, but has recognised the need to address the widespread concerns with Private Finance Initiative and the recent changes in the economic context.'*

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<sup>286</sup> House of Commons Treasury Committee, Private Finance Initiative, Seventeenth Report of Session 2010–12, available at <http://www.publications.parliament.uk/pa/cm201012/cmselect/cmtreasy/1146/1146.pdf>.

<sup>287</sup> For instance, the reviews of Sir Malcolm Bates, see <http://www.publications.parliament.uk/pa/cm199900/cmselect/cmtreasy/147/0012602.htm>. HM Treasury, Modern Government: Modern Procurement, 1999, London, see <https://www.thenbs.com/PublicationIndex/documents/details?Pub=HMT&DocID=248092>. Treasury Reports 2003 and 2006 available at [http://www.treasury.nsw.gov.au/Publications\\_Page/Financial\\_Reports#2003-2004](http://www.treasury.nsw.gov.au/Publications_Page/Financial_Reports#2003-2004). National Audit Office Reports in 2003 and 2009 available at <http://www.nao.org.uk/search/>. Commission on Public Private Partnerships, *Building Better Partnerships: The Final Report from the Commission on Public Private Partnerships*, (Institute for Public Policy Research, 2001). A Pollock, J Shaoul, D Rowland, S Player, 'Public Services and the private sector: a response to the IPPR' [2001] Catalyst Working Paper, available at [http://www.allysonpollock.com/wp-content/uploads/2013/04/Catalyst\\_2001\\_Pollock\\_PublicServicesPrivateSector.pdf](http://www.allysonpollock.com/wp-content/uploads/2013/04/Catalyst_2001_Pollock_PublicServicesPrivateSector.pdf). D Rowland, A M Pollock, 'Understanding the Private Finance Initiative: value for money?' [2003] *Developments in Economics*, 133, 48.

<sup>288</sup> House of Lords, Select Committee on Economic Affairs, 1<sup>st</sup> report of Session 2009-10, Private Finance Projects and off balance sheet debt, March 17, 2010, available at <http://www.publications.parliament.uk/pa/ld200910/ldselect/ldeconaf/63/63i.pdf>.

<sup>289</sup> This in the light of the funding restrictions imposed by the fiscal policy addressing the deficit arising out the international economic crisis and the rescue of the banking sector.

<sup>290</sup> Details available at

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/205112/pf2\\_infrastructure\\_new\\_approach\\_to\\_public\\_private\\_partnerships\\_051212.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/205112/pf2_infrastructure_new_approach_to_public_private_partnerships_051212.pdf).

The main concerns with PFIs can be described as follows. Transfers of assets to the private sector may imply a loss of control and accountability by the public sector. Private sector providers need to make a profit while also having to pay higher finance charges than the public sector. The risk transfer to the private sector may result in an increase of costs for the private provider.

Bearing in mind these concerns, the new approach exploits PFIs' key advantages and introduces a number of changes that seek to eliminate waste, enhance efficiency and improve coordination between private and public parties to support the creation of new forms of partnerships capable of delivering better outputs. The new approach applies to all UK PF2 contracts, with the exception of ICT projects,<sup>291</sup> and is it not suitable for projects with a capital value lower than £50 million.

The revised version of PFIs describes the approach to be taken when structuring PF2 contracts in order to achieve a better allocation of risks and a true understanding of the new model. The Standardisation of PF2 Contracts contains an explanatory text as well as draft provisions to be incorporated into PF2 contracts on either a required or a recommended basis.<sup>292</sup> Changes of the required drafting have to be adequately reasoned in the light of project-specific needs.<sup>293</sup> In addition, the PF2 approach seeks to fill in the standardisation's gap by providing, for instance, a new template for service outputs, a payment mechanism form and a model of shareholder's agreement. The public sector may anyway make changes to the standard drafting in order to deal with project-specific issues. Finally, the new PFI approach aims at reducing procurement time and costs by indicating a number of areas that - by following a standard path - can avoid extended negotiations.

Specifically, it provides for the possibility:

- for the Government, to be a minority public equity investor in a PF2 project,
- to limit the scope of private party's services,
- to allow flexible management of soft services by the public sector,
- to support transparency of operational and financial information on PF2 projects by not over relying on the private party's resources,
- to keep risks on the public sector's side where the latter proves to be more capable of managing them, and
- to enhance the involvement of private sector's investment by encouraging a variety of financing resources.

Thus, the PF2 approach sets out a new policy, procurement, VfM and contractual approach for the creation of a better public-private relationship and delivery of better results for the public sector and citizens.

As mentioned, among the key elements of the new approach, there is the reinforcement of the partnership. This is carried out through a higher public sector involvement. The latter, in fact,

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<sup>291</sup> For ICT projects, see the Model Services Contract and Guidance available at <https://www.gov.uk/government/publications/model-services-contract>.

<sup>292</sup> See

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/207383/infrastructure\\_standardisation\\_of\\_contracts\\_051212.PDF](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/207383/infrastructure_standardisation_of_contracts_051212.PDF).

<sup>293</sup> Public authorities who need support with regard to the guidance must contact the competent Private Finance Unit and then HMT. Local authorities can ask advice from Local Partnerships, see <http://localpartnerships.org.uk/>.

becomes a minority equity investor in PF2 projects,<sup>294</sup> with the same - or similar - rights of the private party. In this regard, the new approach aims at aligning interests, supporting a better understanding of the project by both the parties involved. Moreover, projects' performance and ability to deal with risks is improved because the public sector is involved in strategic decisions. In addition, VfM is fostered because the public party can benefit from equity returns of successful projects and limit its overall project's costs. Furthermore, the new PF2 approach aims at extending equity sources by looking for and incentivising longer-term investors at an earlier stage. Several measures have also been set up in order to obtain greater results in terms of transparency and accountability of privately financed PPPs. Such measures, for instance, entail:

- the specification of ownerships details;
- records of costs and other payments (including those relating to the life cycle fund);
- records of building and operating manuals and service performance reports.

The HM Treasury is asked to publish details on the evaluation and approval phases of every PF2 project as well as an annual report with general information on every PF2 in which the Government is a shareholder.

Another main idea of the PF2 approach is to achieve better flexibility in the structure of PF2 contracts. This is pursued through a different range of measures. For instance, the number of services carried out by the private party is reduced to allow the economic operator to focus foremost on the management and maintenance of the PPP, while the contracting authority carries out soft services, such as catering or cleaning. Moreover, the private party is required to allocate in advance prices of minor maintenance activities in order to let the contracting authority decide whether to keep them in or outside the PF2 arrangement. Furthermore, annual efficiency reviews are required to control and enhance service deliveries and life-cycle reports are carried out to improve the effectiveness of life-cycle maintenance. The new approach focuses also on the creation of better risk allocation mechanisms within PF2 schemes. In this respect, the contracting authority is asked to manage a higher level of risk to improve VfM. For instance, it is the case of changes of insurance premiums or increased capital expenditures caused by unforeseen modifications of the law during the operational phase of the project.

Thus, overall the new PF2 approach aims at enhancing VfM for the public party and taxpayers through an increased market evaluation before the commencement of the procurement, public sector's equity, a more flexible service delivery, the use of mandatory projects' schedules and quicker and improved contracting authority's control processes. Lastly, the way has been opened up to a new guide on VfM assessment.<sup>295</sup>

### **5.1.2 The Netherlands: general overview.**

The Netherlands PPPs' experience is quite recent, yet very interesting. The *Publiek-Private Samenwerking* (hereinafter PPS) was firstly used back in 1986 and its implementation began slowly and cautiously. Between 1986 and 1992, only two PPS were carried out and from 1993 onwards,

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<sup>294</sup> A new independent Central Government Unit - within the HM Treasury - carries out public sector's investments.

<sup>295</sup> Which replaces the 2006 VfM Guide.

PPS went through five years of - foremost public - hesitations and doubts. In fact, at the central level, the public sector had enough national budget to provide public services and/or infrastructure through traditional procurement means. Thus, PPS were considered as neither necessary nor worthwhile.

Roughly around 1999 a change occurred in the cultural and political arena. Specifically, the Ministries of Transport<sup>296</sup> and Finance began to push forward the use of PPS as means of public services and/or infrastructure delivery. On the one hand, this change of attitude arose out the Ministry of Transport's need to downsize and reduce fixed costs in terms of personnel. For instance, cuts were undertaken at the *Rijkswaterstaat*.<sup>297</sup> In this perspective, PPS were seen as effective tools to tackle the need of public sector's internal re-structuring. In fact, PPS allowed extra tasks and risks to be outsourced to the private sector, thereby reducing the public sector's internal organization. On the other hand, the Ministry of Finance moved to a PPS support policy because of economic reasons. PPS allowed contracting authorities to pay private operators - for the provision of the public service and/or infrastructure - considerably after the contract awarding date, even after 25 years during the maintenance phase. Hence, as for PFIs, thanks to such payment mechanism, it was possible to invest public money, before the PPS payments, in other public initiatives and projects. In addition, PPS were perceived as potentially capable of fulfilling the Dutch Parliament's objectives. At that time, there was an urgent need to cope with high unemployment rates. The Dutch private business world was, in fact, lobbying, pushing the Government to deal with the issue of unemployment. Therefore, and within this picture, the Dutch Government decided to move towards a policy of strong PPS support promoting them as effective and viable tools in the delivery of public infrastructure and/or services throughout the Netherlands.

An increase in the use of PPS arrangements started from 2006 reaching a peak in 2012 when numerous PPS projects were launched.<sup>298</sup> Specifically, the Ministry of Transport identified several projects that had to be carried out under PPS schemes. Along the lines of the above-mentioned political pressure coming from the Dutch Cabinet, a national PPS knowledge pool<sup>299</sup> and centre<sup>300</sup> were established, both at a national and local level.<sup>301</sup> Moreover, specific training for civil servants was organized. The latter led to an improvement of public bodies' expertise on tendering and legal

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<sup>296</sup> Among others, it should be recalled that Mrs. Peijs, former Minister of Transport, played an important role in promoting the use of PPS throughout the country. At that time, the Ministry of Transport and Environment were separated. Today there is one unique Ministry of Environment and Infrastructure.

<sup>297</sup> *Rijkswaterstaat* is part of the Dutch Ministry of Infrastructure and the Environment and responsible for the design, construction, management and maintenance of the main infrastructure facilities in the Netherlands. These include: the main road networks, the main waterway network and water systems. *Rijkswaterstaat* manages the Netherlands' main highway and waterway networks. It is responsible not only for technical conditions of infrastructure but also for their user-friendliness. Smooth and safe traffic flows, a safe, clean and user-friendly national waterway system and protection from flooding. This is what *Rijkswaterstaat* aims at.

<sup>298</sup> An extensive list of PPS projects launched in the Netherlands can be found at <http://www.ppsnetwerk.nl/Database1>. However, some of them still have to go through the decision making phase.

<sup>299</sup> At a national level there is the Dutch PPP Unit that pools, develops and disseminates knowledge and expertise in the area of public-private partnerships, both within *Rijkswaterstaat* and the Ministry of Transport, Public Works and Water Management. The PPP Unit participates in various *Rijkswaterstaat* projects and maintains close connections with the private sector, other public authorities (including at national level) and international bodies. See, <http://www.epppc.hu/netherlands>.

<sup>300</sup> At a national level there is the Public-Private Partnership Knowledge Centre, see <http://www2.vlaanderen.be/pps/english/index.html>.

<sup>301</sup> At a local level there is the *Europa Decentraal* which is the local and regional authorities' premier knowledge centre, see <http://www.europadecentraal.nl/english/>.

aspects related to PPS' structures and awards. Furthermore, the so-called Ruding<sup>302</sup> Commission for Private Funding of Infrastructure was set-up in order to sustain and develop PPS.<sup>303</sup> Besides the public sector's support, a positive consensus on the use of these instruments grew also within the private business world.

Today, at a national level, PPS are mostly used in big public infrastructures projects such as highways, ports, dams, tunnels and bridges. At a Province and Municipality level, PPS instead expanded mostly in the housing sector for the development, renovation and refurbishment of housing projects. This because the Dutch housing sector is typically a field where local public authorities have difficulties in creating effective relationships with the private sector. Private businesses, in fact, dominate the housing sector, as its main owners and controllers. Therefore, along with financial reasons, local public authorities at a Province or Municipality level, tend to turn to PPS schemes because PPS ease cooperation arrangements with private housing owners. With PPS, public and private parties collaborate, work together and play on the same level field. In addition, PPS are believed to be beneficial because of their capability of assuring a high overall quality level of projects, thanks, for instance, to the involvement of qualified experts.

Thus, in the NL, the main reasons that pushed forward the use of PPS models are, on the one hand, the increasing need for public services and/or infrastructure and, on the other hand, the private sector's unemployment. In addition, public sectors' organizational cuts, which led to smaller public bodies structures, increasingly made contracting authorities incapable of providing essential public infrastructure investments on their own.

As of today, the NL can count on standardized design, build, finance and maintain (hereinafter DBFM) contracts.<sup>304</sup> Since 1999, the latter are, in fact, the main legal type through which PPS schemes are carried out.<sup>305</sup> DBFM contracts represent an integrated approach under which the private sector normally shoulders design, financing, managing and maintenance risks. DBFM contracts are characterised by a high degree of freedom for the private partner especially in the project's planning phase. They are widely used because they allow the arrangement of several project aspects - such as, for instance, life-cycle considerations - within one unique contract. Hence, with DBFM contracts the public sector buys a complete and integrated performance, instead, of fragmented products or services. From the Dutch public authority's point of view, these contracts allow the provision of public infrastructure and/or services through a 'complete buying' scheme, whereby the private sector carries out all project phases, even the maintenance one, without the public sector having to organize or provide any of them. The economic operator generally receives periodical payments during the contract life. The payment mechanism is structured on an availability basis and on contractually agreed output specifications. Moreover, as these contracts entail the involvement of banks for financing aspects, high profile investment programmes can be funded and put forward.

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<sup>302</sup> Former Minister of Finance of the Netherlands.

<sup>303</sup> Since February 2016, a specific division of the Ministry of Economic Affairs, *PIANOO*, carries out all PPS support tasks. See <https://www.pianoo.nl/public-procurement-in-the-netherlands>.

<sup>304</sup> The 4.1 standard form is the current applicable version. Full text available at <https://www.rijksoverheid.nl/documenten/richtlijnen/2014/12/19/rijksbrede-modelovereenkomst-dbfm-infrastructuur-2014>.

<sup>305</sup> As in the case of the construction and reconstruction of the Second Coen Tunnel (DBFM contract); the construction and reconstruction of the A15 *Maasvlakte-Vaanplein* motorway (DBFM contract) and the motorway reconstruction A12 *Utrecht-Veenendaal* (DBFM contract).

Central Government bodies opt for PPS arrangements after carrying out a comparison with other procurement forms.<sup>306</sup> For accommodation projects with a value of over 25 million Euros and infrastructure projects of over 60 million Euros, such comparison is undertaken through the so-called added value test. The latter entails three major analyses. The first one is called market scan and it is normally carried out at the beginning of the planning phase. In fact, at an early stage, the public sector looks for the best VfM solution that economic operators can offer in terms of best balance between costs, time and quality. Therefore, the market scan allows the contracting authority to identify the private actor that could be involved in a certain project, how and when the latter should be carried out.<sup>307</sup> However, it is used only for investment projects listed in the national multiyear programme of infrastructure projects. The second analysis is the Public-Private Comparator (hereinafter PPC), which is a tool that aims at verifying the extent to which a PPS arrangement will achieve VfM and, thus, if the PPS scheme represents the best contract option for the contracting authority.<sup>308</sup> The PPC shows the financial advantages and disadvantages of different procurement methods for a given project. Political, environmental and/or social concerns are not taken into account. The PPC, in fact, requires only a financial comparison of life-cycle costs, gains and risks between traditional procurement models and PPS schemes. The PPC tool overall includes four modules:

- Module 1. An action plan describing the goal of the project, the major assumptions and differences between the contract types.
- Module 2. A qualitative analysis highlighting differences between the traditional procurement model and the PPS scheme. This analysis includes, for instance, risk allocation issues. The following are used as benchmarks: similar projects, literature, researches, experts' knowledge and an *ad hoc* check-list.
- Module 3. A quantitative analysis evaluating the differences emerged in Module 2. The outcomes of this analysis are calculated through the net present value method, which focuses on cash flows.<sup>309</sup>
- Module 4. The last module sums up what has been done in the previous Modules and offers concluding remarks. Advice is given on the best alternative (which is the one with the lowest net present value). This final report is very important for the contracting authority's final decision. Decisions not in accordance with the PPC outcome are allowed only if extensively reasoned and supported by the consensus of the Director

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<sup>306</sup> In the NL, in fact, the central Government launches the large majority of PPS. In particular its agencies, namely the *Rijkswaterstaat* and the *Rijksvastgoedbedrijf*.

<sup>307</sup> This may be done by, for instance, attending trade fairs, reading trade journals and/or scanning suppliers' websites.

<sup>308</sup> A PPS is considered to generate VfM when the optimal combination of the whole life cycle costs and quality of an infrastructure or service is obtained and end users' requirements are met. HM Treasury, Value for Money Assessment Guidance, London, November 2006, available at [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/252858/vfm\\_assessmentguidance061006\\_opt.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/252858/vfm_assessmentguidance061006_opt.pdf).

<sup>309</sup> The net present value can be described as the difference between the present value of cash inflows and the present value of cash outflows. The net present value is used in capital budgeting to analyse the profitability of an investment or project. See, for instance, *Rijkswaterstaat*, Ministry of Infrastructure and Environment, Evaluating Value for Money, Auditing Public-Private Partnerships, The Work Continues, Seminar for Supreme Audit Institutions, 26 and 27 November 2012, The Hague, the Netherlands.

General. Moreover, the Ministry of Transport regularly reports on PPC results to the Parliament.

For the purpose of a smooth PPC use, two standard documents, a handbook and checklist were elaborated. Moreover, qualified PPC experts of the Dutch PPS Unit offer their support.<sup>310</sup> The PPC is normally carried out before the beginning of the tender or procurement phase.

The last analysis is the Public Sector Comparator (hereinafter PSC), which is generally undertaken at the beginning of the tender or procurement phase. The PSC compares the total life-cycle costs and risks of PPS and conventional procurement models. The Figure below shows how PPS phases are structured and when the market scan, the PPC and the PSC tools are usually carried out.

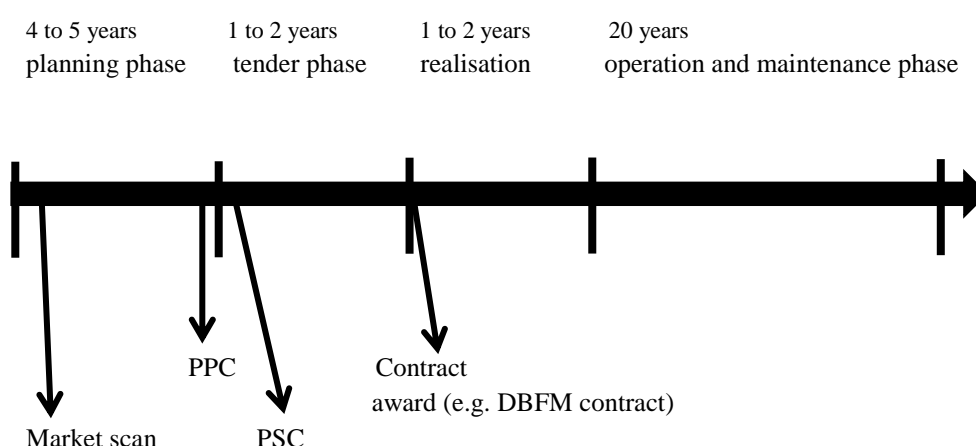


Fig. 3  
PPS phases.

The DBFM option has shown so far to create an average added value of 10% to 15%, if compared to projects carried out under conventional procurement schemes.<sup>311</sup> Especially since 2013, the PPS market is progressively expanding and economic operators are increasingly willing to engage in these kind of arrangements.<sup>312</sup> Moreover, as of today, several PPS projects in the housing and infrastructure sectors are in the pipeline<sup>313</sup> and more PPS projects are expected to be launched also by local authorities.<sup>314</sup> Dutch PPS projects have increasingly proved to be delivered on time and within budget, especially thanks to the allocation of risks to the party that can better control them.

One of the major downfalls in the use of DBFM contracts in the NL arises out the above-mentioned bank involvement in PPS structures. Banks, in fact, indeed play a crucial role in the realization of most public-private arrangements. However, because of their specific nature, they tend to avoid all those risks that may negatively affect contractors' revenues and cash inflows. Thus, for instance, banks usually do not look with favour to innovation, given its inherent high

<sup>310</sup> Further details are available at <http://www.epppc.hu/netherlands>.

<sup>311</sup> J M Hebly, M Klijn, 'Public-Private partnerships in the Netherlands' [2016] EPPPL 46.

<sup>312</sup> J M Hebly, M Klijn, 'Public-Private partnerships in the Netherlands', *ibid.*, 47.

<sup>313</sup> Details on the housing sector available at <https://www.government.nl/topics/public-private-partnership-ppp-in-central-government/contents/housing-ppp-projects>. Details on the infrastructure sector available at <https://www.government.nl/topics/public-private-partnership-ppp-in-central-government/contents/ppp-infrastructure-projects>.

<sup>314</sup> M Hebly, M Klijn, 'Public-Private partnerships in the Netherlands', *op. cit.*, 48.

degree of risk. In addition, banks are overall inflexible, while PPS models by nature need great flexibility in order to survive and effectively work. Besides banks, PPS difficulties may arise out the organization and management of the first two phases of the awarding procedure: the planning and tendering phases. The latter tend, in fact, to be very long. Together they can last up to seven years. Furthermore, given that once a PPS is awarded under a DBFM contract the contractor benefits of a situation of monopoly, project's changes - that may become necessary during the realization phase - may be extremely costly and the public sector may not be able to cover such expenses. Moreover, the inflexible nature of the Dutch national budget represents another reason that can hinder PPS' full exploitation. Hence, a general call for more flexibility<sup>315</sup> in both contract changes and budget availability should be brought forward for a smoother PPS' use in the NL.

Therefore, it can be overall stated that the PPS implementation in the NL was not a big-bang phenomenon. It, instead, slowly progressed through a step-by step process until expansion occurred. It could be argued that in the NL the number of PPS projects undertaken until today is low. However, if one considers that the NL is a relatively small country, this is not anymore true. Therefore, from this perspective, the number of PPS carried out in this country is quite high.<sup>316</sup>

As mentioned, several issues still hinder smooth PPS' implementation. For instance, a full understanding of PPS' financial added value, which is linked to a resistance towards DBFM contracts of some civil servants that consider them as complex arrangements from both a financial and legal point of view. In this regard, the public sector's tendering and legal expertise did improve in the last decades. However, its financial skills are still limited. In fact, the Dutch public sector usually hires external financial advisors from close neighbour Member States, such as France and Germany. Thus, after a full understanding of PPS' financial added value, it should be important to invest more on public servants' training, as this would help to move towards an out-put way of thinking and improve the formulation of functional specifications. Additionally, the PPS political commitment could be increased in order to assure a true boost of the PPS schemes as delivery means of public services and/or infrastructure. The mentioned issues inevitably hamper the use of PPS arrangements. Therefore, especially an evidence-based financial added value scheme for PPS models and a higher Government's awareness and support should be developed.

### 5.1.3 Italy: general overview.

The rise of PPPs is a quite recent phenomenon also in Italy. The first public-private transactions were carried out after the liberalization of the electric energy market at the beginning of the 1990s'.<sup>317</sup> Then, in 1998, the so-called *Merloni-ter* Law introduced the public project-financing scheme and specific provisions on public work concessions became part of the national regulation of public contracts.<sup>318</sup> These allowed a smoother award of public works to the private sector and their improved economic and functional management. In 1999, Law n. 144 established a specific PPP task force, namely the *Unità Tecnica Finanza di Progetto*, in support of the structuring and

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<sup>315</sup> The 2014 public procurement Directives aimed at responding to this call for greater flexibility.

<sup>316</sup> For instance, at a central level, respectively for the housing and infrastructure sector, see <https://www.government.nl/topics/public-private-partnership-ppp-in-central-government/contents/housing-ppp-projects> and <https://www.government.nl/topics/public-private-partnership-ppp-in-central-government/contents/ppp-infrastructure-projects>.

<sup>317</sup> The Laws of January 9, 1991, n. 9 and n. 10 introduced the said liberalization.

<sup>318</sup> Law of November 18, 1998, n. 415.

functioning of PPPs.<sup>319</sup> From the year 2000 onwards a remarkable positive trend registered an increased use of PPP arrangements in the delivery of especially local public infrastructure and/or services. In fact, from 2000 to 2010 new rules on award procedures and contractors' selection were put into place.<sup>320</sup> In addition, the general contractor scheme,<sup>321</sup> the so-called *appalto integrato*<sup>322</sup> and the *locazione finanziaria immobiliare in costruendo*<sup>323</sup> entered into the Italian scenario as different legal types through which PPPs may take form.

The third amendment of the Italian Legislative Decree of April 12, 2006, n. 163 - the former Code of Public Contracts - provided for a legal definition of PPPs.<sup>324</sup> However, it was a definition that did not indicate the distinctive features of the PPP category. It merely - and partially - implemented EU law guidelines without providing any indication on the legal regime that governed the relationship between the private and public partners.<sup>325</sup> The mentioned definition recalled, as a

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<sup>319</sup> The *Unità Tecnica Finanza di Progetto* was an *ad hoc* body established by Article 7 of the Italian Law n. 144/1999 within the *Comitato Interministeriale per la Programmazione Economica*, which is a Committee of the Department for the planning and coordination of the economic policy set up by the central Government. However, Article 1, para 589, of the Italian Law n. 208/2015 (so-called *Legge di Stabilità 2016*) eliminated the UTFP and transferred its competences to the central Government Department for the planning and coordination of economic policy.

<sup>320</sup> Among others, the Law n. 166 of August 1, 2002, widened the number of evaluating subjects including service companies established by credit institutions registered within specific registries, eliminated the restriction of the maximum duration of concessions (that was of 30 years) and of the maximum public funding (that was of the 50%). Moreover, in 2007 it was eliminated the right of the promoter to adequate its proposal to the bidder's one, hence resulting in the winner of the bid.

<sup>321</sup> The general contractor was introduced into the national legal system by the Law of December 21, 2001, n. 443, so-called *Legge Obiettivo*, that in order to streamline and speed up the implementation of strategic public works, authorized the Government to define the relevant discipline. Subsequently, the Decree of August 20, 2002, n. 190 (as amended by Legislative Decree n. 189/2002) outlined the nature and the operating procedural aspects of the general contractor through the provisions of Article 6 (procedures for the creation of infrastructure by the general contractor), Article 9 (reliance on general contractor) and Article 10 (procedure for awards to the general contractor), to which were added Articles of Chapter II-*bis*, on the qualification of the general contractors (Article 20-*bis* 20-j) introduced by the Legislative Decree n. 9/2005. The latter created a system of qualification of the general contractor of strategic works, different from the system of qualification of businesses that merely execute public works.

<sup>322</sup> The introduction of the *appalto integrato*, which took place with Article 19 of the *Merloni* Law n. 109 of 1994, regulated public work contracts of special complexity whereby a single entity is entitled of both the designing and execution of a project. With the amending Decree (Legislative Decree n. 113/2007), the *appalto integrato* became applicable only to complex works of maintenance, refurbishment and archaeological excavations in bids below the European threshold awarded on the basis of preliminary projects, however, leaving it liberalized above the threshold. Article 53 was hence integrated by paragraph 3-*bis*. Later, there was the introduction of the new Regulation implementing the former Code of Public Contracts through the Presidential Decree of October 5, 2010 n. 207. This new legislation extended the scope of applicability of the *appalto integrato* to all works by breaking down the original distinction between design and execution.

<sup>323</sup> The so-called leasing *in costruendo* is a private funding scheme for public infrastructures' deliveries. It was initially regulated by the Law in 2007 and then incorporated into the former Code of Public Contracts (Legislative Decree n. 163/06, Article 160-*bis*), even if in a non-exhaustive way. It is a form of realization of public infrastructure where a financial entity anticipates to a private firm the funds that are needed to carry out a project. Once the asset is built, the private actor is repaid from the public sector with periodic reimbursements. It is an operation of structural finance where the funding aspect is connected to the construction of an asset in one unique tender procedure. Even though the public sector has a direct operative relationship with the service and maintenance providers, there is only one company responsible for the completion of the project, which will receive the reimbursement only when the infrastructure is completed and approved. The leasing *in costruendo* differs from project financing because it is not subject to economic and financial feasibility controls. In fact, cash flows deriving from the management of the asset in leasing do not have to repay the costs borne for its realization. Moreover, the leasing *in costruendo* provides that the management is carried out by the public sector after the payment of the reimbursement to the leasing company.

<sup>324</sup> Legislative Decree n. 152/2008.

<sup>325</sup> See Article 3, para 15-*ter*, Legislative Decree April 12, 2006, n. 163. PPPs are defined as contracts aiming at the execution of either the projecting, construction, management or maintenance of a public infrastructure or utility or the provision of a service, including in any case the total or partial funding of the private partner with a risk allocation that must follow the relevant Italian and EU provisions of law.

way of example of PPP arrangements, concessions and financial leases, jointly held companies, and, under certain conditions, awards to a general contractor.<sup>326</sup> The uncertainties arising out the wording of Article 3, para 15-*ter* of the former Code of Public Contracts were overcome with an interpretation that delimited the PPP category in the light of the criteria set out by the Commission in the 2004 Green Paper. Accordingly, traditional public procurement schemes did not fall within that definition of PPPs because of the absence of the long-term collaboration element recalled by the Commission.<sup>327</sup> Concession contracts, instead, fell within the former Code of Public Contracts' definition of PPPs as the characteristics indicated in the 2004 EU document were met. Likewise, jointly held companies, recalled as well by Article 3, para 15-*ter* of the former Code of Public Contracts, were covered by the PPP notion especially because of the aspects related to the regulation of the private partner's activity, as highlighted by the Commission in the above-mentioned Communication on IPPPs and by the CJEU in the *Acoset* judgement.<sup>328</sup> Therefore, the common elements that allowed the legal identification of Italian PPP arrangements were the infrastructure and/or service management and the allocation of risks between the parties involved.<sup>329</sup>

Within this picture and following a modification of the relationship between demand and offer, openness towards private contractors' financial participation and infrastructure management increased.<sup>330</sup> The market started to focus on either big or small infrastructure and/or service provisions in new sectors, or better, in innovative markets. Thereby the boundaries between private and public assets, between works and services, became blurred and undefined. Since 2002, these new markets increased if compared to the entire public infrastructure and service market. Specifically, in 2002, there were 97% traditional procurements, while ten years later, in 2011, the same value decreased to 74%. Innovative markets, where PPPs - in their various forms - are mostly used, represent today 26% of the opportunities and 68% of transactions' value.<sup>331</sup> The *Osservatorio Nazionale del Partenariato Pubblico Privato*<sup>332</sup> showed that between 2002 and 2010 there has been a boost in the use of PPPs stimulated by increased reductions of public resources.<sup>333</sup> However, this

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<sup>326</sup> If the remuneration for the realization of the project is totally or partially postponed and linked to the availability of the goods to the public sector or end users.

<sup>327</sup> In this respect see, for instance, M P Chiti, *Il partenariato pubblico-privato, concessioni, finanza di progetto, società miste, fondazioni* (Editoriale scientifica, 2009) 5.

<sup>328</sup> C-196/08, *Acoset SpA v Conferenza Sindaci e Presidenza Prov. Reg. ATO Idrico Ragusa and Others*, [2009] I-09913. The Commission in its IPPP Communication and the CJEU in the *Acoset* decision highlighted that the relevant aspects of this type of PPP are the selection of the private partner with regard to the clear delimitation of its managerial and technical contribution.

<sup>329</sup> In this respect, it can be mentioned that within the Italian regulation of project financing Article 153, para 13 has been added. The latter provides that from the beginning of the service execution, the private party has to provide a deposit that guarantees the penalties foreseen in case of breach or non-exact performance of every contractual obligation related to the management of the asset. In addition, the same Article states that not providing the said deposit represents a serious contractual breach.

<sup>330</sup> See *10 Anni di Partenariato Pubblico Privato in Italia, Sintesi, Project Financing, Osservatorio Nazionale, Cresme Europa Servizi*, 2011, 2.

<sup>331</sup> *Ibid.*, 3.

<sup>332</sup> The *Osservatorio Nazionale del Partenariato Pubblico Privato* is promoted by UTFP-CIPE, *Dipartimento per la Programmazione e il Coordinamento della Politica Economica - Unità Tecnica Finanza di Progetto*, ANCE *Associazione Nazionale dei Costruttori Edili* and it is run by *CRESME Europa Servizi*. See <http://www.infoppp.it/>.

<sup>333</sup> For instance, PPPs' awards between 2002 and 2010 have been 2.925. From 83 awards in 2002 to 621 awards in 2010.

increase was not linear nor constant and registered an intensification in 2009. In the last years, PPP percentages remained stable.<sup>334</sup>

In Italy, the most used and common forms of PPPs are public works and services concessions. The latter are more frequent, with 6.191 tenders in the period 2002-2010, representing 58% of the whole PPP market. Nevertheless, service concessions are largely found in low value delivery projects. Public works concessions are, instead, less numerous, but generally have a higher economic value.<sup>335</sup> They represent 76% of the national transaction' volume, for over 40 billion Euros. Furthermore, PPPs delivering so-called *opere fredde* are quite frequent in Italy. *Opere fredde* are public infrastructure and/or services with no end-users. Hence, where the private partner's 'client' is, entirely or partially, the public sector. It is the case of infrastructure or services that do not generate any cash inflow, such as schools, public offices or hospitals. On the public side, local Municipalities act as contracting authorities for several medium-sized infrastructure and/or service projects and play a key role in the use of PPPs.<sup>336</sup> Central public authorities - even if still rarely - focus, instead, on PPP arrangements with a higher overall value. PPPs are mostly used in the transport sector, followed by the water, gas and energy system fields, health and sport sectors, cemeteries and parking constructions and renovations of urban areas.<sup>337</sup> In 2012, the PPP market registered an increase of 1.3% in terms of the number of initiatives, but a decrease of the economic value of projects of 48%.<sup>338</sup> The number of the 2012 PPP projects remained the same as in 2011, which is low if compared to the high values of the previous years - reached mainly because of the Italian Municipalities' boost in the use of PPPs.<sup>339</sup> In 2014, the PPP market registered a 20% decrease of initiatives, from 370 tenders in 2013 to 297 in 2014. However, the economic value improved from 262 million Euros in 2013 to 489 million in 2014.

The use of PPPs has been further supported by the introduction, in 2016, of an *ad hoc* set of rules specifically dedicated to PPPs. In fact, on April 19, 2016, the Legislative Decree n. 50/2016, entered into force, repealed the former Code of Public Contracts<sup>340</sup> and implemented Directives 2014/24/EU, 2014/23/EU and 2014/25/EU. The new Code re-organized the existing rules on public contracts for works, services and supplies, and notably introduced, for the first time in the Italian system, an *ad hoc* legal framework specifically devoted to PPPs. The latter preserved the fundamental rules already existing on PPPs and project financing provided by the Legislative Decree n. 163/2006, however, it specified concepts and introduced new provisions.

Part IV of the Legislative Decree n. 50/2016 - entirely dedicated to PPPs - first of all states that the rules of the new Code on general principles, EU thresholds, award procedures and concession contracts apply also to PPPs. Then, Article 180, Legislative Decree n. 50/2016, in order to deal with the uncertainties arising under the former Code, provides for a detailed definition of PPPs indicating their distinctive features. PPPs are defined as contracts for pecuniary interest,

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<sup>334</sup> See among others, A Petretto, 'Partenariato pubblico-privato e finanziamento degli investimenti pubblici' in G C Feroni (ed), *Il Partenariato pubblico-privato: modelli e strumenti*, (Giappichelli, 2011) 145.

<sup>335</sup> Being more or less the 30% of the total PPP bids.

<sup>336</sup> There are figures showing an increase of PPPs' use by Municipalities from a 10% in 2002 to a 65% in 2011 in terms of economic value of projects and from 1% to 24% in the same years in terms of number of bids.

<sup>337</sup> For further data please refer to *10 Anni di Partenariato Pubblico Privato in Italia*, *op. cit.*, 15.

<sup>338</sup> This occurred because of the 2011 public work concession of 2,7 billion Euros undertaken by the *Autostrade del Lazio S.p.A.* for the construction and management of the highway connecting *Roma-Latina* and *Cisterna-Valmontone*.

<sup>339</sup> In 2012 there have been 3.204 PPP bids for a value of 8,7 billion Euros. If compared to 2011 the PPP demand increased of 13% while decreased for value of 35%.

<sup>340</sup> Legislative Decree n. 163/2006.

concluded in writing, under which one or more contracting authorities give to one or more economic operators, for a specified period and depending on the time needed to recoup the investment made, or on the specific financing mechanism, a number of activities consisting in the:

- realization,
- transformation,
- maintenance, and
- operational management

of an infrastructure in exchange for its availability, economic exploitation, or supply of a service related to its use. Moreover, the Code specifies that in PPP contracts the private operator bears a set of risks according to what is provided by the relevant contract.<sup>341</sup> Article 180, Legislative Decree n. 50/2016, further states that economic operators' revenues consist of fees paid by the public partner, or by any other form of economic consideration, including direct earnings arising out the management of the service or infrastructure. Article 180, para 3, holds that in PPPs risks transfers to the economic operator entail the allocation to the latter of the construction and availability risk or, in cases of profitable projects with respect to third parties, the demand risk for the service delivered during the management period. The recovery of the investments made and of the costs borne by the economic operator depends:

- on the actual delivery of the service, or
- on the availability of the infrastructure, or
- on the volume of service provided with respect to the demand, and
- in any case, if the service or infrastructure complies with the quality levels provided by the contract.

Upon the availability of the infrastructure or demand of the service, the contracting authority may choose to pay a fee, which is proportionally reduced or cancelled in the case of low or non-availability of the infrastructure, of reduced or non-provision of the services. Such fee modifications must negatively affect the net present value of all investments, costs and revenues of the economic operator. The contracting authority may also choose, upon availability of the infrastructure or demand of the service, to pay a different fee or that the remuneration of the service depends on the direct exploitation of the asset by the economic operator, which, hence, bears the risks of the negative fluctuations of the service's demand. Para 6 of the same Article states that the economic and financial equilibrium is the prerequisite for a proper allocation of risks in PPP contracts.<sup>342</sup> Para 8, instead, indicates which are the contracts falling within the notion of PPPs. These are project financing, construction and management concessions, service concessions, financial leases, the *contratto di disponibilità* as well as any other form of partnership - for the realization of works or services - which meets the characteristics specified under Article 180, Legislative Decree n. 50/2016.

Furthermore, Article 181, Legislative Decree n. 50/2016, holds that the selection of economic operators must be carried out through a public tender procedure. The legislator expressly indicated -

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<sup>341</sup> Article 3, para 1, letter eee), Code of Public Contracts.

<sup>342</sup> The economic and financial equilibrium is defined by Article 3, para 1, letter fff), Code of Public Contracts.

as its preferred choice - the competitive dialogue. Article 182, Legislative Decree n. 50/2016, instead, states that the financing of PPP contracts may be carried out using any adequate tool including, among others, project-financing schemes.<sup>343</sup> The PPP contract must indicate risks transferred, monitoring systems and consequences resulting from an early termination of the contract. Article 184, Code of Public Contracts, further states that a call for tender for the award of a concession for the construction and/or management of an infrastructure or service must foresee the possibility for the contractor to establish a project company, namely a SPV. The project company, by taking over the concession agreement, becomes the concessionaire. Moreover, on financing aspects of PPP contracts, Article 185, Legislative Decree n. 50/2016, provides for the possibility for SPVs, and companies awarded with a PPP contract, to issue bonds and debt securities, to be subscribed by qualified investors, for the realization of a public infrastructure or delivery of a public service. Article 185, para 3, states that the aforementioned bonds and debt securities may be secured by the financial system, private foundations and funds.

Article 187, Legislative Decree n. 50/2016, holds that contracting authorities may also resort to a financial lease for the construction, acquisition and completion of a public infrastructure or service. A financial lease is considered a works contract unless works are merely incidental with respect to the main object of the contract. The following Article 188 regulates, instead, the *contratto di disponibilità*. Under this contract, the contractor is paid with an availability fee upon the actual availability of the infrastructure, which is proportionally reduced or cancelled in the event of reduced or non-availability. A payment may be also recognized to the economic operator - when works are in progress - in case of transfer to the contracting authority of the ownership of the infrastructure. In any case, the private party shoulders construction and technical management risks and the relevant contract defines the risks' distribution. The provisions set out in the Legislative Decree n. 50/2016 on general requirements for the participation to procurement procedures and qualification of economic operators apply also to the *contratto di disponibilità*. In addition, Article 191, Legislative Decree n. 50/2016, provides that a call for tender may foresee by way of consideration - partial or total - the transfer to the private party of the ownership of an immovable property belonging to the contracting authority.

Title II, Part IV of the Legislative Decree n. 50/2016, also regulates the special regime of in-house awards. It provides that in-house awards of contracts relating to services available on the market in a competitive regime require a prior evaluation of the economic adequacy of the offers. Particular attention has to be put on the benefits achievable for the community through the chosen management form.

Article 193, Legislative Decree n. 50/2016, then provides that if for the best use of an infrastructure a coordinated action of several public entities is required, such entities may sign a program agreement and, if necessary, establish a public project company. The latter carries out the project on behalf of its shareholders and makes use of an *ad hoc* funding scheme. Chambers of commerce, industry and crafts as well as banking foundations may participate in this kind of project companies.

Title II, Part IV of the Legislative Decree n. 50/2016, finally, regulates awards to general contractors. Under these kind of contracts, the contracting authority entrusts to an economic

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<sup>343</sup> Article 183, Legislative Decree n. 50/2016, provides for a detailed regulation specifically dedicated to project financing. See, among others, M Nicolai, W Tortorella, *Partenariato Pubblico Privato e Project Finance* (Maggioli Editore, 2016).

operator with an adequate organizational, technical and financial capacity the realization, by any means, of a project against a consideration paid, in whole or in part, after the completion of the works. The general contractor prepares the final design project, the works' plan, the financing, the management plan and the managers' selection. The contracting authority approves the design project and carries out works' testing. The general contractor is liable to the contracting authority for the proper and timely execution of works, which may be performed directly, through a project company or by third parties.

Notwithstanding the above-mentioned new legal framework that now regulates and supports PPP arrangements, there are still a number of critical concerns affecting an effective use of PPPs in Italy. As of today, the main issues that hinder the effectiveness of public-private transactions are the use of PPPs especially for medium-sized projects, the fragmentation - and often lack - of contracting authorities' expertise and a poor competitive pressure. The latter mainly arises out of the little innovative capacity and specialization of companies and issues related to high taxation and low incentives. Moreover, critical aspects originate from the long period of time that normally separates the award of contracts and their financial close as well as the use of PPPs as elusive means of public finance restrictive measures.<sup>344</sup> In this latter respect, PPPs may be used to avoid the constraints imposed by fiscal rules on public investment. In fact, by resorting to PPPs, the public sector may formally comply with the relevant fiscal regime, as no upfront public spending is needed. However, the elusion may occur because public spending is only postponed to a future moment, namely at the end of or during the contract life. Lastly, the following aspects affect a full implementation of PPPs in Italy. The potential inadequacy of certain financial feasibility plans, the difficulties related to the possibility of obtaining bank loans and the complexity of the relevant broader national legal framework.

## **6. Conclusions to this Chapter.**

This Chapter investigated the nature and features of the PPP category by firstly discussing its understanding at an International and European level in order to later identify the main goals pursued through these arrangements. Then, the focus was put on PPPs' legal background at an International and European level. At an International level, the discussion concentrated on PPPs' best practices developed in the last decades between international market actors. At a European level, the attention was put on the relevant Treaty principles and public contracts and concessions law provisions. Moreover, this Chapter highlighted the elaboration of the PPP phenomenon made by the EU Institutions, particularly by the Commission. Furthermore, it focused on the relevance of the EU public procurement Directives, in particular, of the 2014 Directive on the award of concession contracts. An overview of the importance of the operating risk element in the 'concession' notion, as explained by the CJEU case law, was presented. The second part of this Chapter was devoted to the investigation of PPPs' implementation in the Member States studied, namely the UK, the NL and Italy. For each jurisdiction, specific aspects were highlighted: (i) the Government support in the promotion of PPPs, (ii) PPPs types most commonly used and the sectors in which they progressed, (iii) the relevant legal framework and (iv) the main criticalities connected to their use.

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<sup>344</sup> See, *Dipartimento per la Programmazione e il Coordinamento della Politica Economica, Unità Tecnica Finanza di Progetto, Partenariato pubblico-privato in Italia, Stato dell'arte, futuro, proposte, 2010.*

The study of the PPP phenomenon - both in general terms and as implemented in the Member States studied - along with a review of its legal framework represents the necessary starting point of this thesis. As seen, PPPs cannot rely on an *ad hoc* regulation specifically dedicated to them, neither at EU nor at an International level. Therefore, Chapter II served the purpose of identifying the International and EU legal regime governing PPPs. At the same time, it highlighted the set of rules that will be analysed in the following Chapters in order to explore the current legal spaces recognised - within these kind of complex public contracts - to sustainable development considerations.

With specific regard to the PPP phenomenon, this preliminary study showed that PPPs entail a different approach to procuring public infrastructure and services from traditional public procurement means. PPPs present a particular set of inherent features, which may range from enhanced feasibility and preliminary studies, public monitoring, long duration, applicability in strategic priority fields, to the need of a sector wide strategy and a policy framework to support them. In this respect, the public sector plays a key role in ensuring the projects' implementation and prompt responses in cases of changes or conflicts, which can in turn avoid potential disputes. PPPs represent an important delivery form of public infrastructure and services re-emerged in the last decades. The PPP phenomenon can count on several different formalizations: numerous legal options, types, structures and strategies are available. The PPP market and the risks that parties are willing to accept vary from place to place and from project to project. PPPs are often described as legal arrangements lying somewhere between public provision and privatization. In fact, until recently, public services and infrastructure facilities were considered to be public goods, hence, they were built by the public sector, financed by taxpayers and managed by public entities. It was more or less in the 1990s that several jurisdictions began to resort to PPPs. These arrangements link together finance, construction and operation into one single long-term contract between the contracting authority and a private company. During the contract life, the private sector receives a set of revenues as compensation for the first investment, operational costs and maintenance expenses. Depending on the contract type chosen, the set of incomes may be users' fees, payments from the contracting authority or a combination of both. At the end of the contract, the asset may be transferred to the public sector.

The importance of PPPs will most likely continue to increase, although at times also for wrong reasons and in the wrong ways. It is, for instance, the case of PPPs used to elude public finance restrictions or to pursue exclusively profitable objectives without considering the related socio-environmental impacts. Therefore, given the erroneous directions toward which PPPs may be oriented, the potentialities of PPPs in the promotion - along with economic concerns - of socio-environmental benefits will be investigated. To this end, the following Chapters will explore the legal means through which PPPs can act as true and effective public delivery options from a sustainable development point of view. Thus, it will be studied the scope for welfare and environmental considerations gains within PPPs' structures, given that the typical features of public-private relationships indeed allow room for opportunism in this respect. Especially in complex infrastructure and service projects, PPPs have the potential to play an important and positive role in the promotion of sustainable development goals. Therefore, moving from the current state of the art on the PPP phenomenon - which had to be dealt with - it is worthwhile to study the current legal spaces for social and environmental considerations that can be located within PPPs' structures.

Unsurprisingly, as PPPs spread throughout the globe during the last decades, PPPs' practice went a long way ahead of a clear understanding and acknowledgment of their potential broader implications. Governments and private actors took advantage of the opportunities offered by PPP schemes - especially from an economic perspective - to advance their own specific interests and agendas. Thus, today more than ever, it is important to move towards a smarter PPPs' understanding, use and governance, whereby also social and environmental considerations are fully embraced.

# III CHAPTER - PUBLIC-PRIVATE PARTNERSHIPS AND SUSTAINABLE DEVELOPMENT IN THE EUROPEAN UNION

## 1. The concept of sustainable development.

There are many definitions of sustainable development.<sup>1</sup> It is a broad and abstract concept,<sup>2</sup> which brings together various meanings that are often understood differently among individuals, professionals, interest groups, State agencies, political leaders and NGOs.<sup>3</sup> In this thesis, the term sustainable development will refer to a particular vision of growth where social, economic and environmental considerations are integrated with one another as inseparable and interdependent components of human progress. In this respect, probably the most renowned definition of sustainable development, explains well such understanding. In 1987, the World Commission on Environment and Development<sup>4</sup> defined sustainable development as a ‘development that meets the needs of the present without compromising the ability of future generations to meet their own.’ In other words, sustainable development is endorsed when the needs of the present generations are met, while the possibility for future generations to meet their own is not put at risk. This can occur only if an effective balance between economic, social and environmental objectives is found.

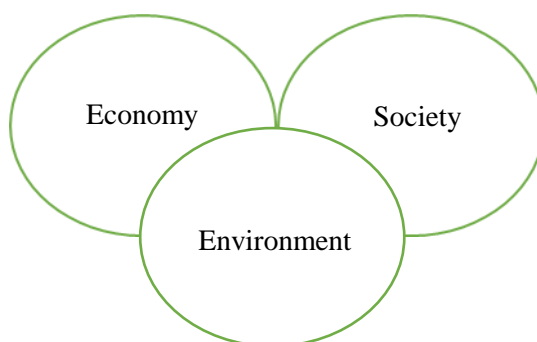


Fig. 4  
The concept of sustainable development.

<sup>1</sup> D C Dragos, B Neamtu, ‘Sustainable Public Procurement in the EU: Experiences and Prospects’ in F Lichère, R Caranta, S Treumer (eds), *Modernising Public Procurement: the New Directive* (DJØF, 2014), 302.

<sup>2</sup> B J Brown et al, ‘Global Sustainability: Toward Definition’ [1987] *Environmental Management*, 713, 719. C Kidd, ‘The Evolution of Sustainability’ [1992] *Journal of Agricultural and Environmental Ethics*, 1, 26.

<sup>3</sup> S Arrowsmith, P Kunzlik, ‘Public Procurement and Horizontal Policies in EC Law: General Principles’ in S Arrowsmith and P Kunzlik (eds), *Social and Environmental Policies in EC Procurement Law* (Cambridge University Press, 2009) 35. M Comba, ‘Green and Social Considerations in Public Procurement Contracts: A Comparative Approach’ in R Caranta and M Trybus (eds), *The Law of Green and Social Procurements in Europe* (DJØF, 2010) 307. K Portney, *Taking Sustainable Cities Seriously*, (MIT Press, 2003). P Selman, *Local Sustainability: Managing and Planning Ecologically Sound Places* (St. Martin’s Press, 1996). J Zachary, *Sustainable Community Indicators: Guideposts for Local Planning* (Wiley, 1999).

<sup>4</sup> The so-called Brundtland Commission. World Commission on Environment and Development, *From One Earth to One World: An Overview* (Oxford University Press, 1987).

On the one hand, it can be argued that - especially in the short term - these objectives are in conflict with one another. On the other hand, by looking at the bigger picture and with a long-term perspective, economic, social and environmental targets are capable of advancing simultaneously and progressing together. Therefore, economic growth goals can, for instance, be pursued along with environmental objectives. The latter view is the one embraced by this thesis: the concept of sustainable development as the establishment of a synergy between the economic, environmental and social dimensions of human life in order to move towards a new approach of human progress.

The principle of sustainable development emerged in the early 1970<sup>5</sup> in order to counteract modern development practices, which were bringing worldwide environmental and social crises.<sup>6</sup> It became a fundamental objective of the EU in 1997 when the Treaty of Amsterdam included it as an over-reaching goal of EU policies.<sup>7</sup> On June 2001, at the Gothenburg Summit, the first EU sustainable development strategy was launched.<sup>8</sup> Objectives and policy measures were set out in order to deal with unsustainable trends. A new approach to policy-making was invoked to ensure that the EU's economic, environmental and social policies mutually support each other. The EU sustainable development strategy added a third environmental dimension to the Lisbon strategy<sup>9</sup> and aimed at identifying actions allowing the EU to obtain an enduring, long-term improvement of quality of life. This, through an effective management and use of resources capable of tapping economic growth, environmental protection and social cohesion. It asked the Commission to refer every new policy proposal to an impact assessment.<sup>10</sup> The outcomes of the Gothenburg Summit form the basis of EU's policies towards sustainable development, along with other commitments such as those taken at the 2002 World Summit on sustainable development in Johannesburg<sup>11</sup> and the 2000 Millennium Development Goals.<sup>12</sup>

Later in 2005, guiding principles on sustainable development were adopted<sup>13</sup> and a proposal for a reviewed strategy was put forward by the Commission in order to take further action. This proposal moved from the 2001 strategy and called for a stronger shift in focus. The outcome was a new strategy that concentrated on the means available to the EU to pursue its long lasting

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<sup>5</sup> It is a principle that was developed and elaborated already in the 1970s. However, only with the Treaty of Amsterdam did it become part of the EU Treaty. Later it was sealed within the Charter of Fundamental rights of the European Union.

<sup>6</sup> S M Wheeler, *Planning for Sustainability. Creating Liveable, Equitable, and Ecological Communities* (Routledge, 2004) 19.

<sup>7</sup> Articles 1 and 2 of the Treaty of Amsterdam. At the International Level, see the first UN Conference on Environment and Development held in Rio in 1992. This conference represented one of the first commitments towards sustainable development. At the summit, a program of action for sustainable development was adopted, namely Agenda 21, Chapter 4.23.

<sup>8</sup> Commission Communication of 15 May 2001, 'A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development' Commission proposal to the Gothenburg European Council, COM (2001) 264 final – not published in the Official Journal.

<sup>9</sup> The Lisbon strategy, or Lisbon Agenda or Process, was an action plan for the development of the EU economy between 2000 and 2010.

<sup>10</sup> See [http://ec.europa.eu/smart-regulation/impact/index\\_en.htm](http://ec.europa.eu/smart-regulation/impact/index_en.htm).

<sup>11</sup> Plan of Implementation, Chapter 3, paras 15 and 19 letter c), available at [http://www.un.org/esa/sustdev/documents/WSSD\\_POI\\_PD/English/WSSD\\_PlanImpl.pdf](http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/WSSD_PlanImpl.pdf).

<sup>12</sup> Data available at <http://www.undp.org/content/undp/en/home/sdgoverview.html>.

<sup>13</sup> See the Communication from the Commission to the Council and the European Parliament, Draft Declaration on Guiding Principles for Sustainable Development, Brussels, 25.5.2005, COM (2005) 218, final. Also, the Commission Communication of 9 February 2005, 'The 2005 Review of the EU Sustainable Development Strategy: Initial Stocktaking and Future Orientations' [COM (2005) 37 final – not published in the Official Journal].

sustainable development targets.<sup>14</sup> The focus was put on the need to replace the current consumption and production attitude with a sustainable and integrated approach. Since 2007, the Commission prepares every two years a report on the implementation progress of the sustainable development strategy.<sup>15</sup> Member States and Eurostat regularly elaborate sustainable development indicators.<sup>16</sup> Specifically, Eurostat carries out bi-annual monitoring reports on sustainable development in the EU. In 2009, the EU Council remarked that sustainable development remains a fundamental objective of the EU under the Lisbon Treaty. Thus, such a principle became part of a broad range of EU policies.<sup>17</sup> In 2010, the European Union launched its ten-year jobs and growth strategy, Europe 2020, which aims at promoting a smart, sustainable and inclusive growth throughout the EU.<sup>18</sup> In 2011, the Commission Communication ‘Rio+20: towards the green economy and better governance’ dedicated specific attention to sustainable development.<sup>19</sup> In addition, in 2012, Member States - moving from the Millennium Development Goals - launched another process to develop a renewed set of sustainable development goals.<sup>20</sup>

## 2. Sustainable public procurement.

Sustainable development is a principle that can guide many different choices. This acknowledgment became part of a general EU call for specific actions in support of sustainable development objectives.<sup>21</sup> Sustainability had to be secured through the adoption of policy measures that included sustainable development considerations. Within this picture, a transition towards sustainable production and consumption was advocated. Thus, public procurement began to be perceived as an effective tool through which sustainable development goals could be positively encouraged.<sup>22</sup>

Traditionally, the main goal of public procurement has been economic efficiency, with little attention put on non-economic considerations.<sup>23</sup> The 1990s began, however, to register a reduction

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<sup>14</sup> Communication from the Commission to the Council and the European Parliament on the Review of the Sustainable Development Strategy, A Platform for Action, Brussels, 13.12.2005 COM (2005) 658, final.

<sup>15</sup> The Commission adopted in 2007 the first progress report, which is available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52007DC0642&from=EN>. Commission Communication of 22 October 2007 ‘Progress Report on the Sustainable Development Strategy 2007’ [COM (2007) 642 final – not published in the Official Journal].

<sup>16</sup> Sustainable development indicators to monitor the implementation of the EU sustainable development strategy [SEC (2005) 161 - not published in the Official Journal]. Further data available at [http://ec.europa.eu/eurostat/statistics-explained/index.php/Main\\_Page](http://ec.europa.eu/eurostat/statistics-explained/index.php/Main_Page).

<sup>17</sup> In this respect see, for instance, the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 24 July 2009, Mainstreaming sustainable development into EU policies: 2009 Review of the European Union Strategy for Sustainable Development [COM (2009) 400 final - Not published in the Official Journal].

<sup>18</sup> Further details on priorities, targets and initiatives available at [http://ec.europa.eu/europe2020/europe-2020-in-a-nutshell/index\\_en.htm](http://ec.europa.eu/europe2020/europe-2020-in-a-nutshell/index_en.htm).

<sup>19</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Rio+20: Towards the Green Economy and Better Governance, Brussels, 20.6.2011 COM (2011) 363 final, 2, 4, 8, 9, 10, 13, 14.

<sup>20</sup> At the UN Conference on sustainable development the focus was on (a) the green economy and (b) the institutional framework for sustainable development. Further details are available at <http://www.uncsd2012.org/about.html#sthash.gt9fepQG.dpuf>.

<sup>21</sup> For instance, in 2007, the EU Council stressed the need to prioritise sustainable development implementation measures. See the Presidency Conclusions, Brussels, December 14, 2007, 16, available at [http://www.consilium.europa.eu/ueDocs/cms\\_Data/docs/pressData/en/ec/97669.pdf](http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/ec/97669.pdf).

<sup>22</sup> B Sjafjell, A Wiesbrock, ‘Why should Public Procurement be about Sustainability?’ in B Sjafjell, A Wiesbrock (eds), *Sustainable Public Procurement Under EU Law* (Cambridge University Press, 2016) 1, 22.

<sup>23</sup> D C Dragos, B Neamtu, ‘Sustainable Public Procurement in the EU: Experiences and Prospects’, *op. cit.*, 301.

in the use of public procurement only to attain policy objectives linked to the Internal Market and competition considerations.<sup>24</sup> Thereafter, the widespread call for sustainable development promotion, increasingly led the public sector to use its purchasing power to uphold sustainable development targets. As a result, sustainable public procurement - as a specific form of development - grew in terms of endorsement and implementation. Today, contracting authorities have to respect general sustainable development obligations as well as specific targets concerning, for instance, energy use.<sup>25</sup> Public procurement is now seen as an essential contributor to the achievement of sustainable development objectives representing an effective and concrete policy measure through which governments can pursue socially and environmentally responsible practises through the use of public contracts.<sup>26</sup>

Sustainable public procurement has been defined in many ways. Among all, it has been defined as ‘a process whereby public organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life cycle basis in terms of generating benefits not only to the organization, but also to society and the economy, whilst significantly reducing negative impacts on the environment’.<sup>27</sup>

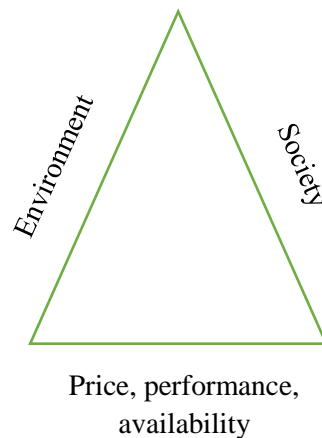


Fig. 5  
Sustainable public procurement.

The above Figure pictures the three main areas or pillars of sustainable development that can be addressed by a sustainable public purchasing, which balances economic, social and environmental goals.<sup>28</sup> Money spent on public contracts should, in fact, contribute to the achievement of all the

<sup>24</sup> In this respect, see, C McCrudden, *Buying Social Justice: Equality Government Procurement and Legal Change* (Oxford University Press, 2007), 331, 363.

<sup>25</sup> A Semple, *A Practical Guide to Public Procurement* (Oxford University Press, 2015), 171.

<sup>26</sup> Sustainable Public Procurement in EU Member States: Overview of Government Initiatives and Selected Cases, Final Report to the EU High-Level Group on CSR, R Steurer, G Berger, A Konrad, A Martinuzzi, Research Institute for Managing Sustainability, Vienna University of Economics and Business Administration, 2007, available at [http://sustainability.eu/pdf/csr/policies/Sustainable%20Public%20Procurement%20in%20EU%20Member%20States\\_Final%20Report.pdf](http://sustainability.eu/pdf/csr/policies/Sustainable%20Public%20Procurement%20in%20EU%20Member%20States_Final%20Report.pdf).

<sup>27</sup> Definition elaborated by the Multistakeholder Advisory Committee of the 10YFP Program, Procuring the Future, Report of the UK Sustainable Procurement Task Force, June 2006.

<sup>28</sup> Numerous researches, guidance and similar materials on sustainable public procurement are referred to in this Chapter. Among others, see the Buying Green! - A Handbook on Green Public Procurement, 2016, available at <http://ec.europa.eu/environment/gpp/pdf/Buying-Green-Handbook-3rd-Edition.pdf>. SEAD Initiative, Us Department of Energy, Energy-Efficient Public Procurement: Best Practice in Program Delivery, 2013. The Irish Environmental Protection Agency, Green Procurement Guidance for the Public Sector, 2014, available at <http://greenbusiness.ie/wp-content/uploads/2014/09/GreenProcurementGuidanceforPublicSector-web.pdf>.

pictured objectives. For instance, public buildings should be constructed in a cost effective, socially inclusive and environmentally friendly way. Sustainable public procurement entails that contracting authorities are willing to reduce the environmental and social impacts of the goods and/or services that they buy during their entire life cycle, while at the same time pursuing more traditional economic efficiency objectives.<sup>29</sup> Resources should be managed in a way that guarantees that future society is not left without their benefits. Environmental impacts, such as greenhouse emissions or water and soil pollution, should be reduced as much as possible. Costs should be evaluated over the entire life-cycle of an asset in order to escape from unforeseen future expenses. Activities that negatively affect social value, such as tax evasion or unfair commercial practises, should be avoided.

Indeed, public purchasing decisions that implement social and environmental considerations are complex because they often entail trade-offs between impacts which are neither visible nor, in some cases, measurable.<sup>30</sup> In addition, from an environmental and/or social perspective, the decision to use a certain new material involves the collection of reliable data on the efficiency of the newer with respect to the existing one as well as any ancillary impact element. Nonetheless, the public sector is overall increasingly committing itself to the identification and prioritization of social and environmental considerations in public purchasing.<sup>31</sup> At EU level, public procurement has become one of the most important actions through which sustainable development goals are implemented and secured. For instance, the Commission, in its Green Paper on modernisation of EU public procurement policy, identified the strategic use of public procurement as one of its major legislative reform goals.<sup>32</sup>

Given the recognition of public procurement as a strategic policy instrument for the implementation of sustainable development considerations, it is now important that EU public procurement rules concretely enable procurement in line with Europe's 2020 objectives. Hence, contracting authorities must be actually able to carry out public procurement strategies consistent with sustainable development policy objectives. In this respect, and as it will be discussed below, the 2014 Directives indeed provide avenues for the incorporation of sustainable development considerations at each stage of public contracts awarding procedures. However, further steps still need to be taken.

### **3. The scope for sustainable development in EU public contracts and concession law.**

Social and environmental aspects, or better, sustainability objectives understood as impacts on longer-term human and environmental welfare, cannot be considered as yet fully implemented into

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Procura+, European Sustainable Procurement network, *The Procura+ Manual: A Guide to Implementing Sustainable Procurement*, 2016, available at

[http://www.procuraplus.org/fileadmin/user\\_upload/Manual/Procuraplus\\_Manual\\_Third\\_Edition.pdf](http://www.procuraplus.org/fileadmin/user_upload/Manual/Procuraplus_Manual_Third_Edition.pdf);

<sup>29</sup> Such as a lower expenditure.

<sup>30</sup> See below paragraph 5.4 and A Semple, *A Practical Guide to Public Procurement*, *op. cit.*, 184.

<sup>31</sup> In this respect, certain sectors have their own legal framework, such as revised Environmental Impact Assessment Directive 2014/52/EU for the construction (and major infrastructures) sector. The mentioned Directive covers the evaluation of impacts of certain private and public projects on the environment.

<sup>32</sup> Green Paper on the Modernisation of EU Public Procurement Policy: European Commission, 'Towards a more efficient European Procurement Market', Brussels, 27.1.2011, COM (2011) 15 final.

EU public contracts and concessions law.<sup>33</sup> Indeed, the 2014 Directives represent an important opportunity in this respect as they, for instance, allow the incorporation, into public contracts' awarding procedures, of sustainability considerations, such as tax payments or access of SMEs, sheltered workshops and social enterprises.<sup>34</sup> However, the large majority of sustainable-related provisions included in the 2014 Directives are optional for the public sector. Thus, their application greatly depends on the political will and relevant regulatory or policy incentives. Bearing this in mind, the following paragraphs will investigate the actual spaces for social and environmental considerations recognised by the EU public contracts and concessions law. Thus, it will be discussed which is the scope for sustainable development objectives within the EU public procurement regime. As it will be seen, the relevant legal framework allows spaces for sustainable development concerns through both mandatory measures<sup>35</sup> and voluntary initiatives.<sup>36</sup>

### **3.1. The International level.**

At an International level, the WTO Plurilateral Agreement on Government Procurement (hereinafter GPA) allows scope for social and environmental sustainability within public procurement<sup>37</sup> and since the EU is part of this agreement, it is bound by its provisions. The GPA generally refers to the principles of non-discrimination and transparency, sets out rules on technical specifications, tenderers' selection and tenders' evaluation. Then, it specifically and expressly foresees that environmental considerations may be incorporated into technical specifications and award criteria. Article X, para 6, provides that technical specifications may 'promote the conservation of natural resources or protect the environment'. Moreover, environmental features are indicated among the evaluation criteria of Article X, para 9. Social considerations are, instead, not mentioned. Nonetheless, they are considered admissible as long as they respect the general principles' requirements.<sup>38</sup>

### **3.2. The European level.**

At European level, a number of primary law provisions support the inclusion of sustainable development concerns within all EU activities, hence, also within public procurement policies.

First of all, the concept of sustainable development is embodied in Article 11 of the TFEU. The latter, in fact, calls for environmental considerations to be included into the structure and implementation of all EU policies and activities, specifically with the aim of promoting sustainable development. Article 11 reads as follows.

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<sup>33</sup> See, among others, the study on 'The uptake of green public procurement in the EU27, submitted to the European Commission, DG Environment and prepared by the Centre for European Policy Studies, 2012, available at <http://ec.europa.eu/environment/gpp/pdf/CEPS-CoE-GPP%20MAIN%20REPORT.pdf>.

<sup>34</sup> Social considerations may cover several issues. These may be grouped in the following way. Supply chain impacts, such as extraction of raw materials, working conditions, manufacture or processing. End-user impacts, such as characteristics of a product, service or work which determine its social utility, accessibility to all users and the added value related with employment, training or apprenticeship.

<sup>35</sup> Those related to energy-efficiency, vehicle emissions and treatment of abnormally low tenders.

<sup>36</sup> For instance, the use of environmental management systems, life-cycle costing and environmental or social labels.

<sup>37</sup> European Commission, Internal Market and Services, EU public procurement legislation: delivering results, available at [http://ec.europa.eu/internal\\_market/publicprocurement/docs/modernising\\_rules/executive-summary\\_en.pdf](http://ec.europa.eu/internal_market/publicprocurement/docs/modernising_rules/executive-summary_en.pdf).

An updated version of the GPA was agreed upon in 2012, see further details at [https://www.wto.org/english/tratop\\_e/gproc\\_e/gp\\_gpa\\_e.htm](https://www.wto.org/english/tratop_e/gproc_e/gp_gpa_e.htm).

<sup>38</sup> D C Dragos, B Neamtu, 'Sustainable Public Procurement in the EU: Experiences and Prospects', *op. cit.*, 315.

*‘Environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development.’*

In addition, Article 9 of the TFEU provides that the following aspects have to be implemented into EU policies

*‘requirements linked to the promotion of a high level of employment, the guarantee of adequate social protection, the fight against social exclusion, and a high level of education, training and protection of human health.’*

Along the same lines, Article 10 of the TFEU states that EU policies

*‘shall aim to combat discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation.’*

Finally, it can be mentioned the Charter of Fundamental Rights of the EU,<sup>39</sup> which is relevant for EU institutions, bodies, offices and agencies, but also for Member States whenever they implement EU law. In the latter case, according to Article 51 of the Charter, they have to respect and promote its application. Thus, for instance, Article 37 of the Charter bound Member States in the implementation of the 2014 public procurement Directives. Article 37 expressly envisages room for sustainability concerns in every EU policy by stating that

*‘A high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development.’*

### **3.3. Secondary legislation.**

At European level, sustainable development objectives are pursued also by secondary legislation adopted in the areas of environmental protection - more specifically, energy and climate change - social inclusion and equality. Secondary EU public contracts and concession law deals with a wide range of social and environmental concerns. In some cases, secondary law reaffirms obligations already imposed on suppliers, such as rules on waste disposal or on maximum working hours contractually provided.<sup>40</sup> For instance, it is the case of the compliance with the Waste Framework Directive, 2008/98/EC, the Packaging and Packaging Waste Directives 94/62/EC and 2004/12/EC and the Working Time Directive, 2003/88/EC. Other times, secondary legislation introduces newly set requirements to be met within the procurement process, such as the obligation to procure only equipment that satisfies certain minimum energy performance levels. In this respect, for instance,

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<sup>39</sup> The Charter of Fundamental Rights of the European Union, (2012/C 326/02). On December 2009, when the Treaty of Lisbon came into force, the Charter became legally binding on EU institutions and national governments as any other EU Treaty.

<sup>40</sup> See, D C Dragos, B Neamtu, ‘Sustainable Public Procurement in the EU: Experiences and Prospects’, *op. cit.*, 308.

the EU Directive on energy efficiency<sup>41</sup> provides for minimum requirements for ordinarily procured goods and services, which are foremost identified through reference to pre-existing standards, such as the energy efficiency requirements listed in Annex C of the Agreement attached to the Council Decision 2006/1005/EC.<sup>42</sup> Compliance with such energy efficiency standards is, however, imposed only if it is cost-effective, economic feasible, sustainable, technically suitable and sufficiently competitive.<sup>43</sup>

The following Tables provide for a non-exhaustive overview of EU secondary legislation allowing room for social and environmental sustainability in public procurement. For most legislative pieces, there are national implementation measures into place.<sup>44</sup> Unfortunately, the 2014 procurement Directives do not specifically mention the EU legislation indicated in the below Tables. Article 18, para 2, Directive 2014/24/EU,<sup>45</sup> only mentions in general terms, ‘social and labour law established by Union law, national law, collective agreements or by the international environmental, social and labour law provisions listed in Annex X’.<sup>46</sup>

<b>EU environmental legislation that allows scope for sustainable development concerns in public procurement</b>		
	<b>Piece of Legislation</b>	<b>How sustainable development goals are secured?</b>
<b>Waste</b>	Waste Framework Directive, 2008/98/EC	Costs and responsibilities in waste management are regulated.
	Packaging and Packaging Waste, Directives 94/62/EC and 2004/12/EC	Packaging of waste is regulated (separation and re-use).
<b>Energy</b>	Energy Efficiency Directive, 2012/27/EU	Energy efficiency standards are set in order to be included by central government's procurement of supplies, services and works.
	Renewable Energy Directive, 2009/28/EU	Criteria for sustainable biofuels are set. Origin certificates must be recognised as evidence of renewable production.
	Energy Performance of Buildings Directive, 2010/31/EU	The public sector has to own and operate buildings that meet minimum energy-efficiency requirements.
	Energy Labelling Directive, 2010/30/EU	Common consumer appliances have to meet efficiency classes and labelling requirements.
<b>Water</b>	Water Framework Directive,	Requires recovery of costs of water

<sup>41</sup> Article 6 and Annex III, Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC Text with EEA relevance.

<sup>42</sup> Council Decision, 18 December 2006, on the conclusion of the Agreement between the Government of the United States of America and the European Community on the coordination of energy-efficiency labelling programmes for office equipment (2006/1005/EC).

<sup>43</sup> Article 6 and Annex III of Directive 2012/27/EU on energy efficiency.

<sup>44</sup> A Semple, *A Practical Guide to Public Procurement*, op. cit., 173.

<sup>45</sup> Equal provisions can be found in Article 36, para 2, Directive 2014/25/EU and Article 30, para 3, Directive 2014/23/EU.

<sup>46</sup> Indicated in Annex X, Directive 2014/24/EU, Annex XIV, Directive 2014/25/EU and Annex X, Directive 2014/23/EU.

	2000/60/EC	services.
<b>IT, electronic and electrical equipment</b>	Energy Star Regulation n. 106/2008	Government procurement of office IT equipment has to set minimum energy-efficiency standards.
	Restriction of Hazardous Substances Directive, 2002/95/EC	Specific hazardous substances cannot be contained in purchased electrical and electronic equipment.
	Waste Electronic and Electrical Equipment Directive 2012/19/EU	Equipment has to be labelled by producers for recycling purposes and taken back at the end of its life.
<b>Wood and paper</b>	Timber Regulation n. 995/2010	Harvest sources must be identifiable for wood and paper products.
<b>Vehicles</b>	Clean Vehicles Directive, 2009/33/EC	Lifetime energy consumption, emissions and noise of road transport vehicles must be considered.
	European Emission Standards Regulation n. 715/2007 (Euro 5 and 6)	Maximum emissions standards are set for vehicles on the market after a set date.
<b>Certification</b>	Ecolabel Regulation n. 66/2010	The identification of environmental friendly products is supported.
	Eco-management and Audit Scheme Regulation, n. 1221/2009	Means for contractors to prove compliance with environmental measures are provided.
	Organic Regulation n. 834/2007 and n. 889/2008	Certain standards for organic certification and labelling are provided.

Table 7 EU Environmental legislation.

**EU social legislation that allows room for sustainable development concerns in public procurement**

	<b>Piece of Legislation</b>	<b>How sustainable development goals are secured?</b>
<b>Employment</b>	Transfer of Undertakings, Protection of Employees Directive, 2001/23/EC	Terms and conditions of employees upon transfer of an undertaking are maintained.
	Working Time Directive, 2003/88/EC	Night and shift works are regulated. Daily and weekly rests, breaks and annual leaves are set.
	Posted Workers Directive, 96/71/EC	Minimum conditions of employment are guaranteed to workers from other Member States.
<b>Equality</b>	Equal treatment of men and women Directive, 2006/54/EC	Direct or indirect discrimination because of sex is not allowed in employment, training and pay.
	Non-discrimination upon racial or ethnic origin Directive, 2000/43/EC	Direct or indirect discrimination because of race or ethnicity is not allowed in employment, training and pay.

<b>Disability</b>	Equal treatment in employment and occupation Framework Directive, 2000/78/EC	Employers provide disabled persons with accommodation for access or advancement in employment.
	Council Decision on Rights of Persons with Disabilities, 2010/48/EC	Communication, technical specifications, award criteria and contract performance conditions have to respect rights of disabled persons.
<b>Services of general interest<sup>47</sup></b>	Protocol n. 26 to the TFEU on Services of General Interest	National, regional and local authorities can discretionally provide, commission and organize services of general interest.
	Universal and Public Service Obligations (several directives)	Specific services in the postal, energy, transport and telecommunication fields can be paid according to different rules.
<b>Health and safety</b>	Health and Safety of Workers at Work Directive, 89/391/EEC	Specific rules on safety are set.
	Protection from Exposure to Asbestos Directive, 2009/148/EC	Working procedures must limit exposure to asbestos and other related risks.

Table 8 EU Social legislation.

### 3.4. Soft law.

The EU Commission has clarified how social and environmental considerations may be integrated within the scope of public procurement through the enactment of a number of soft law measures, which aim at providing guidance to the public sector in the path of sustainable development.

In 2004, it adopted the Buying Green Handbook on green public procurement, which was recently revised in 2011 and in 2016.<sup>48</sup> This document represents an important tool supporting procurers in the choice of goods and services that have a lower environmental impact. It is also meant to help economic operators to include environmental considerations into their tenders. The Handbook goes through each phase of the procurement process and explains how environmental concerns can be integrated. It also provides for practical experiences from contracting authorities around the EU. Additionally, a specific section of the guide is dedicated to green procurement in certain specific fields, such as buildings, food, catering services, road transport vehicles and energy-using products.<sup>49</sup> Another insightful soft law measure is the 2008 Communication on ‘Public Procurement for a Better Environment.’<sup>50</sup> This document identified Member States’ objectives for the achievement of various green public procurement targets before 2010. Accordingly, some Member States committed themselves to 100% green procurement for certain products, while others

<sup>47</sup> Services of general economic interest are economic activities that generate outputs in the general public good, which would not be delivered by the market without public intervention. See the Commission Staff Working Document, Guide to the Application of the European Union Rules on State Aid, Public Procurement and the Internal Market to Services of General Economic Interest and in Particular to Social Services of General Interest SWD, 2013, 53 final/2.

<sup>48</sup> The full text of ‘Buying Green! - A Handbook on green public procurement’, as revised in 2016, is available at <http://ec.europa.eu/environment/gpp/pdf/Buying-Green-Handbook-3rd-Edition.pdf>.

<sup>49</sup> See Chapter 7 of the ‘Buying Green! - A Handbook on green public procurement’, *ibid*.

<sup>50</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Public Procurement for a Better Environment, Brussels, 16.7.2008 COM (2008) 400 final.

set 20% target.<sup>51</sup> The Commission's suggestion was that by 2010, 50% of all tender procedures had to be 'green,' meaning compliant with the 'endorsed common "core" GPP criteria'.<sup>52</sup>

The Commission's support for socially responsible procurement has been less intense than the one given to green public procurement, but still important. In this respect, the Buying Social Guide can, for instance, be mentioned. This document aims at supporting the public sector in the procurement of goods and services in a socially responsible way.<sup>53</sup> The guide holds that public procurement has the potential of being used in order to foster greater social inclusion, which is a key element of a sustainable development. The guide contains a range of examples on how to integrate social issues in the procurement process. It takes into consideration aspects of equal employment opportunities, improvement of working conditions and inclusion of vulnerable persons. It also offers examples of compliance with the provisions of the most relevant International Labour Organization (hereinafter ILO) conventions, however, highlighting especially what is not allowed under EU law rather than what can be done. This is probably because of the higher legal uncertainty surrounding the inclusion of social aspects into 'competitive tender' procedures. Social considerations are, in fact, perceived as contradicting the economic objectives underlying the principle of free competition upon which procurement rules are mainly structured. They may affect market competition and secure local protection and, thus, need to be subject to strict proportionality requirements to avoid risk of abuses of discretion and/or protectionism. Therefore, their inclusion in public contracts is seen as complex and time-consuming accompanied by risks of delays for judicial procedures.<sup>54</sup> Moreover, the discretionary nature of the provisions of the 2014 public procurement Directives allowing the integration of social considerations into public contracts, increases such legal uncertainty and discourages their use by contracting authorities. As it will be seen,<sup>55</sup> the 2014 public procurement Directives made little, yet important, steps further towards the strengthening of social protection concerns into public purchasing. For instance, one can mention the express possibility to include trading conditions into award criteria. However, the Directives highly rely on Member States and contracting authorities' discretion. In the field of compliance with applicable social and labour provisions, the only over-riding obligation imposed on Member States is the one set out in Article 18, para 2, Directive 2014/24/EU,<sup>56</sup> which requires national legislators to take 'appropriate measures' to guarantee that in the performance of public contracts the applicable environmental, social and labour laws are respected. This provision is formulated in a vague way, hence, its effectiveness depends on the relevant national implementing measures. Furthermore, the only obligations directly imposed on contracting authorities are those related to sub-contracting at the performance stage<sup>57</sup> and rejection of abnormally low tenders in case of non-compliance with

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<sup>51</sup> W Kahlenborn, C Moser, J Frijdal, M Essig, 'Strategic Use of Public Procurement in Europe', Final Report to the European Commission, PPRC, Aldelphi, Belmont, MARKT/2010/02/C, 2011, available at [http://ec.europa.eu/internal\\_market/publicprocurement/docs/modernising\\_rules/strategic-use-public-procurement-europe\\_en.pdf](http://ec.europa.eu/internal_market/publicprocurement/docs/modernising_rules/strategic-use-public-procurement-europe_en.pdf).

<sup>52</sup> Point 5.1 of the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Public Procurement for a Better Environment, Brussels, 16.7.2008 COM (2008) 400 final.

<sup>53</sup> Buying Social, A Guide to Taking Account of Social Considerations in Public Procurement, European Commission Directorate-General for Employment, Social Affairs and Equal Opportunities, 2010.

<sup>54</sup> N Bruun, K Ahlberg, 'Public procurement and labor rights: governing by scaremongering' in S Evju (ed), *Regulating transnational labor in Europe: the quandaries of multilevel governance* (Privatrettsfondet, 2014) 263, 279.

<sup>55</sup> See below paragraph 3.6.

<sup>56</sup> Also Article 30, para 3, Directive 2014/23/EU.

<sup>57</sup> Article 71, para 1, Directive 2014/24/EU.

social and labour laws.<sup>58</sup> This means that the actual inclusion of social considerations in procurement procedures largely depends on discretionary measures and decisions, thereby increasing legal uncertainty, which goes against simplification objectives and prevents the creation of a level playing field.

Overall, the adoption of soft law measures in the field of socially sustainable public procurement may be useful to reflect the current wider space recognized by the 2014 Directives to social considerations in the procurement process.<sup>59</sup> However, a mandatory approach to the inclusion of social concerns in public purchasing procedures would probably be more desirable for a number of reasons. First of all, social standards' respect should be inherently part of any public contract and should not be left to a discretionary choice of Member States or contracting authorities. Moreover, the normative choice of making use of public procurement to support also the achievement of objectives other than competition has already been taken with the adoption of the 2014 public procurement Directives.<sup>60</sup> Furthermore, the mandatory inclusion of social value would not contradict other procurement goals, such as free movement of goods and free provision of services within the EU. Instead, it would support simplification and transparency contributing to the achievement of the single market objectives by creating a level playing field. Economic operators would more easily understand and respect social standards if these were integrated in public contracts as minimum mandatory requirements in every Member State and in all phases of procurement procedures. Accordingly, suppliers would not be able to obtain unfair competitive advantages through the abuse of human rights and the adoption of indecent working conditions by using lower prices than those offered by operators that comply with national and international labour legislations.

At the national level, the overall majority of Member States adopted their own policy measures implementing sustainable public procurement.<sup>61</sup> Some of them support the procurement of greener services and/or products, while others identify only indicative objectives. Where national policy instruments set criteria to be applied within their procurement process, they usually refer to the common green public procurement criteria elaborated by the EU Commission, which cover more than 20 service and products' areas.<sup>62</sup> The common green criteria address the most important environmental impacts of specific products and services by taking into consideration their entire life cycle.<sup>63</sup> Normally, the criteria nationally adopted also include social considerations, such as aspects of accessibility to all end-users, exclusion of child labour, or fair wages of the persons involved in

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<sup>58</sup> Article 69, para 3, Directive 2014/24/EU.

<sup>59</sup> Again, see below paragraph 3.6.

<sup>60</sup> Recital 2 and 91, Directive 24/2014/EU. In this respect, see A Wiesbrock, 'Socially responsible public procurement, European Value or national choice?' in B Sjaafjell, A Wiesbrock (eds), *Sustainable Public Procurement Under EU Law*, (Cambridge University Press, 2016) 94.

<sup>61</sup> The National GPP Action Plans available at [http://ec.europa.eu/environment/gpp/action\\_plan\\_en.htm](http://ec.europa.eu/environment/gpp/action_plan_en.htm) contains a comprehensive overview of the state of art in the EU Member States.

<sup>62</sup> Since 2010, the Commission collects examples of GPP implementations to show how public authorities around the EU are successfully launching green tenders. In this respect, see the 'GPP brochure of good practice examples', which includes useful case studies aiming at inspiring public and private actors to purchase green products and services. The full text is available at [http://ec.europa.eu/environment/gpp/pdf/GPP\\_Good\\_Practices\\_Brochure.pdf](http://ec.europa.eu/environment/gpp/pdf/GPP_Good_Practices_Brochure.pdf). The updated status of the EU GPP is, instead, available at [http://ec.europa.eu/environment/gpp/eu\\_gpp\\_criteria\\_en.htm](http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm).

<sup>63</sup> See, A Semple, *A Practical Guide to Public Procurement*, *op. cit.*, 176.

procurement processes.<sup>64</sup> Moreover, several local and regional entities implement their own specific policies, which often go beyond the general targets set by national measures.<sup>65</sup>

### 3.5. The CJEU case law.

The CJEU case law played an important role in specifying the scope for sustainable development goals within EU public contracts and concessions law. The CJEU opened, in fact, the way to the use of social and environmental considerations into public procurement.

Traditionally, according to the CJEU, the main goal of EU law, in the field of public procurement, was to promote competition within the Member States' public markets and guarantee the free movement of goods and services throughout the EU.<sup>66</sup> However, the following decisions show that the Court is slowly starting to change its perspective by making room also for other objectives - not purely economic - among those legitimately pursuable by contracting authorities.

In 1988, the CJEU had to decide in *Gebroeders Beentjes* on a Dutch case where a tenderer for a works contract did not win the bid because of another more expensive tender, which was considered by the public authority more beneficial.<sup>67</sup> One of the main reasons lying behind the choice of the preferred bid was that the bidder was able to fulfil a condition included in the tender documents concerning the employment of long-term unemployed people for the execution of the works. The CJEU stated that this condition was compatible with EU law as long as it was not directly or indirectly discriminatory with respect to other Member States' tenderers and it was expressly indicated in the contract notice.<sup>68</sup> Given that this case arose out a reference for a preliminary ruling, the identification of the specific impact of such condition had to be decided by the national legislator. With this judgement, the CJEU, showed itself to be open to the recognition of a wider social function of public procurement.

Ten years later, the Commission questioned the award in the French Nord-Pas de Calais region of school-building contracts covering an 'additional award criterion' related to local

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<sup>64</sup> For instance, in 2014, the Italian Government issued a document, The Foundations of the Italian Action Plan on the United Nations 'Guiding Principles on Business and Human Rights', English text available at [http://www.mit.gov.it/mit/mop\\_all.php?p\\_id=18077](http://www.mit.gov.it/mit/mop_all.php?p_id=18077). This document dedicates an entire Chapter (Chapter 6) to the integration of human rights in public procurement and refers to the Italian guide on the inclusion of social criteria into public contracts elaborated by the Ministry of the Environment. Text available at <http://www.minambiente.it/sites/default/files/archivio/allegati/GPP/GUDMxALL.pdf>. For further details, see below Chapter IV, paragraph 4.1.

<sup>65</sup> For instance, in the *Piemonte* Region in Italy, the APE project, initiated in 2003 (with the support of the Regional Agency for the Protection of Environment), committed its partners (local public entities) to integrate environmental criteria in the purchase of numerous products and service categories. Only in 2015, the national law adopted and imposed minimum environmental criteria. For further details, see below Chapter IV, paragraph 4.1. Moreover, the Procura+Campaign (<http://www.procuraplus.org/>), the United Nations (especially the United Nations Environment Program, UNEP) and the European Investment Bank provide a continuous support, especially to local authorities, in the implementation of sustainable procurement.

<sup>66</sup> See, for instance, para 31, C-454/06, *Pressetext Nachrichtenagentur GmbH v Republik Österreich (Bund)*, [2008] I-04401. Para 81, C-513/99, *Concordia Bus Finland Oy Ab, formerly Stagecoach Finland Oy Ab v Helsingin kaupunki and HKL-Bussiliikenne*, [2002] I-07213. C H Bovis, *EU Public Procurement Law* (Edward Elgar, 2007) 488. C H Bovis, *The Liberalization of Public Procurement and its effects on the Common Market* (Ashgate, 1998) 229. M Comba, 'Green and Social Considerations in Public Procurement Contracts: A Comparative Approach' in R Caranta and M Trybus (eds), *The Law of Green and Social Procurements in Europe* (DJØF, 2010). S Arrowsmith, *The Law of Public and Utilities Procurement, Regulation in the EU and UK* (Sweet & Maxwell, 2014) 239.

<sup>67</sup> C-31/87, *Gebroeders Beentjes BV v State of the Netherlands*, [1988] 04635. A Colabianchi, 'Ancora in tema di direttive comunitarie sugli appalti' [1990] *Giustizia Civile*, 586, 588.

<sup>68</sup> Point 37, C-31/87, *ibid.*

employment.<sup>69</sup> This criterion was defined according to an inter-ministerial circular implementing a French national policy measure on unemployment reduction. According to this policy, when two bids were found to have an equal value, a commitment towards unemployed workers was decisive. In this case (*Nord-Pas de Calais*), the CJEU stated that conditions pertaining to unemployment could indeed be used as award criteria if they complied with the fundamental principles of Community law, especially with the principle of non-discrimination.<sup>70</sup> Thus, the Court confirmed the possibility to integrate social considerations - foremost those relating to employment - in award criteria and/or contract performance clauses within procurement procedures.

The *PreussenElektra* case, instead, regarded State aid in the field of renewable electricity.<sup>71</sup> The case concerned a German law, which required energy supply companies to purchase, at defined minimum charges, renewable electricity produced in their area of supply. The CJEU stated that this German law was compatible with the Treaty because it aimed at fighting climate change while promoting the integration of renewable electricity markets.<sup>72</sup> Therefore, the Court expressed its opinion on the legal obligations stemming from the Treaty commitments on sustainable development and on the issue of whether environmental considerations could be taken into consideration when interpreting the Treaty provisions on free movement of goods. Thus, with this judgment, the Court offered an instance of the extent to which environmental actions, which may be considered discriminatory in nature, can be justified.

In 1999, the CJEU then decided on a case concerning an invitation to tender in the city of Helsinki for bus transport services (*Concordia Bus Finland*).<sup>73</sup> Nitrogen oxide emissions and noise

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<sup>69</sup> C-225/98, *Commission of the European Communities v French Republic*, [2000] I-07445. K Krüger, 'Non-economical "soft" and "green" considerations in public contract award procedures' [2002] *Europarättslig tidskrift*, 57, 67. J Joël, 'A propos des clauses sociales dans les marchés publics de travaux. Un arrêt étonnant de la Cour de justice des Communautés européennes' [2001] *Journal des tribunaux*, 561, 564. R Williams, 'The proposed Commission Draft Communication on the Environment and the impact of the Nord Pas-de-Calais Region case' [2001] *PPLR*, 75, 80. J Arnould, 'A Turning Point in the Use of Additional Award Criteria?' [2001] *PPLR*, 13, 19. P Lefèvre, 'Les considérations sociales et environnementales dans les marchés publics européens' [2000] *Journal des tribunaux/droit européen*, 245, 247.

<sup>70</sup> Paras 49-54, C-225/98, *ibid.* Following C-45/87, *Commission of the European Communities v Ireland*, [1988] 04929, if a criterion did not comply with the non-discrimination principle it could have not been accepted.

<sup>71</sup> C-379/98, *PreussenElektra AG v Schleswig AG, in the presence of Windpark Reußenköge III GmbH and Land Schleswig-Holstein*, [2001] I-02099. T Kuhn, 'Implications of the "Preussen Elektra" Judgment of the European Court of Justice on the Community Rules on State Aid and the Free Movement of Goods. Preliminary Ruling of 13 March 2001, Case C-379/98, Preussen Elektra v. Schleswig' [2001] *Legal Issues of Economic Integration*, 361, 376. L Rubini, 'Brevi note a margine del caso PreussenElektra, ovvero come "prendere seriamente" le norme sugli aiuti di stato e la tutela dell'ambiente nel diritto comunitario' [2001] *Diritto Comunitario e degli Scambi Internazionali*, 473, 501. M Bronckers, R Van der Vlies, 'The European Court's PreussenElektra Judgment: Tensions Between E.U. Principles and National Renewable Energy Initiatives' [2001] *European Competition Law Review*, 458, 468. J M Belorgey, S Gervasoni, C Lambert, 'Environnement et libre circulation des marchandises' [2001] *L'actualité juridique droit administrative*, 944, 946. C Golfinopoulos, 'Legality of National Measures to Promote the Procurement of Energy from Renewable Sources' [2002] *PPLR*, 8, 11. S Poli, 'National Schemes Supporting the Use of Electricity Produced from Renewable Energy Sources and the Community Legal Framework' [2002] *Journal of Environmental Law*, 221, 231. C Koenig, J Kühling, 'EC Control of aid granted through State resources' [2002] *European State Aid Law Quarterly*, 7, 18. A Colavecchio, 'Aiuti di Stato, ostacoli al commercio tra Stati membri ed esigenze di tutela dell'ambiente nella giurisprudenza comunitaria. A proposito della sentenza della Corte di giustizia nel caso "Preussenelektra"' [2003] *Il Consiglio di Stato*, 631, 664.

<sup>72</sup> C-379/98, *ibid.*, paras 73-81.

<sup>73</sup> C-513/99, *Concordia Bus Finland Oy Ab, formerly Stagecoach Finland Oy Ab v Helsingin kaupunki and HKL-Bussiliikenne*, [2002] I-07213. P Kunzlik, 'Making the Market Work for the Environment: Acceptance of (Some) "Green" Contract Award Criteria in Public Procurement' [2003] *Journal of Environmental Law*, 188, 201. L Bonechi, 'Offerta economicamente più vantaggiosa: la Corte ribadisce la legittimità dei criteri di valutazione di natura non economica' [2003] *Diritto pubblico comparato ed europeo*, 453, 455. S Izzo, 'La tutela dell'ambiente non é un valore

levels were included in the criteria for the identification of the most economically advantageous tender. The CJEU remarkably upheld the legitimacy of environmental considerations as award criteria if they

- (i) were linked to the subject-matter of the contract,
- (ii) did not provide an unlimited freedom of choice to the public sector,
- (iii) were expressly indicated in the contract notice or tender documents  
and
- (iv) were consistent with the fundamental Treaty principles, especially with the non-discrimination principle.<sup>74</sup>

As it will be explained in more detail below in paragraph 3.6, letter f), these criteria are now codified - respectively - in Directive 2014/24/EU, Article 67, paras 2, 4 and 5. Recital 1 and 90, Directive 2014/24/EU, then states that award criteria have to comply with the principles of the TFEU and the principles deriving therefrom, such as, *inter alia*, the principle of non-discrimination.

The *EVN Wienstrom* decision on the purchase by the Austrian Government of renewable electricity can be mentioned together with the *Concordia* judgement.<sup>75</sup> In the *EVN Wienstrom* case, the CJEU, first of all, stated that it was possible to use ecological award criteria even if they did not provide an immediate economic benefit to the contracting authority. In addition, it held that a high score in the overall evaluation of bids could be attached to such criteria. Moreover, the Court clarified that it was legitimate to set an award criterion linked to the production method of the purchased product. Nonetheless, such criterion had to be linked with the subject-matter of the contract and be verifiable.<sup>76</sup> The Court stated that the award criterion that considered the supplier's overall ability to provide renewable electricity did not have the required link with the subject-matter of the contract, because it did not refer to defined quantities indicated in the contract. The CJEU also held that the contracting authority could not effectively verify performance with such criterion.<sup>77</sup> Additionally, the Court considered that this award criterion manifestly discriminated against other tenderers. The latter were, in fact, treated unequally because they may have not been able to meet the general award criterion that considered the overall ability to provide renewable

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assoluto' [2003] Diritto pubblico comparato ed europeo, 455, 458. J Arnould, 'Environmental Criteria and the EC Procurement Directives: A Note on the Concordia Bus Finland Case' [2003] PPLR, 3, 8. M Lottini, 'Appalti comunitari: sull'ammissibilità di criteri di aggiudicazione non prettamente economici' [2002] Il Foro amministrativo, 1950, 1957. A Ménéménis, 'Le recours à des critères environnementaux dans l'attribution des marchés' [2002] Droit administrative, 174.

<sup>74</sup> Para 64, C-513/99, *ibid*.

<sup>75</sup> C-448/01, *EVN AG and Wienstrom GmbH v Republik Österreich*, [2003] I-14527. G Garzia, 'Bandi di gara per appalti pubblici e ammissibilità delle clausole c.d. "ecologiche"' [2003] Il Foro amministrativo, 3515, 3525. T Gliozzo, 'L'admissibilité d'un critère environnemental au regard de la réglementation communautaire des marchés' [2004] L'actualité juridique; droit administratif, 335, 337. M Dischendorfer, 'The Rules on Award Criteria Under the EC Procurement Directives and the Effect of Using Unlawful Criteria: The EVN Case' [2004] PPLR, 74, 84. D U Galetta, 'Vizi procedurali e vizi sostanziali al vaglio della Corte di giustizia (che non si pronuncia sulla questione)' [2004] Rivista italiana di diritto pubblico comunitario, 317, 324. V De Falco, 'L'utilizzo di fonti di energia rinnovabili come criterio di valutazione dell'offerta economicamente più vantaggiosa: la legge austriaca a confronto con l'ordinamento comunitario' [2004] Diritto pubblico comparato ed europeo, 889, 893. F Berrod, 'Critère écologique. Du maniement prudent du critère écologique dans la sélection des offres' [2004] Europe Février Comm, 13, 14.

<sup>76</sup> Para 51, C-448/01, *ibid*.

<sup>77</sup> Paras 67-71, C-448/01, *ibid*.

electricity, but they could have met the one specifically referring to defined quantities of renewable electricity provision.

Following both the *Concordia* and *EVN Wienstrom* judgements, the CJEU recognised the possibility for contracting authorities to use environmental award criteria related to the specific purchased goods, services or works without referring to the general corporate policy or ability of the tenderer.

The CJEU followed such an approach in the *Dutch Coffee* case with regard to award criteria concerning social aspects of the supply chain.<sup>78</sup> In this case, the Court held that award criteria do not have to refer to an intrinsic feature of a product, but may concern also aspects of its production process that do not materially modify the final good. Thus, the CJEU stated that a contracting authority may apply award criteria related to organic agriculture and fair trade in the supply of tea and coffee. The reason is that such aspects can be regarded as contract performance elements and, as such, are linked to its subject-matter.<sup>79</sup> However, the Court ruled that the contracting authority had breached its obligations under the 2004 public procurement Directives because it awarded marks to bidders who had specific organic and fair trade labels, without indicating the precise criteria lying behind such labels.<sup>80</sup>

In the *Dynamiki* case, the European Environment Agency carried out a comparative evaluation of tenders in order to verify whether tenderers had put into place their environmental policies.<sup>81</sup> This assessment showed that only one tenderer had actually implemented its policy. The others had merely stated their intention to do so.<sup>82</sup> The court of first instance held that the European Environment Agency was allowed to take into consideration such aspects and accordingly award different marks. This case can be considered as useful guidance, even though it was decided having regard to the Financial Regulation, which regulates the award of contracts by the European Environment Agency and other EU bodies. The 2014 public procurement Directives are, in fact, alike in this matter and do not fully address the issue of environmental criteria evaluation, which entails the identification of the extent to which contracting authorities can exercise their discretion in such assessment.

In 2014, the CJEU decided two cases relating to green certificate schemes used in Sweden and Flanders.<sup>83</sup> It has to be mentioned that the second case related to an activity explicitly sanctioned by a Directive: the use of national support schemes for the development of renewable

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<sup>78</sup> C-368/10, *European Commission v Kingdom of the Netherlands*, published in the electronic Reports of Cases (Court Reports - general). E Adobati, 'La Corte di giustizia si pronuncia su un appalto pubblico di fornitura subordinato al rispetto di condizioni di carattere ecologico' [2012] *Diritto comunitario e degli scambi internazionali*, 278, 280. T Kotsonis, 'Commission v Netherlands (C-368/10): Environmental and fair-trade considerations in the context of a contract award procedure' [2012] *PPLR*, 234, 244. S Robin-Olivier, 'Verdissement des marchés publics: des exigences environnementales, mais pas un écolabel particulier' [2013] *Revue trimestrielle de droit européen*, 410.

<sup>79</sup> Paras 89-92, C-368/10, *ibid.*

<sup>80</sup> Paras 93-97, C-368/10, *ibid.*

<sup>81</sup> T-331/06, *Evropaiki Dynamiki - Proigmena Systimata Tilepikoinonion Pliroforikis kai Tilematikis AE v European Environment Agency (AEE)*, Reports of Cases, [2010] II-00136, Appeal Case before the Court of Justice C-462/10 P.

<sup>82</sup> Para 76, T-331/06, *ibid.*

<sup>83</sup> C-573/12, *Ålands vindkraft AB v Energimyndigheten*, published in the electronic Reports of Cases (Court Reports - general). D Berlin, 'Une harmonisation partielle empêche-t-elle l'application du traité? Non et oui' [2014] *La Semaine Juridique - édition générale*, 1399. M Lopez Escudero, 'Régimes nationaux d'aide à l'énergie verte face à libre circulation des marchandises dans l'Union européenne' [2014] *Revue des affaires européennes*, 593, 602. Joined cases C-204/12 to C-208/12, *Essent Belgium NV v Vlaamse Reguleringsinstantie voor de Elektriciteits- en Gasmarkt*, published in the electronic Reports of Cases (Court Reports - general). J Kröger, 'Nationally Exclusive Support Schemes for RES Electricity Production and the Free Movement of Goods' [2013] *Journal for European Environmental & Planning Law*, 378, 393.

energy.<sup>84</sup> These kind of schemes help the attainment of national renewable energy objectives, which are mandatory in order to achieve the overall EU goal of 20% renewable electricity by 2020.

According to the green certificate schemes used in Sweden and Flanders, suppliers had to provide to regulators every year certificates showing their production of renewable electricity. Such certificates were accepted only if they showed production in the area of supply. The objective was to promote the development of the renewable energy market in the territory of supply. In both cases, the CJEU stated that such schemes hindered the free movement of goods and were by nature discriminatory. However, they could have been justified in the light of their specific environmental aim. The Court stated that the proportionality of such measures could have been assessed by considering the schemes' impact in the achievement of the goal of promotion of renewable energy production. However, the CJEU did not mention the issue of whether other means, not constraining the principle of free movement to such extent, could have been equally effective. Given that both cases arose out references for preliminary rulings, the Court left the identification of the final result of the proportionality assessment to the national court.

As it will be seen, the 2014 public procurement Directives largely confirmed the CJEU case law. This will be now discussed.

### **3.6. The Scope for sustainable development in the 2014 public procurement Directives.**

The way in which contracting authorities identify their requirements, set their preferences and monitor their compliance can allow the integration of sustainable development considerations into public procurement.<sup>85</sup> Public purchasing can, in fact, be organized in a way that incorporates and supports the achievement of sustainable development objectives at every stage of its process: when defining the requirements that the contract must have, when selecting suppliers or service providers, when evaluating tenders and identifying contract clauses.<sup>86</sup>

The following paragraphs will provide an overview of the new public procurement rules that allow scope for social and environmental sustainability in public purchasing. The analysis will concentrate only on those rules that actually have the ability to incorporate sustainable development objectives within public contracts and concessions. In other words, only those provisions capable of securing socio-environmental considerations into public procurement will be highlighted. Therefore, it will be outlined how sustainable development considerations can be integrated at each stage of the procurement process under the new public procurement regime.

In this regard, it should be noted that when contracting authorities set or define technical and/or functional specifications, selection and award criteria, label requirements and/or contract performance conditions in order to purchase works, supplies or services that take into account

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<sup>84</sup> Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC.

<sup>85</sup> On sustainable public procurement in the EU see, among others, S Arrowsmith, P Kunzlik, *Social and Environmental Policies in EC Procurement Law: New Directives and New Directions* (Cambridge University Press, 2009). R Caranta, M Trybus, *The Law of Green and Social Procurement*, *op. cit.*. R Caranta, 'Sustainable Procurement' in M Trybus, R Caranta, G Edelstam (eds), *European Union Law of Public Contracts: Public Procurement and Beyond* (Buylant, 2014). W Kahlenborn, C Moser, J Frijdal, M Essig, 'Strategic Use of Public Procurement in Europe', Final Report to the European Commission, *op. cit.*

<sup>86</sup> In this respect see, for instance, C McCrudden, *Buying Social Justice: Equality Government Procurement and Legal Change*, *op. cit.*. A Semple, 'Reform of EU Procurement Directives and WTO GPA: Forward Steps for Sustainability' [2012] SSRN, available at <http://ssrn.com/abstract=2089357> or <http://dx.doi.org/10.2139/ssrn.2089357>.

specific environmental and/or social issues, they always have to make sure that these elements are linked with the subject-matter of the contract.<sup>87</sup>

The requirement of the link with the subject-matter of the contract was elaborated by the CJEU in the *Concordia* case<sup>88</sup> and then included in the 2004 Directives only with regard to award criteria. Today, such a condition refers also to technical specifications, variants, labels and contract performance clauses. The 2014 Directives, however, do not indicate whether this requirement should be interpreted in a restrictive way or not. Only one specific restriction is expressly foreseen. Social or environmental considerations related to the overall business practises of tenderers cannot be considered as linked to the subject-matter of the contract.

In this respect, it can be noted that corporate social responsibility concerns - e.g. tax compliance or socio-environmental friendly production methods - are becoming increasingly important for both private companies and citizens' consumption decisions.<sup>89</sup> The public sector is, instead, restrained in addressing such issues.<sup>90</sup> An exception concerns staff qualification, experience and organization, which may be considered at the award stage provided that they are linked with the subject matter of the contract. In addition, the 2014 Directives allow the use of environmental and supply-chain management methods 'that the economic operator will be able to apply when performing the contract,' as means of proof of selection criteria.<sup>91</sup>

With regard to the interpretation of the condition of the link with the subject-matter of the contract, a restrictive approach may be found in the *Concordia* judgement where the CJEU stated that:

*'Since a tender necessarily relates to the subject-matter of the contract, it follows that the award criteria which may be applied in accordance with [the provisions on award criteria set out in the directives] must themselves also be linked to the subject-matter of the contract.'*<sup>92</sup>

Apart from this syllogism used by the Court, it is true that tenders indeed relate to the subject-matter of the contract. However, they may also refer to other aspects, such as the characteristics of the tenderer's company, staff expertise and organization, which, as already mentioned, can now be assessed at the award stage if relevant to the subject-matter of the contract. A restrictive approach towards this requirement would not be desirable especially in view of allowing contracting authorities to implement social and environmental sustainable considerations. If a restrictive

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<sup>87</sup> The requirement of the link with the subject-matter of the contract can be found in Directive 2014/24/EU, in Recitals 75, 83, 92, 97, 104 and Articles 42, 43, 58, 67 and 70. In Directive 2014/23/EU, in Recitals 63, 67, 73 and Articles 36, 38, 41. In Directive 2014/25/EU, in Recitals 85, 97, 102, 109 and Articles 60, 61, 82, 87. M Martens, S De Margerie, 'The Link to the Subject-Matter of the Contract in Green and Social Procurement' [2013] EPPPL, 8, 18. S Arrowsmith, *The Law of Public and Utilities Procurement*, *op. cit.*, 739. A Semple, 'The link to the subject matter: a glass ceiling for sustainable public contracts?' in B Sjøfjell, A Wiesbrock (eds), *Sustainable Public Procurement Under EU Law, New Perspectives on the State as Stakeholder* (Cambridge University Press, 2015), 50, 74.

<sup>88</sup> C-513/99, *op. cit.*

<sup>89</sup> See the *Dutch Coffee* case, C-368/10, *op. cit.*

<sup>90</sup> C-448/01, *op. cit.*

<sup>91</sup> Annex XII, Part II, letters d) and g), Directive 2014/24/EU. See also Article 80, para 1, Directive 2014/25/EU and Article 38, para 7, Directive 2014/23/EU. P Trepte, *Regulating Procurement, Understanding the Ends and Means of Public Procurement Regulation* (Oxford University Press, 2007). S Treumer, 'The Distinction between Selection and Award Criteria in EC Public Procurement Law: A Rule without Exception' [2009] PPLR, 103. A Sanchez Graells, 'Exclusion, Qualitative Selection and Short-listing in the New Public Sector Procurement Directive 2014/24' in F Lichère, R Caranta, S Treumer (eds), *Modernising Public Procurement: the New Directive* (DJØF, 2014), 92, 128. S Arrowsmith, 'Special Issue – The New EU Procurement Directive: Part I, Editors Note' [2014] PPLR, 81.

<sup>92</sup> Para 59, C-513/99, *op. cit.*

interpretation of the link with the subject-matter was endorsed, the attainment of both environmental and social goals would be hindered along with the ability of the market to provide them. For instance, in a supply contract, a criterion that sets the allowed quantity of greenhouse gas emissions during goods transportation according to the distance between the production area and the delivery point, should be considered as linked with the subject-matter of the contract. Otherwise, criteria aiming at addressing climate change would not be effective.

### 3.6.1 Contract design and technical specifications.

Contract designing is an important phase for the inclusion of social and environmental concerns into the overall structure of public contracts. During this preliminary phase, public authorities set the targets and goals that the contract that they are planning to award will aim to achieve. These may be defined in terms of socio-environmental sustainability, being later endorsed into technical specifications drafted accordingly. The 2014 Directives oriented technical specifications towards an overall life-cycle approach allowing greater scope for the integration of environmental and social considerations.

Technical specifications indicate the characteristics of goods, services or works to be purchased and they can be drafted in different ways, being influenced by the subject-matter of the contract, national and local practices. They exist in all procedures, with the exception of the competitive dialogue and design contests where tenderers themselves have to propose such characteristics. Generally, in procurement procedures, when technical specifications are not met, tenders have to be rejected.<sup>93</sup> Economic operators are, thus, highly motivated to comply with them in order to obtain the award of the contract. Therefore, technical specifications can play an important role in allowing scope for sustainability objectives into public contracts. Technical specifications are true requirements, while award criteria are contracting authorities' preferences subject to weighting. Thereby, technical specifications represent the preferred phase where sustainability considerations are usually included.<sup>94</sup>

Technical specifications may refer to the end-work, service or good, but also to its production process or to a specific process of another stage of its life cycle, even if such aspects do not form part of the material substance of the work, service or good.<sup>95</sup> Thus, in principle, renewable electricity, biodegradable packages, organic food or recyclable construction materials can be required. Annex VII, Directive 2014/24/EU, provides for a non-exhaustive list of characteristics that may be referred to when drafting technical specifications. Technical specifications merely have to guarantee equal access to economic operators, do not hinder competition, be linked with the subject-matter of the contract and be proportionate to its objectives and value.<sup>96</sup> Within these limits

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<sup>93</sup> Article 66, para 1, letter a), Directive 2014/24/EU. Article 76, para 5, Directive 2014/25/EU. Article 36, para 3, Directive 2014/23/EU. R Bickerstaff, 'Applying the EC rules on standards and specifications in public and utilities procurement' [1994] PPLR, 153, 162. D C Dragos, B Neamtu, 'Sustainable Public Procurement in the EU: Experiences and Prospects', *op. cit.*, 317. Buying Green! - A Handbook on Green Public Procurement, 2016, *op. cit.*, 32. The CJEU stated the obligation of rejecting tenders that do not comply with technical specifications in the following cases. C-243/89, para 37, *Commission of the European Communities v Kingdom of Denmark*, [1993] I-03353. C-561/12, paras 37-39, *Nordecon AS and Ramboll Eesti AS v Rahandusministerium*, published in the electronic Reports of Cases (Court Reports - general).

<sup>94</sup> D C Dragos, B Neamtu, 'Sustainable Public Procurement in the EU: Experiences and Prospects', *op. cit.*, 316.

<sup>95</sup> Article 42, para 1, Directive 2014/24/EU. Article 60, Directive 2014/25/EU. Article 36, para 1, Directive 2014/23/EU.

<sup>96</sup> Article 42, paras 1 and 2, Directive 2014/24/EU. Article 60, paras 1 and 2, Directive 2014/25/EU.

contracting authorities can draft them embedding social and/or environmental sustainability concerns. Specifically, technical specifications can be formulated with reference to standards, technical assessments or technical reference systems, in terms of performance of functional levels.<sup>97</sup>

Additionally, technical specifications allow scope for the integration of sustainable development considerations especially because they can set out performance or outcome-based specifications, which are capable of promoting competition, innovative and sustainable solutions. Performance-based specifications focus on the outcome and usually come together with minimum performance targets. In addition, variants, which are alternative solutions proposed by economic operators in order to meet contracting authorities' minimum needs, may also push forward innovation and the delivery of sustainable solutions.<sup>98</sup> For instance, contracting authorities may use variants to compare traditional diesel or petrol vehicles with alternative-fuelled, electric or hybrid ones. Performance-based specifications and variants may be helpful especially when the public sector does not know which are the available solutions on the market or when different technologies need to be compared and their impact on cost and/or quality has to be assessed. The use of performance-based specifications and variants requires that the public sector knows how to apply effective evaluation methodologies and compare tenders. In other words, performance-based specifications indeed represent an effective way to promote innovative and sustainable solutions. However, they entail assessments and contract management systems, which can be challenging. Anyway, if technical specifications do not indicate optimal levels of performance, these may be achieved by means of variants and/or performance evaluations under contract award criteria and/or performance clauses.

With the exception of accessibility for disabled users, it seems that technical specifications are better able to incorporate environmental considerations than social concerns. With regard to the latter, Recital 76 of Directive 2014/24/EU, only provides that 'for all procurement intended for use by persons, [...] it is necessary for contracting authorities to lay down technical specifications so as to take into account accessibility criteria for people with disabilities or design for all users [...].' However, Recital 76 is not mandatory. Along the same lines, Recital 99, Directive 2014/24/EU, provides that 'in technical specifications contracting authorities can provide [...] social requirements which directly characterise the product or service in question, such as accessibility for persons with disabilities or design for all users.' Thus, the attention is expressly put only on accessibility for disabled users. With respect to other social considerations, such as social and labour conditions within the supply-chain, it may be argued that technical specifications cannot refer to them. However, this is not anymore the case. Social supply-chain considerations, such as fair trade, may, in fact, now be used as technical specifications. First of all, because the latter can refer to both environmental and social labels, with the only obligation to accept equivalents,<sup>99</sup> and social labels normally entail supply-chain considerations, such as minimum acceptable wages and work conditions.

Moreover, given the current wording of the technical specifications' definition in Directive 2014/24/EU,<sup>100</sup> they can refer also to a certain process or production method even if not part of the material substance of the required work, service or supply, provided that they are linked to the

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<sup>97</sup> Article 42, para 3, Directive 2014/24/EU. Article 60, para 3, Directive 2014/25/EU.

<sup>98</sup> Article 45, Directive 2014/24/EU and Article 64, Directive 2014/25/EU.

<sup>99</sup> Article 43, para 1, Directive 2014/24/EU. Article 61, para 1, Directive 2014/25/EU. Article 36, para 1, Directive 2014/23/EU.

<sup>100</sup> See Article 42, para 1, Directive 2014/24/EU.

subject-matter of the contract and are proportionate to its value and objectives. According to Directive 2004/18/EU, simply requiring a fair trade label as a technical requirement, without specifically indicating its underlying specifications, was not allowed.<sup>101</sup> However, today, under Directive 2014/24/EU, if all fair trade label's specifications are required, the mere reference to a certain fair trade label in the procurement documents would be allowed.<sup>102</sup>

Furthermore, under the 2014 rules, contracting authorities can exclude tenders not complying with wage provisions or other labour standards set out in collective agreements, national, EU or international law.<sup>103</sup> In this respect, however, the Commission stated that wider social concerns, such as a fair trade or observance of non-legislative social considerations, are better integrated into contract performance clauses, while the CJEU held that they might be included into award criteria.<sup>104</sup>

Overall, contracting authorities should be able to integrate general social considerations also in technical specifications as tenders could be rejected in the case of non-compliance. Award criteria and contract performance clauses do not lead to the tenders' exclusion. Thus, the integration of social considerations would be less effective. In fact, if a tender does not meet a certain award criterion, it would merely fail to achieve marks under that criterion. If minimum scores are not required, that tender would still be considered as the most economically advantageous tender. Likewise, contract performance clauses merely 'constitute fixed objective requirements that have no impact on the assessment of tenders.'<sup>105</sup> Thus, both award criteria and contract performance clauses may be insufficient to effectively incorporate social considerations within public procurement procedures.

### 3.6.2 Labels.

The public sector is increasingly resorting to third-party verification of environmental and social performance levels through labels or certificates. As a consequence, available standards, labels and certifications are growing in number making it sometimes difficult to identify those actually independent, not closely linked or controlled by industry.<sup>106</sup>

In general terms, labels allow tenderers to prove that their products and/or services meet certain criteria and ease contracting authorities evaluation processes. As mentioned, labels or certificates can also be used to control compliance with social criteria, such as minimum labour conditions and ethical production methods.<sup>107</sup> However, labels and certifications are less common in

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<sup>101</sup> C-368/10, the *Dutch Eco-Labels* case, *op. cit.*

<sup>102</sup> In this respect see, among others, H Schebesta, 'EU Green Public Procurement Policy Modernisation Package, Eco- Labelling and Framing Measure' in S Schoenmaekers, W Devroe, N Philipsen (eds), *State Aid and Public Procurement in the European Union* (Intersentia, 2014), 136.

<sup>103</sup> Articles 18, para 2 and 56, para 1, Directive 2014/24/EU. Articles 36, para 2 and 76, para 6, Directive 2014/25/EU. Recitals 55 and 58, Article 30 para 3, Directive 2014/23/EU.

<sup>104</sup> C-368/10, *op. cit.*

<sup>105</sup> Recital 104, Directive 2014/24/EU.

<sup>106</sup> On eco-labels see, among others, D C Dragos, B Neamtu, 'Sustainable Public Procurement in the EU: Experiences and Prospects', *op. cit.*, 329. F Rubik, D Scheer, E StØ, P Strandbakken, 'Background: theoretical contributions, eco-labels and environmental policy' in F Rubik, P Frankl (eds), *The Future of Eco-labelling: Making Environmental Product Information Systems More Effective* (Greenleaf Publishing, 2005) 17. M Bleda, M Valente, 'Graded eco-labels: A demand-oriented approach to reduce pollution' [2009] *Technological Forecasting & Social Change*, 512. H Schebesta, 'EU Green Public Procurement Policy Modernisation Package, Eco-Labelling and Framing Measure', *op. cit.* Buying Green! - A Handbook on Green Public Procurement, 2016, *op. cit.*, 37.

<sup>107</sup> Article 43, Directive 2014/24/EU.

the field of social value, with the exception of fair trade. Public procurement incorporating social concerns, in fact, tends to be more local, regional or national.

In public procurement, environmental and social labels can be used to:

- i. specify technical specifications, award criteria or contract performance clauses;  
and
- ii. control compliance with technical specifications, award criteria and contract performance clauses.

The existence of labels can help to lower the costs of proving compliance with environmental and/or social requirements. Contracting authorities can require specific labels to verify that works, services or suppliers correspond to the required characteristics.<sup>108</sup> However, they have to accept equivalent labels. Tenderers can also refer to other means of proof, such as a technical dossier of the manufacturer, in case they cannot obtain that specific label or an equivalent one within the set time limits.

The development and alignment to the EU Eco-label and national eco-labels is part of the process towards EU green public procurement.<sup>109</sup> The EU Eco-label Regulation provides for a voluntary scheme supporting products that have a high level of environmental performance.<sup>110</sup> The use of eco-labels is encouraged in order to set boundaries to an unlimited creation of labelling schemes and to promote higher environmental performance standards in various sectors.<sup>111</sup> Functional requirements can, in fact, be defined by reference to an eco-label. Products bearing an eco-label are presumed to be compliant with certain performance targets.

It may be argued that labels and certifications limit innovative solutions. The fact that labels are designed to refer to the state of art of performance in a specific sector may go against innovation. However, labels are frequently revised in order to reproduce the developments occurring in a certain field. Moreover, if a label not yet updated actually inhibits an innovative solution, the benefits of having a unique reference framework for sustainable goods and services, in terms of price reduction and larger availability, would balance the situation.

### **3.6.3 Exclusion criteria.**

As in 2004, the new Directives provide for mandatory and discretionary grounds for tenderers' exclusion. Mandatory grounds relate to specific and serious offences, such as fraud or money laundering, which prohibit the award of a public contract for at least a certain period of time to an

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<sup>108</sup> Article 43, para 1, Directive 2014/24/EU. Article 61, para 1, Directive 2014/25/EU. Article 36, para 1, Directive 2014/23/EU.

<sup>109</sup> H Karl, C Orwat, 'Environmental labelling in Europe: European and national tasks' [1999] *Environmental Policy and Government*, 214, 217. B Neamtu, D C Dragos, 'Sustainable Public Procurement: The Use of Eco-Labels' [2015] *EPPPL*, 1, 11.

<sup>110</sup> Regulation n. 66/2010 of the European Parliament and of the Council of 25 November 2009.

<sup>111</sup> H Schebesta, 'EU Green Public Procurement Policy Modernisation Package, Eco-Labeling and Framing Measure' *op. cit.*, 138, 141.

economic operator.<sup>112</sup> Exclusions can only take place if there is a conviction by a final judgement for one of the offences specifically indicated in the text of the Directives. Mandatory exclusions are applied in any phase of the procurement procedure and contracting authorities can terminate a contract awarded to an economic operator that should have been excluded under a mandatory ground. Moreover, mandatory exclusion grounds may be exceptionally derogated in case of ‘overriding reasons relating to the public interest such as public health or protection of the environment.’<sup>113</sup> In terms of sustainable development objectives, the mandatory exclusion ground that relates to the case of non-payment of tax or social security by the economic operator strengthens the integration of social considerations into the procurement process. Under the 2004 regime, it was only a discretionary ground of exclusion. Today, it is a mandatory one. However, it still has a limited effect. It does not apply if the economic operator executes the payment or agrees to pay the sums owed.<sup>114</sup> Furthermore, a Member State may derogate from this ground of exclusion if it is disproportionate. For instance, when there are small amounts of taxes or social securities not paid.<sup>115</sup> The maximum exclusion period that can be set is of five years from the date of the final judgement.<sup>116</sup>

Discretionary exclusion grounds are, instead, more extensive and specifically embrace the case of violation of applicable obligations in ‘the fields of environmental, social and labour law established by Union law, national law, collective agreements or by the international environmental, social and labour law provisions.’<sup>117</sup> Member States are also allowed to make these discretionary exclusion grounds become mandatory when implementing the Directives in their national law. They have to indicate the maximum period during which the exclusion will apply if there is no indication in this respect in the judgment against the economic operator. The maximum exclusion period is of three years from the relevant event in the case of discretionary grounds. No specific exclusion period is foreseen for the case of non-payment of taxes or social securities. The mentioned periods are included within the possibility provided for by Article 57, para 6, Directive 2014/24/EU. Economic operators - even if there is an exclusion ground - can demonstrate that they are taking actions that prove their reliability.

Under the 2014 Directives, contracting authorities can exclude economic operators in the case of their defective prior performance of a public contract, which may occur also in the field of environmental and/or social sustainability. However, the following cumulative conditions have to be satisfied.<sup>118</sup> The deficiencies have to be significant, continuative and referring to a substantive requirement of the previous contract. Moreover, they have to affect a public, utility, or concession

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<sup>112</sup> Article 57, Directive 2014/24/EU. Article 80, para 1, Directive 2014/25/EU. Article 38, paras 4 and 5, Directive 2014/23/EU. A Sanchez Graells, ‘Exclusion, Qualitative Selection and Short-listing in the New Public Sector Procurement Directive 2014/24’, *op. cit.*, 105.

<sup>113</sup> Article 57, para 3, Directive 2014/24/EU. Article 38, para 6, Directive 2014/23/EU.

<sup>114</sup> Article 57, para 2, Directive 2014/24/EU. Foremost, see the joined cases C-226/04 and C-228/04, *La Cascina Soc. coop. arl and Zilch Srl v Ministero della Difesa and Others* (C-226/04) and *Consorzio G. f. M. v Ministero della Difesa and La Cascina Soc. coop. arl* (C-228/04), [2006] I-01347.

<sup>115</sup> In this respect, it has to be noted that the CJEU held that this exclusion ground based on a very small-unpaid amount is not disproportionate. See C-358/12, *Consorzio Stabile Libor Lavori Pubblici v Comune di Milano*, published in the electronic Reports of Cases (Court Reports - general). A Brown, ‘Is a National Law Requiring the Exclusion of Bidders for Non-Payment of Social Security Contributions Exceeding 100 euros Compatible with the EU Treaty and the Principle of Proportionality? Case C-358/12 *Consorzio Stabile Libor Lavori Pubblici v Comune di Milano*’ [2014] PPLR, 165, 170.

<sup>116</sup> Article 57, para 7, Directive 2014/24/EU.

<sup>117</sup> Articles 18, para 2 and 57, para 4, Directive 2014/24/EU. Articles 30, para 3 and 38, para 7, Directive 2014/23/EU.

<sup>118</sup> Article 57, para 4, letter g), Directive 2014/24/EU.

contract leading to an early termination, damages or other similar circumstance.<sup>119</sup> Undoubtedly, such conditions limit the possibility of excluding an economic operator in the case of defective prior performance. This is why - given such restrictions - exclusions of tenderers with poor socio-environmental records can be more easily achieved through qualitative selection criteria. Another discretionary exclusion basis that can allow the integration of social considerations into procurement procedures is the one concerning the ‘grave professional misconduct’ of a tenderer, which may render its reliability questionable.<sup>120</sup> Professional misconduct may result from using hidden employment, from treating workers non-equally or from non-complying with health and safety provisions.<sup>121</sup> However, the identification of what ‘grave professional misconduct’ exactly entails is left to Member States’ discretion.

### 3.6.4 Criteria for qualitative selection.

In general terms, criteria for qualitative selection, or selection criteria, allow contracting authorities to identify suitable tenderers according to their needs and reduce the number of candidates to be invited to tender. They focus on the past and/or on the present situation of tenderers, while technical specifications and award criteria refer to what will be performed in the future.<sup>122</sup> Since 2014, this is no longer completely true because contracting authorities can assess staff experience at the award phase.<sup>123</sup> Article 67, para 2, letter b), Directive 2014/24/EU states that award criteria may cover the ‘organisation, qualification and experience of staff assigned to performing the contract, where the quality of the staff assigned can have a significant impact on the level of performance of the contract.’ In any case, selection criteria must relate to the subject matter of the contract and be proportionate to it. The general headings under which selection criteria can be structured are (i) suitability to pursue the professional activity, (ii) economic and financial standing and (iii) technical and professional ability. Under Directive 2014/24/EU, the list of permissible selection criteria is an exhaustive one,<sup>124</sup> while pursuant to Directives 2014/25/EU and 2014/23/EU there is a greater flexibility concerning the choice of selection criteria.<sup>125</sup>

Selection criteria have a large potential in securing sustainable development objectives. Contracting authorities can decide to take into account, when evaluating selection criteria, tenderers’ past performance of environmental and/or social obligations. Moreover, contracting authorities can allow scope for sustainability considerations if they set selection criteria - under the general heading of technical and professional ability - that address tenderers’ human and technical resources, skills, efficiency, experience and reliability in the field of environmental sustainability. Hence, if a contract requires specific knowledge in the environmental field, a specific skill may be

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<sup>119</sup> Article 57, para 4, Directive 2014/24/EU. Article 38, para 7, Directive 2014/23/EU.

<sup>120</sup> Article 57, para 4, letter c), Directive 2014/24/EU. Article 80, Directive 2014/25/EU. Article 38, para 7, letter c), Directive 2014/23/EU.

<sup>121</sup> Point 1.3.1, Interpretative Communication of the Commission on the Community law applicable to Public Procurement and the possibilities for integrating social considerations into Public Procurement (2001/C 333/08) COM (2001) 566 final.

<sup>122</sup> See, C-532/06, *Emm. G. Lianakis AE, Sima Anonymi Techniki Etairia Meleton kai Epivlepseon and Nikolaos Vlachopoulos v Dimos Alexandroupolis and Others*, [2008] I-00251. T Kotsonis, ‘The Nature of Award Criteria and the Subsequent Stipulation of Weightings and Sub-criteria: *Lianakis v Dimos Alexandroupolis* (C-532/06)’ [2008] PPLR, 128, 134.

<sup>123</sup> See, for instance, Article 67, para 2, letter b), Directive 2014/24/EU.

<sup>124</sup> Articles 58, para 1, Directive 2014/24/EU.

<sup>125</sup> Articles 78, Directive 2014/25/EU. Article 38, Directive 2014/23/EU.

used as a selection criterion allowing the contracting authority to identify the most suitable candidates. In addition, tenderers' corporate social responsibility may be referred to if it helps to prove their ability to perform the contract.<sup>126</sup>

Moreover, selection criteria may allow scope for sustainability when they require evidence of quality assurance and environmental management systems. Evidence that can be provided by tenderers may range from products' samples, to supply chain management or tracking systems. Economic operators can also rely on the capacity of others in order to prove their compliance with selection criteria, irrespective of the link existing between them.<sup>127</sup> In this case, the contracting authority has to verify that the other entity complies with the mandatory exclusion criteria and, in the case of non-compliance, require its replacement. Furthermore, the economic operator has to prove that it will have access to such capacity during the performance of the contract.<sup>128</sup>

Finally, it can be mentioned that the 2014 regime provides for a greater possibility to reserve contracts to companies that employ disabled or disadvantaged workers.<sup>129</sup> Hence, social considerations may be integrated in public purchasing also in this way.

### 3.6.5 Means of proof.

Economic operators can use the European Single Procurement Document (hereinafter ESPD) to demonstrate compliance with exclusion and selection criteria. The ESPD is a self-declaration form designed to provide an electronic and standard model that can be easily updated. Contracting authorities have to accept the ESPD as 'preliminary evidence in replacement' of certificates issued by other public authorities or third parties.<sup>130</sup> The ESPD indicates that supporting documents can be provided 'without delay' by the economic operator and specifies from which databases they can be retrieved.<sup>131</sup> Supporting documents may be required at any time unless they are freely available in national databases. The winning bidder is, instead, obliged to provide them along with the ESPD.<sup>132</sup> Article 60, Directive 2014/24/EU, indicates which certificates and declarations can be used as means of proof to demonstrate compliance with exclusion and selection criteria.

Under the 2014 rules, room for sustainable development considerations can be found also when dealing with means of proof. For instance, Article 62 of Directive 2014/24/EU, addresses the use of quality assurance standards and environmental management systems at the selection phase.<sup>133</sup> Contracting authorities can request certification from independent entities in order to attest

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<sup>126</sup> Point 1.3.2, Interpretative Communication of the Commission on the Community law applicable to Public Procurement and the possibilities for integrating social considerations into Public Procurement (2001/C 333/08) COM (2001) 566 final.

<sup>127</sup> Article 63, Directive 2014/24/EU. Article 79, Directive 2014/25/EU. Article 38, para 2, Directive 2014/23/EU.

<sup>128</sup> In this respect, see C-389/92, *Ballast Nedam Groep NV v Belgian State*, 1994 I-01289. C-176/98, *Holst Italia SpA v Comune di Cagliari*, [1999] I-08607. C-314/01, *Siemens AG Österreich and ARGE Telekom & Partner v Hauptverband der österreichischen Sozialversicherungsträger*, [2004] I-02549. C-399/05, *Commission of the European Communities v Hellenic Republic*, [2007] I-00101. C-95/10, *Strong Segurança SA v Município de Sintra and Securitas-Serviços e Tecnologia de Segurança*, [2011] I-01865. C-218/11, *Észak-dunántúli Környezetvédelmi és Vízügyi Igazgatóság (Édkövízig) and Hochtief Construction AG Magyarországi Fióktelepe v Közbeszerzések Tanácsa Közbeszerzési Döntőbizottság*, published in the electronic Reports of Cases (Court Reports - general).

<sup>129</sup> Article 20, Directive 2014/24/EU. Article 38, Directive 2014/25/EU. Article 24, Directive 2014/23/EU.

<sup>130</sup> Article 59, para 1, Directive 2014/24/EU.

<sup>131</sup> Article 59, para 1, Directive 2014/24/EU. Article 61 requires contracting authorities to primarily consult the on-line repository of certificates (e-Certis).

<sup>132</sup> Article 59, para 4, Directive 2014/24/EU.

<sup>133</sup> See also Article 81, Directive 2014/25/EU.

tenderers' compliance with sustainable standards or systems. Nonetheless, they also still have to accept equivalent certifications. Moreover, the scope for sustainable objectives can be secured through environmental management systems that can now be requested in all public contracts, while previously such a possibility was limited only to services and works contracts. Furthermore, the possibility to request third-party labels may now also include and refer to labels concerning social and other characteristics, in addition to eco-labels.<sup>134</sup> In this respect, it can be recalled that the increased number of existing labels makes it sometimes difficult to identify independent and objective labels.

In principle, contracting authorities cannot ask for a specific label. Nonetheless, when drafting technical specifications, award criteria and contract performance clauses, they can specifically refer to one - that for instance attests the environmental sustainability of a product - if the following conditions, set out in Article 43, para 1, Directive 2014/24/EU, are met.

- 'a) the label requirements only concern criteria which are linked to the subject-matter of the contract and are appropriate to define characteristics of the works, supplies or services that are the subject-matter of the contract;*
- (b) the label requirements are based on objectively verifiable and non-discriminatory criteria;*
- (c) the labels are established in an open and transparent procedure in which all relevant stakeholders, including government bodies, consumers, social partners, manufacturers, distributors and non-governmental organisations, may participate;*
- (d) the labels are accessible to all interested parties;*
- (e) the label requirements are set by a third party over which the economic operator applying for the label cannot exercise a decisive influence.'*

In any case, equivalent labels have to be accepted by contracting authorities. In this respect, it can be mentioned that economic operators now have limited possibilities to rely on internal technical dossiers, which can only be referred to in case of unavailability of the label for reasons not attributable to the tenderer.

Finally, it can be noted that contracting authorities can also request test reports and certification issued by conformity evaluation bodies in order to obtain evidence of compliance with technical specifications, award criteria or contract clauses.<sup>135</sup> These bodies play a crucial role in the implementation of the principle of mutual recognition within the EU and are accredited under Regulation n. 765/2008 to carry out adjustment, testing, verification and certification of products subject to harmonized standards, including the CE mark.

### **3.6.6 Award criteria.**

One of the most significant achievements of the 2014 reform has been the choice of the 'most economically advantageous tender' (hereinafter MEAT) as criterion for any award decision, thereby

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<sup>134</sup> Articles 43 and 44, Directive 2014/24/EU. Articles 61 and 62, Directive 2014/25/EU.

<sup>135</sup> Article 44, para 1, Directive 2014/24/EU.

formally eliminating the previous distinction between the MEAT and the lowest price. When this decision was taken, the European Parliament during a press release stated that:

*‘Thanks to the new criterion of the ‘most economically advantageous tender’ in the award procedure, public authorities will be able to put more emphasis on quality, environmental considerations, social aspects or innovation while still taking into account the price and life-cycle-costs of what is procured.’*<sup>136</sup>

Moreover, Mr Tarabella<sup>137</sup> pointed out that

*‘The new criteria will put an end to the dictatorship of the lowest price and once again make quality the central issue.’*

Indeed the MEAT is an award criterion capable of accommodating innovative, environmental and social issues, allowing the actual integration of sustainable considerations within the procurement process.<sup>138</sup> However, the MEAT must still be identified by looking at the price or cost. Thus, the lowest price criterion is somehow still present in the expression ‘price or cost’ of Article 67, para 2, Directive 2014/24/EU. What is remarkable is that the identification of the MEAT - on the basis of price or cost - entails the application of a cost-effectiveness approach, such as Life Cycle Costs (hereinafter LCC)<sup>139</sup> and may include the best price-quality ratio. The latter may be evaluated on the basis of qualitative, environmental and/or social criteria linked to the subject-matter of the contract. Such criteria may refer to quality, technical merit, aesthetic and functional features, accessibility, design for all users, social, environmental and innovative characteristics and trading conditions of the goods, works, or services to be purchased. Moreover, the way in which contracting authorities decide to weigh costs and qualitative criteria may actually support the inclusion of sustainable considerations in the procurement process. Contracting authorities have to clarify which approach they will follow to verify tenderers’ performance. Therefore, they have to state whether they will refer to economic operators’ statements or third-party evidence, such as labels, certifications or test reports.

As mentioned, the MEAT criterion implies that contracting authorities cannot exclude price or cost from their evaluation. Public bodies may still adopt the lowest price criterion if deemed more adequate for the award of a certain public contract. However, when implementing the 2014 Directives, Member States may choose to limit the use of lowest-price or lowest-cost awards.<sup>140</sup> Thus, Member States may exclude or restrict the use of price or cost, but cannot impose the use of

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<sup>136</sup> New EU-procurement rules to ensure better quality and value for money, European Parliament press release, 2014, available at <http://www.europarl.europa.eu/news/en/news-room/20140110IPR32386/New-EU-procurement-rules-to-ensure-better-quality-and-value-for-money>.

<sup>137</sup> Belgian politician and member of the EU Parliament.

<sup>138</sup> D C Dragos, B Neamtu, ‘Sustainable public procurement in the EU: Experiences and Prospects’, *op. cit.*, 318. M Burgi, B Brandmeier, ‘Quality as an Interacting Award Criterion under Current and Future EU-Law’ [2014] EPPPL. S Arrowsmith, P Kunzlik, *Social and Environmental Policies in EC Procurement Law: New Directives and New Directions*, *op. cit.*. R Caranta, M Trybus, *The Law of Green and Social Procurement*, *op. cit.*. P Bordalo Faustino, ‘Award criteria in the new EU Directive on public procurement’ [2014] PPLR, 124, 133.

<sup>139</sup> See below, paragraph 3.6.6.

<sup>140</sup> Article 67, para 2, Directive 2014/24/EU.

price and cost only. This view seems to be supported by the increasing tendency to limit - if not eliminate - the use of the lowest price criterion promoting greater attention to quality considerations.<sup>141</sup>

Overall, award criteria (i) must be linked to the subject matter of the contract, (ii) be clearly indicated in the procurement documents and (iii) should not allow an unrestricted freedom of choice on the public authority. The requirement of the link with the subject-matter of the contract means that award criteria have to relate to the works, supplies or services to be purchased in any respect and in any phase of their life cycle.<sup>142</sup> Award criteria cannot refer to the general practices of tenderers, but only to the specific goods, services or works to be provided under the contract.<sup>143</sup> Recital 97, Directive 2014/24/EU, clearly explains that the requirement of the link with the subject-matter excludes criteria that refer to the general corporate policy of tenderers.<sup>144</sup> Thus, within these limits, contracting authorities have a considerable leeway in the formulation, weighting and performance evaluation against award criteria, which may include sustainable considerations.

Such broad understanding of the requirement of the link with the subject-matter of the contract allows the inclusion of environmental, social and innovative considerations. Recital 67, para 3, Directive 2014/24/EU, highlights that:

*‘Award criteria shall be considered to be linked to the subject-matter of the public contract where they relate to the works, supplies or services to be provided under that contract in any respect and at any stage of their life cycle, including factors involved in: (a) the specific process of production, provision or trading of those works, supplies or services; or (b) a specific process for another stage of their life cycle, even where such factors do not form part of their material substance.’*

Therefore, award criteria may not only refer to the technical characteristics of the works, supplies or services to be provided under the contract, but can also include various elements related in any respect and at any stage of the life-cycle of the works, supplies or services to be purchased. In addition, the so-called technical characteristics may cover different aspects of the works, supplies or services, such as their process, method of production, provision, specific stage of their life-cycle, even if not part of their material substance. Overall, this flexible approach to the requirement of the link with the subject-matter of the contract seeks to ease and promote the integration of environmental, social and innovative award criteria under the MEAT.<sup>145</sup>

Moreover, as in the case of technical specifications, award criteria have the ability to address sustainable considerations through the application of the life-cycle costing approach, which entails the consideration of the entire life-cycle of a good, service or work. Specific rules on LCC have been introduced in 2014. They allow a significant flexibility in the range of cost factors that can be covered by LCC. Costs related to the purchase, use, maintenance or end of life of the goods,

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<sup>141</sup> See, for instance, Recital 90, para 2, Directive 2014/24/EU. See among others, S Arrowsmith, *The Law of Public and Utilities Procurement*, *op. cit.*, 761. A Semple, *A Practical Guide to Public Procurement*, *op. cit.*, 11, 115.

<sup>142</sup> Article 67, para 3, Directive 2014/24/EU. Article 82, para 3, Directive 2014/25/EU.

<sup>143</sup> A Semple, ‘Reform of EU Procurement Directives and WTO GPA: Forward Steps for Sustainability,’ *op. cit.*

<sup>144</sup> See also Recital 104, Directive 2014/24/EU.

<sup>145</sup> See, *inter alia*, P B Faustino, ‘Award Criteria in the New EU Directive on Public Procurement’, *op. cit.*, 131. A Semple, *A Practical Guide to Public Procurement*, *op. cit.*, 186.

services or works to be purchased may be included.<sup>146</sup> LCC may also include costs allocated to environmental externalities, such as greenhouse gas emissions.<sup>147</sup> Social externalities are not yet included. However, Recital 96 of Directive 2014/24/EU, provides that ‘the feasibility of [...] a common methodology on social life cycle costing should be examined, taking into account existing methodologies such as the Guidelines for Social Life Cycle Assessment of Products adopted within the framework of the United Nations Environment Programme.’

Other significant 2014 changes, in terms of the inclusion of socio-environmental objectives, are the possibility of taking into account staff experience of tenderers as well as the production processes or trade of goods, services or works. Staff qualification and skills can be assessed if they have ‘a significant impact on the level of performance of the contract’ and they were not already evaluated at the selection phase.<sup>148</sup> Staff qualification and skills may indeed be important in the performance of many public contracts delivering public infrastructure or services in a sustainable way.<sup>149</sup> Moreover, following the *Dutch Coffee* case,<sup>150</sup> award criteria may refer to a certain production process, trading or provision method of the goods, services or works to be purchased. In addition, they may refer to a certain process for another phase of their life-cycle, even if such aspects are not part of their material substance. In other words, the 2014 regime explicitly provides for the possibility of integrating environmental features, innovative characteristics and trading conditions in award criteria. Recital 99 of Directive 2014/24/EU, provides guidance on the social considerations that can be integrated within award criteria or performance clauses. These can be social concerns concerning health protection and social integration of disadvantaged people or persons of vulnerable groups. For instance, the employment of long-term job seekers and the implementation of training measures for unemployed or young people. Anyway, as held before, the key requirement for social and innovative award criteria is always the link with the subject-matter of the contract.

As seen, Article 67, para 2, Directive 2014/24/EU, states that the MEAT has to be identified on the basis of the price or cost, using a cost-effectiveness approach such as the LCC. One of the most important changes of the 2014 reform is the explicit reference to the concept of LCC in the text of the Directives.<sup>151</sup> LCC is a tool that allows the assessment of the costs of a product, work or service throughout its life-cycle.<sup>152</sup> In fact, the purchase price alone does not cover all the financial and non-financial benefits attainable through sustainable goods, work or services and accumulated during its operation, use, maintenance and disposal.

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<sup>146</sup> Article 68, para 1, Directive 2014/24/EU. Article 83, para 1, 2014/25/EU.

<sup>147</sup> Article 68, Directive 2014/24/EU. Article 83, Directive 2014/25/EU.

<sup>148</sup> Article 67, para 2, letter b), Annex XII, Part II, point f), Directive 2014/24/EU. Article 82, para 2, letter b) Directive 2014/25/EU.

<sup>149</sup> C-532/06, *Emm. G. Lianakis AE, Sima Anonymi Techniki Etaireia Meleton kai Epivlepseon and Nikolaos Vlachopoulos v Dimos Alexandroupolis and Others*, [2008] I-00251. C-199/07, *Commission of the European Communities v Hellenic Republic*, [2009] I-10669.

<sup>150</sup> C-368/10, *op. cit.*.

<sup>151</sup> Article 68, Directive 2014/24/EU. LCC can be used also when contracting authorities opt for the lowest price/cost criteria.

<sup>152</sup> W Scharnhorst, ‘Life Cycle Assessment in the Telecommunication Industry: A Review’, *op. cit.*, 75, 86. D Dragos, B Neamtu, ‘Sustainable Public Procurement: Life-cycle Costing in the New EU Directive Proposal’ [2013] EPPPL, 19, 30. P Kunzlik, ‘From suspect practice to market-based instrument: policy alignment and the evolution of EU law's approach to "green" public procurement’ [2013] PPLR, 97, 115. A Semple, *A Practical Guide to Public Procurement*, *op. cit.*, 190. R Caranta, ‘Helping Public Procurement Go Green: The Role of International Organisations’ [2013] EPPPL.

The LCC approach covers costs borne by end-users, contracting authorities and the environment, which may range from costs related to consumption and maintenance, to end of life aspects, such as collection or recycling. The 2014 Directives set out the limits within which LCC can be applied in procurement and, in particular, they provide for the inclusion of environmental externalities in the evaluation of costs.<sup>153</sup> LCC can also, in fact, take into account costs associated with environmental externalities related to the product, service or work to be purchased under a certain contract during its life cycle, provided that their value can be monetised. These may be costs of greenhouse gas emissions or other pollutant and climate change mitigation costs.<sup>154</sup> When using the LCC approach, contracting authorities have to specify which method they will use to calculate LCC in the procurement documents and indicate the data that tenderers have to submit. Such method must be objectively verifiable and non-discriminatory. Recital 96, Directive 2014/24/EU, explains that

*“the notion of life-cycle costing includes all costs over the life-cycle of works, supplies or services. This means internal costs, such as research to be carried out, development, production, transport, use, maintenance and end-of-life disposal costs but can also include costs imputed to environmental externalities, such as pollution caused by extraction of the raw materials used in the product or caused by the product itself or its manufacturing, provided they can be monetized and monitored.”*

Article 68, para 1 of Directive 2014/24/EU provides for a sample list of internal costs covered by LCC<sup>155</sup> and an indication of the external costs generated during the life-cycle of a certain product, service or work.<sup>156</sup> Scope for sustainability is explicitly allowed when external costs related to the delivered work, product or service are covered, thus, when externalities are internalized and associated to a financial value. Article 68 of Directive 2014/24/EU specifically refers only to environmental externalities, such as those generated, for instance, during transport. Other kinds of externalities, such as social ones, are not yet included within the LCC approach.<sup>157</sup> Even though the European Parliament called for an inclusion of social externalities into LCC, they were not referred to in the final text of the 2014 Directives, thereby hindering the full potential of LCC. The actual feasibility of a social LCC is still under scrutiny.<sup>158</sup> A social LCC approach would mean taking into account, for instance, labour conditions, equal opportunities and accessibility criteria. Anyway, if

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<sup>153</sup> The expression environmental externalities is an economic concept that refers to the uncompensated impacts of production and consumption (outside the market mechanism) that have an effect on consumers and on private sector costs. See, D C Dragos, B Neamtu, ‘Sustainable public procurement in the EU: Experiences and Prospects’, *op. cit.*, 326.

<sup>154</sup> Article 68, para 1, letter b), Directive 2014/24/EU. Article 83, para 1, letter b), Directive 2014/25/EU.

<sup>155</sup> Article 68, para 1, letter a), Directive 2014/24/EU: (i) costs relating to acquisitions; (ii) costs of use, such as the consumption of energy and other resources; (iii) maintenance costs; (iv) end of life costs, such as collection and recycling costs.

<sup>156</sup> Such costs may refer to the costs of greenhouse gas emissions, other pollutant emissions and climate change mitigation costs. Article 68, para 1, letter a), Directive 2014/24/EU.

<sup>157</sup> D C Dragos, B Neamtu, ‘Sustainable public procurement in the EU: Experiences and Prospects’, *op. cit.*, 25.

<sup>158</sup> See, for instance, T E Swarr, ‘Societal Life Cycle Assessment - Could You Repeat The Question?’ [2009] *International Journal Life Cycle Assessment*, 285, 289. R Griebhammer, C Benoît, L C Dreyer, A Flysjö, ‘Feasibility Study: Integration of Social Aspects into LCA’ [2006] available at <http://www.saiplatform.org/uploads/Library/UNEP-SETACLifeCycleInitiativeTFonSocialIssues-FeasibilityStudy.pdf>. A Jørgensen, A Le Bocq, L Nazarkina, M Hauschild, ‘Methodologies for Social Life Cycle Assessment’ [2008] *International Journal of Life Cycle Assessment*, 96, 103.

public authorities decide to use a cost-effectiveness approach other than the LCC, considerations of any kind, including social ones, could be included. LCC is, in fact, just one of the possible cost-effectiveness approaches that can be used by contracting authorities. The public sector is free to choose any cost-effectiveness approach to evaluate the cost element of the MEAT.<sup>159</sup> In any case, social concerns should be directly or indirectly linked with the product, service or work to be purchased and their monetary value should be measurable,<sup>160</sup> as monetisation is a requirement for any cost-effectiveness approach. Thus, their inclusion would be possible, yet challenging.

Article 68, para 3 of Directive 2014/24/EU provides that if a common method of LCC calculation becomes mandatory at EU level, such a method has to be applied for the assessment of life-cycle costs. Currently the only common and mandatory EU methodology for calculating LCC is the one set out in the Clean Vehicles Directive.<sup>161</sup> According to this Directive, contracting authorities must consider energy consumption and emissions when purchasing road transport vehicles, for instance, by setting a cost to these elements in the evaluation of tenders. The Annex to the Directive provides for a set of costs to be applied so that emissions can be priced and included in the evaluation and comparison of bids. Higher costs may be assigned, up to a maximum of two times the indicated values.<sup>162</sup> The Directive also provides for values on the energy content of different fuel types and the lifetime mileage of various vehicles. A series of LCC tools and methods are anyway available for the purchase of certain categories of goods, services and works<sup>163</sup> and contracting authorities can develop and adopt their own, provided that it complies with the conditions set out in the 2014 Directives.<sup>164</sup>

### **3.6.7 Award criteria vs technical specifications.**

Given the above, the following points can be specified in order to distinguish the role played by award criteria and technical specifications in the integration of socio-environmental objectives within public contracts. There are specific rules governing the way in which technical specifications can be expressed and contracting authorities must verify tenders' compliance with such conditions. As opposed to technical specifications, award criteria are not governed by the same degree of detail. They have to be defined in a clear and precise way and have to be accompanied by specifications that allow the verification of the information provided by economic operators in order to check how well bids meet the set award criteria. Moreover, technical specifications are minimum mandatory requirements applied to all economic operators. Thus, if there is a certain degree of knowledge on what the private sector can offer, they can effectively address, for instance, environmental aspects essential to the contract. Award criteria, instead, allow contracting authorities to distinguish tenders

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<sup>159</sup> See the Non-paper prepared by the Commission services, DG Internal Market, on Cluster 2, Strategic use of public procurement, January 20, 2012, available at <http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%205369%202012%20INIT>.

D C Dragos, B Neamtu, 'Sustainable public procurement in the EU: Experiences and Prospects', *op. cit.*, 324.

<sup>160</sup> Article 67, para 1, letter b), of the Proposal for a Directive on Public Procurement, not included into the final 2014 text.

<sup>161</sup> Directive 2009/33/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of clean and energy-efficient road transport vehicles.

<sup>162</sup> Article 6, para 1, letter c), Directive 2009/33/EC.

<sup>163</sup> For instance, the National Agency for Public Procurement in Sweden developed several product-specific LCC calculation tools that are available on-line. In addition, The SMART SPP project elaborated and tested a tool for contracting authorities to evaluate LCC and CO<sub>2</sub> emissions and compare bids, see <http://www.smart-spp.eu/guidance>.

<sup>164</sup> Recital 96, Directive 2014/24/EU.

upon environmental performance and can be used even if there is no prior knowledge on the minimum or maximum level of such performance. Furthermore, technical specifications may cover minimum requirements with regard to any or all of the elements affecting, for instance, the environmental footprint of a service, such as the choice of vehicles and/or routes, methods for separating, collecting or separating waste. Award criteria are, instead, more adequate to analyse the overall impact of the methods proposed by the economic operators.

Finally, it can be hereby mentioned that contracting authorities are - remarkably - obliged to reject abnormally low tenders that do not comply with environmental, social or labour law.<sup>165</sup> The 2014 reform, in fact, opens the way - also in this respect - to the use of public purchasing as a tool to promote the enforcement of social, labour and environmental law. Thus, enhancing the possibility to use procurement to achieve social and environmental targets.<sup>166</sup> Specifically, contracting authorities may decide not to award a public contract to the economic operator submitting the MEAT if they establish that the tender does not comply with the relevant obligations in the field of environmental, social and labour law set by EU, domestic law and collective agreements. Additionally, this may happen if the tender does not comply with obligations arising out international environmental, social and labour law provisions indicated in Annex X, Directive 2014/24/EU.<sup>167</sup>

### **3.6.8 Contract performance clauses.**

The 2014 Directives explicitly acknowledge that contract performance clauses can include social and environmental requirements.<sup>168</sup> They clearly state that contracting authorities may lay down special contractual performance conditions that include economic, innovation-related, environmental, social or employment-related considerations.<sup>169</sup> These are referred to with the term 'special conditions' and have to be indicated in the call for competition or in the procurement documents. The expression 'special conditions' has not been defined, however. Specific examples are provided in text of the Directives along with the requirement to monitor compliance with such conditions.<sup>170</sup>

Social considerations can more easily be integrated into contract performance clauses.<sup>171</sup> Contract performance conditions may, in fact, - for instance - refer to the purchase of products from small-scale producers in developing countries at favourable trading standards (fair trade) or to measures aiming at the protection of health of the staff involved in the performance of the contract. Moreover, they can require compliance with ILO and human rights conventions. Contractual

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<sup>165</sup> Article 69, para 3, Directive 2014/24/EU. Article 84, para 3, Directive 2014/25/EU. On the rejection of abnormally low tenders see, among others, A Semple, *A Practical Guide to Public Procurement*, *op. cit.*, 117. A Sanchez Graells, 'Rejection of Abnormally Low and Non-Compliant Tenders in EU Public Procurement: A Comparative View on Selected Jurisdictions' in M Comba, S Treumer (eds), *Award of Contracts in EU Procurement*, *European Procurement Law Series* (DJØF, 2013) 289, 293.

<sup>166</sup> A Sanchez Graells, 'Exclusion, Qualitative Selection and Short-listing in the New Public Sector Procurement Directive 2014/24', *op. cit.*, 101.

<sup>167</sup> See Article 18, para 2, Directive 2014/24/EU.

<sup>168</sup> Article 70, Directive 2014/24/EU. Article 87, Directive 2014/25/EU. Recitals 64 to 66, Directive 2014/23/EU.

<sup>169</sup> Article 70, Directive 2014/24/EU. Article 87, Directive 2014/25/EU. Recitals 64 to 66, Directive 2014/23/EU.

<sup>170</sup> See, for instance, Article 56, para 1, Directive 2014/24/EU.

<sup>171</sup> *Buying Social, A Guide to Taking Account of Social Considerations in Public Procurement*, European Commission Directorate-General for Employment, Social Affairs and Equal Opportunities, 2010, 43, 44.

conditions may also refer to environmental considerations, such as the re-use of products or of packaging or, in general, the delivery of products in an environmental friendly way.

Overall, contractual conditions have the potential of stressing the socio-environmental commitments of economic operators, which are normally safeguarded by adequate remedies in case of breach. Contract terms are, in fact, usually accompanied by penalties or incentives - in terms of bonus payments - to encourage the achievement of high performance standards.<sup>172</sup> Thus, contract performance clauses can effectively allow scope for sustainable development objectives as they give contracting authorities the possibility to set conditions that incorporate also socio-environmental considerations. The 2004 Directives already envisaged such a possibility.<sup>173</sup> However, the 2014 rules added the requirement of the link with the subject-matter of the contract. This means that contract performance clauses setting, for instance, corporate responsibility requirements are not allowed. Thus, an economic operator cannot be asked to participate in a carbon-offsetting scheme or to make its investments in a certain territory outside the scope of a specific contract. Instead, it can be asked to offset carbon emissions during the delivery of the goods or services under a certain contract or to offer specific social benefits related to the contract performance, such as traineeships or training programs.

### **3.6.9 Contract review clauses.**

Public contracts may include review clauses allowing adjustments. For instance, review clauses may secure modifications of the way in which certain services or products are delivered in order to improve or update their sustainable characteristics. However, they have to meet the following three conditions.<sup>174</sup> First of all, they have to be indicated in the initial procurement documents. In multi-phase procedures - such as the competitive dialogue - this means that the need for review clauses has to be indicated in the relevant procurement documents, hence, in those setting out contract terms. The second condition requires that review clauses have to be clear, precise, unequivocal and indicate the scope and nature of the potential amendments or options as well as any circumstances in which they may be used. Thus, for instance, the frequency with which the modifications may become necessary and how their value will be assessed, has to be specified. A high level of forecast is, thus, necessary to draft adequate review clauses. Lastly, review clauses may not alter the overall nature of the public contract.

## **4. The scope for sustainable development concerns in public-private partnerships.**

The previous paragraphs examined the actual spaces for social and environmental considerations recognised by the 2014 public procurement Directives into tender procedures for the award of public contracts. The following paragraphs will narrow down the analysis and offer insights on how sustainable development objectives can be integrated into tender procedures for the award of a specific type of public contract, PPPs. It will be discussed how the planning, award, structure, operation and management of these public-private collaborations may be shaped upon sustainable considerations. Hence, the role played by the various procurement phases in the inclusion of

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<sup>172</sup> A Semple, 'Reform of EU Procurement Directives and WTO GPA: Forward Steps for Sustainability', *op. cit.*

<sup>173</sup> Article 26, Directive 2004/18/EC. Article 38, Directive 2004/17/EC.

<sup>174</sup> Article 72, para 1, letter a), Directive 2014/24/EU.

sustainable development concerns into PPPs will be first of all highlighted. Then, it will be briefly seen how public sector financial management choices may influence the integration of socio-environmental concerns in these complex, long-term public contracts.

#### 4.1 The procurement process: overview.

PPPs have been defined as arrangements that combine government or public resources with those of private entities in order to deliver societal goals.<sup>175</sup> Other authors have argued that PPPs can answer general economic growth and sustainable issues that States and local public entities today have to face.<sup>176</sup> Beyond these and others theoretical definitions and statements, it is, however, important to have an understanding of how PPPs can concretely integrate and promote sustainable development goals.

The particular features of PPPs do have the ability of effectively supporting the achievement of also socio-environmental objectives. Nonetheless, there is no universal, *a priori* or correct formula for the structuring of sustainable PPPs. In general terms, PPPs which are planned, operated and managed in a sustainable way deliver a better allocation of resources among the public and the private sector, weighting both economic and socio-environmental aspects.<sup>177</sup> However, the specific ways through which socio-environmental objectives can be concretely integrated and pursued through PPPs may vary widely according, for instance, to the type of infrastructure or service to be delivered and the political, economic and social environment where the public and private sector have to carry out the project.<sup>178</sup> The planning, operation and management of a public-private cooperation that promotes sustainable development objectives is, thus, highly challenging. It requires the ability to balance a number of competing objectives: short and long-term value, overall project's costs to be recouped during the contract life and the achievement of innovation, social and environmental targets. All this, in a way that complies with EU and national public procurement rules.

In this respect, the EU legal framework within which PPPs can be awarded and structured offers considerable spaces for the inclusion of socio-environmental considerations in such arrangements. For instance, the new rules on LCC approach allow the parties involved in a PPP to take into full account the life cycle of a service or infrastructure delivered under such scheme. Moreover, the most straightforward answer to the question of where sustainable development objectives can find space in a PPP is that sustainable development goals can easily be integrated when project's proposals are evaluated and scored against award criteria. Price can, in fact, be weighed against sustainable development considerations upon pre-defined models or schemes. Nonetheless, decisions taken also during other phases of the procurement process can affect the

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<sup>175</sup> C Skelcher, 'Public-Private Partnerships and Hybridity' in E Ferlie, L J Lynn Jr, C Pollitt (eds), *The Oxford Handbook of Public management* (Oxford University Press, 2005) 347.

<sup>176</sup> See, for instance, S P Mullin, 'Public-Private Partnerships and State and Local Economic Development: Leveraging Private Investment' [2002] *Reviews of Economic Development Literature and Practice*, available at <http://fresnostate.edu/academics/oced/documents/Public-Private%20Partnerships.pdf>.

<sup>177</sup> S Colverson, O Perera, 'Harnessing the Power of Public-Private Partnerships: The role of hybrid financing strategies in sustainable development' [2012] *International Institute for Sustainable Development*, available at [http://www.iisd.org/pdf/2012/harnessing\\_ppp.pdf](http://www.iisd.org/pdf/2012/harnessing_ppp.pdf). G Hodge, C Greve, 'Public-Private Partnerships: an International Review' [2007] *Public Administration Review*, 545, 558.

<sup>178</sup> S H Linder, 'Coming to Terms with the Public-Private Partnerships, A Grammar of Multiple Meanings' [1999] *American Behavioral Scientist*, 35, 51. E H Klijn, 'Public-Private Partnerships: deciphering meaning, message and phenomenon' in G Hodge, C Greve (eds), *International Handbook of PPP* (Edgar Elgar, 2010) 68, 80.

inclusion of socio-environmental concerns in PPP arrangements. The first step to be taken for the structure of private-public cooperation oriented towards the achievement of socio-environmental benefits is the precise identification and classification of the public sector's needs. The decisions taken at this initial stage by the contracting authority on needs' assessment are, in fact, crucial, being capable of affecting the degree of sustainability that will be included in the PPP.<sup>179</sup> Such decisions may, for instance, concern the extent to which environmental or maintenance concerns are desired during the performance of the contract.

Once all needs, especially in terms of socio-environmental sustainability, are clearly set, contracting authorities should have an idea of the solutions that the private market can offer. The engagement in some form of pre-procurement can be beneficial in this respect and for the structuring of a PPP that allows scope for sustainable development considerations.<sup>180</sup> Preliminary answers to questions on the overall feasibility of the project can be obtained. The engagement with potential private partners during pre-procurement can also promote competition levels that can contribute to the award of the PPP contract to the best private partner.<sup>181</sup> In order to secure competition, pre-procurement could be carried out through open days dedicated to economic operators or by distributing questionnaires or project's booklets. In addition, web searches in online databases or catalogues could be carried out. Pre-procurement can be an important moment for the public sector to understand which could be the best contract's requirements, tender deadlines and payment mechanisms that can better secure sustainable development considerations.<sup>182</sup> This phase can also encourage the creation of consortia, which normally represent the private side of PPPs, since they are normally more capable of delivering a full range of objectives.

The decisions taken during this phase can influence the degree of sustainability included in a PPP and they are more likely to be taken in the right way if the public sector fully understands the market within which it can cooperate.<sup>183</sup> From a sustainable development perspective, the advantages of pre-procurement vary according to the ability of the public sector to use the information collected, without giving any economic operator a real or perceived advantage. Thus, the engagement with private operators must maintain a competitive tension.

Further steps, which can allow the integration of socio-environmental considerations in the structure of PPP arrangements, are the definition of the subject-matter and scope of the contract and the choice of the more adequate PPP legal type for the achievement of the set goals.<sup>184</sup> Contracting authorities must have a clear idea of which could be the best legal scheme, given the specific circumstances of the case at stake and the exact nature of the needs to be satisfied. This is a prerequisite for the choice of the best way through which to structure the competitive tender. The

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<sup>179</sup> P H Pattberg, *Public-Private Partnerships for Sustainable Development: Emergence, Influence and Legitimacy* (Edward Elgar, 2012). P D Rwelamila, P Fewings, C Henjewle, 'Addressing the Missing Link in PPP Projects: What Constitutes the Public?' [2014] *Journal of Management in Engineering*.

<sup>180</sup> On pre-procurement under the 2014 Directives, see Chapter II, para 4.2.4.1., letter a).

<sup>181</sup> A Semple, *A Practical Guide to Public Procurement*, *op. cit.*, 71.

<sup>182</sup> A R Apostol, 'Pre-commercial Procurement in Support of Innovation: Regulatory Effectiveness?' [2012] PPLR.

<sup>183</sup> B Ryan, *Public-Private Partnerships and Sustainability, Principles Guiding Legislation and Current Practice*, 2004, available at <http://arrow.dit.ie/cgi/viewcontent.cgi?article=1007&context=futuresacrep>.

<sup>184</sup> *Typologie des PPP: Comparaison Juridique et Terminologique des PPP dans les Conceptions Française et Anglo-saxonne*, Mission d'appui aux partenariats public-privé (MAPPP), 2013, available at [http://www.economie.gouv.fr/files/files/directions\\_services/ppp/glossaire\\_fr\\_en.pdf](http://www.economie.gouv.fr/files/files/directions_services/ppp/glossaire_fr_en.pdf). G Hodge, C Greve, 'Theorizing Public-Private Partnership Success: A Market-Based Alternative to Government?' paper for the Public Management Research Conference at Syracuse University, 2-4 June 2011, Themed Panel on 'Market-Based Alternatives to Government', available at [http://openarchive.cbs.dk/bitstream/handle/10398/8573/Greve\\_2011\\_c.pdf?sequence=1](http://openarchive.cbs.dk/bitstream/handle/10398/8573/Greve_2011_c.pdf?sequence=1).

choice of the procedure, in fact, normally reflects the nature of the contract to be awarded and the private market operator with which it will be signed. As seen, the competitive dialogue, the CPN or the innovation partnership appear to be the most suitable procedures for the award of PPP contracts.<sup>185</sup> The decisive factors that should orient public authorities in the choice of the procedure for the delivery of an investment project under a PPP are the following. The desired level of interaction with potential private partners, which is fundamental for the identification of the best proposal, resources and expertise available to carry out the procedure.<sup>186</sup> So the choice of the most adequate procedure, depends on the specific features of the project to be delivered and on the ability of the public sector to manage negotiations or dialogues, maintaining a competitive tension among private operators.<sup>187</sup>

Technical specifications also play a crucial role in the award of PPPs that incorporate sustainable development concerns. As seen in the previous paragraphs, specifications have the potential of positively affecting the attainment of sustainability targets. They control which tenders will proceed towards the assessment against award criteria. Thus, the substance of technical specifications determines what will be offered and how it will be delivered. Unclear or unnecessarily complicated specifications can hinder the scope of sustainability into PPP arrangements by reducing the number of proposals submitted or the achievable quality. Technical specifications have to avoid negative effects during the contract management phase, such as outputs that do not satisfy the public sector's needs.<sup>188</sup> In complex public contracts, such as PPPs, this issue can be covered by the definition in advance of the required results, rather than the specification of how outputs should be achieved, which is instead determined by the private party. Unarguably, some ambiguities in specifications sometimes cannot be avoided or are even intentional, for instance, when the contracting authority wants to test the private sector to see what it can offer and in which conditions. In this case, the public sector may include options in the scope of a tender, identify minimum requirements and indicate how options or variants will be valued. In the competitive dialogue procedure, technical specifications do not have to be defined in advance. Proposals have to meet the contracting authority's requirements description that can be later specified and defined. For complex public contracts, this can reduce costs in the long-run because it guarantees that the solution proposed actually fits with the public sector's needs reducing risks of underperformance.<sup>189</sup>

Furthermore, selection criteria can secure sustainable development considerations within the structure of PPPs. They limit the number of candidates and ensure that those invited to tender have the specific technical, financial and professional capability to carry out the project. If such

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<sup>185</sup> See above Chapter II, para 4.2.4.1., letters d), e) and f). J Davey, 'Procedures Involving Negotiation in the New Public Procurement Directive: Key Reforms to Grounds of Use and the Procedural Rules' [2014] PPLR, 103, 111.

<sup>186</sup> A Brown, 'The Impact of the New Procurement Directive in Large Public Infrastructure Projects: Competitive Dialogue or Better the Devil you Know' [2004] PPLR, 173. S S Charveron, 'Competitive Dialogue threatens PFI' [2007] Construction Law, 29.

<sup>187</sup> S Arrowsmith, S Treumer, 'Competitive Dialogue in EU Law: A Critical Review' in S Arrowsmith, S Treumer (eds), *Competitive Dialogue in EU Procurement* (Cambridge University Press, 2012). A Goddard, 'Procedures Involving Negotiation in the New Public Procurement Directive: Key Reforms to the Grounds for Use and the Procedural Rules' [2014] PPLR, 103, 111. M Burnett, 'The New Rules for Competitive Dialogue and Competitive Procedure with Negotiation in Directive 2014/24 – What Might They Mean for PPP?' [2015] EPPPL, 62, 71.

<sup>188</sup> C Skelcher, 'Governing Partnerships' in G A Hodge, C Greve, A E Boardman Van Dusen (eds), *Handbook on Public-Private Partnerships* (Edward Elgar, 2012).

<sup>189</sup> M Burnett, 'The New European Directive on the Award of Concession Contracts, Promoting Value for Money in PPP Contracts?' [2014] EPPPL, 86, 103.

assessment is not undertaken properly, it may hinder the scope for sustainable development considerations. For instance, private partner's deficiencies that could have been identified at an earlier stage through an in depth investigation may lead to under-performance and limited scope for sustainability. Thus, in order to secure socio-environmental considerations within the structure of PPPs, it is important to set the bar of selection at an adequate level, which means upon the specific requirements of the project.

Moreover, a crucial role is played by award criteria.<sup>190</sup> They have to be linked to the subject matter of the contract and may refer to qualitative, environmental and/or social aspects. Their weighting and application is also very important. In fact, their weighing has to adequately reflect the importance given to sustainable development objectives. Moreover, contracting authorities may use the LCC approach to calculate costs in a broader way, including operating and end-life costs as well as environmental externalities.

Furthermore, contract terms allow the inclusion of sustainable development considerations in the structure of PPPs in a number of different ways. First of all, they frame the content and purpose of a PPP. Then, they can contain special performance conditions. These have to be linked to the subject-matter of the contract and be indicated in the call for competition or in the procurement documents. The 2014 Directives expressly provide that such conditions can include economic, innovative, environmental, social or employment-related considerations.<sup>191</sup> Moreover, contract terms can secure sustainability by foreseeing well-drafted, appropriate and proportionate penalties and bonus payments in case the private partner under-performs or achieves better results than those agreed upon. Financial incentives or penalties linked to performance levels are, in fact, an effective way through which to foster sustainable development goals.<sup>192</sup> Additionally, socio-environmental considerations can be supported through an effective risk allocation - which is specified through contract clauses - between the parties involved. A transfer of excessive or inappropriate risk to one party may represent an obstacle to an effective generation of socio-environmental benefits under PPPs.

The operation or delivery phase *per se* falls outside procurement as generally defined.<sup>193</sup> Nonetheless, the way in which PPP contracts are managed is very important to secure sustainable development issues. The private partner must have the actual capacity and willingness to perform what is agreed upon in the contract, while the contracting authority must be able to verify outcomes and identify potential difficulties at an early stage. This requires that an effective contract management should be in place. Without it, the value attained in the previous tender phases may become irrelevant. Therefore, specific contractual clauses must identify the operational responsibilities of the private partner and how its performance can be measured, in order to allow the contracting authority to carry out compliance monitoring. In this respect, the inclusion of key performance indicators can support the public sector. Key indicators may vary according to the specific project that has to be delivered. For instance, they can refer to fuel efficiency, route optimizations, emissions levels, use of certain materials, energy performance or use of renewable

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<sup>190</sup> A Semple, *A Practical Guide to Public Procurement*, *op. cit.*, 186.

<sup>191</sup> Article 70, Directive 2014/24/EU. Article 87, Directive 2014/24/EU.

<sup>192</sup> L Butler, 'Innovation in Public Procurement: Towards the 'Innovation Union' in F Lichère, R Caranta, S Treumer, *Modernising Public Procurement: the New Directive*, *op. cit.*, 369.

<sup>193</sup> R Caranta, 'Mapping the Margins of EU Public Procurement Law: Covered, Mixed, excluded and special contracts' in F Lichère, R Caranta, S Treumer, *Modernising Public Procurement, The New Directive*, *op. cit.*, 67, 96. R Noguellou, 'Scope and Coverage of the EU Procurement Directives' in M Trybus, R Caranta, G Edelstam (eds), *EU Public Contract Law, Public Procurement and Beyond* (Bruylant, 2014).

energy sources. Provided that the public and private parties involved in a PPP are willing to invest in applying them, they can secure sustainable development objectives. The specific way through which contractual performance is then assessed varies on a case-by-case basis, being less or more complex depending on the specific characteristics of the considered PPP.<sup>194</sup>

#### **4.2 Public sector budgeting: overview.**

A complete and in depth analysis of the public sector's financial management is not the intention of this paragraph. The aim of this section is, instead, to provide a brief overview of the public sector's budgeting characteristics capable of having an impact on the inclusion of sustainable development considerations into PPPs. The highlight is specifically put on their potential direction of influence.

During the last decades, public budgets became overall more responsive to local needs. Spending capacity was transferred to sub-national public authorities and flexible management practices were implemented.<sup>195</sup> Moreover, the focus was put on competition and on incentives for the delivery of cost-effective services or infrastructure. Local public authorities not linked to central objectives progressively became capable of preserving and obtaining efficiency savings.<sup>196</sup> In fact, a contracting authority that knows that it can benefit from its own procurement savings is more easily motivated to achieve them.<sup>197</sup> These features of public sector budgeting, along with an improvement of the public sector's organizational culture and internal process mechanisms, have the potential of positively influencing the creation of PPPs that integrate and foster also socio-environmental considerations. Sub-national public authorities are typically inclined to engage in partnerships that support local sustainable development goals. Flexibility, competition and incentives on cost-effective outputs are other typical elements that can direct public-private parties towards the delivery of high quality level projects.

Furthermore, performance or delivery based budgets link public funds to measurable results, which can in turn be set in terms of sustainable development goals. Thus, delivery based budgets may well fit with PPP arrangements that allow scope for sustainability. Performance assessment methods may vary significantly and range from purely quantitative indicators to those including quality evaluations or users' satisfaction. In order to support sustainable development goals, performance-based budgets should be based on qualitative evaluation of outcomes, rather than on merely numeric quantity of outputs.<sup>198</sup> Moreover, multi-year budgets are likely to allow flexibility and longer-term assessment of sustainability, thus, securing sustainable development considerations within PPPs, which are by nature long-term and flexible public contracts.<sup>199</sup>

Public budgets normally account capital costs separately from current expenditure. Such division in accounting can lead to difficulties in the consideration and evaluation of life-cycle costs of a public infrastructure or service. In PPPs, capital costs and operational costs are, instead,

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<sup>194</sup> Assessment methods are more developed in some sectors - such as the health and education fields - than in others.

<sup>195</sup> T Curristine, Z Lonti, I Joumard, 'Improving Public Sector Efficiency: Challenges and Opportunities' [2007] OECD Journal on Budgeting, 5.

<sup>196</sup> A Semple, *A Practical Guide to Public Procurement*, *op. cit.*, 162.

<sup>197</sup> Among others see, R Hamson, L Bird, 'Devolved Budgets in the Public Sector: A New Conceptual Framework for Consultancy Evaluation' [2008] Journal of Finance and Management in Public Services, 33.

<sup>198</sup> T Curristine, Z Lonti, I Joumard, 'Improving Public Sector Efficiency: Challenges and Opportunities', *op. cit.*, 4. Unarguably, a part from specific sectors - such as health and education - there is a lack of data on the use and impact of different approaches to performance budgeting.

<sup>199</sup> M Spackman, 'Multi-Year Perspective in Budgeting and Public Investment Planning' [2002] draft paper, session III, OECD Global Forum on Sustainable Development, 5.

typically borne both and entirely - or at least in large part - by the private party. Hence, the issue of separation of public accounting is overtaken and longer-term investments in sustainable projects can be carried out.<sup>200</sup>

Furthermore, discount rate policies have an impact on any procurement choice and on the extent to which innovative and sustainable solutions can be offered. In fact, the higher the discount rate is, the lower the actual value of future cash flows is. On the contrary, a lower discount rate entails less expensive capital and a higher value of future cash flows, which supports investments in larger longer-term projects where sustainability issues can be integrated.<sup>201</sup> In PPPs, the discount rate is usually set according to the individual project level.<sup>202</sup> Project-tailored discount rates normally lead to a higher value of future cash flows, allowing the private partner to recoup the overall investments made in innovative and sustainable solutions. Therefore, depending on the discount rate policy applied, PPPs are to a varying degree capable of investing in sustainability.

### 4.3 Concluding remarks.

Overall, including sustainable development considerations within PPP contracts entails a number of conceptual and practical challenges that vary from case to case and from project to project. In addition, the little agreement on the precise boundaries of socio-environmental concerns leads to uncertainties on the ways through which they should be compared with other important objectives such as transparency, fairness and competition. Nonetheless, there is a high motivation to pursue sustainable development goals in PPPs.

The Table below aims at summing up the role that the various procurement phases may play in the inclusion of sustainable development considerations in PPPs. It is a general reference framework that needs to be adapted on a case-by-case basis, tailored to the specific PPP legal type used and project's characteristics.

Phase	Suggested measures
Budgeting and Planning	The public sector should prefer multi-year, performance or availability budgeting and evaluate long-term sustainable needs with stakeholders and end-users. Life-cycle costs should be also considered.
Market examination	The public sector should properly advertise its needs and look for detailed input from potential private partners, consult other public authorities for advice and use the collected information to clearly identify the scope and specifications of the contract to be awarded. Any competitive advantage to economic operators should be avoided.

<sup>200</sup> Among others, see, J Shaoul, A Stafford, P Stapleton, 'The Cost of Using Private Finance to Build, Finance and Operate Hospitals' [2008] *Public Money and Management*, 101, 108.

<sup>201</sup> A Richard, 'Overview of Budget Systems and Public Procurement in OECD Countries' in OECD, *Environmental Performance of Public Procurement: Issues of Policy Coherence* (OECD, 2003), 118.

<sup>202</sup> By the way, the discount rate applied may be particularly important when a public sector comparator is used to decide whether to undertake a project with or without private funding. A public sector comparator is a tool used by the public sector to make decisions by verifying whether a private investment proposal offers value for money in comparison with the most effective form of traditional procurement.

Choice of Procedure	The public sector should choose the level of interaction needed to select the best solution. The contracting authority should also verify the available time and resources and preferably opt for the competitive dialogue procedure or the CPN. The competitive dialogue procedure should be used when data from potential private partners are needed in order to draft specifications.
Technical Specifications	The public sector should lay down clear requirements possibly allowing variants for verification of effectiveness.
Selection	The public sector should apply selection criteria according to the specific goals to be achieved, verify tenderers' prior performance and the content of the European Single Procurement Document.
Evaluation	The public sector should set award criteria and weightings, which adequately reflect the qualitative, environmental and/or social needs identified. The contracting authority should apply minimum scores to such criteria and use a life-cycle costing approach whenever there is available supporting data.
Contract terms	Contract terms should allocate risks to the party better capable of managing them. Standards conditions should be avoided as they may hinder the achievement of project-tailored sustainable goals.
Contract management	The public sector should apply adequate and proportionated performance indicators allowing sufficient time and resources for compliance monitoring.

Table 9  
Measures that can support the integration of sustainability in PPPs.

## 5. Public-Private Partnerships' socio-environmental benefits.

Through an effective integration of sustainable development considerations, PPPs have the potential for generating a high level of socio-environmental benefits. These can be intentional or unintentional and vary according to the specific structure of the public-private scheme adopted and the public service and/or infrastructure delivered.<sup>203</sup> In order to better identify them, they are conceptualized into three macro-categories, namely accelerated delivery benefits, enhanced delivery benefits and wider socio-environmental benefits.<sup>204</sup>

### 5.1 Accelerated delivery benefits.

The first category of socio-environmental benefits refers to those gains arising out of events of accelerated deliveries, thus, all those advantages enjoyed by end-users, society and environment connected to an early availability of the public infrastructure and/or service. It is the case of roads,

<sup>203</sup> On sustainability and innovation in public contracts see, among others, E Uyarra, K Flanagan, 'Understanding the Innovation Impacts of Public Procurement' [2010] *European Planning Studies*, 123. L Hommen, M Rolfstam, 'Public Procurement and Innovation: Towards a Taxonomy' [2009] *Journal of Public Procurement*, 17. J JR Cibinic, R C Nash, C R Yukins, *Formation of Government Contracts* (CCH, 2011).

<sup>204</sup> The Non-Financial Benefits of PPPs, A Review of Concepts and Methodology, European PPP Expertise Centre, European Investment Bank, June 2011, available at <http://www.eib.org/epec/resources/epec-non-financial-benefits-of-ppps-public.pdf>.

schools or hospitals, which are delivered earlier than normally expected or planned under traditional procurements. In such cases, broader society can profit sooner from the estimated socio-environmental benefits arising out the anticipated functioning of public transportations, education or health services. Thus, accelerated delivery benefits vary according to how quickly public services and/or infrastructure are made operational as well as to the inherent characteristics of the project.

PPP arrangements are capable of accelerating the delivery of an infrastructure and/or of a service by guaranteeing quick or on-time construction performances,<sup>205</sup> thereby providing investment projects that actually start to operate in a short time or at the pre-arranged date.

Traditional public procurement means may as well deliver on-time public infrastructure or services. However, in PPPs there is a higher pressure to complete investment projects on-time. Normally, this pressure comes from banks and/or financial institutions who lend money only if it is agreed that the infrastructure or service will be delivered in a relatively short time so that the private party can start to pay back the loan. Moreover, PPP contracts usually have a well-functioning penalty mechanism, which financially burdens the private party for every day of delay in the completion of works.<sup>206</sup> Furthermore, PPPs have the ability of guaranteeing quick deliveries because of the higher availability of budgetary funds. These increase the possibilities of using technology and construction methods that are more effective and allow quicker projects deliveries. Thus, on-time construction performances are mainly achieved through high levels of budgetary funds and *ad hoc* financial incentives set out in the terms and conditions of the PPP contract.<sup>207</sup> In the latter respect, whenever it is agreed that public payments will occur only when the planned service and/or infrastructure is actually delivered, the private partner is highly motivated to deliver it on-time. Empirical data showed that this happens also if the private sector has to shoulder additional costs for the fulfilment of an on-time delivery contractual obligation.<sup>208</sup> One of the objectives of financial planning, feasibility studies and due diligence activities is to identify the conditions that can better guarantee an on-time delivery of the planned infrastructure and/or service. PPPs are usually structured in order to easily foresee and handle unexpected developments or events of delay.

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<sup>205</sup> See, for instance, National Audit Office, PFI: Construction Performance, 2003, available at <https://www.nao.org.uk/wp-content/uploads/2003/02/0203371.pdf>. Performance of PFI Construction, Report of the National Audit Office, 2009, available at [https://www.nao.org.uk/wp-content/uploads/2009/10/2009\\_performance\\_pfi\\_construction.pdf](https://www.nao.org.uk/wp-content/uploads/2009/10/2009_performance_pfi_construction.pdf). Standard and Poor's, Infrastructure finance, The Anatomy of Construction Risk: Lessons from a Millennium of PPP Experience, 2007, available at <http://www.robain.com/The%20Anatomy%20Of%20Construction%20Risk.pdf>. A Kappeler, M Nemoz, Economic and Financial Report, Public-Private Partnerships in Europe before and during the recent financial crisis, European Investment Bank, 2010, available at [http://www.eib.org/epcc/resources/efr\\_epcc\\_ppp\\_report1.pdf](http://www.eib.org/epcc/resources/efr_epcc_ppp_report1.pdf). University of Melbourne, National PPP Forum, Benchmarking Study, Phase II, Report on the Performance of PPP projects in Australia when compared with a representative sample of traditionally procured infrastructure projects, 2008, available at [http://infrastructureaustralia.gov.au/policy-publications/publications/files/PC\\_Submission\\_Attachment\\_K.pdf](http://infrastructureaustralia.gov.au/policy-publications/publications/files/PC_Submission_Attachment_K.pdf).

<sup>206</sup> See, for instance, the United Kingdom Treasury - Standardisation of PF2 Contracts, 8.6 Bonus Payments for Early Service Commencement, 63, available at [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/207383/infrastructure\\_standardisation\\_of\\_contracts\\_051212.PDF](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/207383/infrastructure_standardisation_of_contracts_051212.PDF).

<sup>207</sup> See National Audit Office, Department of Health, Innovation in the NHS: Local Improvement Finance Trusts, 2005, available at <https://www.nao.org.uk/wp-content/uploads/2005/05/050628.pdf>.

<sup>208</sup> *Op. cit.*, footnote 159.

Still lingering is, however, the issue of identifying the best way through which to include<sup>209</sup> accelerated delivery benefits in the *ex-ante* cost minimisation analysis that public authorities undertake to decide whether to deliver an investment through a PPP or a traditional procurement. The private partner should detail how the PPP project can offer an early availability of the planned infrastructure, identifying and - where possible - measuring the socio-environmental benefits that could be generated. In this respect, the French MAPPP<sup>210</sup> studied how to assess the value of accelerated delivery benefits. Thanks to numerical assumptions, diagrams and calculations comparing private and public deliveries, the findings hold that the value of the additional benefits arising out PPPs was larger than the additional costs. Hence, the PPP option was justifiable on efficiency grounds.<sup>211</sup>

## 5.2 Enhanced delivery benefits.

The second category of socio-environmental benefits covers all those advantages, enjoyed by end-users, related to enhanced deliveries of public services and/or infrastructure.<sup>212</sup> Enhanced deliveries occur when a certain project is delivered with an added value in terms of sustainability. Thus, enhanced delivery benefits arise out of a high quality level of a given public service or infrastructure.<sup>213</sup> They can be generated mainly in three ways. Firstly, when PPPs apply LCC methodologies.<sup>214</sup> In this case, PPP contractual obligations for infrastructure and/or service maintenance can guarantee duration overtime, providing long-lasting high quality conditions and outstanding benefits. Secondly, when contractual arrangements are set out in a way that allow the application of specific and project-tailored performance standards, better planned and high quality deliveries are assured.<sup>215</sup> Lastly, provided that a clearly defined PPP governance structure is in place, enhanced delivery benefits are generated, for instance, by due diligence activities carried out by lenders and/or investors, by a well-functioning infrastructure or service management and by the public sector focusing on its core monitoring task.

Moreover, whenever the public partner identifies only the desired output, the generation of enhanced delivery benefits increases. In fact, if the private sector is free to choose the best way

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<sup>209</sup> For an overview of the followed approaches and evaluation methods see, among others the European Commission, 'Guide to Cost-Benefit Analysis of Infrastructure Projects, Structural Funds, Cohesion Fund and Instrument for Pre-Accession', Directorate General Regional Policy, 2008, available at [http://ec.europa.eu/regional\\_policy/sources/docgener/guides/cost/guide2008\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docgener/guides/cost/guide2008_en.pdf). Extensive data on socio-economics benefits can be, for instance, found at HEATCO, Developing Harmonized European Approaches for Transport Costing and Project Assessment, Proposal for Harmonized Guidelines, 2006, available at [http://heatco.ier.uni-stuttgart.de/HEATCO\\_D5.pdf](http://heatco.ier.uni-stuttgart.de/HEATCO_D5.pdf).

<sup>210</sup> Mission d'appui à la réalisation des contrats de partenariat, available at <http://www.tresor.economie.gouv.fr/mission-dappui-aux-partenariats-public-privé>.

<sup>211</sup> The Non-Financial Benefits of PPPs, A Review of Concepts and Methodology, European PPP Expertise Centre, European Investment Bank, *op. cit.*.

<sup>212</sup> The number of users may increase if the quality of the infrastructure improves. This is because better services raise the infrastructure or service demand, consequently there are more users that profit of the enhanced delivery.

<sup>213</sup> *Op. cit.*, footnote 159. '4Ps Review of Operational PFI and PPP projects, Local Government's project delivery specialist, 2005, available at <https://www.bipsolutions.com/docstore/pdf/11980.pdf>. On the quality of services see also, KPMG in collaboration with University College London, Operating Healthcare Infrastructure: Analysing the Evidence, 2010, available at <http://www.kpmg.com/TW/zh/IssuesAndInsights/Documents/IGH/Global-infrastructure-spotlight-Benchmarking-healthcare.pdf>.

<sup>214</sup> On LCC applications see, for instance, S Fuller, National Institute of Standards and Technology, Life Cycle Cost Analysis for Sustainable Buildings, available at <https://www.wbdg.org/resources/lcca.php>.

<sup>215</sup> *Op. cit.*, footnote, 164.

through which to deliver the service and/or build the infrastructure, innovation and socio-environmental benefits are promoted.<sup>216</sup> PPPs are typically designed to provide innovative solutions by applying the best available technology, infrastructure designs or service delivery methods.<sup>217</sup> Thus, by stimulating innovative solutions in the delivery of public services and/or infrastructure, enhanced delivery benefits are generated. For instance, a well-designed and functioning school can support the educational achievement of students. A well-structured hospital can help patients in their recovery.<sup>218</sup> Since PPPs are long-term contracts, the private partner has strong incentives to invest in solutions that account for the entire life-time of the infrastructure or service, recouping the investments made in the long run.

Investing in innovative and sustainable solutions indeed implies a certain degree of risk. Such risk is generally avoided if there are no advantages or incentives to do so. In traditional procurement, the public sector usually picks from the solutions that worked in the past and adapts them to new circumstances in order to bear fewer risks. Instead, in PPPs, the innovation challenge is crucial. Innovation and sustainability are powerful competitive incentives for the private sector. In order to obtain the award of a PPP contract, private actors are normally strongly encouraged to develop new and innovative delivery methods, leading the way to the generation of enhanced delivery benefits.<sup>219</sup>

### **5.3 Wider socio-environmental benefits.**

The third category of socio-environmental benefits refers to all those advantages arising out of a specific PPP investment project and enjoyed by wider society, local community, environment and economy. These may range from job creation to improvement of social cohesion, from better connectivity between cities to the creation of green areas. Further examples of wider socio-environmental benefits can be innovative solutions or learning environments from which to draw inspiration and exploit best practices, innovative management techniques applied by the private sector capable of being exploited for other public service or infrastructure deliveries, the reliance of consumers on long-term fixed prices and specifically set out outputs. The precise identification of such benefits cannot, however, be provided *a priori* as it varies from project to project and from PPP to PPP.

### **5.4 The open issue of measurement of socio-environmental benefits.**

Socio-environmental benefits can present themselves in various ways and can be largely yielded by PPPs that integrate sustainable development considerations in their structure in an effective way.

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<sup>216</sup> Cambridge Economic Policy Associates Ltd, Report on Public-Private Partnerships in Scotland, Evaluation of Performance, 2005, available at <http://www.gov.scot/Resource/Doc/917/0011854.pdf>. CBI, Building on Success: the Way forward for PFI, 2007, available at [http://infrastructureaustralia.gov.au/policy-publications/publications/files/Bldg\\_on\\_success\\_The\\_way\\_forward\\_4\\_PFI\\_UK\\_CBI.pdf](http://infrastructureaustralia.gov.au/policy-publications/publications/files/Bldg_on_success_The_way_forward_4_PFI_UK_CBI.pdf).

<sup>217</sup> E R Yescombe, *Public-Private Partnerships: Principles of Policy and Finance*, *op. cit.*.

<sup>218</sup> The Non-Financial Benefits of PPPs, A Review of Concepts and Methodology, European PPP Expertise Centre, European Investment Bank, *op. cit.*, 3.

<sup>219</sup> In this respect, two studies carried by KPMG showed that PPP projects can enhance the delivery in the education and health sectors. KPMG, Infrastructure Spotlight Report, PFI in school building - does it influence educational outcomes?, 2009, available at [http://www.kpmg.eu/docs/20100120\\_PFI-in-school-building.pdf](http://www.kpmg.eu/docs/20100120_PFI-in-school-building.pdf). KPMG in collaboration with University College London, Operating Healthcare Infrastructure: Analysing the Evidence, *op. cit.*.

However, difficulties related to their measurement still hamper their full consideration. In fact, there is no consensus on how they can be best calculated. Emblematic, in this respect, is the following quote attributed to Albert Einstein.

*‘Not everything that can be counted counts and not everything that counts can be counted.’*

The question of measurement of socio-environmental benefits is an open issue. It is a subject of debate and empirical studies entailing practical and conceptual complex challenges. However, it is an issue that must be dealt with in order to truly allow a full integration of sustainable development considerations into the structure of any public contract and, especially, of PPPs.<sup>220</sup> In the field of public-private collaborations, evaluation methods of socio-environmental benefits are still modest and data on applications of life-cycle costing methodologies are rare.<sup>221</sup> This leads to a high risk of misrepresentations of PPPs’ costs and benefits, which in turn should be avoided if PPP projects are to be promoted for an economic and socio-environmental sustainable development within the EU.<sup>222</sup> Well-structured forecasting methods of socio-environmental benefits identification and support of empirical evidence could, instead, decrease mistakes and bias in the choice and structuring of PPP projects. Assessments should be carried out by referring to classes of similar PPPs and measurement of socio-environmental benefits should entail engagement with stakeholders and end-users. Furthermore, details on the benefits achievable through a certain PPP project should be provided in advance by the private sector. This is because once identified and measured, socio-environmental benefits should be considered alongside with economic benefits providing contracting authorities with a comprehensive knowledge that can allow them to make coherent decisions for a sustainable delivery of public services and/or infrastructure.

Ongoing studies and researches keep on putting efforts into finding ways through which measure socio-environmental benefits when market prices are not available.<sup>223</sup> Some approaches refer to consumers’ perceptions or willingness to purchase certain goods and/or pay for the provision of a service, for instance, by relying on interviews and questionnaires.<sup>224</sup> A complex task remains, however, the recognition of a monetary value for users’ satisfaction. In this respect, scales comparing satisfaction levels may be used. They should, however, be applied over various investment projects within a specific sector and be supported by empirical evidence and a certain degree of consensus.<sup>225</sup>

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<sup>220</sup> See, among others, the European Investment Bank Evaluation Report, Operations Evaluation Department, Evaluation of PPP projects financed by the EIB - Synthesis Report March, 2005, available at [http://www.eib.org/attachments/ev/ev\\_ppp\\_en.pdf](http://www.eib.org/attachments/ev/ev_ppp_en.pdf). HM Treasury, Value for Money Assessment Guidance, 2008, available at [http://webarchive.nationalarchives.gov.uk/20130129110402/http://www.hm-treasury.gov.uk/d/vfm\\_assessmentguidance061006opt.pdf](http://webarchive.nationalarchives.gov.uk/20130129110402/http://www.hm-treasury.gov.uk/d/vfm_assessmentguidance061006opt.pdf).

<sup>221</sup> See, for instance, E Hochschorner, M Noring, ‘Practitioners’ use of life-cycle costing with environmental costs--a Swedish study’ [2011] International Journal of Life Cycle Assessment.

<sup>222</sup> B Flyvbjerg, ‘Policy and planning for large-infrastructure projects: problems causes, cures’ [2007] Environment and Planning B: Planning and Design, 578, 597.

<sup>223</sup> See, for instance HM Treasury, The Green Book, Appraisal and Evaluation in Central Government, 2003, available at [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/220541/green\\_book\\_complete.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220541/green_book_complete.pdf).

<sup>224</sup> See, The Non-Financial Benefits of PPPs, A Review of Concepts and Methodology, European PPP Expertise Centre, European Investment Bank, *op. cit.*

<sup>225</sup> In this regard, see, for instance, the Department of Treasury and Finance, Investment Evaluation: Policy and Guidelines, 1996, State of Victoria, Australia.

In principle, environmental benefits are generally measurable, while social ones are considered by nature more difficult to measure. The main difficulty is to isolate their causal effect. Thus, to ascribe them to the PPP and not to other sources. Hence, from an econometric point of view, the situation produced with a PPP should be compared against a counterfactual, which is a hypothetical identical situation without the PPP. Typically, socio-environmental benefits are being measured by referring to cost reductions, minimized risks and revenue growth.<sup>226</sup>

Management tools allow the measurement of cost reductions achieved through the inclusion of sustainable development considerations.<sup>227</sup> Therefore, socio-environmental benefits, such as an improved education, workplace safety, social inclusion, CO<sub>2</sub> emissions, water and solid waste, are measured by looking at the savings obtained.<sup>228</sup> Moreover, the management of the different risks arising out of socio-environmental factors represents another measurement technique. The improvement of the quality of technical management of water, energy, waste or greenhouse gas emissions reduces the risk of fines and environmental risks. The improvement of working conditions does not only reduce the risk of ILO conventions violations, but also has a beneficial effect on costs and quality. In this respect, analyses on externalities allow private operators to map, compare, rate and identify the most significant sustainability risk. When the most relevant risk-cause is identified, possible mitigation measures are assessed and benchmarked against one another. An alternative process is identified and a monetary value is given to the socio-environmental externality.<sup>229</sup> Finally, socio-environmental benefits are measured by evaluating the increased growth revenue obtained through the inclusion of sustainable development considerations. Studies have shown that consumers are willing to pay high premiums for sustainable products.<sup>230</sup> An increasing number of consumers is, in fact, looking for sustainable products.<sup>231</sup>

Under the 2014 Directives, in order to consider environmental benefits contracting authorities have to indicate which will be the method used to monetize them. Such a method has to (i) be based on accessible, verifiable, objective and non-discriminatory criteria and (ii) use readily available data to any diligent tenderer.<sup>232</sup> If there is a common methodology at EU level for LCC calculations in a certain sector, it has to be used. Reference is explicitly made to the Clean Vehicles Directive.<sup>233</sup> Usually, LCC calculations methods are based on purely financial assessments that consider four main factors: investment, operation, maintenance and end of life-disposal costs. The effectiveness of the LCC approach depends on the extent of its scope and on the methodology used. At times, the latter may be incomplete<sup>234</sup> or based only on expert's evaluations, not on hard evidence.<sup>235</sup>

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<sup>226</sup> O Bruel, O Menuet, P F Thaler, R Kromoser, Time to Measure Value Creation!, Whitepaper, HEC, EcoVadis, Sustainable Procurement Barometer, 2013, available at [https://www.atkearney.de/documents/856314/4303900/HEC\\_AT+Kearney\\_EcoVadis\\_Sustainable+Procurement+Barometer+2013.pdf/8b1e9a61-52e3-4f1f-8e77-e0f3c21757e9](https://www.atkearney.de/documents/856314/4303900/HEC_AT+Kearney_EcoVadis_Sustainable+Procurement+Barometer+2013.pdf/8b1e9a61-52e3-4f1f-8e77-e0f3c21757e9).

<sup>227</sup> O Bruel, O Menuet, P F Thaler, R Kromoser, Time to Measure Value Creation!, *ibid.*, 26.

<sup>228</sup> *Ibid.*, 28.

<sup>229</sup> O Bruel, O Menuet, P F Thaler, R Kromoser, Time to Measure Value Creation!, *ibid.*, 31.

<sup>230</sup> The Sustainability Imperative, New insights on Consumer Expectations, Nielsen, 2015, available at <http://www.nielsen.com/content/dam/niensenglobal/dk/docs/global-sustainability-report-oct-2015.pdf>.

<sup>231</sup> D Hunkeler, K Lichtenvort, G Rebitzer, *Environmental Life Cycle Costing* (CRC Press, 2008).

<sup>232</sup> Article 68, para 2, Directive 2014/24/EU. Article 83, para 2, Directive 2014/25/EU.

<sup>233</sup> Directive 2009/33/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of clean and energy-efficient road transport vehicles.

<sup>234</sup> E Hochschorner, M Noring, 'Practitioners' Use of Life Cycle Costing with Environmental Costs - a Swedish Study', *op. cit.*, 897, 902.

<sup>235</sup> E Korpi, T Ala-Risku, 'Life Cycle Costing: A Review of Published Case Studies' [2008] *Managerial Auditing Journal*, 240, 261.

Calculation methodologies are, in fact, usually tailored to the specific circumstances of the case at stake<sup>236</sup> and their outcomes vary according to the reliability of the data used, the discount rate applied and the life-cycle phases considered.

An adequate methodology supporting sustainable public procurement is the Environmental Life Cycle Costing (hereinafter ELCC), which takes into account the environmental impact of products, works or services provided through a Life Cycle Assessment (hereinafter LCA) analysis.<sup>237</sup> LCA assesses the impacts of a product on the environment during its lifetime. Environmental costs are evaluated, for instance, with regard to acidification, eutrophication, land use or other measurable effects.<sup>238</sup> The UK and the Netherlands have been carrying out LCC analyses for the procurement of, especially, energy-efficiency and refurbishment of existing buildings (e.g. heat, light, ventilation and management systems), in some cases of indoor and outdoor lighting, solar systems, office equipment, such as computers, and printer copy machines. Italy is, instead, experiencing the use of LCC methodologies especially in the procurement of energy-efficient buildings.<sup>239</sup>

As mentioned, social benefits, such as social cohesion, are more challenging to forecast and measure with any degree of certainty.<sup>240</sup> Nevertheless, attempts in this direction have been made.<sup>241</sup> For instance, work has been done to elaborate a common methodology to measure social returns on investment<sup>242</sup> and social life-cycle assessment<sup>243</sup> of certain products and services. In this respect, Recital 96, Directive, 24/2014/EU, calls for an investigation at EU level of the feasibility of a common methodology for social life-cycle costing using as starting point the Guidelines developed by the United Nations Environment Program.<sup>244</sup> Moreover, public authorities around Europe are experiencing new methods of inclusion of social value in public procurement especially through contract management techniques, such as inspections and verification of private sector's compliance with a specifically agreed upon code of conduct.<sup>245</sup> These contract management techniques may be

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<sup>236</sup> *Ibid.*

<sup>237</sup> D Hunkeler, K Lichtenvort, G Rebitzer, *Environmental Life Cycle Costing, op. cit.*

<sup>238</sup> For instance, see the evaluation tool for LCC and CO<sub>2</sub> emissions developed by the SMART – SPP project. Guidance on the use of the tool is available at

[http://www.smart-](http://www.smart-spp.eu/fileadmin/template/projects/smart_spp/files/Guidance/Final_versions/EN_SMART_SPP_Tool_User_Guide_2011_FINAL.pdf)

[spp.eu/fileadmin/template/projects/smart\\_spp/files/Guidance/Final\\_versions/EN\\_SMART\\_SPP\\_Tool\\_User\\_Guide\\_2011\\_FINAL.pdf](http://www.smart-spp.eu/fileadmin/template/projects/smart_spp/files/Guidance/Final_versions/EN_SMART_SPP_Tool_User_Guide_2011_FINAL.pdf)

<sup>239</sup> O Perera, B Morton, T Perfrement, *Life Cycle Costing in Sustainable Public Procurement: a Question of Value*, International Institute for Sustainable Development, Winnipeg, 2009, available at

[https://www.iisd.org/pdf/2009/life\\_cycle\\_costing.pdf](https://www.iisd.org/pdf/2009/life_cycle_costing.pdf).

<sup>240</sup> C Jobse, N Dimitri, *LCC-Calculations and the Principles of Public Procurement*, available at <https://underpinn.portals.mbs.ac.uk/Portals/70/docs/2.1%20-%20Jobse%20&%20Dimitri%20-%20LCC%20calculations%20v1%200.pdf>.

<sup>241</sup> D Hunkeler, 'Societal LCA Methodology and a Case Study' [2006] *International Journal of Life Cycle Assessment*, 371, 382. A Bala, M Raugei, G Benveniste, C Gazulla et al, 'Simplified Tools for Global Warming Potential Evaluation: When 'Good Enough' Is Best' [2010] *International Journal of Life Cycle Assessment*, 489, 498.

<sup>242</sup> Details on the methodology can be found at <http://impactinvesting.marsdd.com/simt/social-return-on-investment-sroi/>.

<sup>243</sup> The Guidelines for social life cycle assessment of products is available at [http://www.unep.org/pdf/DTIE\\_PDFS/DTIx1164xPA-guidelines\\_sLCA.pdf](http://www.unep.org/pdf/DTIE_PDFS/DTIx1164xPA-guidelines_sLCA.pdf).

<sup>244</sup> *Ibid.*

<sup>245</sup> *Good Practice in Socially Responsible Public Procurement, Approaches to Verification from Across Europe*, The Landmark Project, *Moving Towards Socially Responsible Procurement*, 2012, available at [http://www.landmark-project.eu/fileadmin/files/en/latest-achievements/LANDMARK-good\\_practices\\_FINAL.pdf](http://www.landmark-project.eu/fileadmin/files/en/latest-achievements/LANDMARK-good_practices_FINAL.pdf).

relevant also for the measurement of social benefits.<sup>246</sup> For instance, by looking at the extent to which codes of conduct are complied with, the social value achieved may be measured. Codes of conduct, in fact, normally refer to core ILO conventions and work related health and safety legislation, labour law rules on minimum wages and social insurance. Codes of conduct are used as a list of commitments that economic operators have to agree upon in order not to be excluded from tender procedures. Contracting authorities also use labels, verifications schemes and follow-up questionnaires - as part of their contract management process - which are usually followed by inspections.<sup>247</sup> Thus, even though the verification and monitoring aspect is complex because of a lack of an effective auditing process, the public sector has found ways to embark in the path of social benefits' measurement.

## 6 Conclusions to this Chapter.

In 2009<sup>248</sup> the EU Commission - with the purpose of promoting PPPs - published a Communication 'Developing Public Private Partnerships' stressing their importance specifically in connection with climate change fighting, renewable forms of energy and sustainable transport promotion. Outlining new paths of concern for potential EU intervention, this document of the Commission defined PPPs as

*[...] interesting vehicles for the long-term structural development of infrastructure and services, bringing together distinct advantages of the private sector and the public sector, respectively.*<sup>249</sup>

Moreover, the Agenda 'Transforming Our World: the 2030 Agenda for Sustainable Development'<sup>250</sup> set 17 new Sustainable Development Goals and 169 targets. It called for action in five areas critically important: people, planet, prosperity, peace and partnership. UN member States were asked to develop, accordingly, indicators for the implementation of the Sustainable Developments Agenda. The majority of participants agreed upon the need for an implementation of measures based on an innovative partnership between governments, businesses and civil society within the framework of PPPs.<sup>251</sup> PPPs were specifically recognized as important tools for the achievement of the Sustainable Development Goals.<sup>252</sup> The main reasons lying behind such recognition are the following:

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<sup>246</sup> Good Practice in Socially Responsible Public Procurement, Approaches to Verification from Across Europe, The Landmark Project, *ibid.*, 12.

<sup>247</sup> Good Practice in Socially Responsible Public Procurement, Approaches to Verification from Across Europe, The Landmark Project, *ibid.*, 8.

<sup>248</sup> See the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 'Mobilizing private and public investment for recovery and long-term structural change: developing Public Private Partnerships', Brussels, 19.11.2009, COM (2009) 615 final, 10.

<sup>249</sup> *Ibid.*

<sup>250</sup> The Agenda was agreed by the 193 United Nations members at the Sustainable Development Summit held at the UN Headquarters in New York on September 2015.

<sup>251</sup> See, Goal 17 of the Sustainable Development Goals.

<sup>252</sup> I Zapatrina, 'Sustainable Development Goals for Developing Economies and Public-private Partnership' [2016] EPPPL, 39.

1. The need to mobilize the private sector and institutional capital investors to achieve sustainable development goals through modern, environmental friendly, energy efficient and smart infrastructure. PPPs are, in fact, the spotlight of International institutions, such as multilateral development banks, donor countries, private commercial lenders and institutional investors. In this respect, these entities have recently created the Global Infrastructure Facility, which is a global, open platform supporting the planning and structuring of PPPs in order to mobilize the private sector and institutional investor capital.<sup>253</sup>

2. The need to ensure a global partnership between governments, private businesses and society. In this respect, PPPs are arrangements focusing on results, risk sharing and cooperation between public and private actors.

3. PPPs are perceived as effective tools for the provision of socially inclusive development, which is one of the key elements of sustainable development growth.<sup>254</sup> Without partnerships, and so without understanding and trust between public authorities, economic operators and society, it is difficult to realize shared public investment projects. In addition, PPPs are believed to create incentives for job creation, entrepreneurship, innovation development, scientific and technological capacity improvement.

In complex contractual formats - such as PPPs - sustainability and innovation are distinctive features. They characterise the private market by feeding competition among economic operators through costs reduction and quality improvement.<sup>255</sup> They allow consumers to enjoy enhanced products, infrastructure or services. In public markets, innovation and sustainability are, instead, usually not a priority. The demand is institutionalised and it normally functions according to budgetary considerations, rather than on price mechanisms. Public markets are based on the achievement of specific tasks, above all, the pursuit of the public interest. Thus, products, infrastructure, services are seldom innovative, sustainable or technologically advanced and the price is mostly defined in tenders.<sup>256</sup> In principle, innovation does not fit well within the legal fundamentals of the procurement regime, being also expensive in terms of capital and resources needing many years to recoup the investments made. The desirability for sustainability and innovation in public contracts is hindered by the difficulties of their regulation. They are, in fact, aspirational and intangible elements, which do not typically adapt with the procedural uniformity of awarding procedures.

It is within this picture that this Chapter aimed at investigating the relationship between PPPs and sustainable development, or better, the way in which public-private cooperation schemes can integrate and promote sustainable development objectives. In order to do so, this Chapter, first of all, examined the meaning and boundaries of the concept of sustainable development. Then, it discussed the ability of public procurement as an effective implementing measure of sustainable development goals. Then, it delved into the extent to which EU law allows scope for sustainability into public procurement. Specifically, attention was put on the 2014 Directives. Furthermore, it discussed how sustainable development considerations can be included into the choice, award and

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<sup>253</sup> World Bank, Global Infrastructure Facility, available at <http://www.worldbank.org/en/programs/global-infrastructure-facility>.

<sup>254</sup> I Zapatin, 'Sustainable Development Goals for Developing Economies and Public-private Partnership', *op. cit.*, 40.

<sup>255</sup> C H Bovis, Editorial, [2015] EPPPL, 59, 61.

<sup>256</sup> C Edquist, L Hommen, L Tsipouri, *Public Technology Procurement and Innovation* (Kluwer Academic Publishers, 2000).

structure of PPPs. Finally, this Chapter analysed the possible socio-environmental benefits achievable, with an overview on the open issue of their measurement.

Overall, it emerged that through PPPs innovation and sustainable development goals have the possibility to be effectively promoted. In public-private cooperative models, the private partner's motivation, in fact, creates a favourable environment for innovation and sustainability. PPPs can balance price, cost, risk, quality and performance with ongoing improvements, which in turn support the achievement of sustainable development objectives. PPP models and mechanisms can be adapted to the demands of sustainable development. Their choice, planning, structure and management can be designed in a sustainably oriented way. Financial feasibility studies can be adjusted to incorporate the assessment of socio-environmental benefits in the light of sustainable development objectives. However, capacity building measures and supporting institutions have to be functioning and in place. Moreover, the overall ability of PPPs to integrate and promote sustainable considerations largely depends on the efficiency and innovation capacity of the private partner. Thus, an incentive-based regulation is fundamental. Therefore, at EU level, a system that improves outputs, defines prices in a sustainable manner, sets boundaries to monopoly profits, increases incentives for the private sector to be more efficient and innovative, while reducing costs, should be promoted.

# IV CHAPTER - MEMBER STATES' EXPERIENCE: THE UNITED KINGDOM, THE NETHERLANDS AND ITALY

## 1 Introduction.

This Chapter will examine if the previous theoretical and academic discourse can be validated on practical grounds. Therefore, if in the every-day practice PPPs are actually capable of promoting sustainable development considerations through the generation of socio-environmental benefits.

The research questions that will be addressed through this Chapter will be: which are the spaces for sustainable development considerations that can be located within PPP schemes according to national policies and public procurement regimes of the Member States studied? Through which practical means (i.e. tender and contractual strategies) public and private actors can actually integrate sustainability concerns within PPPs' structures and, therefore, deliver also socio-environmental benefits?

Therefore, it will be first of all explored the room for sustainable development concerns into the public contracts and concession law regimes of the Member States studied. It will be, hence, provided an overview of the policy and legal framework allowing space for sustainability considerations into public contracts within each jurisdiction. All three Member States enacted domestic laws that closely follow the content of the EU 2014 Directives. The UK did so through two different Acts, which came into force on February 2015 and April 2016,<sup>1</sup> while the NL amended on July 2016, the 2012 Dutch Procurement Act, the *Aanbestedingswet*.<sup>2</sup> On April 2016, Italy took advantage of the Directives' transposition period to enact a full and comprehensive reform that revised and updated the existing public contracts and concession law.<sup>3</sup>

A general theoretical reconstruction of the stated national rules, transposing the EU 2014 Directives, will be provided, however, highlighting only those provisions (and policies) that allow room for sustainable development considerations in public contracts, and so into PPPs.

Secondly, an empirical and field research will follow in order to explore the concrete strategies through which public and private actors may implement socio-environmental considerations within PPPs' structures and, thus, foster sustainable development throughout the EU. To this end, for each Member State studied, three representative case studies will be presented. These were chosen according to the following criteria:

- i. operational PPPs carried out in the UK, the NL and Italy.  
The generation of socio-environmental benefits through PPPs can be investigated only if the considered PPP projects are in the operation and maintenance phase.

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<sup>1</sup> See below, paragraph 2.1.

<sup>2</sup> See below, paragraph 3.1.

<sup>3</sup> See below, paragraph 4.1.

Given that the PPPs studied in this thesis had not yet reached the end of the operation and maintenance phase, the end of life of such contracts is out of the scope of this research.

- ii. PPPs that promote sustainable development objectives or that implemented sustainability considerations in some or all projects' phases.

In order to study how PPP arrangements can integrate sustainability concerns within their structures and, thus, how they can deliver socio-environmental benefits, PPPs promoting sustainable development goals or implementing sustainability considerations in some or all projects' phases, had to be chosen.

The case studies presented in this Chapter are, therefore, examples of PPP projects structured in a way that promotes sustainable development concerns. They are representative case studies that allow the investigation of the concrete strategies through which public and private actors can implement socio-environmental considerations within PPP structures and, thus, foster sustainable development. Qualitative data (e.g. in depth interviews/direct observation and written documents) on the socio-environmental benefits generated by the PPP projects considered and on the strategies used to embed sustainability concerns within their structures were collected. The empirical research was, thus, conducted through the study of the following information, which varied according to the specific PPP project analysed. Such data comprises, by way of example, national or local PPP reports, tender documents, contractual arrangements and in-depth face-to-face interviews with public officers and private project-managers involved in the PPP projects. The latter allowed - *inter alia* - an understanding of the different views of the key actors involved, which do not normally emerge in written or official documents. Interview questions were sent to the respondents before the interviews and, in order to supplement the knowledge obtained from such interviews, a process of desk research and study of the project-related documents was conducted.<sup>4</sup> These were stored according to the type of data and responsible authority for a systematic approach and treatment of the material collected before and after the interviews. Interviews and documents were studied also highlighting critical events in the existing data.<sup>5</sup> This empirical study allowed the identification - for each PPP case - of the three categories of socio-environmental gains as described in Chapter III, paragraph 5, namely, accelerated delivery benefits, enhanced delivery benefits and wider socio-environmental benefits. Moreover, it served the purpose of identifying the concrete strategies through which public and private sectors can implement sustainable development considerations in PPP structures and, thus, generate socio-environmental benefits.

This empirical research was deemed necessary in order to support and enrich purely academic discourses and theoretical statements.<sup>6</sup> Case studies were considered crucial to assess the actual

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<sup>4</sup> Namely, contract notices, project's proposals, PPP contracts, due diligence reports, monitoring reports, government reports and newspaper articles.

<sup>5</sup> M Barzelay, F Cortazar, J C & Cejudo, 'Research on Public Management Policy Change in the Latin America Region: A Conceptual Framework and Methodological Guide' [2003] *International Public Management Review*, 20, 41. C C Ragin, *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies* (University of California Press, 2014).

<sup>6</sup> O H Petersen, 'Emerging Meta-Governance as a Regulation Framework for Public-private partnerships: an examination of the European Union's Approach' [2010] *International Public Management Review*, 5.

ability of PPPs to foster sustainable development considerations.<sup>7</sup> In addition, a case-by-case analysis of representative PPP projects - in terms of the integration of sustainable development concerns and delivery of socio-environmental benefits - was perceived as an effective way to deal with the causality issue and the need to draw specific conclusions from this research.<sup>8</sup>

## 2 The United Kingdom.

### 2.1 Sustainable development considerations: policies and national law.

The UK has a long and rich history of public procurement policies and rules supporting sustainable development objectives.<sup>9</sup> From the 19<sup>th</sup> century up to the 1980s and 1990s, numerous public procurement policy schemes were enacted to promote socio-environmental considerations.<sup>10</sup> Especially within the context of the central Government agenda, sustainability policies gained significant importance. However, the rise of the 'Thatcherism' era and the limitations set out by EU law<sup>11</sup> significantly reduced the possibilities to use public procurement rules to promote social and environmental objectives.<sup>12</sup> Only under the Labour Governments of 1997-2010, public procurement

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<sup>7</sup> This, even though case studies methodologies may be considered as lacking a 'generalization attitude'. In this respect see, among others, D E Gray, *Doing research in the real world* (SAGE, 2013). D Dragos, B Neamtu, R Veliscu, 'Secondary Considerations in Public Procurement in Romania' in R Caranta, M Trybus (eds), *The Law of Green and Social Procurement in Europe*, (DJØF, 2010). S Treumer, 'Green Public Procurement and Socially Responsible Public Procurement: An Analysis of Danish Regulation and Practice,' *ibid.*, 59. R Caranta, S Richetto, 'Sustainable Procurements in Italy: Of Light and Some Shadows,' *ibid.*, 147. M E Comba, 'Green and Social Considerations in Public Procurement Contracts: A Comparative Approach', *ibid.*, 318.

<sup>8</sup> The causality issue refers to the need of establishing the correct link between the perceived cause (e.g. PPPs) and the perceived effect (e.g. the generation of socio-environmental benefits). See, for instance, L A Palinkas, 'Causality and Causal Inference in Social Work: Quantitative and Qualitative Perspectives' [2014] *Res Soc Work Pract*, 540, 547.

<sup>9</sup> P Kunzlik, 'Environmental Issues in International Procurement' in S Arrowsmith, A Davies (eds), *Public Procurement: Global Revolution* (Kluwer Law International, 1998). M Trybus, 'Sustainability and Value for Money: Social and Environmental Considerations in the United Kingdom Public Procurement Law' in R Caranta, M Trybus (eds), *The Law of Green and Social Procurement in Europe, op. cit.*. S Arrowsmith, J Linarelli, D Jr Wallace, *Regulating Public Procurement: National and International Perspectives* (Kluwer Law International, 2000). R H Weber, 'Development promotion as a secondary policy in public procurement' [2009] PPLR.

<sup>10</sup> These ranged, for instance, from payment of fair wages to workers employed by the Government to the use of procurement to diminish sex and race discrimination. For an extensive historical overview see, among others, S O Kahn-Freund, 'Legislation through Adjudication: the Legal Aspects of the Fair Wages Clauses and Recognised Conditions' [1948] *Modern Law Review*, 274. S Arrowsmith, *The Law of Public and Utilities Procurement: Regulation in the EU and UK* (Sweet & Maxwell, 2014). C McCrudden, *Buying Social Justice: Equality Government Procurement and Legal Change, op. cit.*. C McCrudden, 'Social Policy Issues in Public Procurement: A Legal Overview' in S Arrowsmith, Davies (eds), *Public Procurement: Global Revolution, Public Procurement: Global Revolution, op. cit.*

<sup>11</sup> In general terms, EU law limited the possibility of using public procurement rules to promote social and environmental objectives because Internal Market rules (i.e. Treaty provisions and secondary legislation) were mainly directed towards the promotion of free trade. Accordingly, the primary goal of public procurement had to be that contracting authorities acted following economic considerations in order to guarantee the free movement of goods and services. In this way, little space for non-economic considerations was recognised in the award of public contracts.

<sup>12</sup> The election of Margaret Thatcher as British Prime Minister in 1979 had a significant effect on the debate concerning the relationship between procurement rules and procurement linkages. On the limitations set by EC law and enforced by the EU Commission see, for instance, S Arrowsmith, *The Law of Public and Utilities Procurement, op.cit.*, 1226. S Arrowsmith, 'Application of EC Treaty and Directives to horizontal policies: a critical review' in S Arrowsmith, P Kunzilk (eds), *Social and Environmental Policies in EC Procurement Law: New Directive and New Directions, op. cit.*. M Trybus, 'Public Contracts in European Union internal market law' in R Nogouellou, U Stelkens (eds), *Traité de droit compare des contrats publics* (Bruylant, 2010).

began to slowly re-emerge as a policy tool capable of supporting an actual path towards sustainable development objectives.<sup>13</sup>

In 2009, the UK's National Audit Office held that public procurement was capable of addressing several social and economic objectives.<sup>14</sup> It could generate jobs, wealth, promote opportunities for SMEs and support disability, race and gender equality. Sustainable public procurement was, thus, considered capable of stimulating the market towards innovative, cost-effective, competitive and sustainable products and services. Along these lines, in 2011, the Government published a document entitled 'Mainstreaming sustainable development - the Government's vision and what this means in practice', which indicated procurement as a key tool to achieve sustainable development goals. The Government thereby committed itself to 'lead by example with the greenest ever operations and procurement through a step change in leadership, efficiency, transparency and accountability that will underpin the Government's operations and procurement.'<sup>15</sup> In the same year, the Government introduced the 'Greening Governments Commitments' to reaffirm its vow towards sustainable procurement.<sup>16</sup> An *ad hoc* Greening Government sub-committee monitors the implementation of the mentioned commitments, one of which expressly states that the Government must carry out more efficient and sustainable purchases engaging with suppliers in order to understand and limit its supply chain impacts. According to the Greening Governments Commitments, the Government is also required to implement the so-called Buying Standards, which lay down technical specifications and contract award criteria for a number of services and products, using a long-term cost effectiveness approach.<sup>17</sup> In addition, the Government is asked to publish data on its supply chain impacts - focusing on carbon, water and

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<sup>13</sup> See P P Craig, M Trybus, 'Public Contracts: England and Wales' in R Nogouellou, U Stelkens (eds), *Traité de droit compare des contrats publics*, *ibid.*. Instances of legal arrangements promoting sustainability are, among others, the Landfill Tax of 1996, the Climate Change Levy of 2001 and the Aggregates Levy of 2002. These legislative measures are relevant in the construction field and encourage the use of recycling materials, an efficient use of energy and of alternative materials. Among the multitude of publications on the UK's sustainability policies, there are the following. The White Paper, A Better Quality of Life - a Strategy for Sustainable Development, 1999, details available at <https://www.publications.parliament.uk/pa/cm200102/cmselect/cmenvaud/824/824.pdf>. Moreover, Securing the Future: the UK sustainable Development Strategy, 2005, available at <https://sustainabledevelopment.un.org/content/documents/1408uk.pdf>. One Future Different Paths – The UK's shared framework for sustainable development, 2005, available at <http://www.sd-commission.org.uk/publications.php?id=215>. Choosing our Future: Scotland's Sustainable Development Strategy, 2005, available at <http://www.gov.scot/resource/doc/47121/0020703.pdf>. First Steps Towards Sustainability, 2006. Sustainable Development Indicators in Your Pocket, 2009, available at [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69414/pb13265-sdiyp-2009-a9-090821.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69414/pb13265-sdiyp-2009-a9-090821.pdf). All documents elaborated or commissioned by the UK's Government's Sustainable Development Unit since 1999 can be found at <http://collections.europarchive.org/tna/20080530153425/http://www.sustainable-development.gov.uk/publications/index.htm#1999>.

<sup>14</sup> NAO, Sustainable Procurement in Government, 2013, 9, available at

[https://www.nao.org.uk/wp-content/uploads/2013/03/EAC\\_briefing\\_sustainable\\_procurement\\_government.pdf](https://www.nao.org.uk/wp-content/uploads/2013/03/EAC_briefing_sustainable_procurement_government.pdf).

<sup>15</sup> Department for Environment, Food and Rural Affairs, 'Mainstreaming Sustainable Development: the government's vision and what this means in practice' 2011, see

<https://www.gov.uk/government/policies/sustainable-development>.

<sup>16</sup> See <https://www.gov.uk/government/publications/greening-government-commitments-targets>. In this respect, see also the Prime Minister's speech at the Department of Energy and Climate Change of May 14, 2010, available at <http://www.number10.gov.uk/news/pms-speech-at-decc/>. The Greening Governments Commitments bind central public entities. A specific Sustainable Procurement Strategy is, in fact, dedicated to local authorities, NHS Trusts and academies. The local government sustainable procurement strategy, incorporating the Local Government Response to the Report of the Sustainable Procurement, Task Force and to the UK Government Sustainable Procurement Action Plan, available at [http://www.local.gov.uk/publications/-/journal\\_content/56/10180/3372545/PUBLICATION](http://www.local.gov.uk/publications/-/journal_content/56/10180/3372545/PUBLICATION).

<sup>17</sup> See <https://www.gov.uk/government/collections/sustainable-procurement-the-government-buying-standards-gbs>.

waste usage - setting out detailed targets for their reduction.<sup>18</sup> In this respect, a number of tools support the public sector in monitoring its supply chain impacts.<sup>19</sup>

The Buying Standards are developed and updated by the Department for Environment, Food and Rural Affairs (hereinafter DEFRA).<sup>20</sup> They identify core sustainability issues in the public purchasing of certain products, taking into account their life-cycle. They cover a number of product categories ranging from building or construction projects, to furniture or water using products. For each category, there are sub-standard levels: mandatory standards, which set out minimum specifications that have to be met, best practice standards that support sustainability beyond minimum levels and standards applicable only to specific products pushing for innovation. DEFRA's supply chain impacts analyses make use of an Input Output Analysis method assessing the entire life-cycle impacts of the considered products.<sup>21</sup> Even though the Government's Buying Standards do not apply to all UK's public authorities, DEFRA funds the National Sustainable Public Procurement Policy, which offers a training program dedicated to the whole public sector. This training program, *inter alia*, shows how to apply sustainability throughout the purchasing cycle.<sup>22</sup> DEFRA also published the 'Flexible Framework for Sustainable Procurement' guidance, which serves as a voluntary self-assessment tool supporting economic operators in the monitoring and measurement of their improvements in sustainable procurement.<sup>23</sup> This guidance includes also the Greening Governments Commitments.

Furthermore, an executive agency of the Cabinet Office, the Government Procurement Service, works to promote and ease an 'effective access to a range of sustainable and environmentally friendly products and services.'<sup>24</sup> Specifically, this agency:

- elaborated procurement frameworks setting out specifications, and
- drafted standard contract terms and conditions aiming at limiting procurement costs.

It also prepared catalogues that central procuring entities may refer to when buying certain products. In these catalogues, products are marked with a 'green tick' if they comply with the Government Buying Standards and the latter are integrated into the procurement frameworks. The Government Procurement Service, hence, played an important role in driving sustainable procurement as it supported public purchasing of both central and local authorities. The promotion of sustainable procurement was, in fact, one of its key objectives pursued through the provision of guidance on the use of the procurement frameworks, the Government Buying Standards and by means of a constant engagement with stakeholders. Moreover, the Government Procurement

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<sup>18</sup> Department for Environment, Food and Rural Affairs, 'Greening Government Commitments: operations and procurement', 2011, available at <https://www.gov.uk/government/publications/greening-government-commitments-operations-and-procurement>.

<sup>19</sup> For instance, the CAESER, the Corporate Assessment of Environmental, Social and Economic Responsibility.

<sup>20</sup> See <https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs>.

<sup>21</sup> For instance, see the Development of an Embedded Carbon Emissions Indicator, Producing a Time Series of Input-Output Tables and Embedded Carbon Dioxide Emissions for the UK by Using a MRIO Data Optimisation System Final Report to the Department for Environment, Food and Rural Affairs, 2008.

<sup>22</sup> Details available at <https://www.gov.uk/government/publications/sustainable-procurement-e-learning-modules>.

<sup>23</sup> Text available at <https://www.gov.uk/government/publications/sustainable-procurement-in-government-guidance-to-the-flexible-framework>.

<sup>24</sup> NAO, *op. cit.*, 6. The Government Procurement Service is now part of the Crown Commercial Service. See <https://www.gov.uk/government/organisations/government-procurement-service>.

Service evaluated carbon emissions of certain suppliers and monitored the progress made towards the Government's targets.<sup>25</sup> In this respect, a process of review, improvement and reporting was undertaken.<sup>26</sup> In addition, the Environmental Audit Committee constantly reviews the Government's progress reporting on greening government and green economy.<sup>27</sup> In 2012, the Cabinet Office Minister for Political and Constitutional Reform remarked on the importance of VfM<sup>28</sup> in public procurement and stated that the public sector should pursue wider socio-environmental policy objectives whenever they are directly relevant to what it is purchased.<sup>29</sup> Examples of cases where it is appropriate to pursue such policy objectives are given in the Government Buying Standards.<sup>30</sup> Overall, the DEFRA and the Cabinet Office cooperate to foster sustainable public procurement. The DEFRA has a driving policy and monitoring role specifically in the field of sustainable procurement, while the Cabinet Office and the Government Procurement Service are entrusted with a wider government procurement policy. They anyway work together to achieve specific key objectives, such as long-term cost-effectiveness reduction of waste, carbon emission, energy and water consumption, promotion of recycling and re-use, protection of biodiversity and support of fair and sustainable growth.<sup>31</sup> As of today, the response of the UK's public sector to the sustainable public procurement policy agenda has been overall positive.<sup>32</sup>

With regard to the UK's relevant legal framework, the Public Services Act of 2012, which came into force in 2013, may be mentioned.<sup>33</sup> This Act requires public authorities to evaluate - during the pre-procurement phase - the ways which support economic, social and environmental improvements in a given area. Moreover, the Act requires public authorities to secure these kind of gains specifically through public procurement. Nonetheless, nowadays, the main legislative means through which to implement sustainable development considerations into public contracts are those available within the limits of EU law - hence through specifications, award criteria and contract terms drafting - and the principle of VfM. Therefore, this paragraph will examine the spaces for socio-environmental considerations in public contracts and concessions recognised by the UK's legislative measures that implemented the 2014 EU public procurement reform.<sup>34</sup> The overview will focus on the relevant national provisions allowing the integration of social-environmental considerations into the structure of public contracts and, hence, into PPPs. This paragraph will cover the Public Contracts Regulations 2015 (hereinafter PCR 2015)<sup>35</sup> and the Concession

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<sup>25</sup> There is a list of suppliers' who have high carbon emissions and are highly dependent on public contracts. In this case, the Government may encourage suppliers to commit themselves to certain carbon reduction objectives.

<sup>26</sup> See, for instance, the Government Procurement Service annual report and accounts 2013 to 2014 available at <https://www.gov.uk/government/publications/government-procurement-service-annual-report-and-accounts-2013-to-2014>.

<sup>27</sup> See <http://www.parliament.uk/business/committees/committees-a-z/commons-select/environmental-audit-committee/>.

<sup>28</sup> See Chapter II, paragraph 5.1.1.

<sup>29</sup> NAO, *op. cit.*, 4.

<sup>30</sup> See <https://www.gov.uk/government/collections/sustainable-procurement-the-government-buying-standards-gbs>.

<sup>31</sup> Further information is available at <https://www.gov.uk/government/policies/sustainable-development>.

<sup>32</sup> There are several examples of good practices. Among others, the HM Revenue and Customs, the Department for Work and Pensions and the Ministry of Defence. For details on best practices brought forward see [http://www.unpcdc.org/media/414878/eac\\_briefing\\_sustainable\\_procurement\\_government.pdf](http://www.unpcdc.org/media/414878/eac_briefing_sustainable_procurement_government.pdf), 27.

<sup>33</sup> This Act applies to service contracts above the EU threshold and to English and Welsh public authorities. It does not apply to the purchase of goods, unless they are part of a service contract. The text of the Act is available at <http://www.legislation.gov.uk/ukpga/2012/3/enacted>.

<sup>34</sup> Given the recent adoption of UK's implementation measures, there is no authoritative case law yet on the application of the relevant provisions.

<sup>35</sup> Full text available at [http://www.legislation.gov.uk/uksi/2015/102/pdfs/uksi\\_20150102\\_en.pdf](http://www.legislation.gov.uk/uksi/2015/102/pdfs/uksi_20150102_en.pdf).

Contracts Regulations 2016<sup>36</sup> (hereinafter CCR 2016), which transposed in England and Wales - respectively - Directive 2014/24/EU and Directive 2014/23/EU.<sup>37</sup>

The PCR 2015 came into force on February 26, 2015, and applies to all procurements. The CCR 2016 was, instead, enacted on April 18, 2016, and regulates, for the first time, the award of concession contracts.<sup>38</sup> As mentioned, both texts of law closely follow the content of the EU 2014 Directives allowing the same degree of space to sustainable development considerations. For instance, reg. 56, para 2, PCR 2015, largely recalls the wording of Article 18, para 2, Directive 24/2014/EU and states that contracting authorities may not award a contract to the bidder that submits the most economically advantageous tender if the tender does not comply with the relevant environmental, social and labour law obligations set by EU and national laws. Moreover, reg. 57, PCR 2015 sets out groups of exclusion grounds that take into account socio-environmental concerns.<sup>39</sup> Among the mandatory exclusion grounds of para 1, letters j), k) and m) require contracting authorities to exclude an economic operator convicted of an offence under the Asylum and Immigration Act 2004, the Sexual Offences Act 2003 and the Drug Trafficking Act 1994, thereby supporting the choice for tenderers that promote social value.<sup>40</sup> In addition, reg. 57, para 3, PCR 2015, provides that an economic operator in breach of its obligations relating to the payment of taxes and social security contributions - according to a final and binding decision - must be excluded from the participation to a procurement procedure.<sup>41</sup> This mandatory exclusion ground becomes discretionary if there is no final and binding decision on such violation, but the contracting authority can demonstrate by any appropriate means that the economic operator is in breach.<sup>42</sup> According to reg. 57, para 6, PCR 2015, contracting authorities may disregard mandatory exclusions grounds for over-riding reasons such as public health or environment protection.<sup>43</sup> The line of reasoning followed by the CJEU in the field of free movement of goods and the concept of 'general interest' may be a useful guidance in the interpretation and application of this derogation ground.<sup>44</sup> An additional derogation applies in relation to the lack of payment of taxes and social

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<sup>36</sup> Full text available at [http://www.legislation.gov.uk/ukxi/2016/273/pdfs/ukxi\\_20160273\\_en.pdf](http://www.legislation.gov.uk/ukxi/2016/273/pdfs/ukxi_20160273_en.pdf).

<sup>37</sup> The Scottish separate set of regulations, which came into force on April 18, 2016, will not be discussed as the larger part of UK's PPP projects are carried out in England and Wales. The Scottish legislative package anyway encompasses a Procurement Reform Act 2014, Procurement Regulations 2016, Public Contracts Regulations 2015, Utilities Contracts Regulations 2016 and Concessions Contracts Regulations 2016. Scottish Acts' full texts are available at <http://www.gov.scot/Topics/Government/Procurement/policy/ProcurementReform/implementEUDirProcRef>. In addition, the Scottish government prepared statutory guidance describing how the public sector should achieve the objectives of the Acts. See <http://www.gov.scot/publications/2016/03/8410>.

<sup>38</sup> The CCR 2016 applies to public works concessions and public services concessions above the threshold of 4,104,394 £ according to Reg. 9, para 1, CCR 2016.

<sup>39</sup> L Butler, 'Qualification, Selection and Exclusion in EU Procurement' in M Burgi, M Trybus, S Treumer (eds), *Exclusion, Qualification and Selection in the UK under the Public Contracts Regulations 2015* (DJØF, 2016).

<sup>40</sup> Similarly to the PCR 2015, economic operators are excluded from participation to a concession contract award procedure if they have been convicted of offences under the Asylum and Immigration Act 2004, the Sexual Offences Act 2003 and the Modern Slavery Act 2015. Reg. 38, para 8, letters j), k) and m), CCR 2016.

<sup>41</sup> Likewise, under the CCR 2016, economic operators must be excluded if they are in breach of obligations relating to the payment of taxes or social security contributions following a final and binding decision. This mandatory exclusion becomes discretionary when there is no final judgement.

<sup>42</sup> A Sanchez Graells, 'Exclusion, Qualitative Selection and Short-listing in the New Public Sector Procurement Directive 2014/24' in F Lichère, R Caranta, S Treumer (eds), *Modernising Public Procurement: the New Directive* (DJØF, 2014), *op. cit.*, 92, 128.

<sup>43</sup> The CCR 2016 provides for the same general exceptional possibility set out in the PCR 2015. Mandatory exclusion grounds may be derogated in case of over-riding reasons relating to public health or protection of the environment. Reg. 38, para 13, CCR 2016.

<sup>44</sup> C-120/78, *Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein*, [1979] 00649.

security contributions, namely when the exclusion would be disproportionate because only minor taxes or social security contributions are unpaid.

To the same extent, discretionary exclusions grounds set out in reg. 57, PCR 2015, allow scope for socio-environmental considerations into public contracts. Reg. 57, para 8, letter a), PCR 2015, states that contracting authorities may exclude an economic operator that violated the applicable obligations in the social, labour and environmental fields, as provided by reg. 56, para 2, PCR 2015 (Article 18, para 2, Directive 2014/24/EU).<sup>45</sup> According to reg. 57, para 8, letter c), PCR 2015, an economic operator may also be excluded if the contracting authority can demonstrate - by any appropriate means - that it is guilty of a grave professional misconduct, which makes its integrity questionable, thereby, for instance, being unsuitable to carry out a service or provide work in a sustainable manner.<sup>46</sup> Reg. 57, para 8, letter g), PCR 2015, then supports sustainable development concerns as it allows the exclusion of economic operators that showed a significant or persistent deficiency in the performance of a prior public contract - for instance in terms of energy savings or waste management - which led to an early termination or damages.<sup>47</sup> Exclusion grounds are not waivable. Thus, UK's contracting authorities must check their compliance throughout tender procedures.<sup>48</sup>

Furthermore, also the PCR 2015 provision on selection criteria allows scope for sustainability into public contracts. Reg. 58, para 15, PCR 2015, in fact, states that contracting authorities may impose requirements ensuring that economic operators have the necessary experience, human and technical resources to perform the contract to an appropriate quality standard.<sup>49</sup> This may be extremely important, for instance, in case of complex public contracts, such as PPPs, where a high degree of ability is required to perform a certain contract and achieve a specific environmental standard.<sup>50</sup> Moreover, the professional ability of economic operators to deliver the service or to execute the work may be assessed with regard to their skills, efficiency, experience and reliability. Requirements for participation may also be expressed by minimum levels of ability, representing this as an effective way through which to encourage economic operators to attain contractually set quality performance levels.<sup>51</sup> Moreover, reg. 107, PCR 2015, provides that when contracting

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<sup>45</sup> Reg. 38, para 16, CCR 2016, allows as well the exclusion of economic operators if the contracting authority can demonstrate by any appropriate mean that they have breached the applicable obligations in the fields of social, labour and environmental laws. Reg. 38, para 16, letter a), CCR 2016.

<sup>46</sup> Similarly, reg. 38, para 16, CCR 2016, allows the exclusion of economic operators if the contracting authority demonstrates by any appropriate mean that they are guilty of grave professional misconducts. Reg. 38, para 16, letter c), CCR 2016.

<sup>47</sup> The Public Contracts Regulations 2015, Guidance on Awarding Contracts, Crown Commercial Service, available at [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/417934/Guidance\\_on\\_Awarding\\_Contracts.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/417934/Guidance_on_Awarding_Contracts.pdf). Moreover, reg. 38, para 16, CCR 2016, allows the exclusion of economic operators if the contracting authority can demonstrate by any appropriate means a significant or persistent deficiency in the performance of previous concession contracts, which led to an early termination or damages. Reg. 38, para 16, letter f), CCR 2016.

<sup>48</sup> Reg. 57, paras 9 and 10, PCR 2015.

<sup>49</sup> The Public Contracts Regulations 2015, Unravelling the key changes, Eversheds, 14, available at <http://www.eversheds.com/documents/sectors/tmt/The-Public-Contracts-Regulations-2015-Unravelling-the-key-changes.pdf>.

<sup>50</sup> Also according to reg. 38, CCR 2016, conditions for the participation to tender procedures can refer to technical abilities of candidates. In any case, participation conditions must be related and proportionate to the need to ensure the ability of concessionaries to perform the concession contract.

<sup>51</sup> Reg. 36, CCR 2016, states that technical specifications may, *inter alia*, refer to the production process or provision of the work or service, provided that they are linked with the subject-matter of the contract and are proportionate to its objectives and value. Such specifications may, remarkably, refer to quality levels, environmental and climate performance levels, design for all requirements - with a specific emphasis on accessibility for disabled persons - performance, safety or labelling. In principle, these characteristics cannot refer to a specific process offered by a certain

authorities select economic operators for participation to procurement procedures and decide whether to exclude them or not, they have to refer to a standardised pre-qualification questionnaire and to the relevant guidance issued by the Minister for the Cabinet Office concerning the qualitative selection of economic operators.<sup>52</sup>

With some drafting modifications, but with fundamentally the same content of Article 62, Directive 2014/24/EU, reg. 63, PCR 2015, provides that contracting authorities may require economic operators to comply with certain quality or environmental management standards. If this is the case, they have to ask for certificates issued by independent bodies, which prove that the economic operator complies with those quality assurance standards. Specifically, such certificates must refer to the EU Eco-management and Audit Scheme,<sup>53</sup> other environmental management systems according with Article 45, Regulation n. 1221/2009, or other environmental management standards based on EU or international standards. Contracting authorities have also to accept equivalent certificates issued by bodies established in other Member States.

Moreover, reg. 67, PCR 2015, closely follows Article 67, Directive 2014/24/EU, as it provides that the MEAT has to be identified on the basis of the price or cost, using a cost-effectiveness approach, such as life cycle costing, and may include the best price-quality ratio. The latter is evaluated on the basis of qualitative criteria, environmental and/or social aspects, linked to the subject-matter of the contract.<sup>54</sup> As remarked in Chapter III, para 3.6, letter g), such provision on award criteria indeed allows the integration of social and environmental considerations into the structure of public contracts.<sup>55</sup> The mentioned qualitative criteria can, in fact, include, technical merit, aesthetic and functional characteristics, accessibility, design for all users, social, environmental and innovative features as well as trading conditions. Additionally, qualitative criteria can refer to the organisation, qualification and experience of the staff that has to perform the contract, aspect that is highly important, for instance, in cases of works that need to be carried out in a sustainable manner. The quality of the staff involved often affects the contract performance and, thus, the whole economic value of a tender. Qualitative criteria may also cover delivery conditions such as the delivery date, process or completion period. The requirement of the link with the subject-matter of the contract entails that award criteria have to relate to the works, supplies or

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economic operator. However, this could be done, on an exceptional basis, if a precise description of the subject-matter of the contract is not possible. Reg. 36, para 4, CCR 2016.

<sup>52</sup> Further details on the standardised pre-qualification questionnaire are available at <https://www.gov.uk/government/publications/public-contracts-regulations-2015-requirements-on-pre-qualification-questionnaires> and [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/417963/4279-15\\_GN\\_PQQ\\_Lord\\_Young\\_Guidance.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/417963/4279-15_GN_PQQ_Lord_Young_Guidance.pdf).

<sup>53</sup> The EU Eco-Management and Audit Scheme is a management tool developed by the EU Commission for companies and other organisations aimed to support the improvement, evaluation and report of their environmental performances. Details are available at [http://ec.europa.eu/environment/emas/index\\_en.htm](http://ec.europa.eu/environment/emas/index_en.htm).

<sup>54</sup> Reg. 41, CCR 2016, provides that concession contracts must be awarded according to criteria - linked with the subject-matter of the contract - which may be environmental, social or innovation-related, accompanied by specifications that allow the verification of the information provided by tenderers. Contracting authorities must verify if tenders comply with the mentioned criteria. In addition, if a tenderer proposes an innovative solution with an exceptional level of functional performance - as it may be the case with complex public contracts, such as PPPs - that the contracting authority did not foresee, the ranking order of award criteria may be modified to include such innovative solution. The latter are often sustainable solutions. In fact, the term innovation, as defined by reg. 41, para 9, CCR 2016, includes any mean of implementation of a new or significantly improved product, service or process, such as a building or construction process, a new organisational method in business practice, a workplace organisation or external relations, explicitly with the aim of helping to solve societal issues or support Europe 2020 strategy for a smart, sustainable and inclusive growth.

<sup>55</sup> For an extensive analysis of Article 67, Directive 2014/24/EU, see, among others, A Sanchez Graells, *Public procurement and the EU competition rules* (Hart Publishing, 2015), 378, 391.

services to be provided under that contract in any respect and at any stage of their life cycle, such as the production process or processes of another phase of their life-cycle, even if they do not form part of their material substance.<sup>56</sup> Undoubtedly, distinguishing, on the one hand, between permissible award criteria related to production processes - or to other phases of the life-cycle of the service or work to be purchased - and, on the other hand, unjustified and excessive conditions that may advantage certain tenderers may be challenging. However, it is a risk worth taking if sustainable development considerations are to be included into public contracts. In this respect, the principle of proportionality may be used as a useful guidance to avoid distortions of competition. Moreover, following Directive 2014/24/EU, also reg. 67, PCR 2015, states that award criteria must come along with specifications that allow the verification of the information provided by tenderers in order to evaluate how well tenders meet award criteria.<sup>57</sup>

Furthermore, reg. 68, PCR 2015, transposing Article 68, Directive 24/2014/EU, specifies that the life-cycle costing approach includes parts or all the costs, over the life-cycle of a product, service or works borne by the contracting authority, other users and the environment. Such costs may relate to acquisition, use - such as consumption of energy and other resources - maintenance costs and end of life costs - such as collection and recycling costs - as well as to costs related to environmental externalities linked to the service or work during its life-cycle, provided that their monetary value can be identified and proven.<sup>58</sup> The latter group of costs may also include costs of greenhouse gas emissions, other pollutant emissions and climate change mitigation costs.<sup>59</sup>

Sustainable development considerations are fostered also thanks to the provision set out in reg. 69, PCR 2015, which holds that contracting authorities must reject tenders, which are abnormally low, because of non-compliance with the applicable obligations in the fields of social, labour and environmental law.<sup>60</sup>

Moreover, contract terms allow room for socio-environmental concerns within public contracts' structures since reg. 70, PCR 2015, provides that contracting authorities may set special conditions relating to the performance of the contract. These have to be indicated in the procurement documents, be linked with the subject-matter of the contract and may include

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<sup>56</sup> In this respect see, C-368/10, *European Commission v Kingdom of the Netherlands*, published in the electronic Reports of Cases (Court Reports - general). E Adobati, 'La Corte di giustizia si pronuncia su un appalto pubblico di fornitura subordinato al rispetto di condizioni di carattere ecologico' [2012] Diritto comunitario e degli scambi internazionali, 278, 280. T Kotsonis, 'Commission v Netherlands (C-368/10): Environmental and fair-trade considerations in the context of a contract award procedure' [2012] PPLR, 234, 244. S Robin-Olivier, 'Verdissement des marchés publics: des exigences environnementales, mais pas un écolabel particulier' [2013] Revue trimestrielle de droit européen, 410.

<sup>57</sup> The CJEU made clear that award criteria cannot relate to the general qualities of the tenderer but only to the tender as such. Case T-148/04, *TQ3 Travel Solutions Belgium SA v Commission of the European Communities*, [2005] II-02627. C-31/87, *Gebroeders Beentjes BV v State of the Netherlands*, [1988] 04635. Case T-169/00, *Esedra SPRL v Commission of the European Communities*, [2002] II-00609.

<sup>58</sup> On the difficulties of establishing a monetary value to environmental externalities and on the complexity of using the models developed see, among others, M Sagoff, 'The rise and fall of ecological economics. A cautionary tale' [2012] Breakthrough Journal, 45, 58. I Røpke, 'The emergence and current challenges of ecological economics' Inaugural lecture, University of Aarhus. S L Conner & M R Hyman, 'Adjusting prices for externalities' in M Taghian, M Polonsky, C D'Souza (eds), *Readings and Cases in Sustainable Marketing: A Strategic Approach to Social Responsibility* (Tilde Publishing and Distribution, 2011), 1, 25.

<sup>59</sup> In this respect, see, for instance D Dragos, B Neamtu, 'Sustainable Public Procurement: Life-Cycle Costing in the New EU Directive Proposal' [2013] EPPPL, 19, 30. O Perera, B Morton, T Perfrement, 'Life Cycle Costing in Sustainable Public Procurement: A Question of Value' [2009] IISD Paper, available at [https://www.iisd.org/pdf/2009/life\\_cycle\\_costing.pdf](https://www.iisd.org/pdf/2009/life_cycle_costing.pdf).

<sup>60</sup> Reg. 56, para 2, which implements Article 18, para 2, Directive 2014/24/EU.

innovation-related, environmental, social or employment-related conditions.<sup>61</sup> Contractual clauses of this kind are, however, not new in the UK. Community Benefit clauses are, in fact, commonly used to create economic, social or environmental value into public contracts.<sup>62</sup> These clauses support the achievement of social and environmental benefits through contract requirements, thereby contributing to the principle of best VfM and sustainable public procurement. Community benefit clauses can be included in public contracts provided that they comply with EU procurement rules. Above all, they must respect the principles of equal treatment, non-discrimination, transparency, proportionality and mutual recognition. Therefore, such clauses must not directly or indirectly disadvantage or discriminate, for instance, non-local suppliers thereby creating protectionism issues. Community benefit requirements must be objective, proportionate and related to the subject matter of the contract and should not favour local suppliers or restrict employment or training just to UK nationals.<sup>63</sup> Contracting authorities must not express a preference for employees from a particular area or score bidders higher if they deliver benefits to a particular community through products manufactured in a certain geographic region. The widest variety of economic operators possible must be able to tender for public contracts.

Finally, the Guidance on Social and Environmental aspects of public procurement under the PCR 2015 may be mentioned.<sup>64</sup> It is a document issued by the UK's Crown Commercial Service that offers an overview on how public procurement can be used to promote environmental and social considerations. It highlights key points that must be considered and provides a list of measures that contracting authorities can adopt to implement such considerations as well as suggested contract clauses. However, the Guidance does not go much beyond the content of the mentioned PCR 2015 rules.

It has been argued that, in principle, PFIs have a natural relationship with sustainability,<sup>65</sup> meaning that they can offer real scope to promote sustainable deliveries.<sup>66</sup> Their mechanisms may,

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<sup>61</sup> In this respect, see C-549/13, *Bundesdruckerei GmbH v Stadt Dortmund*, published in the electronic Reports of Cases (Court Reports - general), where the Court reduced the applicability of this provision by not allowing its use to set minimum wage requirements because it would prevent economic operators to use of their competitive advantage. However, in this case, the public contract had to be carried out by recurring exclusively to workers employed by a subcontractor established in a Member State other than that to which the contracting authority belonged to. E Mazuyer, 'La légitimation de la concurrence salariale entre États membres' [2014] *Revue Lamy Droit Des Affaires*, 66, 68. A Brown, 'The Lawfulness of a National Rule Requiring a Subcontractor of a Bidder for a Public Contract to Pay its Workers a Minimum Wage, Where the Services Will be Carried Out Exclusively in a Lower-Cost Third Country: Case C-549/13 *Bundesdruckerei GmbH v Stadt Dortmund*' [2015] *PPLR*, 17, 21. P Ichino, 'La clausola sociale di garanzia del salario minimo negli appalti pubblici al vaglio della Corte di giustizia europea: il caso *Bundesdruckerei*' [2015] *Rivista Italiana di Diritto del Lavoro*, 550, 580. A Semple, 'RegioPost judgment: CJEU upholds minimum wage clause' [2015] available at <http://www.procurementanalysis.eu/>. In C-115/14, *RegioPost GmbH & Co. KG v Stadt Landau in der Pfalz*, published in the electronic Reports of Cases (Court Reports - general), the Court, instead, held that Directive 2004/18/EU does not preclude legislation that requires tenderers and their subcontractors to pay staff a predetermined minimum wage. A tenderer or subcontractor who refuses to pay a minimum wage required under that legislation may be excluded from a procurement procedure. Unlike C-549/13, *op. cit.*, in the *RegioPost* judgment none of the bidders was either based outside of Germany or proposing to use a workforce based elsewhere.

<sup>62</sup> See <http://readyforbusiness.org/programme-offering/community-benefit-clauses/>.

<sup>63</sup> See, among others, <http://readyforbusiness.org/wp-content/uploads/2012/11/lib-CBCsInProcurementGuide.pdf> and <http://www.improvementservice.org.uk/documents/econdev/CBC%20Summary.pdf>. Moreover, case studies on social value implementation and measurement are available at <https://www.gov.uk/government/publications/social-value-implementation-and-measurement-project-case-studies>.

<sup>64</sup> Full text available at

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/558032/20160912socialenvironmentalguidancefinal.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/558032/20160912socialenvironmentalguidancefinal.pdf).

<sup>65</sup> BRE, *Profiting from Sustainability: Business and Sustainability*, London, 2002. J Hill, J Collins, *PFI: meeting the Sustainability challenge*, Green Alliance, London, 2004, available at

in fact, be used to move towards more social and environmental sustainable products and practices.<sup>67</sup> Along these lines, several PFI sustainability evaluation tools have been elaborated in the UK especially in the construction industry.<sup>68</sup> For instance, the Environmental Assessment Method is an integrated sustainability evaluation system, which supports the design of sustainable buildings.<sup>69</sup> This tool assesses different types of buildings such as courts, health care, industrial, multi-residential, education infrastructures and prisons, by referring to criteria that allow the evaluation of the project's sustainability level. These are, *inter alia*, waste, energy, pollution, health and well-being of users and building management. In the construction field, the Code for Sustainable Homes may be mentioned. It represents the UK's standard for a sustainable design and building of new homes, which mainly seeks to achieve a decrease in carbon emissions and the construction of more sustainable households.<sup>70</sup>

## 2.2 Case studies.

As already anticipated, the UK's PPP case studies described in the following paragraphs are examples of public-private collaboration schemes that generate socio-environmental benefits through an effective integration of sustainable development considerations in their design, structure, management and maintenance.

All three PPPs were initiatives of local public authorities, namely two City Councils and one National Health Service Trust (hereinafter NHS Trust). The research and collection of project data and documents was very challenging. The private and public parties involved were, in fact, overall elusive and non-collaborative. It was difficult to get and keep in touch with them. The few private and public project-managers - available to provide general projects' information<sup>71</sup> - were evasive on the question of whether it was possible to study the relevant PPP contract terms and conditions. For this reason, in two cases out of three, a request under the Freedom of Information Act was submitted to access the projects' agreements.<sup>72</sup> With specific regard to the first case - the Plymouth Grove PFI project, concerning a social housing scheme - the City Council responded to such formal

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<http://www.green-alliance.org.uk/resources/PFI%20Meeting%20the%20sustainability%20challenge.pdf>. L Zhou, E Kurul, R Keivani, Sustainability Evaluation in the PFI industry: Analysis of the questionnaire survey. Proceedings of Symposium on 'Sustainability and Value through Construction Procurement', Manchester, 2006. L Zhou, E Kurul, R Keivani, 'The Economic Benefits of Sustainable PFI Project: A case study of Newport Southern Distributor Road, Proceedings of the 2008 World Sustainable Building Conference, Melbourne, Australia, 2008.

<sup>66</sup> B Addis, R Talbot, *Sustainable Construction procurement: a guide to delivering environmentally responsible projects* (CIRIA, 2001).

<sup>67</sup> J Hill, J Collins, 'PFI: meeting the Sustainability challenge', *op. cit.*

<sup>68</sup> J Saporauskas, Z Turskis, 'Evaluation of Construction Sustainability by multiple criteria methods' [2006] *Technological and Economic Development of Economy*, 321, 326. G K C Ding, 'Sustainable Construction – the role of environmental assessment tools' [2008] *Journal of Environmental Management*, 451, 464. J Yuan, M J Skibniewski, Q Li, L Zheng, 'Performance objectives selection model in public-private partnership projects based on the perspective of stakeholders' [2010] *Journal of Management in Engineering*, 89, 104. N Wang, 'Risk allocation in the operational stage of private finance initiative projects' [2011] *Journal of Performance of Constructed Facilities*, 598, 605.

<sup>69</sup> See <http://www.breeam.com/>.

<sup>70</sup> Further details are available at

<http://webarchive.nationalarchives.gov.uk/20151113141044/http://www.planningportal.gov.uk/buildingregulations/greenbuildings/sustainablehomes>.

<sup>71</sup> Interview with Mr. David Szuminski, Housing Manager, Plymouth Grove project. Interview with Mr. Rob Stanway, Project Manager, Manchester City Council, Plymouth Grove project. Interview with Mr. Niklas Franck, Skanska Infrastructure Development, Barts and the London Hospitals' project.

<sup>72</sup> English Freedom of Information Act of 2000, available at <http://www.legislation.gov.uk/ukpga/2000/36/contents>. Scottish Freedom of Information Act of 2002, available at <http://www.itspublicknowledge.info/Law/FOISA.aspx>.

request by withholding the contract for confidentiality reasons.<sup>73</sup> Nonetheless, the key contractual features - for the purposes of this research - of the PFI arrangement were indirectly identified through the study of other project-related documents. With regard to the second case - Barts and the London Hospitals, a hospital regeneration project - a formal request under the Freedom of Information Act was not submitted because the private party - once contacted - clearly stated the sensitive nature of the PPP agreement, which did not allow its disclosure. Nevertheless, since the contract was based on the UK's PFI standard form it was possible to analyse its key elements.<sup>74</sup> The third case study - the Glasgow Schools' project - is a re-development PFI program in the education sector. The City Council replied to a request under the relevant Freedom of Information Act by disclosing the project agreement. However, it redacted important terms and conditions as they were held to be covered by confidentiality.<sup>75</sup> Nevertheless, the overall content of such contractual obligations was identified through the study of other project-related documents.

## **2.2.1 Case n. 1. The Plymouth Grove PFI project.**

### **2.2.1.1 Introduction.**

Plymouth Grove is a housing regeneration project launched by the central Government and undertaken through a PFI scheme by Manchester City Council in the Plymouth Grove estate, Ardwick. The project started with residents' associations requesting a drastic change, working side by side with Manchester City Council to find an effective solution to improve the Plymouth Grove estate. The latter was, in fact, an area characterised by poor housing, a high level of crime, unemployment and social deprivation. At the same time, the City Council was looking for a new way forward for the regeneration of a number of residential areas. In addition, to Plymouth Grove, there were Miles Platting and Brunswick Collyhurst. Consultations took place across the city and Plymouth Grove was finally identified as the estate where to carry out the PFI project.<sup>76</sup> Manchester City Council decided to opt for a PFI arrangement because of the integrated approach of the project. Its goal was, in fact, not only to renovate houses, but reduce crime and anti-social behaviour through the promotion of social value. In addition, the design and technical solutions had to be structured in a way that positively affected the environment, the buildings' maintenance and the management of the whole estate. Moreover, a significant amount of investment was needed and the contracting authority, as well as the housing associations, did not have the necessary funds to carry out the infrastructure works, the housing renovation and the estate management. Hence, a PFI scheme was chosen.<sup>77</sup>

After tenants and residents' consultations, the PFI was advertised for consortia to bid and the Grove Village consortium was eventually selected as the preferred bidder. Grove Village is a consortium of private companies, which includes MJ Gleeson Group, Harvest Housing Group - now

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<sup>73</sup> Request for Information, ref. n. GAN/A96L6W.

<sup>74</sup> Full text available at

<https://ppp.worldbank.org/public-private-partnership/library/united-kingdom-treasury-standardisation-pf2-contracts-sopc-december-2012>.

<sup>75</sup> Request for Information, ref. n. 329124-8CE1D27B.

<sup>76</sup> Grove Village Limited, Lovell Case Study, available at

[http://www.lovell.co.uk/wp-content/uploads/2012/11/GroveVillage\\_CaseStudy\\_0912Lowres.pdf](http://www.lovell.co.uk/wp-content/uploads/2012/11/GroveVillage_CaseStudy_0912Lowres.pdf).

<sup>77</sup> S Hodkinson, 'The Private Finance Initiative in English Council Housing Regeneration: a Privatisation too Far?' [2011] *Housing Studies*, 911, 932.

Your Housing Group - and Nationwide Building Society. The relevant contractual close was reached on March 2003 and the Grove Village consortium established a SPV company - the Grove Village Limited - to carry out the project.<sup>78</sup> The private party receives by the contracting authority the payment of a pre-arranged fee over the PFI contract's life and bears all the project's risks. Each company of the Grove Village consortium delivers - through the SPV - different aspects of the PFI project. MJ Gleeson Group carried out the housing refurbishment, Harvest Housing Group runs the housing management, while the Nationwide Building Society shouldered the project's funding.

This 30 year, £100 million PFI housing scheme eventually transformed - and still manages - the former inner city estate of Plymouth Grove into a thriving urban village. Specifically, through this PFI agreement, over 660 homes were refurbished, 650 high-quality new homes 'for sale' were constructed, over 400 unpopular properties were demolished and a new village centre was created. The Plymouth Grove PFI project was characterised by an extensive remodelling and regeneration element. It has been a successful and exciting challenge, especially for the private partner involved. The PFI arrangement benefitted the estate offering, *inter alia*, 50% of social housing and 50% of private homes, new local facilities and job opportunities. Moreover, it tackled issues such as educational attainment, crime, anti-social behaviour and poor economic opportunities.

### 2.2.1.2 Socio-environmental benefits generated by the Plymouth Grove PFI project.

Through this PFI project, numerous socio-environmental benefits were generated. These will be described in the following paragraphs. However, they can be summarised as follows.

Accelerated Delivery Benefits	Enhanced Delivery Benefits	Wider socio-environmental benefits
- quick and on time project completion	- high-quality housing refurbishment - complete and sustainable regeneration of the estate	- improvement of local facilities - strong community involvement - rise of property values - generation of new jobs

Table 10  
Socio-environmental benefits generated by the Plymouth Grove PFI project.

### 2.2.1.3 Accelerated Delivery.

The Plymouth Grove PFI project generated accelerated delivery benefits. The estate was, in fact, renovated in only three years.

Works were split into several stages and were initially slightly delayed because of difficulties in collecting all planning authorizations and consents. Nonetheless, works were completed on

<sup>78</sup> NAO, PFI in Housing, Project Details, 2010, 2, available at <https://www.nao.org.uk/wp-content/uploads/2010/06/101171.pdf>.

October 2006, while the planned completion date was November 2008.<sup>79</sup> Specifically, the completion of infrastructure such as roads, lighting and drainage was on-time. Moreover, refurbishments were quick and smooth. Instead, the building of the new ‘for sale’ properties was suspended in 2008 because of the financial crisis and the fact that houses were not being sold. At present, all houses are sold off plan and were completed by April 2017.<sup>80</sup>

#### **2.2.1.4 Enhanced Delivery.**

The Plymouth Grove PFI project also generated enhanced delivery benefits. The PFI scheme, in fact, allowed a high-quality housing refurbishment and a complete and sustainable estate regeneration. To date, the outputs that have been achieved include 660 refurbished homes and 400 unpopular properties demolished. Works delivered renovated kitchens, bathrooms, electrical rewires, roofs, windows, efficient heating systems, a thicker insulation and new remodelled gardens. Energy efficient features were implemented in every housing unit. These include thermal insulation and more cost-effective heating systems. A low-cost wireless broadband service supports the entire area and 9 bungalows for the disabled and elderly Grove Village residents were built. Furthermore, the entire estate layout was redesigned through the application of sustainable solutions such as the extension of gardens, green areas, the creation of a pedestrian priority ‘green route’ running through the estate to promote walking and cycling, the introduction of a litter picking system, planting and watering services. An intense planting of trees was specifically carried out. This included 540 elevated planters and bedding plants, which became one of the reasons why the Plymouth Grove PFI project was awarded the Gold prize - meaning ‘outstanding’ - of Britain in Bloom.<sup>81</sup> Recycling points were created and the highest recycling percentage in the city of Manchester - compared to landfills’ efficiency - was reached. In addition, a new village centre was created with shops, a housing office and a community centre.<sup>82</sup> 6 Primary Schools were set up in the Ardwick Ward, with 1,200 children attending. Notwithstanding the threat of schools’ closures in 2006, today, 4 out of 6 schools are extending their buildings to accommodate extra classes. Moreover, specifically set performance targets allow the overall project quality to increase constantly. In this respect, it can be, for instance, mentioned the quick responses to graffiti clearing, which are monthly and annually measured. Services’ levels are monitored and enforced against the contractor through the application of contractually set penalties.<sup>83</sup> Finally yet importantly, before the project started, residents bought their houses in the so-called Grove Village for £10,000. They are now worth over £100,000.

#### **2.2.1.5 Wider socio-environmental gains.**

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<sup>79</sup> The Private Finance Initiative for Housing Revenue Account Housing, The Pathfinder Schemes Baseline Report, Communities and Local Government, 2008, 53, available at <https://www.thenbs.com/PublicationIndex/documents/details?Pub=DCLG&DocID=287294>.

<sup>80</sup> Interview with Mr. David Szuminski, Housing Manager, Plymouth Grove project.

<sup>81</sup> Since 1964, Britain in Bloom is a national community gardening campaign, which aims at transforming cities and towns. It is held every year and it supports community actions for the transformation of spaces. See, <https://www.rhs.org.uk/communities/campaigns/britain-in-bloom>.

<sup>82</sup> Interview with Mr. Rob Stanway, Project Manager, Manchester City Council.

<sup>83</sup> NAO, PFI in Housing, Case Studies Summary Report, 2010, 6, available at <https://www.nao.org.uk/wp-content/uploads/2010/06/101171.pdf>.

The Plymouth Grove PFI project also generated wider socio-environmental benefits. The PFI arrangement, in fact, positively affected the local community in several different aspects. As mentioned, the entire area - originally built in the 1970s - suffered from poor housing, socio-economic difficulties and high levels of burglary and crime. Following the Plymouth Grove PFI project, levels of crime and fear were significantly reduced.<sup>84</sup> A large number of alleys and footpaths behind houses - considered as encouraging places for burglars and drug dealer's activities - were, in fact, eliminated. A neighbourhood security team was created and a CCTV was installed in order to improve local safety. In addition, a crime and safety focus group involving both residents and police was organised. Moreover, a renewed sense of pride was created alongside with a strong community involvement. In this respect, several new activities were launched and opened to the wider local community. These include a new village and shopping centre, organised elderly holiday trips, camping tours for kids and a community football sponsorship.<sup>85</sup> A Grove Village Neighbourhood Team runs a new community centre that promotes the local youth football team and manages sport and playing facilities for children. A job centre for local residents was set up supporting access to training and employment opportunities in the construction industry. A neighbourhood office - called 'one stop shop' - was created as an extension of Manchester City Council where residents - irrespective of tenure - can access any kind of service, from ordering a replacement bit to renewing their car parking permits. Furthermore, a new road network was built, which better connects the Grove Village, both internally and with the surrounding area. Therefore, the previously under-invested inner city council estate was transformed into a modern, mixed-tenure urban village with an exciting future ahead.

Grove Village was the name of the winning consortium. However, residents adopted it. They now say 'I live in Grove Village' and not 'I live in Ardwick'.<sup>86</sup> The Grove Village PFI scheme, thus, regenerated a community, generated new jobs,<sup>87</sup> transformed local facilities, raised property prices,<sup>88</sup> and gave new hope to a former run-down, inner city estate with a record of under investment. Finally, the Plymouth Grove PFI scheme is leading the way to other similar projects where sustainability considerations are largely implemented within their structure. The Grove Village project was, in fact, a Government pathfinder project and now a project model for UK's social housing PFI schemes. Many new PFI projects are drawing important lessons from the Grove Village housing requalification programme.<sup>89</sup> Among others, can be mentioned the Brunswick PFI Housing scheme, which is a new 25-year regeneration project that will provide 522 high-quality new homes, the refurbishment of over 650 existing council homes, a 60 bed sheltered

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<sup>84</sup> For instance, there have been 161 incidents in 2005-2006 compared to 72 in 2007-2008. Ardwick Local Plan, Approved by Manchester City Council's Executive, Funded by Communities and Local Government, available at [www.manchester.gov.uk/download/downloads/id/9743/ardwick\\_local\\_plan.pdf](http://www.manchester.gov.uk/download/downloads/id/9743/ardwick_local_plan.pdf), 23, 2007. NAO, PFI in Housing, 2010, available at <https://www.nao.org.uk/report/pfi-in-housing/>.

<sup>85</sup> The payment by Manchester City Council to the private sector - as provided by the terms and conditions of the contract - represented a sufficient investment to support community activities. See, NAO, PFI in Housing, 2010, *op. cit.*, 72.

<sup>86</sup> Interview with Mr. David Szuminski, team leader at Grove Village Neighbourhood Office, Housing Manager, [yourhousinggroup.co.uk](http://yourhousinggroup.co.uk).

<sup>87</sup> Specifically, 20 new jobs were created alongside with a comprehensive training and job centre program.

<sup>88</sup> As mentioned, property values rose. New homes in the estate are valued at £150,000 and £200,000 and the average waiting time to get a house at Grove Village is between 4-6 years.

<sup>89</sup> The Private Finance Initiative for Housing Revenue Account Housing, The Pathfinder Schemes Baseline Report, Communities and Local Government, 2008, 27, *op. cit.*.

accommodation facility and a new retail area.<sup>90</sup> This PFI project is meant to provide new shops and local social activities along with an improved sustainable neighbourhood design. New road layouts and safe open spaces will be created. This PFI will offer a wide range of opportunities for residents including training programs and work experience within the local community groups.<sup>91</sup>

### **2.2.1.6 Tender's Strategies.**

This paragraph will offer an overview of the strategies used in the tender procedure to embed sustainability considerations into the structure of the PFI project.

First of all, it can be mentioned that Manchester City Council's contract notice expressly stated that economic operators had to submit proposals to procure a comprehensive renewal of the estate, secure the diversification of the tenure and deliver a sustainable housing estate, including management and maintenance.<sup>92</sup> Moreover, the notice specified that the project had to be delivered in accordance with an agreed output specification system and that throughout the contract life the economic operator had to maintain the project in view of making the estate a safe and attractive place to live. In addition, economic operators were asked to submit proposals that provided innovative and flexible solutions for an optimum service delivery.

Furthermore, from the project's evaluation pack it emerged that the criteria used by Manchester City Council to evaluate tenders expressly allowed the integration of socio-environmental considerations into the structure of the PFI.<sup>93</sup> Specifically, among the contractual performance conditions used to assess how works had to be carried out, there were 'conditions of buildings, including cleanliness and security.' Moreover, on quality:

- methods of monitoring and maintaining an accurate, consistent and appropriate service;
- management control systems ensuring competence of staff and implementing a quality improvement programme;
- training programmes on quality;
- polite, courteous and approachable staff; and
- data protection of records and information.

Furthermore, economic operators were required to detail how they would have complemented the Council's aims and objectives, which included the following:

- an anti-poverty statement;
- a sustainability strategy;
- a green strategy;
- a customer care policies; and

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<sup>90</sup> Further details are available, *inter alia*, at <http://www.localgov.co.uk/Manchester-Councils-signs-contract-for-100m-Brunswick-PFI/35244>.

<sup>91</sup> In this respect, see Office of the Deputy Prime Minister, Private Finance Initiative Schemes for HRA/Non-HRA Housing, Guidance for Authorities Making Proposals, Private Finance Initiative, Creating Sustainable Communities, 2005, London, available at

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/7874/142805.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7874/142805.pdf).

<sup>92</sup> Manchester City Council's contract notice despatched on November 25, 1999.

<sup>93</sup> Manchester A6 PFI, Evaluation Pack, Confidential Report.

- knowledge and application of health and safety matters.

In addition, economic operators were required to detail how they would have developed the services offered to the residents of the concerned area, including the following:

- innovation, new ideas and solutions for this project;
- ability to respond to changes in user needs and service development;
- recognition of the needs of the area and responding accordingly; and
- work within a best value regime.

Finally, Manchester City Council divided the evaluation criteria into three main categories: technical, financial and contractual. For each category, the criteria allowing spaces for sustainability considerations were the following.

Technical criteria:

- recognition and appreciation of sensitivities of housing environment;
- innovation in service delivery;
- timing and robustness of proposals to meet full output specification;
- efficiency of life-cycle asset management;
- design proposals;
- proposals for estate-wide efficiencies;
- environmental impact;
- quality of the proposed works;
- approach to addressing social exclusion and training initiatives;
- energy management initiatives;
- flexibility in approach to service delivery; and
- innovation in maximizing potential for usage of assets.

Financial criteria:

- strength and quality of funding commitment; and
- overall VfM.

Contractual criteria:

- an output specification approach; and
- innovation in partnering arrangements.

#### **2.2.1.7 Contractual Strategies.**

It was not possible to analyse the specific terms and conditions of the PFI contract that integrated and supported socio-environmental objectives because the private consortium and Manchester City Council withheld the Grove Village PFI project agreement. Access to this agreement was requested

also through a freedom of information request under the Freedom of Information Act 2000.<sup>94</sup> Manchester City Council replied to this request by stating that it wished to be as open and transparent as possible, however, there were exceptions under the UK's Environmental Information Regulations 2004, which allowed a public authority to withhold information in certain cases. The reasons provided for withholding the agreement, including the public interest test, were the following.

A public authority may refuse to disclose information to the extent that the disclosure adversely affects the confidentiality or commercial or industrial information, where such confidentiality protects a legitimate economic interest. Moreover, the Grove Village PFI project agreement specifically contains the below confidentiality clause.

*“The Parties shall save as they may otherwise agree in writing keep confidential all matters relating to this Agreement and the Funding Agreements and the Project Documents and shall use all reasonable endeavours to prevent their employees and agents from making any disclosure to any person of any matter relating to this Agreement, the Funding Agreements and the Project Documents”.*

Additionally, Manchester City Council specified that:

- It was not willing to leave itself open to a legal challenge by disclosing commercially sensitive information that was likely to affect the commercial interests of a third party. The Council was under an obligation of confidentiality imposed by the contract.
- The release of such commercially sensitive information would have disadvantaged the contractor and Council's interests in future tendering procedures by distorting competition in other similar tendering processes.
- There was a risk of harm for the commercial and economic interests of the Council if the requested information were disclosed.
- It was willing to protect the strong working relationships with third parties, which ensures the delivery of this kind of development projects.
- The existence of a public interest in ensuring that the development of Manchester continued, allowing the region to flourish economically, not prejudicing future developments by disclosing commercially confidential information.

Notwithstanding the above, project-related data, along with the support of the UK's PPP standard form<sup>95</sup> - which was used as reference point - allowed the identification of the main strategies used in this PPP to integrate sustainable development concerns. These are the following:

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<sup>94</sup> Request for information ref. n. GAN/A96L6W received by Manchester City Council on April 21, 2016. The request was handled under the Environmental Information Regulations 2004.

<sup>95</sup> The UK's standard form provides for detailed guidance on how to draft PPP contract provisions. Moreover, it outlines a standard services output template and a pro-forma payment mechanism model. The PPP UK's standard form is fully available on-line at, United Kingdom Treasury - Standardisation of PF2 Contracts,

- specifically set performance targets drafted also in terms of socio-environmental sustainability;
- payment mechanism that provides for financial penalties in cases of underperformances by the private contractor;
- effective monitoring system carried out by the contracting authority.

A detailed analysis of such aspects can be found below under paragraph 2.2.2.7.

## **2.2.2 Case n. 2. Barts and the London Hospitals.**

### **2.2.2.1 Introduction.**

Barts and the London Hospitals is the UK's largest healthcare PPP scheme and one of the top ten projects in the country. This design, build, finance and operate (hereinafter DBFO) contract combined the design and redevelopment of two historical hospitals in central London. The project entailed demolishing some buildings, renovating others, landscaping the area and improving pedestrian access. All this was carried out in two separate architecturally sensitive sites in central London. Specifically, the Royal London Hospital project (hereinafter Royal Hospital) entailed the construction of a new building and of three towers. 144,000 m<sup>2</sup> of new built space and the creation of a unique, modern and inter-connected glass infrastructure. The goal was to obtain one single health care facility that could house all clinical activities, including the city's leading trauma and emergency centre and one of the EU biggest renal units. Moreover, an air ambulance had to operate from one of the 17-floors towers. The St Bartholomew's Hospital project (hereinafter Barts), instead, envisaged the construction of new 60,000 m<sup>2</sup> and the refurbishment of 6,650 m<sup>2</sup>. Two-ruined buildings' wings had to be demolished and a single infrastructure had to be built to house, among others, a modern cancer and cardiac centre. In sum, a new and unique clinical facility that integrated the existing buildings had to be created.

In both sites, the existing infrastructure was old and in poor condition. They needed to be modernised and expanded after several years of insufficient investment. This was, especially, the case of the Royal Hospital that was located in an area that suffered from severe infrastructural under-investment during the last years. The UK Government wanted to create a renewed hospital at the Royal Hospital and an advanced health care centre at Barts so that locals and patients could benefit from a new health care experience capable of adapting itself to future needs. Within this picture, the local authority - the Greater London Authority - set up a sustainable development commission and elaborated a practical guide for new business proposals in 2004. This document highlighted the '4Rs' principle - Responsibility, Respect, Resource and Results - as key drivers of the city's sustainable development framework. In 2006, London's Mayor prepared an additional planning guide on sustainable design and construction, identifying a new policy framework for all new buildings and designs in London. Along these lines, the NHS Trust published a regeneration and sustainability action plan, stressing the importance of initiating redevelopment and local regeneration projects to contribute to east London's growth.

With the mentioned institutional support, Barts Health NHS<sup>96</sup> Trust awarded in 2006 a £1 billion DBFO contract to a private consortium.<sup>97</sup> The tendering procedure lasted more than four years and the preferred bidder phase took twenty-eight months. During the negotiation phase, the private party proposed a sustainable development plan and the contracting authority elaborated a regeneration strategy stressing, *inter alia*, the need to reinforce employment opportunities for local people. The aim of the public authority was to maximise the benefits of this investment project in terms of local regeneration, community health care enhancement and sustainability objectives. As a result, a sustainable development index was elaborated to limit the ecological footprint of the project and maximise its sustainability benefits.<sup>98</sup> The winning tenderer was the Skanska-led consortium consisting of Innisfree and the Dutch Infrastructure Fund. This consortium established a SPV called Capital Hospitals to carry out the project. Capital Hospitals is responsible for the design, funding, building, redevelopment and maintenance of the Barts and Royal Hospitals until 2048. Specifically, under the DBFO contract, Capital Hospitals has to:

- bear the funding of the project,
- deliver a new hospital at the Royal London,
- redevelop and create a cancer and cardiac centre at Barts,
- deliver a wide range of services, such as clinical support services, cleaning, catering, laundry, medical and radiotherapy equipment and sterile services,<sup>99</sup> and
- maintain both hospitals, according to a life-cycle approach.

At the end of the contract life, the hospitals' ownership will revert to the NHS. Services' provision and maintenance are currently on going at both hospitals. The project funding was borne by the private contractor and entailed bonds issued by Deutsche Bank and Morgan Stanley as well as a loan from the European Investment Bank.

### 2.2.2.2 Socio-environmental benefits generated by the Barts and the London Hospitals.

Through this PPP project, numerous socio-environmental benefits were generated. These will be described in the following paragraphs. However, they can be summarised as follows.

Accelerated Delivery Benefits	Enhanced Delivery Benefits	Wider socio-environmental benefits
- quick and on time project completion	- high-quality building construction - sustainable buildings' regeneration and	- improved access and high-quality health care - strong community involvement

<sup>96</sup> Barts NHS Trust is the largest hospital group in the UK's National Health Service.

<sup>97</sup> The contractual close occurred on April 2006.

<sup>98</sup> Barts and the London NHS Trust, Sustainable Regeneration Programme, 2006, available at <http://www.apho.org.uk/resource/item.aspx?RID=92888>.

<sup>99</sup> Sub-contractors deliver the mentioned wide range of services. Hard and soft facilities management (Skanska Facilities Services and Carillion), sterile services (Synergy), managed equipment (Siemens) and radiotherapy managed equipment (Varian).

	refurbishment	- generation of new job opportunities
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Table 11  
Socio-environmental benefits generated by the Barts and the London Hospitals.

### 2.2.2.3 Accelerated Delivery.

Redevelopment works began in May 2006. The construction phase was extremely challenging because both hospitals had to remain fully operational during the works. Skanska UK with HOK architects carried out the works and organised them in different phases.

At the Royal Hospital, the first phase saw the demolition of the existing buildings and the construction of 144,000m<sup>2</sup> and of three new towers. It was completed in 2011. During the second phase (ended in 2014), 15,600m<sup>2</sup> were renovated. At Barts, the first two phases saw the construction of new 60,000m<sup>2</sup> (which included the cardiac and cancer centre) and the renovation of 6,650m<sup>2</sup>. These phases were completed - respectively - in March 2010 and September 2014. The third and last phase, ended in March 2016. During the latter stage, final demolition, structural works and the construction of a new car park were carried out.

This PPP project generated accelerated delivery benefits. In fact, it was delivered quickly and on time, with only 11 days of delay on the planned schedule during the second phase at Barts. The on time and quick completion of both hospitals - compared to the complexity and amount of works that had to be carried out - allowed Barts and the Royal Hospital to become one of the city's designated hospitals for the 2012 Olympics.

### 2.2.2.4 Enhanced Delivery.

This PPP project also generated enhanced delivery benefits. In fact, under the DBFO contract, a 21<sup>st</sup> century approach to building and asset management was used. Investments were made in leading edge technologies and works were carried out allowing the hospitals' services to be continued and not disrupted. The two hospitals were built and renovated in complex sites, in the middle of a very busy city, with a heavy pedestrian and road traffic. Nonetheless, the private party efficiently coordinated two overlapping works distant from each other, always engaging with many stakeholders affected by the project, such as staff, patients and local community. In fact, since the beginning of the project, Capital Hospitals elaborated plans and built strong partnerships with stakeholders. They were consulted on the cultural and historical preservation of the sites and were constantly updated on the project's progresses. In addition, NHS personnel undertook regular monitoring.

The broad project package was delivered though a high focus on innovation and sustainability concerns, limiting costs while maintaining and improving quality. For instance, high safety and health standards were met and disturbance to hospitals' activities was very limited. The DBFO contract integrated design, construction pre-fabrication, logistics and stakeholder management in an effective way. A traffic evaluation and management plan was carried out during the pre-construction and planning phase. Construction materials were pre-fabricated and stored off-site and were delivered through consolidated loads, in this way reducing transports, emissions and vehicles into London. Moreover, the limited volume of materials on site diminished waste and supported the

creation of a safer and cleaner working environment. Trained personnel managed pedestrians and traffic of vehicles in and out the site. Local residents and other stakeholders were constantly updated on traffic conditions. In addition, alerts and warnings were given whenever certain activities disturbed traffic. An innovative modelling system was also used to identify the quantities of materials needed to avoid an excess of materials and waste.

Furthermore, the hospitals were rebuilt in a functional - especially in terms of healthy indoor environments - and energy efficient way. The wards are bright and airy and there are large windows and glass atria, which allow natural light into the buildings. Capital Hospitals arranged wards next to diagnostic and treatment areas to ease patients' transfers and access to relevant facilities. Solar control glazing limits the need for cooling in summer. Both buildings are air-conditioned and outside air is filtered to avoid pollutants getting inside the hospitals' premises and compromising its sterile environment. During the renovation of the buildings, only electricity from renewable sources was used. To prevent air pollution, non-toxic and water-based elements - such as vinyl floor adhesives - were used. A noise and dust protocol - elaborated during the planning phase - allowed an effective monitoring system, guaranteeing that any serious issue could be quickly dealt with.

At the Royal Hospital, much of the noisy construction was scheduled during quiet hospital periods and low-vibration rings were adopted. Moreover, an acoustic screen limited noise and vibration in children's intensive care areas. This screen - covering the entire facade and with a lifespan of 25 years - reduced the noise by about 25 decibels. Clinicians said that they felt 'wrapped in cotton-wool'.<sup>100</sup> Demolition was carried out floor-by-floor, isolating the relevant areas. An *ad hoc* drop zone was also established. A significant reduction of dust and noise was, thus, achieved. At all sites, monitoring stations were installed and alerts to the construction team were sent whenever the level of dust exceeded the set thresholds. Barts was designed in order to maximise the use of available space, which had to be flexible enough to accommodate new and larger diagnostics and treatment equipment. Walls are, in fact, movable so that future equipment can be easily delivered and changed. Both Barts and the Royal Hospital were built to satisfy the NHS Environmental Assessment Tool and rated 'Excellent'.<sup>101</sup> To obtain this rating the DBFO contract integrated sustainability concerns in every phase of the project. For instance, the *ad hoc* off-site factory, where construction materials were pre-fabricated, had outstanding recycling facilities, which avoided the creation of waste. After demolition, materials were crushed and reused, while few others were sent off-site to be recycled, with a high recovery rate.<sup>102</sup> 96% of demolition waste was, in fact, recycled, while salvaged materials - such as sinks, railings, radiators and bricks - were sold to private operators.<sup>103</sup> Moreover, environmentally responsible construction materials were used. Timber came entirely from sustainable sources certified by the Forest Stewardship Council or the Program for the Endorsement of Forest Certification.<sup>104</sup> In addition, the use of a special

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<sup>100</sup> Capital Hospitals and Barts and the Royal London, Transforming London's historic hospital, Skanska, 7, available at <http://skanska-sustainability-case-studies.com/index.php/latest-case-studies/item/128-barts-and-the-london-hospitals-uk>.

<sup>101</sup> The so-called NEAT (the NHS Environmental Assessment Tool) was developed in 2002 on behalf of the NHS Estate (for England and Wales) and was a self-assessment tool, which defines the environmental performance of healthcare buildings, both new and existing ones. On July 2008, the NEAT was replaced by the BREEAM Healthcare 2008 and more recently by the BREEAM New Construction in 2011.

<sup>102</sup> WRAP, Recycling Demolition Arisings at Barts and the London Hospital, WAS006-002: Demolition Exemplar Case Study, 2007, available at <http://www.wrap.org.uk/sites/files/wrap/Barts%20and%20The%20London%20Report%20full%20case%20study.pdf>.

<sup>103</sup> Skanska, Barts and the London Hospital, UK, Aspects of Sustainability, Case Study 65, 2010, available at [http://www.businessperformance.org/sites/default/files/65\\_Barts\\_v001.pdf](http://www.businessperformance.org/sites/default/files/65_Barts_v001.pdf).

<sup>104</sup> Details on these certifications can be found at <https://us.fsc.org/en-us> and <http://pefc.org/certification-services/forest>.

technique to transport materials significantly reduced packaging waste and limited the risk of damaged goods.<sup>105</sup> During the planning phase, each supplier had to identify and eliminate potentially harmful materials. The consortium's sub-contractors were constantly monitored in order to improve their sustainability performance and one of them became the first company in the UK to obtain the ISO 14001 certification.<sup>106</sup>

Energy efficiency concerns were also taken in consideration.<sup>107</sup> Energy was saved, *inter alia*, through high performance insulation, glazing and modern medical equipment. The private contractor went beyond what was contractually agreed upon by funding a new combined cooling, heating and power system at Barts, which is meant to provide substantial savings and extra electricity to be sold in the national market. Heat recovery systems limit the amount of waste of heat. Efficient ventilation fans and variable speed drives provide that the energy used does not exceed the demand. Moreover, the use of low-energy lighting - such as LEDs - in the 25 elevators of the Royal Hospital allows significant savings. The maintenance team uses a high-tech mobile system for effective reports, which diminishes administration time and costs and eliminates paper reports.

#### **2.2.2.5 Wider socio-environmental gains.**

The Barts and the London Hospitals PPP project is also delivering socio-environmental benefits to the surrounding territory and local community. The DBFO contract provided, in fact, a modern healthcare centre, which is contributing to an urban regeneration preserving, at the same time, the cultural environment of the surrounding area. In this respect, Barts and the Royal Hospitals currently offer:

- 9,955 rooms;
- 1,248 patient beds for the benefit of the people of East London, the city and the wider community within a modern environment capable of providing 21<sup>st</sup> century healthcare;
- 1,070 showers;
- 2,000 toilets;
- improved access to healthcare thanks to co-located clinical services;
- a higher quality healthcare because of, *inter alia*, the adoption of new clinical models, latest technology and treatment equipment;
- a better hospital environment with indoor areas designed to support patients' healing and improve employees and visitors' experience;
- a higher number of patients treated. For instance, advanced radiotherapy equipment allows the treatment of 100 cancer patients a day; and
- better staff training with simulations displaying operations, modern IT and communications tools allowing smooth operations and real time diagnoses.

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<sup>105</sup> The Returnable Transit Packaging uses strong plastic crates that can be returned to suppliers and be reused.

<sup>106</sup> On the characteristics and benefits of this environmental certification, see <http://www.isoqsltd.com/iso-certification/iso-14001-environmental-management-certification/>.

<sup>107</sup> Sustainable Development Unit, Case Study, Energy Engagement, Barts and the London NHS Trust, 2013, available at <http://greenhospitals.net/wp-content/uploads/2012/03/Energy-Barts-UK.pdf>.

The Royal Hospital has 738 extra beds dedicated to extensive day care facilities. This is raising the number of patients treated while cutting overnight stays. The hospital also houses a Medical College and a fully integrated research and teaching centre. Public spaces were enlarged with two additional civic spaces, gardens and a car park. Instead, at Barts, patients' relatives have the possibility to stay overnight in nearby rooms and the building enjoys a pedestrian area, which eases the navigation through the hospital, a fountain and street lamps along the renovated facades.<sup>108</sup>

The innovative designs and sustainable techniques implemented under the PPP contract allowed the project to win a number of sustainability awards, such as the Corporate Social Responsibility Award,<sup>109</sup> an Innovation Award,<sup>110</sup> a Waste Management Award<sup>111</sup> and a Sustainable Procurement Award.<sup>112</sup> As mentioned, environmental externalities were minimised through the implementation of an efficient waste management process, a sustainable sourcing of construction materials and limited transport journeys of construction materials to the sites. Moreover, the PPP scheme established a full time safety and health test centre open to any worker, even if not involved in the project. An employment program for long-term unemployed people was also established on both sites and English classes for construction workers were set up at the Royal Hospital. Capital Hospitals is contributing to the community well-being also by regularly donating money to local charities. Such donations allowed, for instance, the refurbishment at both hospitals of children's play areas. Furthermore, the PPP project is supporting an economic and employment growth. In the latter respect, 80% of new hospitals' positions are guaranteed to locals. In addition, the consortium used local construction employees and sub-contractors. 17% of the project's workers and 34% of the project's sub-contractors came from the surrounding area. Mostly British companies were employed, thereby supporting the economic growth of the region. Finally, nearby schools visit the PPP project and mentoring activities are provided to them.

#### **2.2.2.6 Tender's Strategies.**

Please consult paragraph 2.2.1.1 for the strategies used in the tender procedure to embed sustainability considerations into the structure of this PPP project. The relevant contract notice was not retrieved as it was published before the creation of the Tenders Electronic Daily on-line database established under Directive 2004/18/EC.<sup>113</sup>

#### **2.2.2.7 Contractual Strategies.**

This paragraph will offer an overview of the contractual strategies that allowed the integration of sustainable development considerations into the structure of this PPP project.

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<sup>108</sup> Capital Hospitals and Barts and the Royal London, Transforming London's historic hospital, Skanska, 9, available at <http://skanska-sustainability-case-studies.com/index.php/latest-case-studies/item/128-barts-and-the-london-hospitals-uk>.

<sup>109</sup> From Construction News, see <https://nationalcsrawards.co.uk/>.

<sup>110</sup> From Constructing Excellence, see <http://constructingexcellence.org.uk/awards/>.

<sup>111</sup> From the Chartered Institute of Waste Management, see <http://www.ciwm.co.uk/>.

<sup>112</sup> By the UK's Sustainable City Awards, see <http://theenergyst.com/2016-sustainable-city-awards/>.

<sup>113</sup> TED publishes on-line calls for tenders. See <http://ted.europa.eu/TED/main/HomePage.do>. It was established following the transposition of Directive 2004/18/EC, on January 1, 2006. The contract notice of the Barts and London Hospitals PPP was, instead, published before 2006, approximately in 2001. Thus, it could not be retrieved in the on-line database.

The DFBM contract was specifically structured so as to implement and support the achievement of socio-environmental objectives. To this end, first of all, the payment mechanism was construed on an availability basis. Therefore, Capital Hospitals was paid only if the project was delivered and if it complied with the contractually agreed upon quality and sustainability requirements. Secondly, the five sub-contractors had to comply with strict budget and service levels. For instance, in the field of waste management, bins with bar codes monitor the production of waste. A waste management database controls every suppliers' waste stream. Sub-contractors are responsible for every bit of waste they create and receive financial penalties or premiums - per ton of waste - if the defined waste levels are exceeded or met. Because of the strong waste management strategy adopted and the relevant monitoring system, 0% of the project's waste was sent to landfills.

The specific contractual clauses adopted in this PPP contract could not be studied as Capital Hospitals withheld the agreement because of confidentially reasons and the sensitive nature of the document. Nonetheless, since the DBFM contract was based on the UK's standard form, it was anyway possible to identify the key features of the contractual terms and conditions that supported the integration of sustainable development considerations into this PPP scheme. The mentioned UK's standard form provides for detailed guidance on how to draft PPP contract provisions. Moreover, it outlines a standard services output template and a pro-forma payment mechanism model.<sup>114</sup>

#### Quality management systems.<sup>115</sup>

The adoption by the private party of a quality management system (e.g. ISO 9000 or an equivalent standard), allowed the contracting authority to obtain the infrastructure and service in accordance with set quality standards.

The contracting authority audits the contractor's quality management system (e.g. examination or inspection of works or activities on or off-site). Moreover, the contractor and sub-contractors provide assistance and access whenever the contracting authority requires it.<sup>116</sup>

#### Maintenance and life cycle issues.<sup>117</sup>

The adoption of a life-cycle maintenance approach. This allows the services and works to be carried out in accordance with the agreed standards over a long period of time (i.e. duration of the PPP agreement) through compliance with the relevant maintenance and life-cycle responsibilities.<sup>118</sup>

#### Continuous improvement and efficiency reviews.<sup>119</sup>

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<sup>114</sup> The PPP UK's standard form is fully available on-line at, United Kingdom Treasury - Standardisation of PF2 Contracts, [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/221556/infrastructure\\_standardisation\\_of\\_contracts\\_051212.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221556/infrastructure_standardisation_of_contracts_051212.pdf).

<sup>115</sup> The previous UK's standard form of 2007 provides for the same on quality management systems. See, Standardisation of PFI Contracts available at, [http://webarchive.nationalarchives.gov.uk/20130129110402/http://www.hm-treasury.gov.uk/d/pfi\\_sopc4pu101\\_210307.pdf](http://webarchive.nationalarchives.gov.uk/20130129110402/http://www.hm-treasury.gov.uk/d/pfi_sopc4pu101_210307.pdf).

<sup>116</sup> See section 7.5, United Kingdom Treasury - Standardisation of PF2 Contracts, *op. cit.*.

<sup>117</sup> The previous UK's standard form of 2007 provides for the same on maintenance and life cycle issues, however, there is less emphasis put on life cycle aspects. See, Standardisation of PFI Contracts, *op. cit.*.

<sup>118</sup> See section 7.16, United Kingdom Treasury - Standardisation of PF2 Contracts, *op. cit.*.

<sup>119</sup> The previous UK's standard form of 2007 provides for the same on continuous improvement and efficiency reviews, however, there is less emphasis put on such aspect. See, Standardisation of PFI Contracts, *op. cit.*.

A constant improvement of the services delivered during the contract life. This implies the following aspects to be taken into account:

- (a) cooperation with the contracting authority to identify opportunities for performance, efficiency and effectiveness improvement;
- (b) periodically, the contractor and the contracting authority carry out a contract efficiency review to ensure that the services and the infrastructure are providing a suitable and cost effective solution to the public sector;
- (c) the contractor submits a contract improvement report that identifies the activities undertaken to improve the effectiveness of the services and any opportunity for improvement through changes in services and/or behaviour or usage changes, by either party. This report overall includes:

- (i) a performance analysis against performance and availability standards to highlight areas that can be improved and steps to be taken by the private party to address performance issues. If the performance analysis shows a deteriorating performance, repeated or significant failures, the private party explains how these failures will be improved;
- (ii) an annual customer satisfaction survey; foreseeing action plans to address areas of dissatisfaction;
- (iii) a report on energy consumption identifying the effectiveness of the energy consumption initiatives taken, concentrating on areas where energy consumption can be further limited;
- (iv) a review of scheduled maintenance, in the form of a risk based maintenance analysis (compliant with PAS55 requirements or equivalent) highlighting areas where planned or reactive maintenance can be revised and opportunities for limiting scheduled or reactive maintenance costs;
- (iv) the private party's review of minor maintenance obligations to focus on areas where efficiency or effectiveness can be improved through changes to such provisions.

If the private party does not provide the improvement report or it does not provide it to a standard acceptable to the contracting authority, or the latter has reasonable grounds to question the accuracy of the analysis carried out, it may appoint an independent technical advisor to undertake an independent review and produce an independent contract improvement report. The costs of the independent technical advisor are borne by the contractor.<sup>120</sup>

Equality requirements.<sup>121</sup>

The private party and each contractor-related party comply with the Racial and Religious Hatred Act of 2006, the Civil Partnership Act of 2004, the Gender Recognition Act of 2004 and the Equality Act of 2010.<sup>122</sup>

Control of sub-contractors.<sup>123</sup>

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<sup>120</sup> See section 7.19, United Kingdom Treasury - Standardisation of PF2 Contracts, *op. cit.*.

<sup>121</sup> The previous UK's standard form of 2007 does not provide for equality requirements. See, Standardisation of PFI Contracts, *op. cit.*.

<sup>122</sup> See section 7.24, United Kingdom Treasury - Standardisation of PF2 Contracts, *op. cit.*.

<sup>123</sup> The previous UK's standard form of 2007 provides for the same on control of sub-contractors. See, Standardisation of PFI Contracts, *op. cit.*.

The contracting authority relies on the payment mechanism and its termination rights to address sub-standard performance. In addition, it can resort to a temporary increase of monitoring at the contractor's expense, requiring the provision of an acceptable plan showing how the under-performance will be dealt with.<sup>124</sup>

Bonus payments for early service commencement.<sup>125</sup>

The contracting authority accepts an early handover or service commencement if it provides value for money (e.g. there is a critical demand for the service or the early commencement financially benefits the public sector).

If the contracting authority keeps the original expiry date, the private party receives a bonus payment through the unitary charge paid with regard to the extra service period. If the contracting authority moves the expiry date forward, the public party may pay the unitary charge for the original length of period (there would be a bonus element because the payment is received earlier) or pay the private party a bonus payment equal to the additional amount that the economic operator would have received if the expiry date had not been moved. The contracting authority may alternatively simply opt for an agreed fixed amount of bonus payment.<sup>126</sup>

Lifecycle fund.<sup>127</sup>

The payment of the unitary charge includes amounts to cover the contractor's future maintenance costs. The contractor renews or replaces assets in accordance with a lifecycle schedule approved by the contracting authority. The risk of adequacy of these lifecycle arrangements is on the contractor. Maintenance is, thus, at the contractor's risk. The contractor builds up a lifecycle fund to anticipate future significant capital expenditure, for instance, by allocating to this fund a portion of the contracting authority's payments. Financiers may require to do so. Lenders may, in fact, specifically ask the private party to create a lifecycle fund in order to make budget available for future repairs, renewals or replacements for the maintenance of the public infrastructure and/or service delivered.

The contracting authority adequately protects maintenance requirements through payment and termination provisions. The contracting authority conducts a final survey and withholds the payment of the unitary charge if the assets do not meet the required maintenance standards. An independent review checks the adequacy of the lifecycle arrangements. A lifecycle funding report is prepared. If the contractor does not provide an acceptable life cycle funding report or the contracting authority questions the accuracy of the analysis, an independent technical advisor carries out an independent review and elaborates an independent lifecycle funding report.<sup>128</sup>

Incentivisation.<sup>129</sup>

The private party is required to achieve certain performance indicators. If these indicators are not met, cash deductions are applied. The latter increase in case of further delay. The contracting

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<sup>124</sup> See section 7.25, United Kingdom Treasury - Standardisation of PF2 Contracts, *op. cit.*.

<sup>125</sup> The previous UK's standard form of 2007 provides for the same on bonus payments for early service commencement. See, Standardisation of PFI Contracts *op. cit.*.

<sup>126</sup> See section 8.6, United Kingdom Treasury - Standardisation of PF2 Contracts, *op. cit.*.

<sup>127</sup> The previous UK's standard form of 2007 does not provide for a lifecycle fund. See, Standardisation of PFI Contracts, *op. cit.*.

<sup>128</sup> See section 9.2, United Kingdom Treasury - Standardisation of PF2 Contracts, *op. cit.*.

<sup>129</sup> The previous UK's standard form of 2007 provides for the same on incentivisation. See, Standardisation of PFI Contracts, *op. cit.*.

authority rewards performance in excess of the set targets through bonus payments or reward points (if it offers VfM).<sup>130</sup>

The payment mechanism.<sup>131</sup>

The main features of the payment mechanism are:

- no payments are made until service commencement;
- one single unitary charge is paid;
- the payment is linked to the level of the service. Payments are related to both availability and service quality;
- the unitary charge is not paid prior to the period to which it relates;
- the payment mechanism is modified in case of sub-standard performance. Deductions reflect the strictness of failure (e.g. no service leads to no payment; a minor failure causes a minor deduction);
- the payment mechanism incentivizes the contractor to remedy service failures;
- payments are verifiable.

Structuring the payment mechanism.<sup>132</sup>

Principles of the payment mechanism:

- there must be a clear relationship between the definition of availability and the performance measurement system. For example in a hospital project, cleanliness is an element of availability, but the lack of cleaning may also be a performance failure. In this case, it is a matter of degree. It may be appropriate to place cleanliness in both the availability definition and in the performance measurement system, provided that this is clear and that there is no double-counting;
- the payment mechanism directly leads to cash deductions in the case of failure (e.g. unavailability or poor performance);
- simplicity. 'Measure less, but measure well'. Moreover, the payment mechanism focuses on measuring outputs not on measuring inputs;
- for every project area there is an appropriate potential deduction.<sup>133</sup>

Availability requirements.<sup>134</sup>

Unavailability leads to a reduced payment by the contracting authority or, in certain circumstances, to a non-payment. The definition of availability specifies the conditions under which the service is considered available, it concentrates on the service's key functions and it is not limited to its

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<sup>130</sup> See section 11.5, United Kingdom Treasury - Standardisation of PF2 Contracts, *op. cit.*.

<sup>131</sup> The previous UK's standard form of 2007 provides for the same on payment mechanisms. See, Standardisation of PFI Contracts, *op. cit.*.

<sup>132</sup> The previous UK's standard form of 2007 provides for the same on the structuring of payment mechanisms. See, Standardisation of PFI Contracts *op. cit.*.

<sup>133</sup> See section 19.2, United Kingdom Treasury - Standardisation of PF2 Contracts, *op. cit.*.

<sup>134</sup> The previous UK's standard form of 2007 provides for the same on availability requirements. See, Standardisation of PFI Contracts, *op. cit.*.

physical aspects (e.g. the provision of a bed in a room). Thus, for instance, catering and delivery of meals may be included.

The contract specifies which areas are more important and allocates to them a higher weighting (e.g. greater deduction from the unitary charge in case of unavailability). The contract also specifies when unavailability begins. The contract provides for a rectification period - depending on the criticality of the area - within which the private party rectifies the issue without triggering the commencing of an unavailability period. If the contractor supplies the service by other means, availability payments continue in full. However, deductions are made to reflect performance standards. If the private party does not rectify the failure, the service is unavailable and availability deductions are made. The contract includes a mechanism that assesses when availability is restored (e.g. technology or a building management system). Maintenance is required to allow the private party to keep facilities at the set standards and meet the output specifications throughout the contract life.<sup>135</sup>

Performance requirements: failure to meet such requirements entails no or reduced payment or the implementation of other non-financial measures.<sup>136</sup>

The unitary charge paid to the private party varies depending on the quality of the performance of the service. Performance regimes cover every aspect of the service and normally go along with availability regimes. The contract sets out:

- the level of performance required;
- how the contracting authority monitors the contractor's performance against such level; and
- the consequences of a failure to meet such level.

To support innovation and optimise risk transfer, the contract specifies the required performance level through output requirements (e.g. the required service standards). The performance level focuses on the level of service that it is required. There is a clear link between the seriousness of the failure and the financial impact on the private party. If the performance fails below a certain level, other non-financial mechanisms may be implemented to encourage the private party to improve performance. For instance, a formal warning of termination for breach of the contract.<sup>137</sup> Through the payment mechanism, the contracting authority calibrates the financial consequences of service failures. This does not substitute claims for specific performances or injunctive remedies. Moreover, the contracting authority has an adequate termination right in terms of levels of unavailability or service failure.<sup>138</sup>

The contract defines what is an unacceptable level of performance and sets related thresholds. In addition, lenders have their own remedies.<sup>139</sup>

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<sup>135</sup> See section 19.5, United Kingdom Treasury - Standardisation of PF2 Contracts, *op. cit.*.

<sup>136</sup> The previous UK's standard form of 2007 provides for the same on performance requirements. However, it is less specific with regard to the case in which performance fails below a certain level and on the relevant mechanisms capable of encouraging the private party to improve performance. See, Standardisation of PFI Contracts, *op. cit.*.

<sup>137</sup> See section 19.6, United Kingdom Treasury - Standardisation of PF2 Contracts, *ibid.*.

<sup>138</sup> The previous UK's standard form of 2007 provides for the same on other remedies for poor performance. See, Standardisation of PFI Contracts, *op. cit.*.

<sup>139</sup> See section 19.12, United Kingdom Treasury - Standardisation of PF2 Contracts, *op. cit.*.

### Calibration.<sup>140</sup>

Calibration prevents the application of high levels of deductions if the overall performance is good.<sup>141</sup>

### Contract management.<sup>142</sup>

To ensure that the desired performance level is achieved, an effective contract management arrangement is in place. It includes, among others, the following aspects:

- an explanation of the payment mechanism to help the management by individuals who have not been involved in the original negotiation;
- a review mechanism to calibrate the payment mechanism;
- training sessions assisting third parties in understanding their monitoring role and elaboration of user's guides so that communications between the contracting authority/private party/third party are clearly set out.<sup>143</sup>

### Monitoring against the payment mechanism.<sup>144</sup>

The contracting authority monitors the contractor's performance against the payment mechanism so that the latter can operate effectively. Monitoring includes the collection and assessment of objective, relevant, quantifiable and agreed upon data.<sup>145</sup>

### Qualitative factors and user satisfaction.<sup>146</sup>

Objective and well-defined performance criteria are used. Regular customer satisfaction surveys - with deductions in case of low or falling score - are also used. Even though customer satisfaction surveys may be considered as biased and vulnerable because based on individuals' perceptions rather than on hard measurable facts, they are a useful means of monitoring performance.

In addition, the private party carries out a performance audit and has a remedial plan for cases of low user satisfaction (e.g. periodic user satisfaction surveys comparing the quality of the service against the quality of comparable services elsewhere).

Survey's results do not have a direct financial impact. Failure to carry out surveys may, however, trigger a penalty under the payment mechanism. Sanctions for poor user satisfaction may be:

- an immediate direct financial deduction (subject to a value for money evaluation);
- a remediation plan (also connected to deductions);
- a performance audit (at the private party's expenses);

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<sup>140</sup> The previous UK's standard form of 2007 provides for the same on calibration. See, *Standardisation of PFI Contracts, op. cit.*

<sup>141</sup> See section 19.7, United Kingdom Treasury - *Standardisation of PF2 Contracts, op. cit.*

<sup>142</sup> The previous UK's standard form of 2007 overall provides for the same on contract management. See, *Standardisation of PFI Contracts, op. cit.*

<sup>143</sup> See section 20.1, United Kingdom Treasury - *Standardisation of PF2 Contracts, op. cit.*

<sup>144</sup> The previous UK's standard form of 2007 provides for the same on monitoring against the payment mechanism. See, *Standardisation of PFI Contracts, op. cit.*

<sup>145</sup> See section 20.2, United Kingdom Treasury - *Standardisation of PF2 Contracts, op. cit.*

<sup>146</sup> The previous UK's standard form of 2007 provides for the same on qualitative factors and user satisfaction. See, *Standardisation of PFI Contracts, op. cit.*

- deductions linked to complaints or calls to a help-desk.<sup>147</sup>

### **2.2.3 Case n. 3. Glasgow Schools Project.**

#### **2.2.3.1 Introduction.**

In the 1990s, the 39 secondary schools of Glasgow City Council were in poor condition and in need of extensive refurbishment. The existing buildings lacked sufficient investment in buildings' maintenance and did not meet the technical demands of current and future ICT technologies. The schools were differently equipped and some of them did not even have networking arrangements or internet access. A long-term investment was, thus, envisaged to provide a strategic solution for extensive building works, refurbishment and ICT facilities.<sup>148</sup> Overall, the Council needed to provide an adequate and sustainable standard of school accommodation.

Faced with this challenge and willing to reach modern standards, the City Council decided to close 10 schools and strategically invest in the remaining 29 schools in order to provide high quality accommodation and a stimulating environment with first class ICT availabilities. However, the City Council did not have the funds to carry out this investment project. Therefore, in 1997, it carried out a feasibility study of a PFI education project for the modernisation of the Council's secondary school estate. Following the positive result of this study, in 1998, it published a notice inviting economic operators to present their bids. The City Council shortlisted four consortia.<sup>149</sup> The subsequent invitation to negotiate listed the Council's requirements and indicated the evaluation criteria. Each bidder offered a solution based on the Council's detailed output specification and tenders were compared with one another and against the PSC. Only one tender provided the best value and met all the Council's requirements, proving also to have elements of innovation and sustainability in terms - for instance - of reduction of energy consumption and high quality ICT delivery and management, which supported the Council's goal of improving teaching and learning standards and techniques.

In 1999, following a detailed evaluation, the Council identified this tender as the MEAT and the 3ED consortium as the preferred bidder for the provision of accommodation services for 30 years and ICT services for 12 years.<sup>150</sup> 3ED was invited to finalise its offer through extensive discussions, consultations and negotiations. Then, the economic operator and the Council signed the project agreement for the provision, operation and maintenance of 29 secondary schools and the design, commissioning, delivery, management and maintenance of ICT technologies. This PFI project is also known as Project 2002 because in 2002 all works<sup>151</sup> were completed. It is a £1.2 billion PFI scheme and the biggest PPP arrangement in the UK's education sector. Project 2002 created a stimulating and caring learning environment in all Glasgow's 29 secondary schools with a pupil population of 30,000. Among the main goals of the project there was, in fact, the creation of schools where students could achieve their full potential, developing basic core and general ICT<sup>152</sup>

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<sup>147</sup> See section 20.7, United Kingdom Treasury - Standardisation of PF2 Contracts, *op. cit.*.

<sup>148</sup> See Project 2002, Full Business Case, submitted by the Glasgow City Council, available at <http://www.gov.scot/resource/doc/923/0050881.pdf>.

<sup>149</sup> Jarvis PLC/ICL, Babcock & Brown/Research Machines, Balfour Beatty/WS Atkins and Miller/Mitel & Hewlett Packard (3ED), see <http://www.gov.scot/resource/doc/923/0050881.pdf>.

<sup>150</sup> The 3ED consortium consists of the Miller Group Ltd, Amey Ventures Ltd. and Halifax Projects Investments Ltd..

<sup>151</sup> With the exception of one school. See below, paragraph 2.2.3.3.

<sup>152</sup> ICT stands for Information Communications Technology.

skills with the help of new technology. The below Figure shows how this PFI scheme was structured.

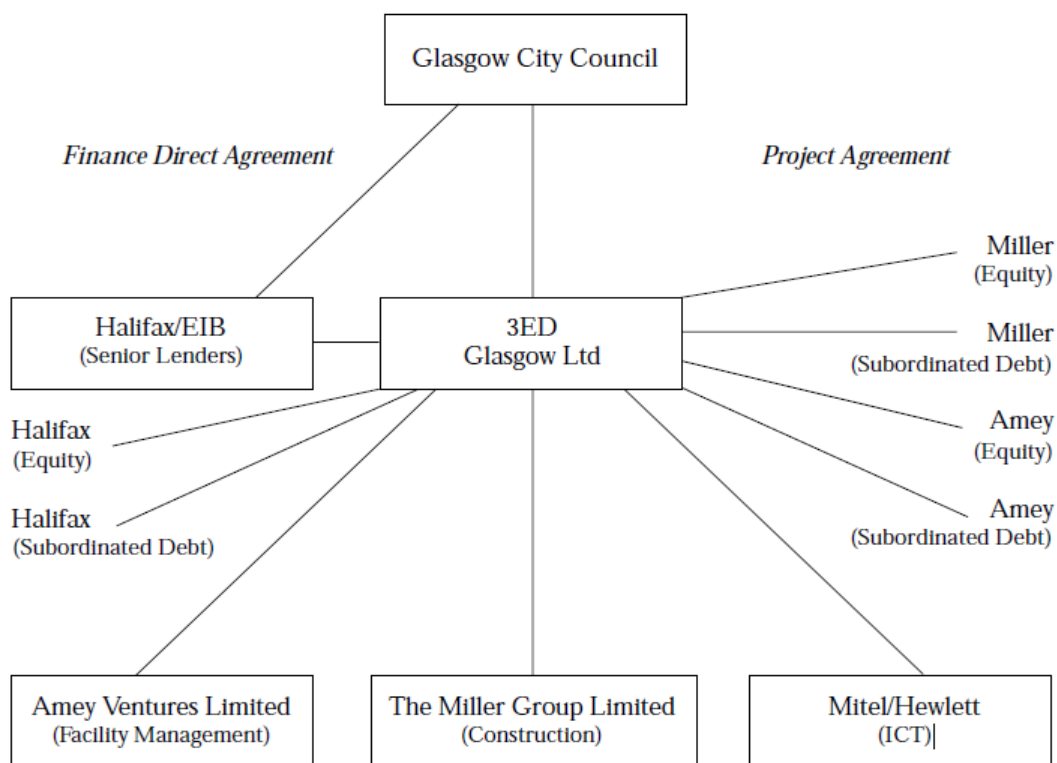


Fig. 6 Project 2002 PFI structure.  
Source: Project 2002, Full Business Case, 51.

During the contract life, the City Council pays a monthly unitary fee to 3ED for the delivery of the accommodation and ICT services. The 3ED consortium has borne the responsibility of the funding, construction, renovation, management and (internal and external) maintenance of Glasgow's 29 schools. Moreover, it provides several different activities and services, such as sanitation, cleaning, heating, security and ICT service management. Specifically, Miller Ltd and Amey Ltd were responsible for the design and building of the schools, while Halifax Ltd and the European Investment Bank were responsible of the funding of the project, which was carried out through a project finance structure.

### 2.2.3.2 Socio-environmental benefits generated by the Glasgow Schools Project.

Through this PFI project, numerous socio-environmental benefits were generated. These will be described in the following paragraphs. However, they can be summarised as follows.

Accelerated Delivery Benefits	Enhanced Delivery Benefits	Wider socio-environmental benefits
- quick and on time project completion	- construction, extension and refurbishment of buildings according to high and modern quality	- improved learning and teaching environments - raise of educational standards

	standards	
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Table 12  
Socio-environmental benefits generated by the Glasgow Schools Project.

### 2.2.3.3 Accelerated Delivery.

The Glasgow Schools Project generated accelerated delivery benefits. In fact, in only two years (from the year 2000 to the year 2002), the private party carried out an on time and quick construction, extension and refurbishment of 29 schools, with the exception of only one.<sup>153</sup> Every school was built, renovated or extended in accordance with modern and high quality standards. More specifically, 6 schools were completed on schedule (in 2002), 18 were completed before the planned completion date (in 2001) and just 4 were completed with few months of delay, but anyway within the end of 2002.

### 2.2.3.4 Enhanced Delivery.

The Glasgow Schools Project also generated enhanced delivery benefits. The PFI contract, in fact, allowed an effective allocation of risks, which enabled improvements in terms of enhanced resources (e.g. ICT) and school accommodations. One of the remarkable features of this PFI project is that it delivered a mixture of new builds, 17 refurbishments, 7 extensions, infrastructure managements, life-cycle maintenance and ICT services under one integrated contractual arrangement.

The 3ED consortium adopted an overall innovative approach in the provision of this PFI project. The 29 Glasgow's schools, for instance, enjoy a 24/7 facility management service, an on-going maintenance service, upgraded ICT equipment and a 24-hour helpdesk service accessible by all schools. Moreover, regular consultations with stakeholders - such as school boards and head teachers - helped the development of a better design solution and a wider project acceptance.<sup>154</sup> Stakeholders provided educational input and participated to regular meetings. The agreed collaborative structure is allowing issues to be effectively dealt with during the contract performance. In this respect, Project 2002 implemented a high-level problem solving system as well as performance reviews and reports.

The construction phase was challenging because buildings were occupied at all times. Nonetheless, during works, disruption of schools' activities were minimised and all schools experienced smooth running. As of today, the use of energy efficient construction material is limiting energy requirements across the estate. Furthermore, Glasgow's schools were equipped with scanners, whiteboards, digital cameras and free internet. Practical classrooms and staff areas were designed and built to raise levels of teaching environments. The PFI project aimed, in fact, at benefitting teachers by including them more effectively into the learning process. Teachers have, for instance, the possibility to use ICT technologies for the preparation of learning and evaluation materials and access to the most important on-line learning resources. This kind of solutions aim at

<sup>153</sup> The Council and 3ED formally agreed to complete all schools within 2002 with the only exception of the St. Thomas Aquinas school. The latter was completed in 2003.

<sup>154</sup> Design Strategies - Design for Learning: 21<sup>st</sup> Century Schools, Glasgow, The Lighthouse, Scotland's Centre for Architecture, Design and the City, 2004, see <http://www.gov.scot/resource/doc/920/0049548.pdf>.

supporting the development of their skills and confidence in the use of both traditional and new teaching techniques. The adopted ICT services are flexible - capable of accommodating future changes - and enhance the quality of the schools' working and learning environments.

#### **2.2.3.5 Wider socio-environmental gains.**

The Glasgow Schools project also generated wider socio-environmental benefits. Project 2002, in fact, delivered high-quality and sustainable schools with external sport facilities, improved social spaces, conference rooms, drama studios and access to world class ICT technology. It created an efficient and productive work context aiming at improving overall educational standards as well as individual potentials.<sup>155</sup> Project 2002 offered a safe and attractive learning solution, which motivates students and helps teachers and the Council in their efforts to improve students' outcomes in all secondary schools. Head teachers, staff and students are following a fresh and innovative approach to teaching and learning methods with the support of excellent ICT services. In this respect, a high level of connectivity was also established. Every school is, in fact, networked and it is part of a wider City's network. Moreover, standards are rising because learning and teaching activities are carried out in well-maintained and functioning schools.

Furthermore, Project 2002 spread a shared sense of optimism among head teachers, staff, students and the wider local community. It became a flagship programme for the Treasury Taskforce receiving its support throughout its phases.<sup>156</sup>

#### **2.2.3.6 Tender's strategies.**

This paragraph outlines the strategies used in the tender procedure to integrate sustainable development considerations into the planning and structure of this PFI project.

Glasgow City Council carried out a highly competitive tendering procedure and detailed what it expected from tenders in the invitation to tender. The Council specifically required innovative solutions and, *inter alia*, (i) the design and implementation of a comprehensive programme of life cycle maintenance covering scheduled and reactive maintenance activities, (ii) the creation of libraries, study areas and classrooms with computers as research tools and means of enrichment of the learning and teaching process and (iii) the provision of efficient ICT systems within schools. ICT systems had to be structured in order to meet the following goals:

- improve the educational attainment of secondary students through effective use of ICT in line with national targets,
- increase students' attendance through effective ICT monitoring,
- guarantee that students meet the evolving targets of ICT core skills,
- use ICT to support life-long learning,
- limit teachers' administrative burden through an effective ICT system.

3ED's solution was selected because of its overall quality and ability to meet the Council's technical requirements. The evaluation of tenders was based on technical, facility management,

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<sup>155</sup> The World Bank, *The Role and Impact of Public-Private Partnerships in Education*, 2009, available at [http://www.ungei.org/resources/files/Role\\_Impact\\_PPP\\_Education.pdf](http://www.ungei.org/resources/files/Role_Impact_PPP_Education.pdf).

<sup>156</sup> Section 3.4, Project 2002, Full Business Case, submitted by the Glasgow City Council, 19, *op. cit.*.

education, ICT and financial criteria. The relevant assessment outcomes are relevant in terms of sustainability implementation. The technical evaluation showed, in fact, that the 3ED's solution met the Council's requirements especially because of the higher investment in a life-cycle programme. The ICT evaluation proved that the 3ED's solution met in the best way the Council's requirements in terms of service quality, staff improvement and training programme. Moreover, the financial evaluation concluded that 3ED's tender was the MEAT.

Additionally, the PSC assumed that under other procurement options, even with the same funding availability and the same time schedule, the PFI scheme would have anyway provided the best value to the Council. This was mainly because of the contractually efficient risk transfer mechanism provided by the PFI agreement.<sup>157</sup>

### **2.2.3.7 Contractual strategies.**

This paragraph will offer an overview of the contractual terms and conditions that allowed the integration of sustainability considerations into the structure of this PFI project.

The key agreement's strategies consisted of an efficient risk transfer and payment mechanism. The latter foresees that the Council pays 3ED a monthly unitary charge on an availability and performance basis. The PFI contract, in fact, provides for specific payment deductions to be applied whenever performance standards are not met. In other words, the construction, refurbishment, management and maintenance of Glasgow's schools have to fully comply with the Council's output specifications and, in case of poor or inadequate performance, 3ED bears severe financial penalties, being also required to solve any potential problem at its own expense. Additionally, the project agreement provides that the Council may terminate the contract if, *inter alia*, deductions for under-performance reach a certain agreed upon level. The Council also incentivised early school handovers through the provision of bonus payments. In case schools' availability certificates were not issued by the set early date, Council's payments were reduced to reflect the number of availability certificates actually issued. Furthermore, the Council and 3ED could propose changes to the contract to accommodate future needs thanks to a specific contractual mechanism that specifies how costs will be allocated. Moreover, the Council has the right to monitor the overall performance of the private operator, especially its compliance with the set quality assurance standards. Accordingly, 3ED is required to keep monthly records fully accessible to the Council.

As anticipated, the City Council disclosed the PFI project agreement. However, it redacted several important clauses because their content was held exempted from a request under the Freedom of Information Act submitted to access such a document. Specifically, the City Council redacted clauses concerning the payment mechanism because their disclosure would have been prejudicial for the commercial interests of the Council's PFI contractor. According to the Council, the payment mechanism, in fact, provides for sensitive pricing policies that could not be disclosed. Therefore, the full content of important terms and conditions allowing the implementation of sustainability considerations into this PFI scheme could not be studied. Nonetheless, such clauses were identified through the overall study of the PFI agreement structure, its schedule and the full business case provided by Glasgow City Council. Their content is highlighted below.

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<sup>157</sup> Section 2.4, Project 2002, Full Business Case, submitted by the Glasgow City Council, 19, *op. cit.*.

Articles 3.2. and 5.6. support the generation of enhanced delivery benefits. In order to promote sustainable development concerns, the contract sets out the required performance levels. Thus, the required service standards that must be guaranteed by the private contractor. These are set also in terms of sustainability and quality considerations. In PFI arrangements, thanks to the availability of extra budgetary funds, the contractor can be required and can actually achieve high sustainable performance standards by allocating high funds in the implementation of sustainable and/or innovative solutions. Moreover, in PFIs, performance standards and related risks are borne by the private contractor, which is normally better capable of handling them. In addition to extra budget concerns, in PFIs, private expertise and skills for sustainable performances can be applied in every project's phase, thereby supporting the generation of enhanced delivery benefits.

Articles 11, 13, 25 and Part 11 of the contracts' Schedule further promote the generation of enhanced delivery benefits. Article 11, by stating that the public party will verify that works meet the availability criteria, reinforces the delivery of a project that meets the set conditions under which the service is considered available. These concentrate on the service's key functions and embed social and environmental sustainability and quality considerations. Article 13 and Part 11 of the contract's Schedule, by specifying that the public contractor will ensure that works are carried out in accordance with the set requirements and that it will monitor the service performance against the set target levels, enhance the provision of a service designed also upon quality and sustainable standards. In PFIs, the monitoring system is very important. Monitoring and verifications take place not only when works are completed, but also periodically during the entire contract life, which is normally of 20-30 years. Thus, if the monitoring system effectively works, a sustainable public service or infrastructure can be delivered over a long period of time, thereby generating wide socio-environmental benefits. Article 25, by stating that the public party will terminate the contract in the case of breach by the private contractor of provisions relating to the service delivery, incentivises the private party to comply with such contractual requirements delivering an overall sustainable project.

Section 11 specifies the availability standards that have to be met by the private contractor. These also include social and environmental considerations. Among those used in this agreement, the following may be mentioned:

- general security services,
- temperature requirements,
- lighting requirements,
- statutory health and safety compliance by the project,
- availability of a helpdesk facility 24 hours.

Along the same lines, Articles 5.17 and 9.5 promote the generation of enhanced delivery benefits as they require the private contractor to maintain the service at the set performance levels, which as mentioned are specified also in terms of quality and sustainable considerations. Moreover, the typical long duration of PFI arrangements increases the generation over time of enhanced delivery benefits.

Section 3C of the contract's Schedule represents a typical feature of PFI contracts. Section 3C supports the generation of enhanced delivery benefits by financially incentivising the private party to deliver an overall sustainable project in accordance with the set requirements. The contractor is incentivised to do so in order to avoid financial deductions - for cases of unavailability or under-performance - on the monthly payments made by the public party.

Furthermore, Article 3.3 supports the generation of wide social benefits by promoting the delivery of a project that takes into account also social value concerns.

Finally, Section 3B of the contract's Schedule supports the generation of accelerated delivery benefits. The contract incentivises the delivery of the project according to the planned schedule by foreseeing bonus payments in the case of on-time delivery and penalties in case of unavailability of the infrastructure on the set date. In PFI arrangements, the private contractor is highly motivated to deliver the project on-time as it needs to recoup the initial - and normally high - investments made.

### **3 The Netherlands.**

#### **3.1 Sustainable development considerations: policies and national law.**

##### **3.1.1 Policy.**

In 2010, the Dutch House of Commons decided that all public authorities had to include green criteria in every tender, hence, also in those leading to PPS awards. Moreover, since 2015, the Dutch public sector is required to implement 100% sustainable procurement.<sup>158</sup> The NL, in fact, aims at obtaining a 20% reduction in CO<sub>2</sub> emissions by 2020, compared to 1999 levels, and targets 14% renewable energy production by 2020, compared to 2% in 2010. The goal of green public procurement entails - also in the NL - using procurement processes to challenge and encourage economic operators to provide added value through the delivery of sustainable working practices, green materials, energy efficiency methods and reduced carbon emissions. Within this policy agenda, the *Rijkswaterstaat* (hereinafter RWS) is playing a key role. RWS is the Department of Public Works within the Dutch Ministry of Infrastructure and Environment with an annual budget of approximately EURO 3.5 billion. RWS is the biggest investor in infrastructure projects throughout the country, being the Directorate General for public works and water management and the executive branch of the Ministry of Infrastructure and Environment.<sup>159</sup> RWS specifically aims at creating added value in the so-called p-p-p triangle, which embeds the concept of sustainable development.

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<sup>158</sup> *Rijkswaterstaat*, GPP In practice, Using LCA and CO<sub>2</sub> performance to assess bidders, Issue n. 36, November 2013, available at

[http://ec.europa.eu/environment/gpp/pdf/news\\_alert/Issue36\\_Case\\_Study78\\_Rijkswaterstaat.pdf](http://ec.europa.eu/environment/gpp/pdf/news_alert/Issue36_Case_Study78_Rijkswaterstaat.pdf).

<sup>159</sup> RWS manages the main waterways, 3,000 km of riverbanks, 150 locks and 17 weirs; it manages the main motorways, more than 3,100 km of highways, 15 tunnels, several bridges and flyovers; it manages water systems, more than 63,000 km<sup>2</sup> water including the North Sea and coastal areas.

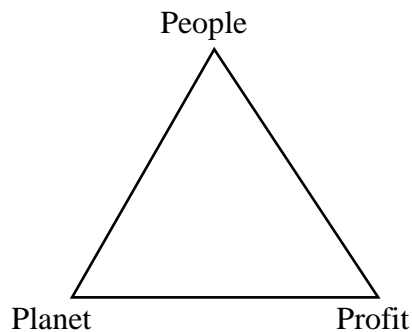


Fig. 7  
The p-p-p triangle.

Following the Green Deal partnership, RWS closely collaborates with stakeholders to make - especially the civil engineering sector - more sustainable.<sup>160</sup> Moreover, RWS works to improve sustainability in infrastructure projects by using five tools: the *Omgevingswijzer*, namely the context appraiser, the DuboCalc software, the CO<sub>2</sub> Performance Ladder and tender procedures based on functional requirements and the MEAT criterion. The *Omgevingswijzer* was created to map the degree of projects' sustainability and consists of twelve sustainability indicators. It is a tool intended to stimulate awareness and debate on sustainability issues in a structured way. The context appraiser is freely available on-line and provides insights on ecological, social and economic considerations, as well as on the p-p-p triangle of planet, people and profit.<sup>161</sup> The *Omgevingswijzer* can be used to identify potential opportunities for socio-environmental sustainable investment programs, either before the launching of a project or during its development. It provides a solid basis for contracting authorities and stakeholders to discuss sustainability opportunities and related risks. An effective communication is, in fact, believed to be the basis of a greater cohesion, which in turn opens the way to innovative solutions and agreements on the responsibilities that each party has to bear. Synergies are perceived as a crucial element for the integration of socio-environmental concerns in the different phases of a development project. The *Omgevingswijzer* allows the benefits of such synergies to emerge.<sup>162</sup> This tool consists also of a questionnaire on twelve sustainability areas that can be filled in on-line, printed and saved for future record.<sup>163</sup> By filling such a questionnaire, sustainable development knowledge is shared and stimulating constructive discussions on the relevant outcomes are promoted.<sup>164</sup>

<sup>160</sup> Improved sustainable and innovative solutions, increased energy savings and achievements with a lower budget. These are some of the goals of the Green Deal, *Grond-Weg-Waterbouw*, which was signed in Utrecht on June 10, 2013, by the Ministry of Infrastructure and the Environment and the Department of Public Works and Water Management (*Rijkswaterstaat*), the Ministry of Economic Affairs, the Ministry of Defence, ProRail and 17 other parties. This Green Deal facilitates accelerated transition towards a sustainable railway engineering and civil engineering sector. The core of *Aanpak Duurzaam GWW* (Sustainability Approach for Civil Engineering) is energy savings, quality of life and restriction of supplies and raw materials in projects at the earliest stage possible. It is a joint initiative of public bodies, contractors and professional associations.

<sup>161</sup> The *Omgevingswijzer* is part of the Sustainable Infrastructure Project, *the Aanpak Duurzaam GWW*.

<sup>162</sup> The effects of such synergy are visible in the so-called Results Wheel. The *Omgevingswijzer* can be found at [omgevingswijzer.org](http://omgevingswijzer.org).

<sup>163</sup> The concerned areas are settlement conditions for the population and businesses, investment, accessibility, health and well-being, social relevance, spatial quality, land use, ecology and biodiversity, energy materials, soil and water.

<sup>164</sup> Answers to the questionnaire are saved for future reference, see [www.rws.nl/omgevingswijzer](http://www.rws.nl/omgevingswijzer).

In Dutch tender procedures, the key tools to pursue socio-environmental sustainability are functional specifications, the MEAT criterion and the monetization of environmental impacts.<sup>165</sup> Contracting authorities often provide bidders with a document containing the indication of functional specifications, the description of the quality aspects that will be evaluated, the assessment criteria used and the calculation method that allows their monetization. RWS uses functional specifications - which include also maximum environmental impact thresholds - for all infrastructure projects and bidders are required to comply with such requirements in the delivery of a project. Functional or performance-based specifications are used to enable the private market to provide innovative and effective solutions.

Bidders submit their offers describing their solution, the bidding price and their commitments in terms of the project's quality. The contracting authority assesses tenders and carries out a monetization of the proposed project-quality. A comparison between the bidding prices minus the monetized quality value of each project is then carried out. The MEAT is identified with the tender that guarantees an energy-efficient working process and a final product with the lowest environmental impact. In other words, the MEAT criterion entails pricing the quality of the working processes and environmental impacts. Two specifically tailored tools are used to do so, the DuboCalc software and the CO<sub>2</sub> Performance Ladder.<sup>166</sup> These tools assess and monetize the overall environmental quality of a tender. They were developed to enhance bidders' commitments to reduce carbon emissions and assess the life-cycle environmental impacts of a delivered infrastructure. DuboCalc and the CO<sub>2</sub> Performance Ladder aim at stimulating and exploiting the market's innovative and creative skills in a more effective way allowing economic operators to work in a targeted manner towards higher quality and innovative solutions.

RWS selects the MEAT by looking at a combination of price and quality in order to identify the tender that offers the best VfM.<sup>167</sup> Quality aspects include design, project management capabilities, risk management and sustainability.

	ENVIRONMENTAL QUALITY OF	MEASUREMENT TOOL
CO <sub>2</sub> emissions →	<u>Working processes</u>	CO <sub>2</sub> Performance Ladder
Environmental impact →	<u>The final product</u>	DuboCalc

Fig. 8  
The monetization of environmental impacts.

<sup>165</sup> See [http://ec.europa.eu/environment/gpp/pdf/news\\_alert/Issue36\\_Case\\_Study78\\_Rijkswaterstaat.pdf](http://ec.europa.eu/environment/gpp/pdf/news_alert/Issue36_Case_Study78_Rijkswaterstaat.pdf).

<sup>166</sup> *Rijkswaterstaat*, Sustainable procurement using DuboCalc and the CO<sub>2</sub> performance ladder, 2015, available at [http://www.gpp2020.eu/fileadmin/files/Training\\_materials/Training\\_reports\\_photos\\_etc/Sustainable-procurement-using-DuboCalc-and-the-CO2-performance-ladder\\_lr....pdf](http://www.gpp2020.eu/fileadmin/files/Training_materials/Training_reports_photos_etc/Sustainable-procurement-using-DuboCalc-and-the-CO2-performance-ladder_lr....pdf).

<sup>167</sup> OECD, *Public Governance Reviews Effective Delivery of Large Infrastructure Projects* (OECD, 2015), 77.

The above Figure pictures the two different tools used to monetise the overall environmental impacts of an infrastructure project. The first tool is the CO<sub>2</sub> Performance Ladder, which focuses on working processes and it is used to assess the efforts of bidders in reducing CO<sub>2</sub> emissions when - for instance - building infrastructure.<sup>168</sup> Public contracts are, in fact, awarded to tenderers that are capable of organizing their working processes in an effective way. Tenderers are asked to choose a certain level of ambition of CO<sub>2</sub> emissions, one between the five existing rungs, being 1 the lowest and 5 the highest. Each level entails 1% of fictional reduction on the bidding price. The CO<sub>2</sub> Performance Ladder is a self-certification system. The more effort bidders put in the reduction of CO<sub>2</sub> emissions, the higher on the ladder they place themselves, thereby obtaining an equivalent fictional discount on the bidding price, which in turn becomes more competitive. Therefore, the higher a tender is on the ladder, the higher discount it achieves, meaning a greater chance to win the bid. Once the contract is awarded, the level indicated on the ladder by the winning tenderer becomes a contractual performance requirement. The economic operator must demonstrate the achievement of that contractual performance level by obtaining a CO<sub>2</sub> awareness certificate, which is issued by qualified authorities and accordingly approved. Such a certificate is required one year after the contract award in order to demonstrate the achievement of the indicated sustainable target.

The second tool is DuboCalc. It is a freely available software developed by RWS and used to assess and monetise environmental impacts of a product, infrastructure or design through a life-cycle analysis.<sup>169</sup> The software calculates life-cycle environmental impacts in eleven areas by using a Life Cycle Assessment (hereinafter LCA) database.<sup>170</sup> DuboCalc converts such impacts into an Environmental Cost Indicator (hereinafter ECI) for each proposed design or solution. The ECI of the winning tender becomes a contractual obligation. The ECI value of the final product is controlled only upon completion of the project. Therefore, bidders calculate themselves the sustainability of their tender by inserting their proposed solution or design into the DuboCalc software. The latter calculates the total environmental impacts of a final product, from its initial stage - sourcing of raw materials - to its disposal, end-of life or demolition.<sup>171</sup> The outcome of this calculation is expressed with a number, the mentioned ECI value. The lower the ECI value is, the less environmental impacts there are and the better the tender scores in the MEAT assessment.<sup>172</sup>

Among the environmental parameters used by DuboCalc there are climate change, ozone layer depletion, human, fresh water, marine and terrestrial toxicity, photochemical oxidation, abiotic depletion, depletion of fossil energy carriers, eutrophication and acidification.<sup>173</sup> In fact, a wide range of environmental impacts may, for instance, be associated with road constructions and other infrastructure projects such as buildings, tunnels, and bridges. The extraction and processing of raw

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<sup>168</sup> OECD, Country Case, Green Public Procurement in the Netherlands, Public Procurement Toolbox, 2016, available at <https://www.oecd.org/governance/procurement/toolbox/search/green-public-procurement-netherlands.pdf>.

<sup>169</sup> Eco-innovation achieved through advanced policy and procurement mechanisms, Innovation seeds, available at <http://www.innovationseeds.eu/Policy-Library/Core-Articles/Eco-Innovation-Achieved-Through-Advanced-Policy-And-Procurement-Mechanisms.kl>.

<sup>170</sup> For further details on the functioning of the DuboCalc see A Schuurmans, Arno Fluitman, P Spiertz, J Broers, G Schweitzer, J Duijsens, DuboCalc: LCA tool for design of constructions in the ground, road and waterworks sector, available at <http://www.irbnet.de/daten/iconda/CIB2921.pdf>.

<sup>171</sup> On the tools elaborated by RWS, see also, The World Bank, Procurement Policy Review, Feedback Summary, 2012, available at

<https://consultations.worldbank.org/Data/hub/files/meetings/HagueFeedbackSummary.pdf>.

<sup>172</sup> OECD, *Effective Delivery of Large Infrastructure Projects* (OECD, 2015), 77.

<sup>173</sup> On the DuboCal tool see, *inter alia*, Rijkswaterstaat, GPP 2020, Procurement for a low carbon economy, Construction of a low-carbon motorway exit, available at [ec.europa.eu/environment/gpp/pdf/news\\_alert/Issue36\\_Case\\_Study78\\_Rijkswaterstaat.pdf](http://ec.europa.eu/environment/gpp/pdf/news_alert/Issue36_Case_Study78_Rijkswaterstaat.pdf).

materials - e.g. through mining operations - may cause the physical disruption of land and of watercourses as well as pollution of land, water and air. The manufacturing and processing of materials such as concrete, cement, asphalt and bitumen entail high-energy requirements, especially if they are needed in large quantities. The transport of materials to and from projects' sites causes local air pollution and greenhouse gas emissions. The construction phase itself may also cause habitat disruption and loss of biodiversity. The completion, for instance, of a road project may generate environmental impacts such as damage of rainwater run-offs arising from abrasion, fuels, lubricants and road surface treatment.

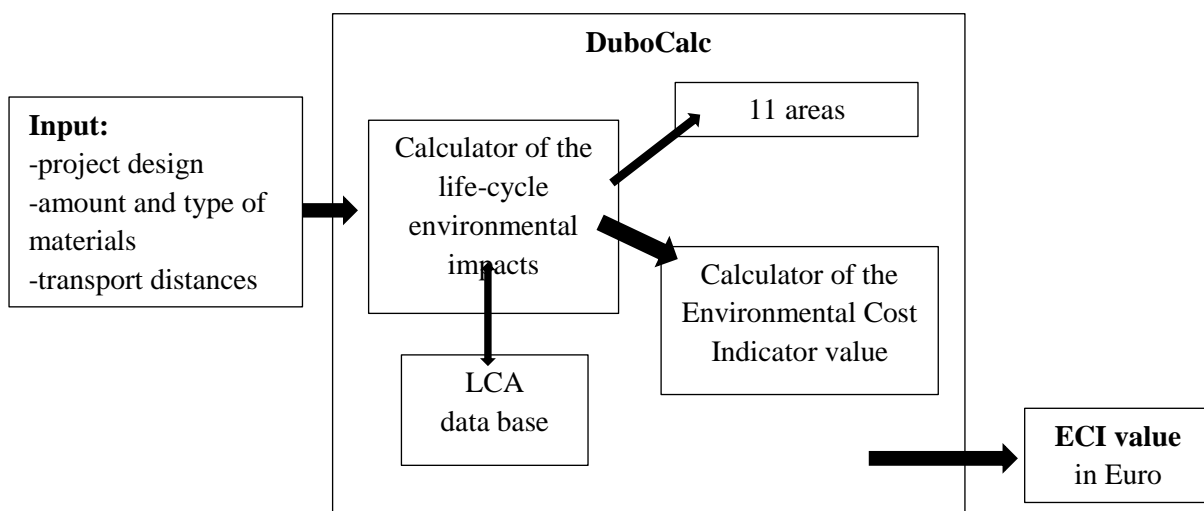


Fig. 9  
The functioning of the DuboCalc tool.

As the above Figure shows, the DuboCalc tool calculates, for instance, the environmental impact of the materials used to deliver a certain project over its life-time. Eleven environmental impacts - including CO<sub>2</sub> emissions - are evaluated and translated into a number, the ECI.<sup>174</sup> The lower the ECI, the better is the environmental quality of the project and the higher is the fictional discount on the bidding price. The DuboCalc tool is used only when there are visible quality differences among tenders. This because DuboCalc entails a highly sensitive analysis, which is not carried out if it is not considered essential. In addition, RWS normally invests in projects with a value of more than EURO 35 million. For smaller projects, DuboCalc is not always used, especially when sustainability aspects are easily assessable.

Anyway, as seen, tenderers expressing their interest in bidding are provided with a document containing the indication of functional specifications, which include the maximum ECI value, and details on how to use the DuboCalc assessment tool. Tenderers submit their bids by specifying the solution proposed as optimized by the DuboCalc tool, the bidding price, the CO<sub>2</sub> Performance ladder stage and the ECI value calculated through DuboCalc.<sup>175</sup> The public authority then selects

<sup>174</sup> On DuboCalc features see also OECD, *Policy Guidance on Resource Efficiency* (OECD, 2016), 62, 63.

<sup>175</sup> 'CO<sub>2</sub> emission' represents one of the eleven parameters of the DuboCalc calculation that contribute to the ECI value. The 'CO<sub>2</sub> emission' is the amount of emissions emitted as a result of: building materials involved in the production, their transport, demolition and re-use phase, together with the working process. The amount of CO<sub>2</sub> emissions reduced can be easily calculated by deducting the ECI value of the proposed design from the bidding price. The ECI value is directly proportional to the reduction in energy use and CO<sub>2</sub> emissions.

the winning bidder by comparing bidding prices minus the monetized ECI value. The Figure below shows how the winning tender is selected.

	Bidder n.1	Bidder n. 2	Bidder n. 3	
Bidding price	25	30	40	
ECI value	0	10	15	
<hr/>				
Bidding price minus ECI value	25	<b>20</b>	25	Fictional price
		↑ Best bid, winning contractor		

Fig. 10  
The selection of the best bid.

Both the CO<sub>2</sub> Performance Ladder stage and the ECI value are deducted from the bidding price and the bid with the lowest overall fictional price - or lowest adjusted price - is awarded the contract. By monetising efforts made to reduce environmental externalities and deducting them from the bidding price, tenderers with the best quality solution have a higher chance of obtaining the contract award. Therefore, Dutch tender procedures, through the combined use of the CO<sub>2</sub> Performance Ladder and DuboCalc tool allow the promotion of sustainability concerns. Reduction of CO<sub>2</sub> emissions is achieved through actions that the private party undertakes, while the overall environmental quality can be improved thanks to the DuboCalc calculation. The CO<sub>2</sub> Performance Ladder requires efforts by the economic operator once the contract is awarded. Tenderers' CO<sub>2</sub> commitments become, in fact, contractual obligations. DuboCalc, instead, requires *ex ante* precise input specifications. Compliance, in both cases, is verified *ex post*. Compliance with the CO<sub>2</sub> Performance Ladder stage is verified through an *ad hoc* certification provided by the private contractor during the execution of the contract, while the ECI value is checked once the infrastructure and/or service is delivered.<sup>176</sup> RWS' experience is showing that tender procedures structured in this way support bidders in the submission of cost efficient and environmental-friendly project plans, with energy-efficient working processes.<sup>177</sup> As of today, a considerable number of Dutch private contractors is positively welcoming this approach and the public sector is justifying it as its benefits outweigh costs.<sup>178</sup> The

<sup>176</sup> The private party must demonstrate the achievement of the ECI value during the execution of the contract. If the actual quality of the infrastructure or service delivered does not comply with the ECI value then a sanction of 1.5 times the calculated price of the quality value follows (e.g. the contracting authority will not pay 1.5 times the calculated quality price to the private contractor).

<sup>177</sup> Examples of green design or work processes proposed and then applied in awarded contracts are: recycled and reused materials, long life and low temperature asphalt, cement replacement with concrete, design of pillars and of bridges for pedestrians and cyclists, solar powered lighting and green electricity, low emission heavy duty vehicles and machinery, minimized transport of materials and fuel savings from driving courses of trucks and dumper drivers.

<sup>178</sup> For instance, the reduction of carbon emissions outweighs tendering costs.

tools mentioned are, in fact, considered as eye openers for better design solutions, not only in terms of environmental considerations, but also in terms of cost reductions.

Overall, sustainability objectives are, however, mostly encouraged through traditional procurements rather than specifically under PPS schemes. This because of the general understanding and consideration of PPS arrangements as beneficial means only from an economic point of view. Anyway, in order to pursue sustainable development goals through public contracts in general, the Dutch Government identified focus areas, which include energy, climate, materials, water, soil, quality of life (e.g. disruption, air and noise), environment, biodiversity, space, health and welfare (e.g. working conditions and animal welfare). It also elaborated environmental criteria and set minimum requirements for groups of products - with high environmental impacts - commonly purchased by Government authorities.<sup>179</sup> Environmental criteria were developed along the lines of the EU GPP criteria and are annually revised and updated. Furthermore, in order to support contracting authorities who wish to include sustainability objectives in their public purchasing, the PIANOo<sup>180</sup> network elaborated a check-list for sustainable public procurement.<sup>181</sup> The latter assumes that even though sustainability considerations vary from project to project, there are certain aspects that should always be considered. These range from the need to incorporate all costs throughout the product's lifetime, the inclusion of contractual performance incentives, or the monitoring of the contract's performance. This check-list identifies such aspects and guides contracting authorities through them. In 2015, the Government also adopted a procurement Action Plan, which provides public purchasers with clear criteria and tools for the implementation of sustainable procurement.<sup>182</sup> Among such tools the following can be mentioned: circular procurement, bio-based procurement, implementation of international social conditions and innovation in public contracts. This Action Plan was, in fact, specifically drafted upon the idea that public procurement must take into account the effects of the purchased services and/or works on both the society and the environment.<sup>183</sup>

### 3.1.2 Law.

The relevant Dutch legal framework is represented by the newly enacted Procurement Act (hereinafter DPA), which implemented - along with the 2016 Procurement Decision<sup>184</sup> - the 2014 EU public procurement Directives. The DPA entered into force on July 1, 2016,<sup>185</sup> and amended the *Aanbestedingswet* 2012 - in force since April 1, 2013 - which implemented the 2004 EU public procurement Directives and provided for a general public procurement regime.

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<sup>179</sup> The environmental criteria for sustainable public procurement are available at <https://www.pianoo.nl/public-procurement-in-the-netherlands/sustainable-public-procurement-spp/environmental-criteria-for-sustainable-public>.

<sup>180</sup> PIANOo is a tendering expertise centre of the Dutch government. Details on its functions are available at <https://www.pianoo.nl/public-procurement-in-the-netherlands/about-pianoo>.

<sup>181</sup> The check-list is available in English at <https://www.pianoo.nl/public-procurement-in-the-netherlands/sustainable-public-procurement-spp/spp-in-the-procurement-process/check-list-for>.

<sup>182</sup> The Action Plan for Responsible and Sustainable Procurement by governments 2015-2020, available at <https://www.pianoo.nl/document/11858/action-plan-for-responsible-and-sustainable-procurement-by-governments-2015-2020>. This plan is in line with the Government's sustainability objectives set out in the Energy Agreement for Sustainable Growth, the Local Climate Agenda and the 'From Refuse to Raw Material' programme.

<sup>183</sup> For further details see <https://www.pianoo.nl/document/11858/action-plan-for-responsible-and-sustainable-procurement-by-governments-2015-2020>.

<sup>184</sup> See <http://wetten.overheid.nl/BWBR0032919/2016-07-01>.

<sup>185</sup> See <http://wetten.overheid.nl/BWBR0032203/2016-07-01>.

The DPA upheld the sustainability policy measures carried out in the last years by the Dutch central Government and overall confirmed the 2014 EU Directive provisions, which allow room for sustainable development considerations in the structure of public contracts. For instance, Article 2.81, para 2, DPA, largely recalls Article 18, para 2, Directive 2014/24/EU. It states that contracting authorities should require tenderers to take into account - in their proposals - national and EU obligations in the fields of environmental, social or labour law, as well as the collective agreements, international environmental, social and labor law conventions indicated in Annex X, Directive 2014/24/EU. Moreover, Article 2.86, DPA, implementing Article 57, Directive 2014/24/EU, sets out groups of exclusion grounds that support the choice for tenderers that promote social value. Among the mandatory exclusion grounds, Article 2.86, para 2, DPA, can be mentioned. It provides that contracting authorities should exclude economic operators convicted of an offence under the Dutch Penal Code, for instance, for having provided incorrect information in order to obtain benefits.<sup>186</sup> This provision, thus, promotes social value concerns as it supports the presentation of bids by tenderers who do not disregard, but take into due account, socially responsible behaviours. In addition, and along the same lines, Article 2.86, para 4, DPA, states that a contracting authority should exclude a candidate that did not comply with the relevant tax and social security obligations. Anyway, mandatory exclusion grounds can be derogated whenever the exclusion of an economic operator may be disproportionate or unreasonable.<sup>187</sup> According to Article 4.1, DPA, the Ministry of Security and Justice can issue behavioral declarations,<sup>188</sup> which can be used by economic operators whenever contracting authorities set out exclusion grounds based on final convictions.<sup>189</sup> Behavioral declarations indicate that the economic operator was not convicted of a certain crime under a final conviction. If, instead, the economic operator was convicted of a certain crime and a further appeal is not possible, such a declaration is not issued.<sup>190</sup> Specifically, Article 4.7, para 1, letter b), DPA, states that when drafting such declarations the Government takes into account whether there has been a conviction (and no appeal is possible) for a crime mentioned in the Dutch Penal Code or in the Act on Economic Crimes or in a general administrative act. Article 8, of the Procurement Decision 2016, further specifies such provision by referring to other Articles of the Penal Code and other legislative Acts.

To the same extent, discretionary exclusion grounds provided by Article 2.87, DPA, allow scope for social and environmental considerations in public contracts. According to Article 2.87, letter c), DPA, an economic operator may, in fact, be excluded if the contracting authority can demonstrate - by any appropriate means - that the tenderer is guilty of serious professional misconduct, which makes its integrity questionable. This can be the case when it is not capable of carrying out a service or work in a sustainable manner while it was required to do so. Article 2.87, letter g), DPA, then supports sustainability concerns through the provision of grounds for exclusion in the case of deficiencies of a tenderer in the performance of a prior public contract - for instance in terms of energy savings - which led to an early termination, damages or other similar measures.<sup>191</sup>

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<sup>186</sup> Article 227, Dutch Penal Code.

<sup>187</sup> See Article 57, para 3, Directive 2014/24/EU.

<sup>188</sup> If asked by an economic operator, according to Article 4.4, DPA.

<sup>189</sup> Article 1.20, DPA.

<sup>190</sup> Article 4.10, DPA.

<sup>191</sup> According to Article 2a.43, DPA (implementing Directive 2014/23/EU), Articles 2.86 and 2.86a, DPA, on exclusion grounds, are applicable also to concession contracts.

Furthermore, Article 2.92, letter a), DPA, on selection criteria, allows the integration of sustainable development objectives into public contracts as it states that contracting authorities may require that economic operators have the necessary experience, human and technical resources to perform the contract to an appropriate quality standard. This may be extremely relevant in PPS arrangements where a high degree of ability is required to perform the contract and achieve the specifically set quality, environmental or social standards.<sup>192</sup>

With some drafting modifications, but fundamentally the same content as Article 62, Directive 2014/24/EU, Articles 2.96, para 1 and 2.97, DPA, hold that contracting authorities may ask for certificates issued by independent bodies attesting that the economic operator complies with certain quality assurance standards - these may also concern accessibility for disabled persons. Contracting authorities must refer to quality assurance systems based on EU standards certified by accredited bodies and recognize equivalent certificates issued from bodies of other Member States. Moreover, contracting authorities may require economic operators to comply with specific quality or environmental management standards. However, they must refer to the EU Eco-management and Audit Scheme (hereinafter EMAS) or other environmental management systems recognized by Regulation n.1221/2009.

Then, Article 2.114, DPA, implementing Article 67, Directive 2014/24/EU, states that the MEAT is determined either on the basis of the best price-quality, the lowest cost or lowest price.<sup>193</sup> If the MEAT is identified by referring to the best price-quality or lowest cost *ratio*, contracting authorities take into account both price and quality and must - according to Article 2.115 - indicate in the contract notice which are the sub-criteria applied. The latter have to be linked to the subject-matter of the contract and may refer to:

- quality (e.g. technical merit);
- aesthetic and functional characteristics;
- accessibility;
- design for all users,
- social, environmental and innovative characteristics;
- trade and conditions under which trade can be carried out;
- the organization, qualification and experience of the personnel executing the procurement, when the quality of the personnel can have a significant influence on the level of the execution of the procurement;
- customer service and technical assistance;
- supply conditions, such as date of delivery, way of delivery, delivery and completion period.

Such criteria are linked to the subject-matter of the contract when they are relevant for the works, supplies or services, in any way and in every phase of their life-cycle, including factors related to:

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<sup>192</sup> Article 2.a46, DPA (implementing Directive 2014/23/EU) on selection and qualitative assessment of candidates, provides that conditions for the participation to tender procedures may also refer to the technical abilities of candidates. Thus, for instance, economic operators' ability to perform contracts according to specific quality or environmental standards.

<sup>193</sup> See W R Van Eck, 'Netherlands' in Global Legal Group (ed), *The International Comparative Legal Guide to Public Procurement 2017* (GIG, 2016). B K Altes, S Vermeulen, 'Netherlands' in J Davey, Amy Gatenby (eds), *The Government Procurement Review* (Law Business Research, 2016) 210.

- the specific production process, the offer or trade of the works, supplies or services; or
- a specific process of a different phase of their life cycle even when such elements are not part of their material basis.<sup>194</sup>

Moreover, contracting authorities must specify in the procurement documents the weight of each criterion used to determine the MEAT on the basis of the best price-quality. If weighing is not possible for objective reasons, contracting authorities have to mention the criteria in descending order of importance.<sup>195</sup>

Furthermore, Article 2.115a, DPA, transposes Article 68, Directive 2014/24/EU, on life cycle costing. As in the EU Directive, this provision specifies that a life-cycle costing approach includes:

- costs borne by the contracting authority or by other users, such as costs of use (e.g. consumption of energy and other resources, maintenance costs, end of life costs, such as collection and recycling costs);
- costs of environmental externalities related to the products, services or works, during their life-cycle. Such costs may refer to the cost of emissions of greenhouse gases, other pollutant emissions and climate change mitigation costs.

Article 2.115a, DPA, recalls that if contracting authorities evaluate costs using a life-cycle costing approach, they must specify the information that tenderers have to provide and the method used to determine life-cycle costs. According to Article 2.113, DPA, award criteria must then go along with specifications that allow the verification of the information provided by tenderers in order to evaluate how well tenders meet the award criteria.

Sustainable development considerations are further fostered through the provision set out in Article 2.116, DPA. Contracting authorities may, in fact, reject tenders, which are abnormally low because of non-compliance with EU or national environmental, social and labor laws. If this is the case, contracting authorities are required to ask first for clarification. The economic operator is then allowed to explain, for instance, the effectiveness of the infrastructure or service project, the technical solutions adopted, their originality and compliance with EU or national environmental, social and labor laws.<sup>196</sup> The contracting authority examines the information provided and may

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<sup>194</sup> Article 2a.39, DPA, implementing Directive 2014/23/EU, allows space for sustainability considerations within concession contracts as it states that technical and functional specifications may also refer to the specific production process or execution or provision of the works or services in so far as they are linked to the subject-matter of the contract and are proportionate to its value and aim.

<sup>195</sup> Article 2.50, DPA (implementing Directive 2014/23/EU) on award criteria states that such criteria may include social, innovation-related and environmental criteria and that they must come along with requirements that allow the verification of the information provided by tenderers. Contracting authorities may not indicate award criteria in a decreasing order of importance if they receive an offer, which includes an innovative solution with an exceptional high functional performance level that could not have been foreseen by any careful contracting authority. In this case, the contracting authority will inform all tenderers of the change of order of award criteria and will launch a new call for the submission of proposals. In this way, contracting authorities can take into account innovative solutions, which typically characterise PPS projects.

<sup>196</sup> Reference is also made to Annex X, Directive 2014/24/EU.

reject the tender application if the low prices or costs are not sufficiently proven by the mentioned indicators.

Additionally, Article 2.80, DPA, implementing Article 70, Directive 2014/24/EU, states that contracting authorities may set special conditions relating to the performance of contracts. Such conditions may relate to innovation, labor, social or environmental aspects. They may also refer to the specific production process, the offer or trade of the works, supplies or services or to a specific process of another phase of their life-cycle, as indicated in Article 2.115, para 3, DPA.

### **3.2 Case studies.**

The PPS case studies that will be described in the following paragraphs are examples of public-private collaboration schemes that generated socio-environmental benefits through an effective integration of sustainable development considerations in their design, structure and management.

The first two cases - the A12 *Lunetten-Veenendaal* and the N33 project - were central Government initiatives, specifically of the Directorate General for public works and water management, the RWS. The third case study saw a local public authority, the Municipality of Eindhoven, launching a tender procedure for the award of a public contract for a project known as the International School of Eindhoven. Researching and gathering PPS' data and documents has been stimulating and enriching. The RWS and the Municipality of Eindhoven were, in fact, very supportive during the entire research period, being constantly available for interviews, clarifications and provision of projects' documents.<sup>197</sup> Specifically, for what concerns the first case study - the A12 project - contract managers were interviewed and the relevant PPS contract clauses were studied.<sup>198</sup> The same happened with the second case - the N33 project. The contract manager was interviewed and the DBFM contract was studied.<sup>199</sup> With regard to the third case study - the International School of Eindhoven - the senior project manager was interviewed and documents concerning the PPS scheme were studied. However, the relevant contract terms and conditions could not be analysed because the public and private partners withheld the contract for confidentiality reasons. Nevertheless, the content of the most significant - in the light of the scope of this research - contractual obligations were identified through the information gathered from the interview carried out and the study of the other documents related to the PPP project and contract.

#### **3.2.1 Case n. 1. The A12 project.**

##### **3.2.1.1 Introduction.**

The first Dutch PPS case study concerns a road development project carried out through a DBFM contract.

On January 2011, the Ministry of Infrastructure and Environment gave the green light to start the works of the A12 *Lunetten-Veenendaal* project (hereinafter A12). The A12 was a large investment project for the widening of a highway over the length of thirty kilometres, the renewal and new construction of viaducts, underpasses, two large eco-ducts, noise barriers, traffic and

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<sup>197</sup> In this respect, Mr. Arno Eversdijk and Mr. Lendert Van Geldermansen, *Rijkswaterstaat*, deserve a specific mention.

<sup>198</sup> Interviews, *Rijkswaterstaat*, A12 Project Managers, Mr. Wop Schat and Mr. Leon Kneepkens.

<sup>199</sup> Interview, *Rijkswaterstaat*, N33 Project Manager, Mr. Michiel de Beer.

public lighting control. The RWS decided that the project had to be delivered through a public-private partnership scheme under which the private party had to design, construct, finance and maintain the said road section over a period of twenty years. Four consortia tendered for the A12 DBFM contract and on June 2010 - following a competitive dialogue procedure - the RWS selected the *Poort van Bunnik* consortium as the preferred bidder to carry out the widening of the thirty kilometres section of the A12 motorway between *Utrecht-Lunetten* and *Veenendaal*. Specifically, under the A12 PPS contract, the consortium had to construct a third lane in both directions of the highway, build and modify viaducts and adjust traffic installations. The relevant DBFM contract - with a value of almost EURO 260 million - reached the contractual close on September 2010.



Fig. 11  
The A12 highway.  
Source: RWS.

The *Poort van Bunnik* consortium - composed of several operating companies of the Royal BAM group, namely BAM PPP, BAM Wegen, BAM Civiel, BAM Infratechniek and BAM Infraconsult - carried out the project through highly coordinated work. The private party financed the works through a project financing structure,<sup>200</sup> which saw the participation of a consortium of banks, which included BTMU, DZ Bank, Fortis, KBC, KfW and the European Investment Bank. The PPS involved also several consultant entities, such as KPMG Corporate Finance, *De Brauw Blackstone Westbroek*, *Nauta Dutilh*, *Aon Risk Services*, Clifford Chance, Mott MacDonald, Aon Global Risk Consulting and BDO. RWS was advised by PWC Advisory and by *Pels Rijcken & Drooglever Fortuijn*.

As of today, the A12 project is completed and the public party' objectives, which will be highlighted hereunder, have been achieved. The consortium is now responsible for the project's maintenance over a period of twenty years. The DBFM contract will end in 2032.

### 3.2.1.2 Socio-environmental benefits generated by the A12 project.

Through this PPS project, numerous socio-environmental benefits were generated. These will be described in the following paragraphs. However, they can be summarised as follows.

Accelerated Delivery	Enhanced Delivery Benefits	Wider socio-environmental
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<sup>200</sup> Article 3.1, A12 DBFM Agreement.

Benefits		benefits
- quick and on time project completion	- works conducted in a sustainable and energy efficient way	- congestion reduction - low environmental impacts - stakeholders' engagement

Table 13  
Socio-environmental benefits generated by the A12 project.

### 3.2.1.3 Accelerated Delivery.

The A12 PPS scheme generated accelerated delivery benefits. The A12 project was, in fact, completed way before the contractually agreed upon schedule.

RWS first assumed that works would have taken four years to be completed. Instead, the private contractor - already during the tender phase - indicated two years for the completion of the works. Works started on January 2011 and the extra rush-hour lanes between *Driebergen* and *Veenendaal* were put into service in August 2012. Thus, they were finished in less than nineteen months, way ahead the project's schedule and RWS' expectations. The full delivery of the project - with all local connecting roads completed - took place, within schedule, on August 2013, overall lasting two years.<sup>201</sup>

### 3.2.1.4 Enhanced Delivery.

The A12 project also generated enhanced delivery benefits. Works were, in fact, carried out in a sustainable and energy efficient manner.

For instance, in order to reduce maintenance-related costs and activities, the private party used a high-quality asphalt. The asphalt normally used in these kind of infrastructure projects generally lasts no more than eight years. Instead, the asphalt used in the A12 project will preserve itself for at least eleven years, thereby reducing over-time maintenance and related costs. In addition, the private party used construction machines that generated few low vibrations and built sound screen walls, which allowed the surrounding area to benefit of noise insulation. Moreover, in order to limit negative environmental impacts during the construction phase, trees removed to make space for extra lanes were relocated in nearby green areas.

Furthermore, and as anticipated, there was a great coordination among the companies part of the winning consortium. They all efficiently and effectively worked together to provide added value to this project. Each company of the *Poort van Bunnik* consortium was, in fact, in charge of carrying out specific tasks, being incentivised to make the best use of its expertise and skills. Moreover, whenever there were losses for one of them, these were compensated by the overall gains of the group. In addition, if a difficulty was encountered by one of them this was notified and solved through a well-functioning communication and remedial system. The private party's ability to efficiently coordinate itself represents one of the reasons why RWS looks with more favour to

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<sup>201</sup> Mr. Wop Schat, A12 Contract-Manager, *Rijkswaterstaat*.

groups of companies that have already worked together or that are well-coordinated. It was esteemed that if this is not the case, the entire realization of a PPS project may be negatively affected.<sup>202</sup>

### **3.2.1.5 Wider socio-environmental gains.**

This PPS generated also wider socio-environmental benefits given also its size and, thus, its impact.

The A12 highway had daily and constant congestion problems. It was in the NLs' top ten motorway ranking because of traffic criticalities and lack of capacity. As of today, there is hardly any congestion, being just incidental and not structural.<sup>203</sup> Moreover, during the construction phase, the private party succeeded in guaranteeing no more than 10% congestion with respect to earlier estimations, in this way positively affecting road users in terms of both road availability and environmental costs.

Furthermore, stakeholders' representatives were constantly involved during the project's development with regular meetings. This, strengthened cohesion, confidence and awareness on the project's achievements throughout the Region. The A12 PPS is, in fact, considered by both the private business world and RWS as an extremely positive project in terms of results obtained and environmental sustainability.<sup>204</sup> All parties involved were impressed of the outcomes attained, especially during the construction phase. For this reason, the Dutch National Building Institute, *Bouwend Nederland*, which represents building companies in the NL, awarded a prize to the A12 project.<sup>205</sup> *Bouwend Nederland* every year rewards top projects in different sectors.

Finally, it can be mentioned that the A12 project's strategy envisaged, as an important part of its social planning, a sharing process with local authorities aimed at increasing the economic growth of the surrounding area.

### **3.2.1.6 Tender's Strategies.**

This paragraph indicates the main goals and strategies used in the tender procedure to embed sustainable development considerations into the structure of the A12 PPS project.

Two sustainability considerations played a key role in the shaping of the tender procedure:

- a sustainable business management (e.g. environmental management and corporate social responsibility), and
- a sustainable project management to be demonstrated through the DuboCalc tool.

To obtain them, RWS indicated in the tender procedure the following sustainable requirements:

- prevention of traffic congestion during the construction phase,
- minimization of hindrance during the maintenance phase, and
- reduction of negative effects for the surrounding area.

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<sup>202</sup> Interview, Mr. Leon Kneepkens, A12 Contract-Manager, *Rijkswaterstaat*.

<sup>203</sup> Traffic congestion scored 7.8 out of 10. Interview, Mr. Leon Kneepkens, A12 Contract-Manager, *Rijkswaterstaat*.

<sup>204</sup> In terms of availability satisfaction, the project scored 8 out of 10. Interview, Mr. Leon Kneepkens, A12 Contract-Manager, *Rijkswaterstaat*.

<sup>205</sup> See <http://www.bouwendnederland.nl/english>.

Furthermore, sustainability was a key MEAT tender criterion in the final awarding of the DBFM contract. The project proposal of the *Poort van Bunnik* consortium was, in fact, selected because it focused on safety, health, energy consumption, reduction of CO<sub>2</sub> emissions, use of sustainable materials and adoption of a waste management system. The consortium demonstrated the project's sustainability through the DuboCalc measurement tool, which showed that the design plan offered 25% less environmental impact than the relevant conventional designs.<sup>206</sup>

### **3.2.1.7 Contractual Strategies.**

This paragraph will offer an overview of the terms and conditions of the A12 DBFM agreement supporting the integration of sustainable development considerations into the structure of this PPS project.

Article 2.2 promotes the generation of enhanced delivery benefits by referring to a typical feature of PPS contracts, the payment mechanism. The latter financially incentivises the private party to deliver an overall sustainable project by foreseeing that payments are made only on an availability basis.<sup>207</sup> In other words, if the project meets the set output requirements, which also take into account social and environmental concerns, and it is completed accordingly. Moreover, contracting authority's payments are executed in instalments over the entire PPS contract life (i.e. 25-30 years). Such instalments may be modified - during the execution of the contract - if the infrastructure does not meet the set output specifications. Therefore, through the payment mechanism, the contracting authority can control for a long period of time whether the infrastructure is actually complying with the set outputs requirements and, thus, if it is delivering an overall sustainable project. In PPS schemes, the private partner is highly motivated to deliver the project as contractually foreseen so as to obtain the necessary cash inflows from the public party and, thus, recoup the investments made.

According to Article 2.2., the contracting authority's key obligations are the following:

- pay the contractor the availability payment in accordance with Schedule 2 (i.e. the payment mechanism, as explained below);
- pay the contractor a lump-sum availability payment after the issue of the availability certificate in accordance with Schedule 2 (i.e. the payment mechanism);
- pay the contractor a lump-sum completion payment after the issue of the completion certificate in accordance with Schedule 2 (i.e. the payment mechanism).

Along the same lines, Articles 4.3, 4.4, 4.6, 4.7 and 8.6 promote the generation of enhanced delivery benefits by supporting the functioning of the mentioned payment mechanism. Article 4.3, in fact, reaffirms that the project must be delivered according to the output specifications contractually set out. Article 4.4 refers - in addition - to the maintenance requirements, which - given the long duration of PPS contracts - enhance the completion of sustainable projects for a long

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<sup>206</sup> *Rijkswaterstaat*, 'Huge Sustainability Gains', A12 *Lunetten-Veenendaal*.

<sup>207</sup> Examples of availability requirements used in the A12 project are specified below in this paragraph.

period of time. Article 4.6 specifies that if all the agreed conditions are met, the availability certificate is issued, which in turn - and according to the payment mechanism - allows the contractor to receive payments. Article 4.7 has the same content of Article 4.6, however, it refers to the completion certificate. Article 8.6 specifically foresees that the contractor's performance of the works must comply with the set requirements. These are specified also in terms of social and environmental sustainability and quality considerations. In PPS arrangements, thanks to the availability of extra budgetary funds, the private contractor can be required, and can actually achieve, high sustainable performance standards by allocating high funds in their implementation. Moreover, in PPS agreements, performance requirements and related risks are borne by the private party, which is normally better capable of handling them. In addition to extra budget concerns, in PPS contracts, private expertise and skills in the delivery of sustainable solutions can be applied in each and every one of the project's phases, thereby supporting the generation of enhanced delivery benefits.

Furthermore, Article 8 supports the generation of enhanced delivery benefits. In order to promote sustainable development concerns, the contract requires the private party to set up management and quality systems.<sup>208</sup> These are tailored upon sustainability and quality considerations. In PPS arrangements - thanks to extra budgetary funds and the private sector's know-how - the private party can be required, and can actually achieve, high management and quality standards by allocating high funds in sustainable and/or innovative solutions. Moreover, in PPS schemes, the achievement of such standards and the related risks are usually borne by the private contractor, which is the party normally better capable of controlling them. Likewise, by specifying that the public partner will periodically control whether the private party is meeting the contractual obligations, Article 8 supports the delivery of infrastructure designed upon quality and sustainable standards operating over a long period of time. Monitoring systems are a crucial aspect in PPS arrangements. Verifications and inspections take place once works are completed and periodically during the contract life, which is normally 20-30 years. Therefore, if an efficient monitoring system is in place, it is more likely that sustainable public infrastructure will be delivered over an extended period, thereby generating wide socio-environmental benefits.

Articles 10.1, 10.2 and 11 support as well the generation of enhanced delivery benefits. Article 10.1 indicates that the public party will terminate the contract in case of non-issue of the commencement, availability and completion certificates. In this way, it incentivises the private party to deliver the project according to the quality and sustainable standards provided in the contract. In PPS schemes, the private party normally begins to recoup its investments only when the project is delivered and it meets the set availability standards. Thus, the private contractor is highly motivated to do so. Moreover, by stating that the public party will terminate the contract in case of non-compliance by the private party with one or more obligations related to the infrastructure delivery, Article 10.2, encourages the private contractor to comply with such requirements delivering an overall sustainable project. Additionally, it foresees - in cases of non-compliance by the private party of the mentioned obligations - the termination of the contract. The latter applies also if penalty points are

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<sup>208</sup> That must be compliant with the NEN-ISO/IEC 15288:2008. The latter is an international standard that establishes a common framework and describes the life cycle of any system created by humans. It identifies a set of processes and associated terminology. Further details are available at <https://www.nen.nl/NEN-Shop-2/Standard/NENISOIEC-152882008-en.htm>.

imposed - twice in cases of contractual breach - and defaults are not rectified within a given period of time. Penalty points are financial deductions applied in cases of unavailability or under-performance and are usually used in PPS arrangements to make sure that the private party is adequately motivated to deliver the project according to the designated output requirements. Article 11 then specifies that if the private party does not remedy breaches, the contracting authority or third parties may carry out the relevant rectifications. In this event, the private contractor is required to pay a compensation to the public party, increased with a surcharge. Therefore, the private party is financially incentivised to remedy breaches itself, hence, to promptly rectify defaults that can hinder the delivery of a sustainable project.

Furthermore, Schedule 2 of the A12 agreement details the functioning of the payment mechanism, which - as seen - represents a key feature of PPS contracts. The payment mechanism promotes the generation of enhanced delivery benefits because it foresees financial deductions - on the payments made by the public party to the private partner - for cases of unavailability or under-performance by the private contractor as well as bonus payments for events of over-performance of the latter. Availability and performance levels are set out also in terms of socio-environmental sustainability. The private partner is highly motivated to achieve such targets in order to avoid financial deductions and, thus, recoup the investments made and the expenses borne to carry out the project over the entire contract life. Therefore, through an efficiently shaped payment mechanism the public party can obtain an overall sustainable infrastructure or service over a long period of time. Schedule 2, point 3.1, specifically outlines the events or circumstances that allow the application of the stated financial deductions. Only those that take into consideration social and environmental considerations are indicated below.

- An accident due to a contractor's default as a result of which one or more people have died or have been seriously injured;
- the safety of road users has been directly or indirectly placed in jeopardy;
- the safety of third parties has been directly or indirectly placed in jeopardy;
- a contractor's default relating to compliance with the management system or with capability levels;
- a contractor's default or deviation that is not a consequence of a supervening event and is not reported in time to comply with the management plan (a deviation, in accordance with the definition of ISO 9000, is the non-fulfilment of an obligation of the agreement);
- the failure to remedy a deviation that is not a consequence of a supervening event or the failure to remedy a contractor's default;
- a contractor's default whereby the contractor has failed to comply with the requirements indicated in Schedule 2;
- a contractor's default whereby the first rectification period has expired and the contractor has failed to comply with the requirement indicated in Schedule 2.

Moreover, Schedule 9 indicates the functional requirements that the A12 project must meet in order to avoid penalties and, thus, financial deductions on the contracting authority's payments. Among those embedding socio-environmental considerations the following may be mentioned.

The A12 project shall:

- create an ecological connection between the ecological areas in the north and south of the motorway;
- constitute a functional connection between national roads;
- constitute functional connections for road users between the motorway and other roads;
- inform road users on the rules concerning driving behaviour and provide information in order to stimulate the desired driving behaviour;
- guarantee efficient water management;
- inspect and maintain all parts of the infrastructure in accordance with the Dutch Working Conditions Acts;
- use a minimum amount of energy during its operational life, from implementation to demolition;
- not dispose of any environmentally unfriendly emission into the soil, water or air;
- make sure that the artificial lighting does not cause hindrance to users or surroundings;
- never have a negative influence on the functionality and aesthetic value of the buildings in the surroundings caused by cracking and pollution;
- not in any circumstances, have any negative effect on the location and functionality of railway lines;
- not have any negative effect on the water management;
- be integrated in the landscape and architecture.

Furthermore, the A12 project shall provide that:

- the flora give form to the landscape;
- there is plantation on noise screens;
- no pollution will be on the groundwater as a result of the executed works;
- the use of eco-passages, cycle paths, footpaths, footbridges over and under the motorway are not hindered;
- noise emissions into the environment caused by the use of the motorway are reduced by noise screens;
- the infrastructure promotes users' safety.

Schedule 9 further outlines 'aspect requirements' of the A12 project that must be complied with by the private partner in order to avoid financial penalties. Among those contractually grouped under the sustainability section the following may be mentioned.

- Planting must comply with the set reference standards and be certified.

- Water management systems, existing drainage units and retention facilities must be maintained in accordance with the set reference standards.
- Existing flora and eco-passages must be maintained in conformity with the set reference standards.
- Trees' assessment has to be conducted annually.
- Surfaces within the managed area must comply with set reference standards.

Schedule 9 lays down also 'management specifications'. The following take into account sustainable considerations:

- the contractor must provide evidence of its performance measurement system whenever performance has to comply with set reference levels;
- the contractor's service life assessment system must demonstrate that (on the expiry date) the remaining service life of the infrastructure complies with the set standard levels;
- each individual process referred to in the contractor's managements system must at least perform the level of capability specified in the set reference standard. The contractor's management plan must specify the minimum capability levels;
- the contractor must maintain an up-to-date project planning;
- the project planning must be subjected to a probabilistic assessment in accordance with set reference standards. The contractor's assessment system must demonstrate that the feasibility of the project planning (with respect to the achievement of the following milestones: availability and completion date) is at least 80%;
- mitigating measures, including ecological ones, are indicated in an ecological work protocol. All works must be performed according to this protocol, which must at least indicate: how the contractor will apply the ecological measures and how the contractor will deal with the unexpected appearance of protected species before and during the development phase;
- not later than 10 working days after the identification of a deviation, the contractor must have implemented corrective measures;
- the contractor is responsible of any communication concerning the works. The contractor must provide stakeholders with timely information about the development of the works;
- the contractor is responsible of any communication with the public (specified target groups);
- the contractor must record the data necessary to demonstrate the delivered performance levels regarding events or circumstances that fall within Schedule 2;
- the contractor must record the environmental score achieved in the performance measurement system;
- the contractor must record the results of its monitoring, carried out in accordance with the Local Hindrance requirements, during the development and operational phases;

- the periodic statement prepared by the contractor must at least contain: all instances in which availability deductions apply, the availability requirements that have not been met, the bonus and deduction percentages relating to performance deductions, the deduction percentage accompanied by a list of all instances in which penalty points apply;
- the contractor must prepare a health and safety progress report;
- the contractor must design the risk register in order to provide a complete indication of the main current risks. To this end records must consist of at least the following data for each risk: the consequences for the planning phase, health and safety, the surroundings, the quality of works and an estimate of the mitigating effects;
- an independent and recognised auditor must carry out inspections to verify that the performance measurement system is operating. These may be carried out annually or upon instructions from the contracting authority in case the contractor implements changes in the performance measurement system.

### **3.2.2 Case n. 2. The N33 project.**

#### **3.2.2.1 Introduction.**

N33 is a DBFM project for the widening of an existing Dutch motorway. In order to enhance and secure road safety, traffic flow and the Region's accessibility, the RWS launched a PPS scheme to upgrade 38-kilometres of the N33 motorway, doubling the original lanes to obtain four total lanes. Under a traditional public procurement scheme, the private party would have provided just the minimum required: the widening of the highway according to the set minimum sustainable requirements. Instead, the use of a PPS arrangement allowed the delivery of a project with a significant added value thanks to the incentives inherent to the specific structure of PPS agreements: the widening of the highway according to the set minimum sustainable requirements through the implementation of innovative construction solutions throughout the contract life. Therefore, allowing the infrastructure to meet the requirements over the entire duration of the PPS contract. Moreover, the PPC tool used to decide whether to deliver the infrastructure project through a traditional procurement model or a PPS arrangement showed that the latter offered cost reductions. Thus, the PPS scheme was eventually chosen.<sup>209</sup> Under the relevant DBFM contract, the selected private consortium carried out - in addition to a high-quality highway widening - the construction of bridges, connections with nearby roads, road-related items, such as signposting, lighting, safety and crash barriers, the improvement of the existing and construction of new wildlife crossings.<sup>210</sup> Specifically, the N33 project delivered:

- 38 km of road, from 2x1 to 2x2 lanes;
- road-related items, such as signposting, lighting, safety- and crash barriers;
- 2 main interchanges, along with viaducts and underpasses;

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<sup>209</sup> Interview with Mr. Michiel de Beer, Project Manager, RWS.

<sup>210</sup> Overall, 900.000 m<sup>3</sup> of soil and sand as well as 350.000 tons of asphalt were used to carry out this project.

- 6 exits and relevant access roads;
- 1 movable bridge, with electrical and mechanical installations;
- 2 fixed bridges;
- lengthening of 2 viaducts;
- widening of 2 viaducts;
- 1 railway tunnel;
- 2 new pedestrian subways;
- 1 new tunnel;
- lengthening of 2 tunnels;
- assessment and strengthening of all existing structures.

Nine private companies tendered for the N33 DBFM contract. The tender phase began on May 2011 and, by November 2011, the shortlisted consortia delivered their solution plans. The *Poort Van Noord* consortium was selected as the best bidder. The *Poort Van Noord* consortium established a SPV to carry out the project, namely the BAM PPP PPGM Infrastructure Coop U.A.. The design and build contractors were BAM Civil (57%), BAM Roads (37%) and BAM IT (6%). The consortium also included a financing company, the PGGM. Moreover, pension funds, Regional and local authorities participated to the funding of the project.

The contract's capital value was approximately EURO 120 million and the relevant contractual close was reached in December 2012. The planning phase took approximately five to six years, while the building phase lasted two years and the maintenance phase will continue for twenty years. Thus, for the following twenty years, the *Poort van Noord* consortium will be responsible of the management and maintenance of the N33 highway between Assen and Zuidbroek.

### 3.2.2.2 Socio-environmental benefits generated by the N33 project.

The N33 project is an example of a PPS project that delivered numerous socio-environmental benefits even though sustainability was not part of the award criteria used by the contracting authority. The effective PPS contractual structure allowed - anyway - the generation of socio-environmental benefits. The latter will be described in the following paragraphs, however, they can be summarised as follows.

Accelerated Delivery Benefits	Enhanced Delivery Benefits	Wider socio-environmental benefits
- quick and on time project completion	- works conducted according to high-quality standards	- congestion reduction - road users' safety - stakeholders' engagement

Table 14  
Socio-environmental benefits generated by the N33 project.

### **3.2.2.3 Accelerated Delivery.**

The N33 PPS generated accelerated delivery benefits. The N33 project was, in fact, completed way before the contractually agreed schedule.

Works began on March 2013 and lasted only eighteen months. The doubled N33 motorway between Assen and Zuidbroek was, in fact, officially completed on September 2014, six months ahead of schedule. The N33 project was one of the fastest major road projects in the NL. The Minister of Transport, Melanie Schultz van Haegen and the Deputy Henk Brink of the Province of Drenthe and Groningen, launched its official opening.<sup>211</sup>

### **3.2.2.4 Enhanced Delivery.**

The N33 project also generated enhanced delivery benefits. The project was, in fact, delivered according to high-quality standards. Extra lanes were built with stronger and more durable asphalt<sup>212</sup> and sound screens were set up in order to protect the surrounding environment. Even though it can be argued that noise insulation facilities are normally part of any road construction project, the PPS structure and the available budgetary funds allowed their quick construction according to high-quality levels. Additionally, the N33 project dealt with - in an effective and sustainable manner - the issue of crossing a protected green area, namely a Natura 2000 area.<sup>213</sup> The N33 highway had already crossed this green area in 1962 when the motorway was first constructed, however, at that time the highway was a single lane road. Hence, the N33 project, with the doubling of the existing lanes, would have affected a wider area of Natura 2000. Therefore, the N33 DBFM contract, after investigating the project's CO<sub>2</sub> impacts, identified solutions capable of compensating the negative effects arising out the enlargement of the highway and impacting on the surrounding environment. Further land was bought and trees were removed. However, the latter were re-planted in the nearby wood forests and extra trees were planted in order to broaden the forests' dimension. Furthermore, the motorway went also across rivers.<sup>214</sup> This was done in a sustainable manner. Staircases for fishes were built to preserve and enhance their natural habitat.<sup>215</sup>

Finally, it can be mentioned that the N33 arrangement created an effective cooperation between the Dutch Highway Authority, the Provinces of Groningen and Drenthe, the Municipalities of Assen, Aa and Hunze, Veendam and Menterwolde, which supported a smooth completion of the PPS project.

### **3.2.2.5 Wider socio-environmental gains.**

This PPS generated wider socio-environmental benefits. Environmental quality standards were implemented in the delivery of the project and the overall safety of the motorway was significantly improved. Before the realization of the PPS scheme, there was no separation whatsoever between

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<sup>211</sup> See <http://www.bamppp.com/news/dutch-transport-minister-schultz-opens-doubled-n33-motorway>.

<sup>212</sup> The asphalt used was worth 3.5 million Euros. Thus, it would have not been affordable without the support of the private sector's funding.

<sup>213</sup> Natura 2000 is a network of protected natural areas within the EU territory. It consists of Special Areas of Conservation and of Special Protection Areas identified respectively under the Habitats Directive and Birds Directive. The network covers both terrestrial and marine sites.

<sup>214</sup> For instance, the highway had to cross the river *de Hunze*.

<sup>215</sup> Specifically, fish ladders were constructed into the *Rolderdiep* river.

the two lanes proceeding in opposite directions and the carriageway was too small to accommodate the intensive daily traffic. As of today, the motorway is safer and local communities are showing their appreciation for the high level of safety achieved.<sup>216</sup> Moreover, traffic circulation improved. The local traffic towards Assen and the transit traffic on the N33 are now separated. In this respect, Henk Brink, deputy of the Province of Drenthe, explained that the Assen junction went through a huge metamorphosis with now a stunning fly-over connecting the A28. In addition, the doubling of the N33 gave rise to the Gieten roundabout. Upgrading these two junctions gave a further boost to the economic climate of Drenthe. Moreover, the connection between the N33 and the A7 was upgraded because of the cloverleaf junction in Zuidbroek. Mark Boumans, deputy of the Province of Groningen stated that ‘the Zuidbroek junction built a firm basis for a further expansion of the N33 towards the national sea ports in the north. This also helps to fulfil the Energyport project as it was embraced by the Dutch authorities in their vision on infrastructure and spatial planning.’<sup>217</sup>

Therefore, the N33 PPS project allowed public authorities to pursue their desires for long-term investment plans capable of promoting the local economy. In addition to the improvement of the region’s accessibility, the employment rate was, in fact, raised as the selected consortium employed local workforce and building companies to carry out the project.

### **3.2.2.6 Tender’s strategies.**

The N33 peculiarity is that even though sustainability concerns were not specifically used as award criteria, the PPS project anyway delivered socio-environmental benefits thanks to contractually set minimum requirements and the inherent features of PPS schemes.

The DBFM contract was awarded on the basis of the MEAT, which was identified according to the following elements:

- risk management (e.g. how the construction phase was carried out),
- how quickly the project was delivered, and
- risk transfer.

With regard to the latter aspect, the RWS - during the tender procedure - provided bidders with a list of risks. Tenderers had to decide which risks they were willing to shoulder. For instance, they had the possibility to choose to bear risks such as the discovery of archaeological findings - which entail dealing with the issue of potential delays in the project’s delivery. The more risks bidders were choosing to bear, the higher score their tender was obtaining. The RWS identified the MEAT by focusing on the level of risk mitigation described and offered in the risk management plan; the allocation of risks (e.g. whether the bidder shouldered one or more of the listed risks); and the tender’s solution in terms of early project completion.

No extra bonuses were expressively foreseen for social or environmental sustainability methods and/or criteria. RWS only indicated a set of minimum requirements, which did not envisage extra points for bidders. However, such minimum requirements - concerning, *inter alia*, energy efficient use of electricity, use of environmental friendly supplies and re-use of building

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<sup>216</sup> ‘We have received so many positive responses to the doubling of the N33. We would like to share that positive feeling [...]’ statement of Dirk Flikkema, environmental and stakeholder manager of the N33 project.

<sup>217</sup> Further details available at <http://www.bamppp.com/news/dutch-transport-minister-schultz-opens-doubled-n33-motorway>.

materials - were contractual obligations.<sup>218</sup> Thus, environmental and ecological considerations were not used as award criteria in the N33 tender procedure. Nonetheless, they were inserted in the relevant PPS contract as minimum requirements.

### **3.2.2.7 Contractual strategies.**

This paragraph will offer an overview of the terms and conditions of the N33 DBFM agreement supporting the integration of socio-environmental considerations into the structure of this PPS project.

Articles 2.2, 4.4, 4.5, 4.6 and 8.1 support the generation of enhanced delivery benefits and, indirectly, of wider socio-environmental benefits. Specifically, Article 2.2 provides that the private partner is paid - according to the payment mechanism - on an availability basis. Also in this project, availability requirements include sustainability concerns. As already seen, a payment mechanism whereby payments are executed if the set availability requirements are met, encourages the private contractor to fulfil such obligations in order to obtain cash inflows and, thus, repay the investments made. Article 4.4 then specifies that, the infrastructure has to be maintained in accordance with sustainable standards during the life time of the contract. In this way, the delivery of an overall sustainable project over a long period of time is promoted. Articles 4.5 and 4.6 state that only when the stated availability requirements are met, can the availability and completion certificates be issued. These allow the private partner to obtain public party payments. As anticipated, in PPS arrangements, financial incentives are effective tools to achieve set sustainable targets because the private partner needs to recover the normally high investments made and obtain, whenever possible, additional profits. Finally, Article 8.1 supports the generation of enhanced delivery benefits as well as - indirectly - wider socio-environmental benefits by requiring a management system that encompasses sustainable considerations and a quality certificate based on a specific standard.<sup>219</sup> As already seen, in PPS schemes, the availability of extra budget allows the contractor to achieve advanced quality standards since high funds can be allocated in the implementation of quality-related solutions. In addition, in PPS arrangements, private expertise and skills in this field can be applied in every project's phase, thereby supporting the generation of numerous enhanced delivery benefits.

Furthermore, Articles 8.2, 8.3, 8.4 and 11 promote the generation of enhanced delivery benefits. Articles 8.2 and 8.3 allow the contracting authority to monitor compliance, by the private party, with the contractual requirements. The latter are defined by taking into account socio-environmental considerations. As already seen, the monitoring system - carried out by either the public or the private partner - is a key element of PPS contracts. It ensures that the project is delivered as actually foreseen and, thus, that sustainable considerations are integrated throughout the contract life. Article 8.4, instead, specifies that a contractor's breach must be rectified in order to avoid the application of financial penalties. This motivates the private party to deliver the project as contractually defined and, thus, to meet the availability and performance targets set also in terms of sustainability. In addition, Article 11 states that if the contractor's defaults are rectified by the contracting authority

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<sup>218</sup> Specifically, the use of FSC-wood and of Bottom Ash (from the Municipal's solid waste incinerators) for road construction. The latter is primarily used to fill in embankments and as a granular sub-base of roads.

<sup>219</sup> The NEN ISO/ISO 15288:2008, which is an engineering standard system that covers processes and life cycle stages.

or by third parties, the private party must cover the relevant costs increased with a surcharge. This represents another tool that gives economic incentives to the private party to comply with the set requirements in order to avoid remediation costs or costs related to third parties' rectifications of defaults.

Moreover, Articles 4, 10.1, 10.2 and Schedule 4 support the generation of accelerated and enhanced delivery benefits. Articles 4 and 10.1 provide incentives to the private party to complete the works as contractually planned and upon schedule, by allowing extra payments upon issue of the completion certificate and the termination of the contract if the commencement, availability and completion certificates are not issued as contractually agreed upon. The private party is, thus, highly motivated to deliver the project on time and in compliance with the set availability requirements in order to obtain extra profit and avoid the termination of the contract, which in turn would not allow the recovery of the high investments of the construction phase. Article 10.2, instead, provides for the termination of the contract in cases of non-compliance by the private partner with the availability requirements, which - also in the N33 project - take into account socio-environmental concerns. Schedule 4, then, specifies that in the event of a contractor's default, the private partner must compensate the contracting authority. The mentioned provisions and Schedule support the achievement of the same goal pursued by the payment mechanism: incentivise the private partner to deliver the project according to the set output requirements (indicated in terms of also availability and performance levels) as specified in the contract.

Schedule 2 of the N33 agreement details the functioning of the payment mechanism, which - as already seen - is a key element of PPS contracts and an effective tool that financially provides incentives to the private party to deliver the project according to the availability and performance targets set out in the contract. The latter embed also socio-environmental considerations. Specifically, Article 3, of Schedule 2 on the payment mechanism, contains the indication of the events or circumstances that allow the application of financial penalties. Those mentioned below take into account sustainability concerns.

- An accident due to a contractor default (10 penalty points);
- a situation arisen as a result of a contractor default in which the safety of third parties has, either directly or indirectly, been placed in jeopardy (4 penalty points);
- a contractor default with regard to the compliance with the management system or the capability levels specified in the management specifications (3 penalty points);
- a contractor's default concerning the works which does not satisfy the requirements of the management specifications (1 penalty point);
- the non-remediation of a contractor's default (4 penalty points for each elapsed rectification period);
- a contractor's default where the contractor has failed to comply with the requirements of this Schedule (the number of penalty points listed in table 2, Annex 3, Schedule 2, for the relevant requirement);

- a contractor's default where the first rectification period has expired and the contractor has failed to comply with the requirements stipulated in table 2, Annex 3, Schedule 2 (the same number of penalty points as indicated in the previous point).

Additionally, Annex 3 of the N33 agreement specifies the availability requirements. It, thus, refers to the required service standards that must be guaranteed by the private contractor in order to avoid the application of financial penalties by the contracting authority. Among the various requirements supporting sustainability and quality concerns, the following may be mentioned:

- 'cracking' damages to driven surfaces not greater than a set level,
- road view not obstructed so that road users can drive safely and comfortably,
- offensive graffiti and posters on the RWS infrastructure removed within 24 hours.

Furthermore, Schedule 9 indicates policy rules, standards and guidelines that must be complied with by the private partner in the execution of the PPS contract.<sup>220</sup> By requiring the respect of specific quality and sustainable standards, Schedule 9, supports the generation of enhanced delivery benefits as well as of wider socio-environmental benefits. As already seen, in PPS arrangements, normally high budgetary funds allow the private contractor to achieve high quality and sustainable targets through the allocation of these funds in the implementation of such objectives.

Schedule 9 indicates also the output requirements that the private party must meet in order to avoid the application by the contracting authority of the financial penalties provided by the payment mechanism. The most relevant, in terms of socio-environmental considerations, are mentioned below.

- The RWS infrastructure must limit noise pollution of road and motorway traffic through noise abatement provisions in order to safeguard the environment.
- The RWS infrastructure must prevent the targeted fauna species ending up on or in the RWS infrastructure.
- The RWS infrastructure must offer the target fauna species a place to cross the infrastructure without encountering obstacles.
- New trees planted along the infrastructure must be of the same species or similar to the trees that were cut down. New trees must be suitable to be planted alongside roads.

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<sup>220</sup> Among the binding standards and guidelines referred to in the agreement, the following may be mentioned: guide to Fauna Provisions for Roads. SBR guideline B – measurement and assessment guideline for nuisance to people in buildings. CROW, publication 288 2010 Public Space Quality Catalogue. Guidelines for inspection and maintenance of fauna provisions near roads. Guide to Greenery Provisions Management. SBR guideline A - Measuring and assessment guideline related to damage to buildings. NPR ISO/IEC TR 15504-6: An exemplar system life cycle process assessment model. NEN-ISO 100007: quality management systems - Guidelines for configuration management.

- The design of the following components must entail a life-cycle approach: expansion joints, equipment, railings.
- The contractor must demonstrate that the availability requirements are met as from the commencement date.
- The contractor's management system must include a safety management system for the integral control of all safety issues arising from the works and the infrastructure as from the commencement date.
- The contractor must lay down its mitigation measures (including the ecological ones) in an ecological work protocol. All works must be performed according to this protocol. The protocol must be available before the commencement date and must at least indicate how the contractor will guarantee the ecological measures according to the ecological protocol.
- A green management plan must be updated at least once every 5 years.
- The contractor must have an integral safety management plan. At least the following must be included: how the contractor considers safety issues, how the contractor makes use of verification and validation methods to demonstrate compliance with all safety requirements indicated in the agreement.
- The flora development must be annually investigated and determined by an expert ecologist in accordance with a monitoring plan. The contractor must keep an inventory of the effects and risks on the environment caused by the works during the development phase.
- The contractor must perform a specific analysis to determine the latent safety risk associated with the works. To this end, the contractor must use a pro-active condition measurement instrument.
- The project planning must be subject to a probabilistic assessment in accordance with the Monte Carlo analytical method or equivalent. The contractor's assessment must demonstrate the feasibility of the project planning of 80% with respect to at least the following dates: availability and completion date.
- The contractor must update the deviation register. The following must be updated at least once a week: a status of the contractor deviations and/or defaults, including the status of the corrective and preventive measures; the dates when measures are implemented; the adjustments of the contracting authority's deviations and/or defaults.
- The contractor must work in coordination with stakeholders and provide them with timely information on the direct consequences of the works (before stakeholders are confronted with the direct consequences of such works). To this end, the contractor must communicate with at least the following stakeholders: residents in the immediate area, emergency services, councils, Provinces, water and road maintenance authorities, petrol stations, companies and institutions on immediately adjacent plots.
- The contractor must give the contracting authority a notification of the works that have an impact on accessibility, liveability, business or safety for

and of directly adjacent stakeholders (such as residents and companies in the immediate vicinity) before their performance and must consult stakeholders on the execution of the works.

- Quarterly statements must contain at least the following information:
  1. a health and safety progress report;
  2. the progress of works in comparison with the project planning;
  3. a report stating the top 10 current risks that can place the achievement of the milestones specified in the project planning in jeopardy together with a statement of the control measures to be implemented by the contractor for each risk as well as the chart with the feasibility of each milestone.
- The periodic statement must at least contain the following:
  1. instances in which availability deductions apply;
  2. the availability requirements that have not been met;
  3. availability deductions;
  4. the bonus percentage and deduction percentage relating to the performance deduction;
  5. the deduction percentage accompanied by a summary listing all instances in which penalty points have been determined;
  6. the number of penalty points;
  7. the penalty point's category;
  8. the applicable rectification period;
  9. the starting and finishing times of non-compliance with the contractual requirements.
- The contractor must design the risk register in a way that it provides a complete indication of the prevailing current risk situation. To this end, records must be made of at least the following data for each risk:
  1. the consequences for the quality of works;
  2. the consequences for planning;
  3. the consequences for health and safety;
  4. the consequences for the surroundings;
  5. a link to the documents that detail and/or implement the relevant control measures.
- The contractor must apply the relevant groundwork, road and hydraulic engineering sustainability requirements as indicated in the agreement.
- The contractor must ensure that, at least, the following are present:
  1. the realisation of the infrastructure in accordance with the NEN-ISO-IEC 15288<sup>221</sup> standard and in accordance with the design and requirements set out in Schedule 9 attached to the agreement;
  2. the realisation of the infrastructure validated by stakeholders in accordance with the NEN-ISO-IEC 15288 standard.
- The disposal process specified in the contractor's management plan must ensure that the legal obligations imposed on the contracting authority by the

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<sup>221</sup> NEN-ISO-IEC 15288 is an engineering standard system covering processes and life-cycle phases.

Environmental Management Act or other regulations replacing that act are fulfilled.

### **3.2.3 Case n. 3. The International School of Eindhoven.**

#### **3.2.3.1 Introduction.**

The International School of Eindhoven (hereinafter ISE) is an innovative PPS project in the educational and building sector. It was a pilot project, the 2<sup>nd</sup> school in the NL ever built under a PPS scheme.<sup>222</sup>

The ISE, originally situated in the city centre of Eindhoven in two old and small separate buildings, needed to find a new location. The Municipality wanted to be part of the ISE redevelopment project and identified the Constant Rebecque barracks as the preferred site on which build the new school. The Constant Rebecque barracks were unoccupied historical army barracks of 1938 owned by the Municipality in the neighbourhood of Wielewaal, Eindhoven.<sup>223</sup> Once the location was chosen, the Municipality had to find a project solution capable of addressing a number of issues. On the one hand, the existing buildings had to be preserved. On the other hand, they had to be adapted to the modern needs of the ISE. The renovation plan of the Constant Rebecque historical buildings had to be approved by the national competent authority. As the chosen location was situated outside the city centre in a natural protected area, the construction plan had to guarantee a low environmental impact and foresee new accessibility to the ISE. The Municipality and the Foundation of Primary and Secondary Education of Southern NL (*Stichting Primair en Voortgezet Onderwijs Zuid-Nederland*) considered this project too expensive to be carried out under a traditional procurement scheme. A PPS scheme would have, instead, allowed the public sector to avoid unaffordable upfront costs, rely on private funding and spread the relevant costs over the contract life by paying to the private contractor a fix annual fee. Therefore, the PPS scheme was chosen as the best way to proceed and deliver the project. The DBFMO contract structure was, in fact, considered as capable of addressing in an effective way the above-mentioned project's issues, allowing both the control of construction costs and the provision of innovative solutions. Thus, the typical PPS integrated approach covering funding, construction, renovation, preservation of existing buildings, ammunition and bomb detection, protection of the surrounding environment, fauna and flora, was identified as the best procurement solution.

Three consortia participated to the tender procedure launched by the Municipality of Eindhoven and worked on draft project proposals in a constant dialogue with the contracting authority and in competition with one another. The competitive dialogue procedure ended with the award of a DBFMO contract to the *Van Staten Groep Complan* consortium. Under the relevant contract, the selected private partner had to build a modern school campus and, at the same time, preserve the historical features of the pre-existing infrastructure. Specifically, the *Van Staten Groep Complan* consortium is responsible for the finance, design, construction and maintenance of the ISE for thirty years.

Several stakeholders contributed to the shaping of the ISE project. These are:

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<sup>222</sup> The first Dutch school delivered under a DBFM contract was the Montaigne School in The Hague. The latter was inaugurated in 2006.

<sup>223</sup> They have been built according to the principle of the so-called *Boostkazerne*, a type of barracks designed by captain Boost in the 1930s, also known as *Grensbataljonkazerne*.

- the Municipalities of Veldhoven, Helmond and Best (3 neighbour Municipalities of the city of Eindhoven),
- local companies,
- the City Region of Eindhoven,
- the Province of North-Brabant, and
- the Ministry of Economic Affairs and Finance.

These public and private entities supported - through cash contributions - the Municipality of Eindhoven in the payment of the fixed annual fee to the private consortium.

### **3.2.3.2 Socio-environmental benefits generated by the International School of Eindhoven project.**

Through this PPS project, numerous socio-environmental benefits were generated. These will be described in the following paragraphs. However, they can be summarised as follows.

Accelerated Delivery Benefits	Enhanced Delivery Benefits	Wider socio-environmental benefits
- quick and on time project completion	- technological innovation - environmental sustainability	- provision of a high quality education - integration of expatriate families into the local life - preservation of the existing eco-system

Table 15  
Socio-environmental benefits generated by the International School of Eindhoven project.

### **3.2.3.3 Accelerated Delivery.**

The ISE project generated accelerated delivery benefits. The ISE was, in fact, delivered quickly and on time. The completion date contractually agreed upon was August 19, 2013. Shortly after the contract close in December 2011, works began and ended exactly on August 19, 2013. Therefore, the school project was completed in only two years and within the planned schedule.

### **3.2.3.4 Enhanced Delivery.**

The ISE project generated enhanced delivery benefits. The integration of a life-cycle approach into the design, construction and management of the ISE allowed the delivery of an efficient and sustainable school building. All design decisions were taken following long-term flexibility, maintenance and management criteria. Investment costs of the construction phase mirrored this long-lasting responsibility. Sustainable, robust and maintenance-friendly materials were used and a

healthy working environment was created. Details were designed to be both elegant and effective. Overall, sustainability considerations were mainly implemented through the choice of the construction materials and through the great attention put into the integration of the new school in the surrounding environment. The spatial planning, in fact, required that the existing landscape had to be preserved by, *inter alia*, maintaining local plants and reinforcing ecological areas.



Fig. 12 The ISE buildings.

Source: <http://www.isecampus.com/Flex/Site/Page.aspx?PageID=&Lang=>

The DBFMO contract allowed the achievement of an effective balance between different needs. On the one hand, the Municipality's sustainability goals, which included the need to preserve the barracks' historical heritage and guarantee long-lasting management and maintenance of the ISE and, on the other hand, the private partners' cost-saving objectives. To tackle and balance such needs, the PPS arrangement implemented a highly innovative design solution. For instance, the ISE buildings' details are as flat as possible as edges entail dust, which in turn requires extra time and cleaning costs during both the operational and maintenance phases. Pipes and installation grids are hidden in the dormers in order to preserve the roofs' quality. Existing floors and staircases were effectively integrated within the new ISE building and maintenance-friendly floors and LEDs were used. The previous buildings had one-layer glass windows with steel frames, which did not meet the school's requirements. Therefore, second walls and windows were built from the inside in order to preserve the external historical integrity of the buildings and, at the same time, control sound and temperature in the internal areas. Every indoor space had, in fact, to be insulated from outside noises and be sound effective, meaning that all students had to be able to clearly hear teachers. Windows were built with sunscreens and three layer glasses to maintain an adequate sound and temperature climate in all school areas, including the library, the dance and drama spaces. Fresh air constantly circulates within the ISE buildings in order to reduce window openings that hinder the functioning of the sound and temperature insulation system. Specifically with regard to sound and climate, the ISE obtained the quality *Frisse Scholen A* certificate, which is the highest quality certification in this field achievable in the NL.<sup>224</sup> Once this certificate was obtained, the

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<sup>224</sup> Details available at <http://www.rvo.nl/onderwerpen/duurzaam-ondernemen/gebouwen/utiliteitsbouw/gebouwen-naar-functie/frisse-scholen>.

Municipality of Eindhoven received a bonus payment from the national Government, which allowed an increase of the fixed availability price paid by the Municipality to the private partner.<sup>225</sup>

Moreover, given the strict requirements on buildings' extensions, the original plan of creating one unique school, with a central common multimedia area, had to be rethought. Through the PPS project, the goal of creating one unique building was maintained, however, through an innovative solution. An underground building connecting all school barracks - and not compromising the existing infrastructures - was built.



Fig. 13

The ISE courtyard.

Source: <http://www.isecampus.com/Flex/Site/Page.aspx?PageID=&Lang=>

The gatehouse and the sports hall are, in fact, the only separated premises. The PPS project delivered also a parking space in order to ease the school's accessibility. There are separate entrances for cars, bicycles, trucks and pedestrians. Furthermore, the ISE was built in an area, which is part of the Dutch National Ecological Network. Therefore, tailored measures were adopted within the PPS project to address the issue of fauna and flora preservation. These include valuing and protecting each tree present on the site. The Figure below shows the actual structure of the ISE buildings.

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<sup>225</sup> Interview with Mr. René Bartels, Project Manager, Municipality of Eindhoven.

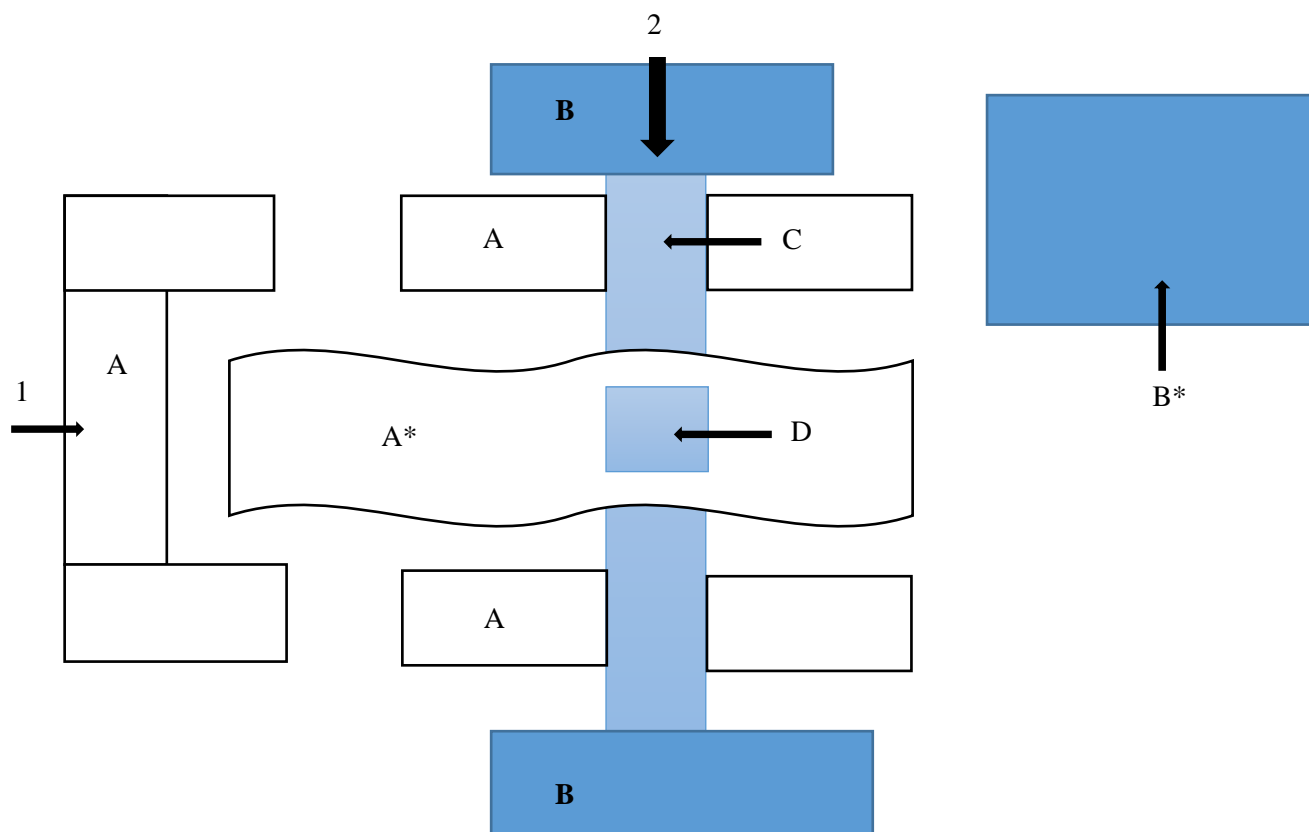


Fig. 14  
The ISE buildings, chart.

- 1 = former entrance
- 2 = new entrance
- A = existing buildings
- A\* = existing army courtyard renovated into a school courtyard
- B = newly constructed buildings
- B\* = sports area
- C = underground corridor connecting 4 of the school buildings hosting classrooms, a library and a theatre
- D = window glass ceiling of the underground corridor, which covers the library. It is visible from the school courtyard allowing light to penetrate in the underground areas.

Finally, it has to be mentioned that the ISE design project obtained the BREAAAM-certificate scoring GOOD with a total mark of 50.37%.<sup>226</sup> This means that the sustainability of the ISE design plan was actually measured. Specifically, BREAAAM-credits were obtained on health, acoustic facilities, sustainable lighting, flexibility, thermal comfort and ventilation, low energy consumption, leakage detection, irrigation, low CO<sub>2</sub> emissions, robust design and waste management. These high scores also meant a high score in the GPR method, the latter being a design instrument that determines sustainability by focusing on five key aspects, energy, environment, health, user quality and future value. The ISE project obtained a Good score in such areas.<sup>227</sup>

### 3.2.3.5 Wider socio-environmental gains.

<sup>226</sup> BREAAAM is the world's leading sustainability assessment method for infrastructure and buildings' master planning projects. It addresses a number of lifecycle stages such as new construction, refurbishment and re-use. Further details are available at <http://www.breeam.com/>.

<sup>227</sup> Energy: 57.69%; environment (materials: 53.85% and waste: 60.41 %); and health: 37.5%.

The ISE project also generated wider socio-environmental benefits. The PPS arrangement, in fact, positively affected the local region from both a social and environmental perspective. From the latter point of view, the school was built in a sustainable manner and great attention was put into the preservation of the existing eco-system.<sup>228</sup> From a social value perspective, the PPS project is effectively supporting the region's growth by forging a highly educated workforce. In this respect, the ISE offers an advanced educational programme, which complies with the relevant international standards. Specifically, the primary school applies the principles of the International Primary Curriculum. The secondary school runs the International Baccalaureate Middle Years Programme and the Diploma Programme.<sup>229</sup> The curricula offered are mainly designed for international students and programs are aligned in order to educate globally minded professionals. As of today, the ISE has been a success. The number of students enrolled increased more than expected. Therefore, under the DBFMO contract, an extra building - which is now under construction and will be delivered within 2023 - was planned in 2013.

As an important education reference point for the international community of the southern NL, the ISE promotes the integration of expatriate families into the local life. It provides educational, cultural and sport opportunities for both students and families. Among the facilities offered there are athletic tracks, a library and a restaurant. Furthermore, in order to ease the school's accessibility, under the PPS arrangement, two new roads connecting the ISE campus to Eindhoven were built and a special bus line was introduced to take students from and to the city's train station. Moreover, since Brainport<sup>230</sup> - with Eindhoven at its heart - has become one of Europe's prominent high-tech regions,<sup>231</sup> the ISE is cooperating with companies and organizations of the surrounding area. Local companies hire foreign workers who send their children to the ISE. Therefore, the school is not only an important educational attraction, but also a stimulating international community centre.

### 3.2.3.6 Tender's Strategies.

This paragraph will offer an overview of the strategies used by the Municipality of Eindhoven to embed socio-environmental sustainability considerations into the structure of this PPS project.

During the tender procedure, extra points were given to projects that guaranteed a high quality performance level. The award criteria used were price, quality - in terms of impacts on climate change - sound, effective use for school purposes and economic benefits. Moreover, the Municipality specified - in the *Outputspecificatie*<sup>232</sup> - the requirements that the ISE design plan had to comply with. This document set out specific goals that had to be met by the economic operator in order to integrate a life-cycle costing approach into the design, building and maintenance of the ISE project and deliver an environmental friendly school. The specific goals were the following.

BREEAM-NL.<sup>233</sup>

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<sup>228</sup> See Chapter IV, para 3.1.1., letter d).

<sup>229</sup> Details available at [http://www.isecampus.nl/Flex/Site/Page.aspx?PageID=&Lang=.](http://www.isecampus.nl/Flex/Site/Page.aspx?PageID=&Lang=)

<sup>230</sup> Brainport is considered as a 'leading technology' region in Europe. It is located in the southeast Netherlands.

<sup>231</sup> Further details available at [http://www.brainport.nl/en/.](http://www.brainport.nl/en/)

<sup>232</sup> *Outputspecificatie*, PPS Campus Internationale School Eindhoven, 2011, 23.

<sup>233</sup> The Building Research Establishment (BRE) - a British research organization - developed, in 1990, the 'Environmental Assessment Method' of buildings (EAM). The EAM aims at minimizing environmental impacts by making sure that sustainable best practices are into place. At the same time, EAM aims at lowering private contractor's

At least the level 'Good' had to be obtained in nine categories (when applying the list of mandatory BREEAM-NL credits).

Energy use.

Reducing and avoiding energy consumption is a high priority. The design plan has to implement an optimal balance between comfort and technology.

User behaviour.

Sustainable behaviour can be requested from building users. The housing and service provisions have to be connected to this goal by making sustainable measures visible.

Use of materials.

The following have to be preferred: biodegradable or re-usable materials; materials that can be recycled or that can be made from old materials.

Environmental burden.

The building use has to be as sustainable as possible and the burden on the environment has to be the least possible. Preference is given to CO<sub>2</sub>-neutral projects.

Waste and rainwater.

Wastewater has to be separated from rainwater at the dike of Oirschot. Rainwater from hard surfaces (e.g. roofs and parking spaces) has to be processed on site or where possible re-used (e.g. toilet flushing).

Waste materials.

Waste materials have to be separated, collected and disposed of as much as possible. Users are responsible for the separation of waste originating at the work place. When buying goods waste prevention has to be taken into account.

### **3.2.3.7 Contractual Strategies.**

The PPS terms and conditions that integrated socio-environmental concerns into the ISE project could not be specifically analysed. The private partner and the Municipality of Eindhoven, in fact, withheld - for confidentiality reasons - the PPS contract. Nonetheless, through the information

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costs through the implementation of energy efficiency measures. The EAM has been exported to other EU countries, such as the Netherlands. A national BREEAM scheme was, in fact, elaborated for the Netherlands upon the British model. The BREEAM-NL can count on four labels. The New Construction and Renovation label, which is used to measure the sustainable performance of new buildings. The In-Use label, which evaluates existing buildings focusing on 3 major aspects: building, management and use. The Area-development label, which evaluates the sustainable performance of an area development and the Demolition label, which evaluates the sustainability of demolition projects. See <https://www.breeam.nl/content/breeam-nl-english>. BREEAM-UK can count as well on different labels. For instance, the New Construction Infrastructure label (which is a pilot), which is a performance based assessment method and a certification of new infrastructures. This label aims at mitigating life cycle impacts of new infrastructure on the environment and enhance, at the same time, social and economic benefits. Moreover, there is the Home Quality Mark label, which provides data from independent experts on expected costs, health, wellbeing benefits and the environmental footprint related to a certain home. Additionally, the Code for Sustainable Homes may be mentioned. The latter is an environmental assessment system for the rating and certification of the performance of new homes.

gathered especially from the Municipality of Eindhoven, the content of the relevant contractual obligations - in the light of the scope of this research - was identified. Among these, reference is made to the payment mechanism, which contractually provides for payments by the Municipality of Eindhoven to the private contractor on an availability and delivery basis. The Municipality annually pays a fixed price - of about EURO 2 million - to the private party. In return, the private party is required to meet contractually set high-quality performance levels. In the case of under-performance, a discount is applied to the mentioned fixed price. Instead, in the case of over-performance, the private sector is entitled to extra profits.

## 4 Italy.

### 4.1 Sustainable development considerations: policies and national law.

Italy's long tradition in the use of public procurement laws and policies to pursue environmental and social objectives became even stronger in the last decades.<sup>234</sup> At central level, *Consip*, the national purchasing entity,<sup>235</sup> is increasingly laying down policy measures that promote socio-environmental considerations through public contracts. These range from the sustainable use of resources and health protection, to the reduction, re-use and correct life-cycle management of waste.<sup>236</sup> *Consip* is also partner of Green *ProcA*, which is a project providing support, know-how and green public procurement tools to the public sector. Specifically, it provides the public sector with guidelines, measurement tools, purchasing policies and best practices.<sup>237</sup> Through this programme, *Consip* organises public servants trainings, supports the development of green public procurement policies in 42 projects, monitors local green public procurement activities, communicates its knowledge through media and newsletters and offers its support on how to achieve green targets.<sup>238</sup>

Following the guidelines of the Ministry of Finance, *Consip* coordinates the *Programma per la Razionalizzazione degli Acquisti della Pubblica Amministrazione*, which is a project created in 2000 to improve public purchasing efficiency and to contribute to the development of procurement models based on innovative processes and technologies.<sup>239</sup> The focus areas of the programme are savings in the use of resources and materials, the protection of health, the reduction of waste production and efficient waste management. The most significant initiatives of this programme are the analyses of the existing legal frameworks and eco-labels as well as the identification of a set of general characteristics in view of a life-cycle analysis. Moreover, the project carries out market studies through questionnaires and meetings with economic operators for the identification of

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<sup>234</sup> See among others, R Caranta, S Richetto, 'Sustainable Procurements in Italy: Of Light and Some Shadows,' in R Caranta, M Trybus (eds), *The Law of Green and Social Procurement in Europe*, op. cit.. R Luciano, L Andriola, M D'Amico, 'Quando la Pubblica Amministrazione Acquista Verde' [2005] *Ambiente e Sviluppo*, 808.

<sup>235</sup> *Consip S.p.A.* is a joint stock company of the Minister of Economy and Finance, who is its only shareholder. *Consip S.p.A.* operates according to the Minister's instructions exclusively in support of the public sector.

<sup>236</sup> Further details are available at [http://www.consip.it/attivita\\_e\\_risultati/acquisti\\_verdi/](http://www.consip.it/attivita_e_risultati/acquisti_verdi/). Moreover, it can be mentioned the Italian National Institute for Environmental Protection and Research, *Istituto Superiore per la Protezione e la Ricerca Ambientale*, which gave an important contribution to the preparation and application of measures for the development of environmentally sustainable and correct buying policies. See <http://www.isprambiente.gov.it/en/ISPRA>.

<sup>237</sup> Further details on the project can be found at <http://gpp-proca.eu/>.

<sup>238</sup> Details on *Consip S.p.A.*'s role in Green *ProcA* can be found at <http://gpp-proca.eu/it/about-the-project/project-participants/consip-s-p-a/>

<sup>239</sup> For further details on the program see

[https://www.acquistinretepa.it/opencms/opencms/menulivello\\_I/header/Inglese/PROGRAM](https://www.acquistinretepa.it/opencms/opencms/menulivello_I/header/Inglese/PROGRAM).

specific criteria. This programme also allows public authorities to carry out green e-purchasing within the categories of products and services covered by the project.<sup>240</sup>

In 2002, the Ministry of the Environment, Land and Sea adopted the *Strategia d'Azione Ambientale per lo Sviluppo Sostenibile*.<sup>241</sup> It is the Italian environmental action strategy for sustainable development<sup>242</sup> focusing especially on environmental issues, such as those arising out of the tension between economic growth and the exploitation of national resources in the fields of agriculture and transport. In this respect, a number of reference indicators have been developed for the use of materials, energy, water and waste per units.<sup>243</sup> The action strategy has been implemented mainly through specific sustainable development initiatives in depressed areas of southern Italy, through the promotion of environmental certifications for SMEs and agreements with industries to create low emissions systems and energy efficient technologies. Research has also been carried out to identify production and exploitation methods of energy through renewable resources and efficient technologies for the distribution of electricity and heat.<sup>244</sup> Moreover, within the 2020 EU strategy for smart, sustainable and inclusive growth, the *Comitato Interministeriale per la Programmazione Economica*<sup>245</sup> adopted the *Piano Nazionale di riduzione dei gas-serra 2013-2020*.<sup>246</sup> The latter is the national action plan for the reduction of greenhouse gas emissions that seeks to guide the country towards emission levels, which comply with those set by Decision n. 406/2009/EC, and continue the process of decarbonisation of the economy within 2050.<sup>247</sup>

In addition, following the EU Commission's 2008 Action Plan for sustainable production and consumption,<sup>248</sup> Italy adopted its own *Piano d'Azione per la Sostenibilità Ambientale dei Consumi nel Settore delle Pubbliche Amministrazioni*.<sup>249</sup> The national action plan for environmental sustainability of public sector's consumptions, revised in 2013,<sup>250</sup> sets out a general reference framework for the purchase of different types of products and services. The plan envisages the adoption of measures for the inclusion of environmental sustainability considerations in public purchasing according to two main criteria, namely, reduction of the use of natural resources and use

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<sup>240</sup> *Mepa*, the *Mercato Elettronico delle PA* is the Italian e-procurement system.

<sup>241</sup> Available at [http://www.minambiente.it/sites/default/files/archivio/allegati/GPP/PAN\\_GPP.pdf](http://www.minambiente.it/sites/default/files/archivio/allegati/GPP/PAN_GPP.pdf).

<sup>242</sup> Approved by the inter-ministerial Committee for Economic Planning on August 2, 2002, Deliberation n. 57.

<sup>243</sup> A set of 150 indicators were elaborated. These include also the key environmental indicators of the Barcelona European Council of 2002.

<sup>244</sup> See Chapter 2, para. 2.8. of the strategy available at [http://www.minambiente.it/sites/default/files/archivio/allegati/sviluppo\\_sostenibile/strategia\\_svs\\_2002.pdf](http://www.minambiente.it/sites/default/files/archivio/allegati/sviluppo_sostenibile/strategia_svs_2002.pdf).

<sup>245</sup> The *Comitato Interministeriale per la Programmazione Economica* is an operational body of the central government entrusted with important competences in the field of economic growth.

<sup>246</sup> See the *Revisione delle Linee Guida per le Politiche e Misure Nazionali di Riduzione delle Emissioni dei Gas Serra* (Legge 120/2002), CIPE, available at

[http://www.minambiente.it/sites/default/files/archivio/allegati/vari/deliberaCIPE\\_19\\_12\\_02.pdf](http://www.minambiente.it/sites/default/files/archivio/allegati/vari/deliberaCIPE_19_12_02.pdf). See also the monitoring report on the state of art, *Documento di Economia e Finanza 2014, Relazione del Ministero dell'Ambiente e della tutela del territorio e del mare sullo stato di attuazione degli impegni per la riduzione delle emissioni di gas ad effetto serra*, L. n. 39/2011, art. 2, co. 9., available at [http://ec.europa.eu/europe2020/pdf/csr2014/ghg2014\\_italy\\_it.pdf](http://ec.europa.eu/europe2020/pdf/csr2014/ghg2014_italy_it.pdf).

<sup>247</sup> *Comitato Interministeriale per la Programmazione Economica*, Delibera 8 marzo 2013, *Aggiornamento del piano di azione nazionale per la riduzione dei livelli di emissione di gas a effetto serra*, (Delibera n. 17/2013), GU, Serie generale - n. 14.

<sup>248</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan, Brussels, 16.7.2008 COM(2008) 397 final, available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52008DC0397&from=EN>.

<sup>249</sup> Adopted by the *Legge Finanziaria* 2007, Law n. 296/2006.

<sup>250</sup> The updated text is available at

[http://www.minambiente.it/sites/default/files/archivio/allegati/GPP/GU\\_102\\_2013\\_PAN\\_GPP\\_revisione.pdf](http://www.minambiente.it/sites/default/files/archivio/allegati/GPP/GU_102_2013_PAN_GPP_revisione.pdf).

of energy from renewable sources.<sup>251</sup> Thus, the key objectives of the action plan are an efficient use of natural resources - especially of energy - reduction of waste and use of dangerous substances. The core national goals entail that at least 30% of goods purchased by the public sector comply with sustainable criteria and that at least 30-40% of public authorities reduce their electricity consumption. Moreover, the plan elaborated and adopted a set of minimum environmental criteria, the so-called *CAM*,<sup>252</sup> for a number of categories of products and services, such as construction materials, public transports, waste management and energy services.<sup>253</sup> Contracting authorities are encouraged to include these criteria in their calls for tenders for all goods and services indicated in the plan, which may be furniture for offices or vehicles.

In 2015, a specific working group was established within the Ministry of the Environment, Land and Sea, to start a review process of the above-mentioned environmental action strategy for sustainable development and to create coordinated strategies between the national institutions involved. In fact, the Italian network of Environmental agencies, including the Italian National Institute for Environmental Protection and Research, *Istituto Superiore per la Protezione e la Ricerca Ambientale*<sup>254</sup> as well as other regional environmental entities, supports the implementation of national sustainable development objectives at a regional level, promoting the elaboration of harmonised methodological and operational guidance. Another national network, along with the managing authorities of EU structural funds, supports, instead, southern regions, which also benefit from EU funding.<sup>255</sup>

National policies take into consideration also social value concerns. In 2012, the Ministry of the Environment, Land and Sea adopted the *Guida per l'integrazione degli aspetti sociali negli appalti pubblici*, which is a guide specifically dedicated to the integration of social considerations into public contracts.<sup>256</sup> This document provides for operational guidance on how to include social considerations in the elaboration of tenders. Reference is made to other Member States' experiences in the integration of social concerns - such as decent work conditions - in public procedures. Social standards are identified by reference to human rights and work conditions internationally recognised and defined in the core ILO conventions. Relevant national legislation, the United Nations Universal Declaration of Human Rights and the Convention on the Rights of the Child, are also used as reference points. Compliance with the highest standard level is required whenever domestic law is applicable. Moreover, the guide expresses the need to create an effective dialogue between the public sector and economic operators in order to improve knowledge on work conditions, give signals of increased commitment on social standards, monitor the application of social considerations and, when needed, adopt corrective measures. Such a dialogue is realised through the drafting of contract terms, which integrate social concerns.<sup>257</sup>

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<sup>251</sup> See <http://www.minambiente.it/pagina/gpp-acquisti-verdi>.

<sup>252</sup> *Criteri Ambientali Minimi (CAM)*.

<sup>253</sup> The updated and complete list of minimum environmental criteria can be found at <http://www.minambiente.it/pagina/criteri-vigore#1>.

<sup>254</sup> The *Istituto Superiore per la Protezione e la Ricerca Ambientale* is the national reference body on environmental and sustainable development. For further details see <http://www.isprambiente.gov.it/en>.

<sup>255</sup> See [http://ec.europa.eu/regional\\_policy/en/information/legislation/guidance/](http://ec.europa.eu/regional_policy/en/information/legislation/guidance/).

<sup>256</sup> The Guide was adopted with Ministerial Decree n. 159/2012. Full text is available at <http://www.minambiente.it/sites/default/files/archivio/allegati/GPP/GUDMxALL.pdf>.

<sup>257</sup> See Section 6 of the Guide at <http://www.minambiente.it/sites/default/files/archivio/allegati/GPP/GUDMxALL.pdf>.

Given the overall decentralised Italian procurement system, many policy initiatives also emerge at a regional and local level.<sup>258</sup> For instance, in 2003, the Province of Torino and the regional agency for the protection of the environment<sup>259</sup> started a project, called *APE*, for the development of green public procurement.<sup>260</sup> The procuring entities joining the *APE* project committed themselves to use shared environmental criteria for the purchase of several categories of goods, reduce the use of toxic chemicals and include environmental aspects in award criteria.<sup>261</sup> The environmental criteria developed within the *APE* project are constantly updated and harmonised with the national *CAM*. In addition, contracting authorities who are part of the *APE* project are required to refer to environmental technologies and eco-labels, in accordance with Regulation 2010/66/EC on the EU Eco-label.<sup>262</sup> Moreover, *APE* envisages an annual monitoring and periodic assessments of the results obtained through the implementation of the project.

As anticipated in Chapter II, para 5.1.3., the relevant Italian legal framework is represented by the Legislative Decree n. 50/2016, which repealed the previous Code of Public Contracts<sup>263</sup> and implemented Directives 2014/24/EU, 2014/23/EU and 2014/25/EU. The Legislative Decree n. 50/2016 - the new Code of Public Contracts, which entered into force on April 19, 2016 - closely follows the content of the EU Directives in terms of promotion of sustainability concerns. In fact, the provisions of the 2014 EU public procurement reform that opened the way to the integration of social and environmental considerations into public contracts were fully implemented into the Italian legal system. In this respect, Article 30 of the new Code of Public Contracts can be mentioned first. It provides that, within the limits prescribed by the applicable laws and this Code, the principle of best VfM can be subordinated to social and health protection, environmental and cultural heritage criteria and promotion of sustainable development.<sup>264</sup> Moreover, Article 30 states that, when performing public contracts, economic operators must comply with the applicable obligations in the fields of environmental, social and labour EU and domestic laws, collective agreements or international provisions listed in Annex X of the Code.

Furthermore, Article 34, Code of Public Contracts goes beyond that provided by the EU Directives. This Article states that contracting authorities contribute to the achievement of the environmental objectives set out in the national action plan through the inclusion - in project and tender documents - of technical specifications and contractual terms contained in the *CAM*. This is mandatory for the award of any public contract. Specifically, the *CAM* must be included in all public purchasing: 100% in cases of services and products that consume energy (among others, the planning, construction, refurbishment, management and maintenance of buildings) and 50%<sup>265</sup> in cases of other procurement categories. Moreover, Article 34 of the Code provides that the *CAM*

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<sup>258</sup> R Caranta, 'I contratti pubblici, in F G Scoca' in F A Roversi Monaco, G Morbidelli (eds), *Sistema del diritto amministrativo italiano* (Giappichelli, 2004).

<sup>259</sup> ARPA, the *Agenzia Regionale per la Protezione dell'Ambiente*.

<sup>260</sup> The *Acquisti Pubblici Ecologici (APE)* project. Details are available at <http://www.cittametropolitana.torino.it/cms/ambiente/agenda21/ape>.

<sup>261</sup> E Degiorgis, M Glisoni, 'Progetto APE: l'esperienza della provincia di Torino negli acquisti pubblici ecologici' [2007] *Ambiente e Sviluppo*, 435.

<sup>262</sup> See [http://www.provincia.torino.gov.it/ambiente/agenda21/acquisti\\_ecologici/](http://www.provincia.torino.gov.it/ambiente/agenda21/acquisti_ecologici/).

<sup>263</sup> The D. Lgs. of April 12, 2006, n. 163, which put together various pieces of legislation on the procurement of works, supplies and services.

<sup>264</sup> The Italian legal system has always been trying to justify the coexistence of the principle of competition with the principle of best value for money in public contract law. See, in this respect, M E Comba, 'Green and Social Considerations in Public Procurement Contracts: A Comparative Approach' *op.cit.*, 299.

<sup>265</sup> The Ministry of the Environment, Land and Sea can increase this percentage.

must be taken in consideration also when applying the criterion of the MEAT. Contracting authorities must publish on their website details of which tender procedures include the *CAM* and the *ANAC*<sup>266</sup> is entrusted with the duty of monitoring the correct application of the minimum environmental criteria. Article 50 of the Code of Public Contracts, instead, expressly takes into account social considerations. This provision allows contracting authorities to use - within the limits of EU law - social clauses to promote employment stability of the personnel involved in the performance of a public contract and foresees the application of the relevant collective agreements.

In Italy, technical specifications are drafted in the so-called *capitolati*<sup>267</sup> and Article 68 of the Code of Public Contracts regulates them closely by following the wording of the EU Directives. It states that they may refer to a specific process or method of production, execution of work or service provision or to a specific process related to another phase of its life-cycle. This is possible even if such elements do not form part of the material substance of the contract, provided that they are linked with the subject-matter of the contract and are proportionate to its value and objectives. Thus, sustainability considerations may find a large space in the drafting of technical specifications. The latter must also take into account accessibility criteria for persons with disabilities and adequate planning for all end-users. Moreover, there are pieces of legislation outside the Code of Public Contracts embedding social and environmental concerns that, even if not expressly referred to, may have to be complied with in the drafting of technical specifications.<sup>268</sup> For instance, rules on the employment of people with disabilities. In addition, as held by Article 68, para 5, Code of Public Contracts, technical specifications must be drafted in terms of performance or functional requirements, expressly including environmental characteristics, or refer to technical systems adopted by EU bodies. Furthermore, Article 69, Code of Public Contracts, provides that contracting authorities that purchase works, supplies or services with specific environmental or social features, can require through technical specifications, award criteria or performance conditions, a specific label proving that the works, supplies or services meet the required characteristics. Such labels must be based on objective, verifiable and non-discriminatory criteria, be established through a specific open and transparent procedure and be accessible to all interest parties.

Sustainable development considerations find space also in Article 80, Code of Public Contracts, which regulates exclusion grounds. This provision supports the creation of social value through the exclusion of economic operators that were convicted, with a final and binding decision, for child labour and other forms of human trafficking in accordance with Legislative Decree n. 24/2014. Furthermore, economic operators are excluded from participation in a tender procedure if they were convicted, with a final and binding decision, for serious violations of the applicable obligations in the fields of taxes and social security contributions. Serious violations are those entailing non-payment of taxes above specifically set thresholds.<sup>269</sup> Discretionary exclusion grounds also support social concerns. Article 80, para 5, letter a), states that economic operators may be

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<sup>266</sup> The *ANAC* (*Autorità Nazionale Anticorruzione*) is the Italian National Authority for Anti-Corruption entrusted of the duty of monitoring public contracts.

<sup>267</sup> S Ponzio, *I capitolati negli appalti pubblici* (Novene, 2006). R Invernizzi, 'Specifiche tecniche' in M A Sandulli, R De Nictolis, R Garofoli (eds), *Trattato sui contratti pubblici* (Giuffrè, 2008), 2073.

<sup>268</sup> Among others, see Cons. Stato, Sez. V, [2009] n. 4028, in *Giur. It.*, 456. Cons. Stato, Sez. V, [2007] n. 256, in [www.giustizia-amministrativa.it](http://www.giustizia-amministrativa.it). Cons. Stato, Sez. V, [2004] n. 7555, in *Foro Amm. CDS*, 3244. M Occhiena, 'Norme di gestione ambientale' in M A Sandulli, R De Nictolis, R Garofoli (eds), *Trattato sui contratti pubblici* (Giuffrè, 2008), 1474.

<sup>269</sup> See Article 48-bis, paras 1 and 2-bis, DPR n. 602/1973.

excluded from participation in a tender procedure if the contracting authority proves, by any mean, a serious violation of the applicable obligations:

- in the field of health and workplace safety, or
- according to Article 30, para 3, of the Code (Article 18, para 2, Directive 2014/24/EU).

Moreover, Article 80, para 5, letter c), provides that exclusions may also follow in the case of serious professional misconduct of the economic operator demonstrated by any mean by the contracting authority. Such conduct may cover poor environmental performance of a previous contract, which has led to an early termination or damages. Mandatory and discretionary exclusion grounds are applicable at any stage of the procedure.<sup>270</sup>

By stating that selection criteria may concern, *inter alia*, the technical and professional ability of the economic operator, Article 83, Code of Public Contracts, allows room for sustainability considerations in public contracts. Contracting authorities may, in fact, require that economic operators have the human and technical resources and experience necessary to perform the contract according to an adequate quality standard. In addition, selection criteria may be drafted in terms of minimum levels of capabilities - e.g. ability of carrying out sustainable constructions - which must be verified by the contracting authority. The ANAC manages a rating system of economic operators based on qualitative, quantitative, objective and measurable indicators.<sup>271</sup> The ANAC defines the rating requirements,<sup>272</sup> the relevant evaluation criteria and the circumstances upon which certifications showing the rating of an economic operator can be issued.<sup>273</sup> Moreover, Article 87 of the Code provides that a contracting authority may require certificates issued by independent bodies attesting that the economic operator meets certain quality standards, including accessibility for persons with disabilities. In this case, the contracting authority must refer to EU quality systems certified by accredited bodies, such as EMAS or other environmental management systems complying with Article 45, Regulation n. 1221/2009.

Furthermore, Article 94, para 2, Code of Public Contracts, provides that contracting authorities may decide not to award the contract to the tenderer that presented the MEAT if that tender does not comply with the applicable obligations in the fields of labour, social and environmental law (Article 30, para 3, Code of Public Contracts and Article 18, para 2, Directive 2014/24/EU). Award criteria must come along with specifications that allow contracting authorities to verify the information provided by economic operators in order to evaluate the extent to which tenders meet such criteria. Following Directive 2014/24/EU, Article 95, Code of Public Contracts, states that the MEAT is identified by looking at the best quality-price ratio or at the price or cost, applying a cost-effectiveness approach, such as life-cycle costing.

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<sup>270</sup> In this respect see, among others, R Greco, 'I requisiti di ordine generale' in M A Sandulli, R De Nictolis, R Garofoli (eds), *Trattato sui contratti pubblici* (Giuffrè, 2008), 1267.

<sup>271</sup> Article 83, para 10, Code of Public Contracts.

<sup>272</sup> These take into account, among other aspects, the rating of legality of the economic operator (as recorded by the ANAC and by the Antitrust Authority), previous performances in terms of time and costs in the execution of contracts and the compliance with tax obligations.

<sup>273</sup> Further details are available at

[http://www.anticorruzione.it/portal/rest/jcr/repository/collaboration/Digital%20Assets/anacdocs/Attivita/ConsultazioniOnline/20160610/RATING.IMP.11.53\\_.pdf](http://www.anticorruzione.it/portal/rest/jcr/repository/collaboration/Digital%20Assets/anacdocs/Attivita/ConsultazioniOnline/20160610/RATING.IMP.11.53_.pdf).

Article 95 of the Code then remarkably goes beyond the wording of Article 67, Directive 2014/24/EU,<sup>274</sup> by somehow limiting the application of the price or cost element. In fact, it expressly states that certain contracts must be exclusively awarded on the basis of the MEAT identified according to the best quality-price ratio. These contracts are those in the fields of social services, hospital food services, school services, services with a high degree of manpower, architectural and engineering services. Moreover, Article 95, para 4, of the Code, provides for some sort of guidance on the use of the price or cost element. It states that this criterion should only be used in specific cases, such as services and supplies that have standardised characteristics or market defined conditions. In addition, the Italian legislator aimed at limiting the use of only the price or cost criterion by requiring contracting authorities that apply it to give adequate reason for its use.

Article 95, para 6, of the Code, with few drafting modifications closely follows Article 67, Directive 2014/24/EU, by stating that the MEAT identified according to the best quality-price ratio is evaluated upon qualitative, environmental and social criteria linked with the subject-matter of the contract. These criteria may include quality, technical, aesthetic and functional characteristics, accessibility for persons with disabilities, adequate planning for all users, certification in the fields of health and safety of workers, such as OSHAS 18001,<sup>275</sup> social and environmental characteristics, energy and resource savings and innovative elements. Moreover, qualitative criteria may refer to the Ecolabel, to costs of use and maintenance, having regard to energy and resource consumptions, to pollutant emissions, to overall costs, including external ones and those related to the mitigation of climate change impacts related to the entire life-cycle of specific goods, services or works. The overall goal is to achieve an efficient use of resources and the promotion of a circular economy, which supports employment and economic growth.<sup>276</sup>

Furthermore, qualitative criteria may refer to compensations of greenhouse gas emissions calculated according to Recommendation n. 2013/179/EU, the delivery date, delivery process, organization, qualification or experience of the staff involved in the execution of the contract. The latter aspect, however, can only be taken into account if the quality of the staff has a significant influence on the level of performance of the contract. Moreover, Article 95, para 11, of the Code along the lines of Article 67, Directive 2014/24/EU - specifies that award criteria are linked with the subject-matter of the contract if they refer to the works, supplies or services of the contract under any aspect and in any phase of their life-cycle. This means that factors involved in the specific production process or in a specific process of another phase of their life-cycle are included, even if such factors are not part of their material substance. Then, Article 95, para 13, of the Code, once again goes beyond what is provided by Directive 2014/24/EU. Within the limits of EU law, the principles of equal treatment, non-discrimination, transparency and proportionality, contracting

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<sup>274</sup> Generally on award criteria in EU law see, among others, M E Comba, 'Selection and award criteria in Public Procurement Law' [2008] PPLR.

<sup>275</sup> OHSAS 18001 are international Occupation Health and Safety Assessment Series in the area of health and safety management systems. OHSAS 18001 aim at supporting organizations in the control of workers' health and safety risks. It was elaborated to respond to the increasing demand for a recognized standard against which it could be certified and evaluated.

<sup>276</sup> The EU Commission adopted a Circular Economy Package, which includes legislative proposals focused on waste that seek to support Europe's transition towards a circular economy which will promote competitiveness, foster a sustainable economic growth and create new jobs. In this respect, see the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions closing the loop - a EU Action Plan for the Circular Economy, COM/2015/0614 final. Further details are also available at [http://ec.europa.eu/environment/circular-economy/index\\_en.htm](http://ec.europa.eu/environment/circular-economy/index_en.htm).

authorities must indicate in the procurement documents the higher weighting that applies to the tender that has the lowest impact on health and environment.

Article 96, Code of Public Contracts, following Article 68, Directive 2014/24/EU, regulates life-cycle costing by stating that it covers all or some of the life-cycle costs of goods, services or products borne by end-users, the contracting authority and the environment. These may be costs related to acquisition, use - such as energy and other resource consumption - maintenance costs, end-life or disposal costs and costs related to environmental externalities. The latter must be valuable in monetary terms and may be costs related to greenhouse gas emissions or mitigations of climate changes.

Additionally, Article 97, of the Code, on abnormally low tenders, allows room for sustainable development concerns. It provides for the exclusion of a tender if the contracting authority establishes that it is abnormally low because it does not comply with the applicable obligations in the fields of social, labour and environmental laws according to Article 30, para 3, of the Code (Article 18, para 2, Directive 2014/24/EU). With regard to the performance of public contracts, Article 100 of the Code holds that contracting authorities may require particular performance conditions related to innovation and, especially, social and environmental considerations. In addition, outside the Code there are often pieces of legislation that must be taken into consideration in the drafting of contract terms. This is the case, for instance, of rules on employment of disadvantaged categories, social security, working hours, workplace safety and health.<sup>277</sup>

In the case of works or service concessions, Article 170 of the Code states that technical specifications may refer to the specific production process or performance of the required work or service. However, such reference must be linked to the subject-matter of the contract and be proportionate to its value and objectives. Technical specifications may also refer to quality and environmental performance levels, impacts on climate and planning for all needs. Article 172, Code of Public Contracts, then holds that contracting authorities verify participation conditions concerning technical and professional capability of economic operators. Participation conditions must be related and proportionate to the need of guaranteeing the concessionaire's ability to perform the contract. Moreover, Article 173 of the Code states that concessions are awarded according to the principles set out in Article 30 of the same Code. Thus, in the award of concession contracts the principle of best VfM may be subordinated to social, health, environmental and cultural criteria and the promotion of sustainable development.<sup>278</sup>

As anticipated in Chapter II, para 5.1.3, the new Code of Public Contracts introduced for the first time in the Italian legal system an entire section specifically dedicated to the regulation of PPP contracts. Part IV of the Code, while offering a rationalisation of the existing rules on PPP contracts, specifies key concepts and introduces new provisions, which expressly allow space for sustainability considerations in the structure of PPP contracts. First of all, according to Article 179 of the Code, in addition to the specifically dedicated rules, the provisions of the Code on general

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<sup>277</sup> Corte Cost. n. 331/2003, Foro it., [2004], I, 1364, with note of M Miglioranza 'Inquinamento elettromagnetico e limiti alle competenze regionali: standard di protezione nazionali e legalità sostanziale'. As a way of example, Law, n. 13/1989 and Law n. 62/1989 that promote accessibility for all in both public and private buildings. Law n. 4/2004 that supports access of persons with disabilities to IT systems of the public sector and of private companies entrusted with the provision of a service of general interest. Law n. 2/2009 that requires the public sector to verify compliance with the relevant rules on social contributions and work safety. Law n. 68/1999 that mandates the mandatory hiring of workers with disabilities in both public and private law entities. Tenderers must show and demonstrate their compliance with the relevant provisions in order not to be excluded from the tender procedure.

<sup>278</sup> Article 30, para 1, Code of Public Contracts.

principles and awarding procedures apply also to PPPs. Article 180 of the Code, then defines PPP contracts and their main characteristics,<sup>279</sup> clearly stating that the recovery of the economic operator's investments and expenses depends:

- on the actual provision of the service, or
- on the availability of the infrastructure, or
- on the delivery of a total amount of services, which satisfies the demand of that service, and,
- in any case, on the compliance with the quality levels contractually agreed upon.

As mentioned, linking the recovery of the private sector's investments to the availability or delivery of the project represents a powerful incentive for the private partner to deliver infrastructure or services on time and according to certain technical characteristics specifically agreed upon. In addition, by allowing the recovery of the investments, in any case, only if the quality levels that were contractually agreed upon are complied with, reaffirms the importance of innovative and sustainable solutions allowing real space for the inclusion of sustainable development concerns into the structure of PPP contracts. Moreover, according to Article 180, para 4, Code of Public Contracts, contracting authorities may choose to remunerate the economic operator - on an availability or demand basis - an amount which is proportionally reduced or eliminated in cases of lower or non-availability of the infrastructure or service. The same provision specifies that such variations in the remuneration must - in any case - have a significant impact on the net actual value of the investments, costs and gains borne by the economic operator. The contracting authority may also choose to remunerate the economic operator differently, however, always on an availability or demand basis. Alternatively, the contracting authority may decide that the economic operator is remunerated through the exploitation of the service itself. In this case, the private partner bears the risks of the negative market fluctuations of the service demand.

Article 183 of the Code, specifically focuses on project financing and specifies that, in addition to what is provided by Article 95 on award criteria,<sup>280</sup> the evaluation of proposals covers also aspects related to the projects' quality,<sup>281</sup> thereby explicitly allowing space for sustainability considerations into this kind of PPP scheme.<sup>282</sup> Furthermore, Article 188, Code of Public Contracts, states that in the availability contract - which is another legal type through which Italian PPPs may present themselves - the private party is remunerated, *inter alia*, through a sum paid upon actual availability of the infrastructure or service. This amount is given to the economic operator only upon the actual availability of the infrastructure or service and it is proportionally reduced or

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<sup>279</sup> See above Chapter II, para 5.1.3.

<sup>280</sup> On the rules on award criteria, see above and Chapter II, para 5.1.3.

<sup>281</sup> The so-called *progetto definitivo*.

<sup>282</sup> On the characteristics of project financing under the previous Code of Public Contracts see the *Linee guida per l'affidamento delle concessioni di lavori pubblici e di servizi ai sensi dell'articolo 153 del decreto legislativo 12 aprile 2006, n. 163*, Autorità Nazionale Anticorruzione Vigilanza Contratti Pubblici, Bozza di Determinazione, 6, available at [http://www.anticorruzione.it/portal/rest/jcr/repository/collaboration/Digital%20Assets/anacdocs/Attivita/Consultazioni Online/20150108/Cons.PF.03.0315.pdf](http://www.anticorruzione.it/portal/rest/jcr/repository/collaboration/Digital%20Assets/anacdocs/Attivita/Consultazioni%20Online/20150108/Cons.PF.03.0315.pdf). M Nicolai, *Primo rapporto sulla finanza pubblica, Finanza pubblica e federalismo* (Maggioli Editore, 2000). G Ferrante, P Marasco, 'Equilibrio economico finanziario e valutazione di congruità del contributo pubblico in un'operazione di finanza di progetto' in G Cartei, M Ricchi (eds), *Finanza di Progetto, Temi e prospettive, Approfondimenti sistematici ed interdisciplinari* (Editoriale Scientifica, 2010).

eliminated in cases of limited or non-availability. Article 188, para 6, Code of Public Contracts, further provides that the contracting authority must verify the completion of the project and compliance with the set performance requirements.<sup>283</sup> Accordingly, it can propose modifications, variants, the reduction of the availability fee or even to re-do certain works.<sup>284</sup> Once more, it is stressed that public sector's payments depend on the completion of works and on the availability of the infrastructure or service according to the conditions set out in the PPP contract, which may include socio-environmental considerations.<sup>285</sup>

According to Article 189, Code of Public Contracts, citizens can manage and maintain public green areas or estates reserved to social and cultural community activities.<sup>286</sup> To this end, citizens create consortia. Regions and municipalities can incentivize the direct management of such areas or estates through tax reductions. Moreover, for the realization of local projects, groups of citizens can forward proposals of prompt realization, indicating costs and funding means, to the competent public entity. The local public entity may approve such proposals and regulate the realization phase as well as the timetable of its execution. Along the same lines, Article 190 of the Code states that local entities define criteria and conditions for the performance of social partnerships contracts carried out upon citizens' projects. These kind of PPPs may concern cleaning or maintenance services, improvement of green areas, squares, streets, or their enhancement through cultural activities, as well as the restoration and re-use in the public interest of unused areas or estates. Local public entities identify tax reductions or exemptions according to the specific activity carried out in order to support and reaffirm the importance of social value and citizens' participation in this kind of initiatives.

Article 192, para 2, Code of Public Contracts, further provides for a specific set of rules on in-house awards. It states that in case of in-house awards of services available on the market in a competitive regime, the contracting authority assesses the consistency of the economic offer having regard, *inter alia*, to the benefits for the community arising out the chosen management system, with specific attention to social, efficiency and quality objectives.

Furthermore, sustainability concerns may be included also in another type of PPP contract, the so-called *affidamento a contraente generale*. According to Article 194, para 4 of the Code, the general contractor is liable for the correct and on time execution of the project. The general contractor may execute the works directly or through third parties. In the latter case, the contracting authority verifies - before any payment to the general contractor - the performance of every contractual obligation by the general contractor in favour of the third parties. If the contracting authority finds the general contractor in breach of its obligations it can deduct further payments, directly pay the third parties and apply contractual penalties. If the general contractor executes the works itself, it will receive the relevant payment only upon completion of the works. Article 195, Code of Public Contracts, states that the award of a contract to a general contractor must be motivated by the complexity of the project and by the need to guarantee a high level of - *inter alia* - quality. Finally, sustainability concerns may find space through the provisions of Article 195, para

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<sup>283</sup> On the *contratto di disponibilità* see, among others, F Saitta, *Appalti e Contratti Pubblici: Commentario sistematico* (Cedam, 2016), para 2.3.

<sup>284</sup> M Nicolai, W Tortorella, *Partenariato Pubblico Privato e Project Finance* (Maggioli Editore, 2016).

<sup>285</sup> On the transfer of risk in PPP contracts see, *inter alia*, L Miniace, *Partenariato Pubblico-Privato* (Youcanprint, 2014).

<sup>286</sup> See Art. 4, 7° *Rapporto sull'attuazione del Programma delle Infrastrutture strategiche*, Camera dei Deputati, 19 dicembre 2012, XVI Legislatura, Bollettino delle Giunte e delle Commissioni Parlamentari, Ambiente, Territorio e Lavori Pubblici (VIII), Allegato 1.

4, of the Code. The latter provide that the award of a contract to a general contractor, in addition to the criteria set out in Article 95,<sup>287</sup> must take into account - among others - the following aspects:

- technical and aesthetic value of variants,
- the execution and delivery schedule,
- use and maintenance costs, and
- any other relevant element with respect to the specific features of the project.

As a final remark, it can be mentioned that on December 28, 2015, the Italian legislator enacted Law n. 221. Its provisions are relevant in the environmental field and are designed to promote green economy measures and restrain an excessive use of natural resources. Law n. 221/2015 entered into force on January 18, 2016,<sup>288</sup> and is having a significant impact on various aspects of the national environmental legislation in the direction of simplification and promotion of re-use of resources and environmental sustainability through, *inter alia*, the provision of incentives that reward virtuous behaviours of consumers, producers and institutions. Among the various measures introduced by Law n. 221/2015, the following may be mentioned. A sustainable mobility fund of approximately EURO 35 million established in order to allow municipalities with more than 100,000 inhabitants to fund sustainable mobility projects that limit traffic and pollution. Moreover, Regions have the possibility to grant economic incentives to municipalities that increase separate waste collection and reduce the amount of non-recycled waste. A new "Made Green in Italy" brand was created in order to indicate and highlight the environmental footprint of products.<sup>289</sup>

## 4.2 Case studies.

The Italian PPP projects that will be described in the following paragraphs are examples of public-private collaboration schemes that generated socio-environmental benefits through an effective integration of sustainability considerations in their design, structure and management.

In line with one of the main characteristics of the Italian PPP phenomenon, all three projects, namely Ivrea 24, TRM and *Scuola di Biotecnologie*, were launched by a local public authority. In fact, in Italy, mainly municipalities engage in PPP arrangements. Recent studies on the national PPP market highlighted the central role played by city councils in the implementation of medium-sized PPP schemes, compared to the smaller role - and concentrated on larger projects - played by central State public bodies.<sup>290</sup>

Researching and gathering data and documents on the selected PPP case studies was a stimulating and enriching activity. The private and public parties involved were very supportive during the entire research and study period, being available for interviews, clarifications and provision of projects' documents. Specifically, for what concerns the first case study - the Ivrea 24

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<sup>287</sup> On the rules on award criteria, see above as well as Chapter II, para 5.1.3..

<sup>288</sup> Law n. 221, December 28, 2015. Full text available at [http://www.gazzettaufficiale.it/atto/stampa/serie\\_generale/originario](http://www.gazzettaufficiale.it/atto/stampa/serie_generale/originario).

<sup>289</sup> Article 21, Law n. 221/2015. The new "Made Green in Italy" brand refers to a voluntary national scheme for the evaluation and communication of the environmentally-friendly footprint of products. This scheme adopts the methodology for determination of the environmental footprint of products defined in the Commission Recommendation 2013/179/EU, April 9, 2013.

<sup>290</sup> Among others, see *10 Anni di Partenariato Pubblico Privato in Italia*, Project Financing, Osservatorio Nazionale, Cresme Europa Servizi, 2011. *Il partenariato pubblico privato e l'edilizia sostenibile in Italia nel 2013*, Cresme Europa Servizi, Unioncamere Camere di Commercio d'Italia, 2013.

case - the SPV CEO and the project manager were interviewed.<sup>291</sup> Moreover, the PPP agreement was studied. The same happened with the second case, the TRM project. The project manager was interviewed and the relevant contracts were studied.<sup>292</sup> With regard to the third case study - the *Scuola di Biotecnologie* project - the senior project manager and SPV shareholders were interviewed.<sup>293</sup> In addition, all contract documents of the PPP scheme were analysed.

#### **4.2.1 Case n. 1. The Ivrea 24 project.**

##### **4.2.1.1 Introduction.**

The PPP Ivrea 24 is a building requalification project that led to the creation of a social housing residence offering temporary accommodation at controlled rates in an energy efficient structure with a low environmental impact.<sup>294</sup>

In order to understand the background of this project, it has to be mentioned that, in 1979, the Municipality of Turin and the Ministry of Posts and Telecommunications, signed an agreement for the transfer, to the latter, of the 99 years surface right on an area located in Via Ivrea 24, in Turin. Following this agreement, in Via Ivrea 24 an infrastructure designed for the temporary accommodation of the Italian Post service staff was built. In 2001, the company *Europa Gestioni Immobiliari - Gruppo Poste Italiane S.p.A.*, which took over the infrastructure long leasehold property, stated that the building was no more necessary to address the accommodation needs of the Italian Post service staff. In 2008, the Post service company officially declared its willingness to sell the building of Via Ivrea 24. Thereafter, the Municipality of Turin identified, within the so-called *Piano Casa 1*, this infrastructure as a suitable location for the construction, through a PPP, of a social housing residence.<sup>295</sup> In particular, the PPP project was the result of an idea of *Oltre Venture*, the only Italian fund of social venture capital,<sup>296</sup> as well as of the management experience of *D.O.C. Società Cooperativa Sociale*.<sup>297</sup> The mentioned *Piano Casa 1* envisaged, in fact, the creation of an integrated national and local fund system for the acquisition and construction of residential buildings and the promotion of innovative financial tools for the participation of public and private actors in the delivery of housing facilities.

In 1998, the building of Via Ivrea 24 was included in an urban redevelopment programme.<sup>298</sup> Ten years later, the company *Europa Gestioni Immobiliari - Gruppo Poste Italiane S.p.A.* and the Municipality of Turin signed an agreement for the sale of the long leasehold property of the Ivrea 24 building to an entity identified by the Municipality. Following this agreement, and with the aim of addressing housing difficulties through the creation of an *ad hoc* high quality infrastructure - and related services - at controlled rates, the Municipality of Turin published in June 2008, a public

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<sup>291</sup> Interview with Mr. Roberto Rocchietti, CEO, *Ivrea 24 Abitare Sostenibile S.p.A.*. Interview with Ms. Valentina Gallia, Project Manager, *Sharing S.r.l.*

<sup>292</sup> Interview with Mrs. Giusi di Bartolo, Project Manager, *TRM S.p.A.*

<sup>293</sup> Interview with Mr. Giorgio Gallesio, *DE-GA S.p.A.*. Interview with Mr. Sandro Perrone, SDB Shareholder. Interview with Mr. Paolo Badino, *Fondo PPP Italia*, SDB Shareholder.

<sup>294</sup> *Torino, Residenza Sociale Sharing Ivrea 24, Programma di riqualificazione urbana*, report available at <http://www.unioncamere.gov.it/P42A2186C189S123/Il-Partenariato-pubblico-privato-e-l-edilizia-sostenibile-in-Italia-nel-2013.htm>.

<sup>295</sup> *Piano Nazionale di Edilizia Abitativa, Piano Casa 1*, D.P.C.M., July 16, 2009.

<sup>296</sup> *Oltre Venture* is the fund that participated in the realization of the Ivrea 24 PPP project.

<sup>297</sup> See <http://www.oltreventure.com/>.

<sup>298</sup> Urban redevelopment programme, Art. 11 Law n. 493/93, approved by the Municipality of Turin in 1998.

notice<sup>299</sup> for the selection of an economic operator willing to buy the building, take over the mentioned agreement of 1998 and transform the building into a social housing residence where people in need could find high quality facilities and services at controlled rates.<sup>300</sup>

The winner of the tender procedure was a consortium of private entities (hereinafter RTI) consisting of *Oltre di Oltre Gestioni SRL s.a.p.a.*, *D.O.C. Società Cooperativa Sociale* and *Fondazione Sviluppo e Crescita CRT*.<sup>301</sup> In order to carry out the PPP project, the RTI established a SPV, namely *Ivrea 24 Abitare Sostenibile S.p.A.*, which took over all the rights and obligations arising out of the participation in the tender procedure and its favourable outcome. Therefore, *Ivrea 24 Abitare Sostenibile S.p.A.* took over the agreement signed by the company *Europa Gestioni Immobiliari - Gruppo Poste Italiane S.p.A.* and the Municipality of Turin as well as the long leasehold property of the interested area for the remaining 70 years. Moreover, it undertook the obligation to buy, build and maintain a social housing residence, bearing all risks arising out of the implementation and management of the project. The three original shareholders of the SPV were *Fondazione Sviluppo e Crescita CRT*, *Oltre di Oltre Gestioni SRL s.a.p.a.* and *D.O.C. Società Cooperativa Sociale*, which respectively held 90%, 9% and 1% of the company's shares. To date, *Fondazione Sviluppo e Crescita CRT* purchased all the shares of the other shareholders while the management of the social housing residence, and of its services, is entrusted to the company *Sharing S.r.l.*, formerly *Cooperativa Sociale D.O.C.*<sup>302</sup>

The private partner entirely shouldered the initial investment of approximately EURO 14 million, bearing all the acquisition and renovation costs. The Municipality of Turin did not contribute to the project with any of its resources. Nonetheless, it obtained the regeneration of a building located in a suburb area as well as the fixed availability of 23 housing units (12% of the total)<sup>303</sup> for the temporary accommodation of evicted families and for the short-term housing of citizens in need. The private partner benefits of the surface ownership of the Ivrea 24 building and of the rent paid by the managing company *Sharing S.r.l.* to the SPV *Ivrea 24 Abitare Sostenibile S.p.A.*. The private partner, in fact, through the company *Sharing S.r.l.*, manages 122 residential units and 58 hotel rooms according to different schemes that take account of the variety of the housing demand.

Since 2011, the social housing residence of Via Ivrea 24 is fully operational and so far it has been a success. It offers - in addition to 470 beds divided in 58 hotel rooms and 122 fully furnished housing units equipped with induction kitchens and access to a high-tech monitoring system of energy consumption - a restaurant, a bar, a launderette, a conference room, living rooms, lounge areas with sofas and plasma screens, and a study room with a library and free access to Wi-Fi. The infrastructure also offers bike and car parking areas as well as a free service of car and bike sharing available for the residence's guests.

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<sup>299</sup> Public notice published by the Municipality of Turin for the selection of the interested private entity on June 5, 2008, n. 327/08/ES.

<sup>300</sup> The *Progetto Sharing Condividere Idee ed Abitazioni* was developed by the *Studio Costa & Partners* and *Studio Mellano Associati*.

<sup>301</sup> The consortium answered to the public notice by presenting a unique project through the so-called *raggruppamento temporaneo di imprese* (RTI) that allows - under Italian law - a group of companies to participate together to a tender procedure, in this way increasing their eligibility.

<sup>302</sup> See [www.sharing.to.it/index.php/it/home.html](http://www.sharing.to.it/index.php/it/home.html).

<sup>303</sup> Which were bought by the Municipality at a reduced price (reduced by about 15% compared to the predicted prices).

#### 4.2.1.2 Socio-environmental benefits generated by the Ivrea 24 project.

Through this PPP project, numerous socio-environmental benefits were generated. These will be described in the following paragraphs. However, they can be summarised as follows.

Accelerated Delivery Benefits	Enhanced Delivery Benefits	Wider socio-environmental benefits
- quick and on time project completion	- high-quality and sustainable building refurbishment - maintenance over time of the building	- regeneration of the estate - community involvement - generation of new jobs

Table 16  
Socio-environmental benefits generated by the Ivrea 24 project.

#### 4.2.1.3 Accelerated Delivery.

This PPP generated accelerated delivery benefits as it allowed the construction of a social housing residence in a very short time and within the contractually agreed upon schedule. There was only a short delay of 39 days on the planned timetable. The infrastructure was completed in 13 months and 9 days instead of 12 months, as contractually provided.<sup>304</sup> Works began on May 18, 2010, and were completed on June 27, 2011. The first guests entered into the residence in September 2011.<sup>305</sup>

#### 4.2.1.4 Enhanced Delivery.

The PPP Ivrea 24 generated enhanced delivery benefits. It created an innovative building through the implementation of sustainable solutions.

The Ivrea 24 project is, in fact, a social housing scheme with a low environmental impact in terms of energy saving and energy production from renewable sources. With regard to the first aspect, the adoption of a low consumption condensing boiler, the improvement of the building's thermal isolation through the creation of an internal coat and the installation of a low consumption lighting system should be mentioned. Moreover, a modern energy saving system operates in every housing unit allowing sustainable every-day resource management. Thanks to this kind of solutions, the building passed from the previous energy class G to the current class B.<sup>306</sup> With regard to the energy produced from renewable sources, it can be mentioned that highly efficient solar thermal and photovoltaic plants generate hot water for bathrooms and electricity. These plants produce a large part of the energy needed by the infrastructure. The building, in fact, generates approximately

<sup>304</sup> Unioncamere, Camere di Commercio d'Italia, Cresme Europa Servizi, 'Il partenariato pubblico privato e l'edilizia sostenibile in Italia nel 2013', 169, 172, available at <http://www.unioncamere.gov.it/P42A2186C189S123/Il-Partenariato-pubblico-privato-e-l-edilizia-sostenibile-in-Italia-nel-2013.htm>.

<sup>305</sup> *Ibid.*, 166, 175.

<sup>306</sup> Interview with Mr. Roberto Rocchietti, CEO *Ivrea 24 Abitare Sostenibile S.p.A.*.

60% of the energy that it consumes. Together with a 10% reduction in heating costs, an overall 30% decrease in energy consumption was achieved.<sup>307</sup>

Furthermore, since the early stages of the planning phase, sustainability criteria were followed in the implementation of this project. This allowed, for instance, the creation of a rainwater recovery system for garden water as well as the use of a photo-catalytic paint for the exterior plastering, which contributes to the improvement of the air quality around the building. Depolluting photocatalytic materials were also used to refurbish the facades. These materials allow the removal of polluting particles from the air and the self-disinfection from bacterial contaminants. With regard to the latter aspect, self-cleansing materials were used to reduce maintenance costs, thereby applying a life-cycle costing approach.<sup>308</sup> Finally, the application of flow reducers to control water consumption, the functioning of a recycling system in all common areas, rooms and apartments and the use of environmentally friendly cleaning products to rinse the building's premises may be mentioned.<sup>309</sup>

#### 4.2.1.5 Wider socio-environmental gains.

The Ivrea 24 project is also generating wider socio-environmental benefits. The social housing residence is, in fact, positively affecting the local community in both a social and environmental perspective. With regard to the latter aspect, the Ivrea 24 residence is an innovative and low environmental impact building. In fact, in 2013, the PPP project won the prize for *Innovazione Amica dell'Ambiente* awarded by *Legambiente*. This national prize rewards projects that have successfully implemented innovative solutions in the environmental field.<sup>310</sup> With respect to the social benefits generated by this project and enjoyed by the wider community, the Ivrea 24 residence is driving the overall regeneration of a suburban area. In addition to what is provided by traditional social housing schemes, this PPP project is offering a large number of related services, which are open to the neighborhood's residents and are supporting the development of an area characterized - as often happens in suburban areas - by a low level of local services and initiatives.<sup>311</sup> Specifically, through this PPP, the following facilities promoting social value were delivered:

- a green area;
- a launderette, which is filling an important gap as in the surrounding area of around 3,000 inhabitants there was no launderette service before;
- exhibition spaces;
- a conference room;
- a dentist centre at controlled rates;
- a library where cultural related events and workshops are organized. In this respect, there is an ongoing collaboration with the city's public libraries;

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<sup>307</sup> *Op. cit.*, 188, 190.

<sup>308</sup> *Ibid.*, 183.

<sup>309</sup> For further details see Chapter IV, paragraph 4.2.1.4.

<sup>310</sup> See <http://www.fondazionecrt.it/news/2014-sharing-premio.html>. *Legambiente* is the most widespread environmental organization in Italy, with 20 Regional branches and more than 115.000 members. It represents Italy at the UNEP, it is one of the leading members of the EEB, the European Environmental Bureau (the EU federation of environmental organizations) and of IUCN, the international union for the preservation of nature.

<sup>311</sup> Interview with Miss Valentina Gallia, Project Manager, *Sharing S.r.l.*

- a free after-school homework service. In this respect, there is a collaboration with a local *ONLUS (Organizzazione Non Lucrativa di Utilità Sociale)*<sup>312</sup> and an organization that promotes social value (*Agenzia per lo Sviluppo di Pietra Alta*);<sup>313</sup>
- a psychologist centre that offers services at half the price normally asked for;
- a legal advice centre, where the first consultation is free and the following ones are offered at controlled rates.

Moreover, people hosted in the social housing residence have the possibility to access a quality low-priced café and restaurant, a free car and bike parking area as well as a free car and bike sharing service. Furthermore, the Ivrea 24 project is promoting social integration by hosting refugees, thereby supporting the Municipality in this difficult task.<sup>314</sup> In addition, the PPP project allowed the creation of approximately 20 new jobs and gave a boost to the local economy enjoyed especially by the neighbourhood's shops.<sup>315</sup> Finally, this PPP project is becoming the reference point for future similar initiatives.<sup>316</sup>

#### 4.2.1.6 Tender's Strategies.

This paragraph will offer an overview of the strategies used by the Municipality of Turin to embed socio-environmental sustainability considerations into the structure of this PPP project.

First of all, when approving the public notice for the selection of an economic operator for the purchase of the building of Via Ivrea 24, the construction and management of the social housing residence, the Municipality of Turin stated the following.

‘[...] a wide range of people may suddenly pass from a situation of economic stability to a condition of fragility and social vulnerability. Moreover, there is a large proportion of housing demand - also with emergency connotations - which requires temporary answers or housing arrangements for a limited period of time in order to respond to transitional or momentary difficult situations. The Municipality of Turin identified the building of Via Ivrea 24 as the appropriate location to build a temporary residence for socially fragile individuals. The Municipality decides to proceed to the identification, through a public notice, of an economic operator who will purchase the property owned by the company Europa Gestioni Immobiliari - Gruppo Poste Italiane S.p.A. and transform it in a social housing residence [...].’<sup>317</sup>

<sup>312</sup> *ONLUS* are non-lucrative organizations of social utility.

<sup>313</sup> See <http://www.pietraalta.it/index.php/chi-siamo/chi-siamo>.

<sup>314</sup> Interview with Miss Valentina Gallia, Project Manager, *Sharing S.r.l.*

<sup>315</sup> Unioncamere, Camere di Commercio d'Italia, Cresme Europa Servizi, ‘Il partenariato pubblico privato e l'edilizia sostenibile in Italia nel 2013’, *op. cit.*, 190.

<sup>316</sup> *Ibid.*, 192.

<sup>317</sup> Vice Direzione Generale Servizi Amministrativi e Legali, Divisione Edilizia Residenziale Pubblica, Settore Edilizia Sociale, Città di Torino, Determinazione Dirigenziale, n. 327/08/ES, approved on June 5, 2008.

Along these lines, the Municipality of Turin published a notice specifically including socio-environmental considerations. Article 3 expressly required the project to implement green building elements, pursue the logic of environmental sustainability in relation to the use of materials, energy saving and renewable energies. Moreover, it provided that the project had to describe the organizational model of the social housing, the quality and nature of the services offered to the residence's guests as well as the range of initiatives aimed at promoting social value within the infrastructure and between guests and the surrounding area. Moreover, Article 6 specified that the tenders' selection was based on the best social, economic and design quality plan evaluated upon specifically designated parameters.

#### **4.2.1.7 Contractual Strategies.**

This paragraph will offer an overview of the terms and conditions that allowed the integration of socio-environmental considerations into the structure of the PPP contract scheme.

Article 2 supports the generation of accelerated delivery benefits by requiring that the construction phase of the PPP project must be completed within the contractually set date, which - as seen above in paragraph 4.2.1.3 - is quite short. The provisions set out in Article 6 reinforce Article 2. As it will be seen below, Article 6 financially incentivises the private contractor to comply with the project's delivery schedule through payments deductions for cases of delays. As already mentioned, financial incentives are a typical features of PPP arrangements. They characterize this kind of contracts and represent effective tools for the achievement, by the private partner, of sustainable contractually set out targets. Furthermore, Article 2 promotes the generation of enhanced delivery benefits as well as of wider socio-environmental benefits by stating that the private contractor is required to maintain the infrastructure in good condition during the entire contract-life, in this way promoting the delivery of an overall sustainable project for a long period of time given the extensive duration of PPP schemes. In this respect, Article 6 provides that in cases of non-compliance by the private partner of its contractual obligations concerning the realization of the social housing residence financial penalties may be applied. Alternatively, the contracting authority can remedy the private partner's defaults by charging it with the relevant expenses increased by a set surcharge. In addition, Article 6 provides for the termination of the contract in case of violation by the private party of its obligations pursuant to the agreement. Therefore, the private party is highly motivated to deliver the project according to the socio-environmental requirements contractually agreed upon.

Article 3 further supports the generation of - especially - wider socio-environmental benefits by detailing the availability requirements that the private partner must meet in order to avoid the application of financial penalties or the termination of the contract. The availability requirements of this PPP contract expressly take into account social value concerns. Article 3 is assisted by the provisions set forth in Article 6, which - as mentioned - financially motivate the private partner to meet the output requirements laid down in the contract. As held by Article 3, the following had to be built:

- 53 housing units, 23 of which are always available and reserved to the Municipality of Turin to meet the needs of those who - as a result of evictions or eviction orders, and before the allocation of public housing - are

in need of accommodation in a social residence for a limited period of time and at agreed upon rates;

- 55 housing units reserved to meet the needs of those who are in financial difficulties at controlled rates;

- 75 housing units reserved for ordinary customers at market rates;

- premises for commercial activities offered to the social housing residents and to the neighbourhood's residents (bar, restaurant and other) to rent - or make available through other contracts - at market rates;

- related services (e.g. internet access, bicycle and car parking spaces, small garage, car sharing);

- social and assistance services offered to the social housing residents and to the neighbourhood's residents, which respond to the social needs of the territory. These services are currently identified in the proposal of an employment project called TO JOB and concern a training programme, a mediation and legal advice centre, a microcredit service, activities for children and teens, the promotion of cultural and recreational activities;

- a medical centre, dental and psychological services at controlled rates.

Moreover, and as anticipated above, Article 6 specifies the financial penalties that the contracting authority may apply in the event of unavailability, under-performance or contractual breach by the private partner. For instance, Article 6 states that, financial penalties and fines are applied if works are completed with a delay of over 30 days, with respect to the planned schedule. Such fines vary according to the number of days of delay following the expiry of the 30 days and are equal to a set percentage based on the property's purchase value and on the value of the works. Furthermore, Article 6 states that in case of breach by the concessionaire of its obligations concerning the realization of the social housing residence, the Municipality, in addition to the application of financial penalties, may execute itself the works and charge the relevant costs to the concessionaire. Article 6 provides also for the termination of the contract in the same cases (e.g. unavailability, under-performance or contractual breach by the private partner), thereby overall supporting the delivery of a sustainable project pursuant to the requirements set out in the agreement.

Specifically, according to Article 6, the Municipality is entitled to terminate the contract:

- 1) in case of serious flaws in the works, or serious or repeated delays when complying with the requirements set for the realization of the social housing residence;
- 2) repeated and serious violations referred to in the section on penalties and fines; and
- 3) other serious and repeated violations of the concessionaire's obligations referred in the agreement.

#### **4.2.2 Case n. 2. The TRM project.**

##### **4.2.2.1 Introduction.**

The TRM (which stands for *Trattamento Rifiuti Metropolitani*) project concerns the construction and management of the incinerator of the city of Turin. The incinerator disposes of non-recyclable

waste and uses its energy to produce electricity and heat.<sup>318</sup> Thus, the incinerator represents the final phase of an integrated waste management system.

The construction of the incinerator is the result of a long process that began in 1997 with the approval of the Regional waste management plan, which expressly provided for the creation of one or more incinerators that recovered energy. To this end, in 2002, a private and publicly held company, TRM S.p.A. (hereinafter TRM company), was established. In 2004, the Gerbido area was selected as the appropriate site for the construction of the incinerator plant<sup>319</sup> and the TRM company was identified as the company entitled to build it. Shortly thereafter, an *ad hoc* highly specialized commission<sup>320</sup> was set up to indicate the most suitable technology for the realization of an energy recovery waste incinerator according to the BAT, the Best Available Techniques.<sup>321</sup>

In May 2005, the Province of Turin awarded to the TRM company the design, construction and management of the incinerator of the city of Turin.<sup>322</sup> It was an in-house award because in early 2005, the private shareholders of the TRM company sold their shares to public shareholders. In this way, the TRM company was awarded - in-house - a 20 year project, until 2034. In 2006, the TRM project obtained a positive opinion in terms of environmental compatibility and the related integrated environmental authorisation from the competent authority.<sup>323</sup> Thereafter, the TRM company published a contract notice for the construction of the incinerator, its management for one year and the training of the TRM company's staff. Five economic operators tendered for the award of the relevant contract. After the exclusion of two tenderers, a letter of invitation was sent to the remaining three candidates.<sup>324</sup> The MEAT was identified in 2009. The winning tender was the project-solution presented by the CNIM consortium.<sup>325</sup> The relevant contract was signed on January 25, 2010, and it provided that CNIM, in addition to the construction of the plant, had to:

- manage the TRM plant for one year;
- provide activities and necessary resources to train the TRM company's staff for the following management of the plant; and
- provide assistance to the TRM company in the implementation of an environmental management system in order to obtain a certification according to the ISO 14001 standard.

Construction costs of the PPP project were approximately of EURO 260 million. The total investment was, however, of almost EURO 503 million and was covered by both banks (83%) and TRM company's shareholders (17%), which added share capital according to a defined capitalization plan. The form of credit used was a project-financing scheme. Thus, the funding was

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<sup>318</sup> Details on the functioning of the incinerator are available at <http://trm.to.it/funzionamento/>.

<sup>319</sup> D.G.P. n.955-348277, July 26, 2005.

<sup>320</sup> D.G.P. n. 528-324404, November 9, 2004.

<sup>321</sup> On the BAT see Article 3, para 10, Directive 2010/75/EU.

<sup>322</sup> According to Article 113, para 4, Legislative Decree n. 267/00.

<sup>323</sup> Which lasts 5 years. Such authorisation was re-obtained in 2012.

<sup>324</sup> The first candidate was the consortium *Termomeccanica Ecologia S.p.A., Consorzio Ravennate delle Cooperative di Produzione and Lavoro Consorzio Stabile Busi CO-VER Edile S.r.l.*. The second tenderer was the consortium: *Consorzio Stabile Maire Tecnimont, Consorzio Cooperative Costruzioni, and Ansaldo Caldaie S.p.A.*. The third candidate was the consortium: *Constructions Industrielles de la Mediterranee (CNIM) Unieco Societa' Cooperativa and Coopsette Soc. Coop.*

<sup>325</sup> The winning consortium consisted of the following entities, *Constructions Industrielles de la Mediterranee (CNIM) Unieco Societa' Cooperativa and Coopsette Soc. Coop.*

granted on the basis of the project's ability of generating cash flows to pay back the loan received. The funding obtained through the project-financing arrangement was of EURO 413 million and was entirely structured by BNP Paribas and guaranteed by the European Investment Bank, Unicredit Corporate Banking, *Banca Popolare di Vicenza* and *SACE*.

As of today, the TRM company obtains its revenues from:

- the sale on the market of the electricity produced from the combustion of waste,
- the rates paid - by the Municipalities surrounding the city of Turin - to access the incinerator plant, and
- the economic benefits arising out of the production of energy from bio-waste.

Finally, it has to be noticed that, in 2012, the Municipality of Turin sold a large part of its shares in the TRM company to a private entity. Therefore, as of today, the TRM company is again a publicly and privately held company with:

- 80% of its shares held by *TRM V. S.p.A.*, a company jointly controlled by *Iren S.p.A.* (IREN Group), the industrial shareholder with 49%, and by the infrastructure fund *F2i Ambiente S.p.A.* (F2i SGR S.p.A.), the financial shareholder with 51%; and
- 20% of the shares held by the Municipality of Turin, the major public shareholder with approximately 18% of the shares. The remaining 2% is divided among the other public shareholders who exercise - during shareholders' meetings - a power of guidance, management and financial control over the company.

#### **4.2.2.2 Socio-environmental benefits generated by the TRM project.**

Through this PPP project, numerous socio-environmental benefits were generated. These will be described in the following paragraphs. However, they can be summarised as follows.

Accelerated Delivery Benefits	Enhanced Delivery Benefits	Wider socio-environmental benefits
<ul style="list-style-type: none"> <li>- fast project completion</li> </ul>	<ul style="list-style-type: none"> <li>- use of advanced and well-established technologies for the plant construction</li> <li>- great attention put on the integration of the structure in the local context</li> </ul>	<ul style="list-style-type: none"> <li>- disposal of and treatment of the city's waste</li> <li>- production of useful resources for the community (e.g. electricity and hot water for housing-heating)</li> </ul>

#### 4.2.2.3 Accelerated Delivery.

This PPP scheme generated accelerated delivery benefits. The TRM project, in fact, allowed the construction and completion of a high-quality and performant incinerator plant specifically designed for the disposal of waste not otherwise recoverable in only three years. The plant construction work began on February 8, 2010, and according to the contract, they had to be completed on January 22, 2013. However, works ended on December 20, 2013, with 11 months of delay on the planned schedule.<sup>326</sup> A number of issues that emerged during the works, among which was the discovery of World War II ordnance, caused the delay. Despite such delay, the plant obtained the authorisation to start its activity of waste disposal on April 30, 2013, thus, before the final completion of the works. At that date, only some internal roads and auxiliary buildings had to be completed.

#### 4.2.2.4 Enhanced Delivery.

The TRM project generated enhanced delivery benefits. In addition to being a sustainable project by its very nature - as it has built a disposal facility that exploits energy contained in waste to produce electricity and heat - it integrated sustainability considerations in all of its phases, from its planning to its management. First of all, the incinerator was built according to advanced and consolidated technology in order to obtain high performance levels in terms of effective waste treatment, efficiency of the turbine and waste combustion. Following the practice of the most modern EU waste disposal facilities, the plant of Turin was also built as an integrated structure in the territory open to the public. Attention was put on aesthetical aspects by implementing decisions consistent with the use of such facility as a building that serves citizens' needs.<sup>327</sup>

Moreover, this PPP effectively connected the plant with the surrounding motorway and railway network. Therefore, negative impacts on the local road network were minimized. Ordinary traffic was not affected by an increase of vehicles serving the plant, because the private contractor guaranteed their circulation during non-peak hours. The use of the existing railway service is, also, significantly reducing the environmental impact of waste transports. Furthermore, this PPP project developed an effective monitoring plan that periodically reports on the plant efficiency and on the conditions of the surrounding environment, including events where air quality standards are exceeded.<sup>328</sup> In this respect, it has to be recalled that before being expelled into the atmosphere, fumes produced by the plant are analysed by an emission monitoring system that measures the values of such substances and verifies their compliance with the set emission limits. ARPA is the Regional body responsible for the control and monitoring of these emissions.<sup>329</sup> The costs of the monitoring system are entirely borne by the private party and thanks to its implementation, a constant improvement of environmental performances is achieved.

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<sup>326</sup> Interview with Mrs. Giusi di Bartolo, Project Manager, *TRM S.p.A.*

<sup>327</sup> Interview with Mrs. Giusi di Bartolo, Project Manager, *TRM S.p.A.*

<sup>328</sup> *Studio di Micro-localizzazione* approved with D.G.P. 955-348277, July 26, 2005.

<sup>329</sup> See <http://trm.to.it/emissioni/>.

Finally, the plant is operated according to environmental protection criteria, production and management optimization. In this regard, the Environmental Management System UNI EN ISO 14001 was implemented. The latter represents the first step towards the adoption of the EU EMAS model.<sup>330</sup> This achievement is strictly linked to the efforts put by the TRM project in management systems in the fields of safety (according to OHSAS 18001<sup>331</sup>) and social responsibility (according to SA 8000<sup>332</sup>).

#### **4.2.2.5 Wider socio-environmental gains.**

This PPP is also generating wider socio-environmental benefits, which are enjoyed by both the local community and the surrounding territory.

The facility disposes, in fact, of approximately 421,000 tons of waste per year coming from the city of Turin and other nearby Municipalities. By burning waste at a temperature of more than a thousand degrees, the incinerator recovers energy and produces electricity and thermal energy (i.e. hot water) to heat houses in the surrounding area. The plant operates exclusively by producing electrical and thermal energy. In the first respect, the incinerator produces an amount of energy equal to the annual needs of approximately 175,000 three-person households.<sup>333</sup> In the second respect, it generates - per year - an amount of thermal energy that heats 17,000 homes of 100 square meters and the electricity consumed by approximately 160,000 families.<sup>334</sup> The transition to a houses heating system based on thermal energy is one of the most significant environmental benefits generated by the TRM plant.

Moreover, the recovery of energy contained in waste saves about 70,000 tons per year of fossil fuels. In this way, it contributes to the protection of the environment and the generation of a sustainable economy. The transition from a classical 'landfill system' to an incinerator, such as the TRM plant, avoids the release into the atmosphere of CO<sub>2</sub> emissions up to 1,000,000 tons every year.

Data on the energy generated through the waste treatment process carried out by the TRM plant can be summarised as follows:

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<sup>330</sup> The Eco-Management and Audit Scheme (EMAS) is a tool developed at the European level that can be used by companies or public entities that wish to assess and improve their environmental performance. It also provides for information on proper environmental management.

<sup>331</sup> OHSAS 18001 (Occupational Health and Safety Assessment Series) indicates the requirements that a safety and health management system of workers must have. A body qualified to issue the relevant certificate of conformity must verify such requirements - once implemented. The OHSAS 18001 standard, is the result of the joint work of certification bodies and experts in the field, and was developed to provide a unique standard for management systems of workers' health and safety. It refers to safety in company's policies, objectives to be achieved, the planning of transactions and operations, the adoption of measures to reduce risk, the management of documents and data, evaluation, corrective and preventive actions, planned review actions and redefinition of objectives and achievements.

<sup>332</sup> Social Accountability 8000 (SA 8000) is a reference standard developed by the Social Accountability International and overseen by the Social Accountability Accreditation Service. It is the first certifiable standard on social responsibility recognized worldwide. It aims at improving working conditions and it is applicable to any company. SA 8000 is based on international conventions such as the ILO, the UN Declaration on Human Rights and the UN Convention on the Rights of the Child. SA 8000 addresses a wide range of issues including child and forced labour, health and safety, freedom of association, the right to collective bargaining, discrimination, disciplinary practices, working hours, remuneration, management systems of control of the supply chain, external communications and other company's policies.

<sup>333</sup> 350.000 megawatt-hours.

<sup>334</sup> 170.000 megawatt-hours (thermal energy) and 320.000 megawatt-hours (electricity).

- electric energy: 300,000 MWh/a (approximately 150,000 average users);
- thermal energy: 140,000 MWh/a (approximately 14,000 average users);
- and
- fuel saved: approximately 75,000 toe/a.

In addition, and as already mentioned, the incinerator was designed as a structure meant to respond to citizens' needs and was integrated into the surrounding territory. In particular, its environmental impacts were assessed and are compensated through the implementation of specific actions designed to improve the environmental quality of the surrounding area as well as the quality of life of local citizens. The Province's waste management plan, in fact, envisaged that:

[...] construction costs must include costs related to environmental compensation measures to be carried out in the territory that bears the drawbacks related to the plant construction [...].

Therefore, part of the construction costs of the PPP project were allocated for environmental compensation measures. Such compensation measures were implemented according to the following criteria:

- the portion of territory situated in the interested area;
- the number of citizens living in the interested area; and
- the distance between residential areas and the plant site.

The interested area is the territory included in a range of 2 km from the centre of the incinerator. Among the compensation measures indicated by the Province of Turin, the following may be mentioned:

- measures to improve air quality (e.g. transition to the above mentioned houses heating system with consequent reduction of emission sources);
- creation of green areas for public use with related planting to create visual curtains and limit noise pollution for residential areas;
- protection of green urban areas.

The amounts allocated for the implementation of these compensation measures include:

- a so-called *una tantum* compensation equal to 10% of the amount of the awarded works (approximately EURO 25 million);
- a compensation calculated according to the volume of activity of the entire plant-life, as provided by Article 16, Regional Law n. 24/02;
- a contribution for the connections to the houses heating system (approximately EURO 4 million); and
- a contribution for the improvement of the nearby road system (approximately EURO 3 million).

Moreover, economic compensation measures for citizens, families and companies located in the interested area may be implemented in the form of:

- tariff reductions on the collection and disposal of waste;
- reductions on usage costs of the energy generated by the plant.

As anticipated, among the compensation measures there are initiatives focusing on the improvement of the local environment and citizens' quality of life in the area affected by the plant construction. An *ad hoc* strategic environmental action plan specifically indicates all compensation measures and - for each of them - describes their positive effect in relation to certain set environmental goals. The latter, *inter alia*, include:

- the reduction of the environmental burden in the interested area;
- the re-organization, protection and development of local rural areas;
- the *Corona Verde* project, that aims at building a Regional ecological network (e.g. creation of bicycle paths, walking trails, picnic areas) in a green area regenerated from landscape and a natural point of view;
- the renovation of the *Casina Mandina* chapel;
- the planting of trees along the railway;
- the construction of pedestrian and bicycle paths;
- the redevelopment of the cemetery area;
- measures against noise pollution;
- the protection of cultural heritage;
- the recovery of contaminated sites;
- the promotion of alternative mobility;
- growth and environmental regeneration;
- the reduction of traffic and the creation of parking areas.

In addition to the aforementioned environmental compensation measures, the so-called SPoTT programme was launched. SPoTT monitors - in the territory surrounding the incinerator - the negative effects of environmental pollution on citizens' health.<sup>335</sup> Moreover, the TRM project generated an employment increase in areas such as design, construction management, testing, production and transport of materials, security guard, cleaning, meals and accommodation services. Finally, great attention is put on environmental education as a fundamental means to open a dialogue with new generations and, in particular, with schools. This PPP, in fact, introduced environmental sustainability projects and educational initiatives. These include the *Progetto Scuole*, which is specifically dedicated to primary and secondary school children, as well as guided tours of the plant tailored for both high school teens and adults.<sup>336</sup>

#### **4.2.2.6 Tender's Strategies.**

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<sup>335</sup> Further details on the SPoTT program are available at [http://www.dors.it/spott\\_home.php](http://www.dors.it/spott_home.php).

<sup>336</sup> See <http://trm.to.it/attivita-in-impianto/>.

This paragraph describes the main strategies used by the public party to embed sustainable development considerations into the structure of the TRM PPP project.

First of all, the invitation letter - drafted in accordance with Article 67, D. Lgs. n. 163/06 - specifies the quality criteria used to evaluate tenders. These refer also to socio-environmental considerations, thereby promoting the shaping of an overall sustainable project. Specifically, with regard to the performance and technical value of the plant, the following aspects were taken into consideration:

- the use of materials, systems and operational procedures that allow the increase of the plant's efficiency, calculated as the ratio between the quantity of waste disposed of and the generation of electricity and/or heat for the housing heating system;
- the reduction of energy consumption and of materials.

Concerning the reduction of the environmental burden, the following elements were taken into account:

- the use of materials, operational systems and procedures that enable the control and/or the elimination of pollutant emissions;
- the use of materials, systems and operational procedures that allow the reduction of production waste;
- the use of materials, systems and operational procedures that give to the produced waste characteristics that make it, totally or in part, re-usable or that promote its final disposal;
- the use of materials, systems and operational procedures that allow to recycle within the plant;
- the use of materials and/or thermal energy generated during the process;
- the use of eco-friendly materials with a low environmental impact for the construction of the plant;
- the use of technological solutions and materials that allow the optimization of energy consumption.

With respect to the plant use, the following aspects were highlighted:

- the reliability of the system, understood as its ability to function regularly with a wide range of waste, even in transitional and emergency conditions;
- an adequate security level for the staff working in the plant;
- a simple usage system;
- the preparation and management of the TRM company's personnel;
- an environmental management plan (certification ISO 14001).

On maintenance, the following aspects were considered:

- the use of materials, systems and operational procedures that extend the plant's life;
- technical features that simplify maintenance operations and minimize time required to carry them out as well as the connected risks.

With regard to the management plan, the following elements were specified:

- the ability to coordinate all phases of the TRM project;
- the professional ability of the key figures to whom implementation tasks are entrusted.

Concerning the completeness and efficiency of the inspection plan, controls and tests, the following were taken into account:

- the efficiency of the control system;
- the implementation of systems capable of preventing and/or solving any problem that may occur.

Moreover, the provisions of the *capitolato speciale* - which contains the technical requirements that must be implemented in the realization of the project - supported the integration of social and environmental concerns into the PPP scheme. Specifically, Articles 15 and 16 promote the generation of wider social benefits by requiring the private party to actually promote social value concerns in the delivery of the project. According to these provisions, the private party must, in fact, comply with the relevant legislative measures on safety at work places, training programmes and wages. If this does not happen, the contracting authority is allowed to withhold or suspend the payments due to the private partner, thereby financial incentivising it to fully implement such sustainable measures.

Articles 36 and 48, para 1, promote, instead, the generation of accelerated delivery benefits. Pursuant to these clauses, the private contractor is required to complete the relevant works on time and according to the agreed schedule, which - as seen in paragraph 4.2.2.3 - is quite short if compared to the complexity of the infrastructure to be completed. As in the majority of PPP cases, these provisions foresee a financial incentive that motivates the private contractor to comply with such a timeline. In fact, in case of delay - notwithstanding the right to further damages - financial deductions may be applied to the payments due to the private contractor.

Furthermore, Articles 25, 26, 31 and 34 support the generation of enhanced delivery benefits by requiring the private party to comply with the set output requirements specified in the contract, which expressly embed socio-environmental concerns. As already seen, in PPPs, high sustainability targets can be set thanks to the private contractor's skills and budgetary funds that can be used effectively to achieve such targets. Moreover, compliance by the private party is required during the entire contract life. An efficient monitoring plan must be, in fact, into place in order to periodically ensure the achievement of the set sustainable performance standards. Additionally, and as it will be seen below, unavailability and under-performance events are financially penalised. Therefore, the

private party is highly incentivised to the deliver an overall sustainable project according to the contractually set provisions.

Articles 44, 48 paras 3 to 5, 49, 51 and 54 promote the generation of accelerated, enhanced and wider socio-environmental benefits. They do so by detailing the functioning of the payment mechanism and of financial incentives, which both represent key features of PPP schemes and are effective tools for the delivery of sustainable solutions. As in almost every PPP arrangement, the payment mechanism is structured upon an availability and performance basis. This means that payments are made to the private partner only upon compliance with the contractually set performance and availability requirements. In this project, such requirements are clearly laid down in terms of socio-environmental terms allowing the delivery of an overall sustainable project over the entire life of the PPP contract. The mentioned Articles provide also for another typical feature of PPPs, namely penalties or financial deductions. These apply in events of under-performance and unavailability, but also in cases of delay in the execution of works. Financial penalties are used to motivate the private partner to perform the contract as agreed upon and, therefore, meet the sustainable availability and performance standards set out in the contract. Furthermore, the above-mentioned provisions provide for the contracting authority's right to damage compensation in addition to the application of the penalty system. The right to damage compensation is another tool used to push the private partner to fulfil its contractual obligations. Article 54 gives to the contracting authority another incentivising tool, namely the termination of the contract for cases of breach by the private partner of any contractual obligation set out in the agreement, including those specifically relating to sustainable solutions.

Finally, the use of the MEAT criterion allowed the public sector to integrate sustainability considerations into the structure of this PPP. The MEAT was, in fact, identified on the basis of the following criteria:

- technical merit (e.g. value of the plant in terms of technical performance and reduction of environmental externalities of the project);
- usage and maintenance process;
- time-table for its completion; and
- management plan.

#### **4.2.2.7 Contractual Strategies.**

This paragraph will highlight the contractual clauses that allowed the inclusion of sustainable development concerns into the PPP structure and that, therefore, support the generation of the social and environmental benefits described in the previous paragraphs.

With regard to the works contract, the following clauses may be mentioned. First of all, Articles 13 and 26 support the delivery of social value. Article 13 specifies that the private partner must comply with the applicable labour law provisions in order to avoid deductions or suspensions of the contracting authority's payments. As already seen, in PPP contracts, financial incentives are highly effective because the private party needs to recoup the - normally - high initial investments made through cash inflows, which usually come from contracting authority's payments. Along the

same lines of Article 13, Article 26 provides for the termination of the contract if the contracting authority finds mafia-related information on the private partner, which may hinder the relationship between the private and the public party.

Articles 14, 19, 20 and 25 promote, instead, the delivery of both accelerated and enhanced delivery benefits. Article 14 requires full compliance by the private party with the contractual obligations set out in the agreement, which also embed socio-environmental considerations. Articles 19 and 20 reinforce what is provided by Article 14 by foreseeing that in case of delay in the completion of works and in cases of underperformance or unavailability, financial penalties will be applied, in addition to compensation for greater damages. Article 25, then, allows the contracting authority to further incentivise the private party to deliver an overall sustainable project by foreseeing the possibility of terminating the contract in case of private partners' breach of the set contractual requirements. If the contract is terminated, the private party cannot recover the investments made to carry out the project, thereby being highly motivated to comply with the output requirements set out in the contract.

Article 28 further supports the generation of enhanced delivery benefits by requiring the maintenance of the plant according to the requirements specified in the contract - which also take into consideration socio-environmental concerns - as well as the implementation of an environmental management system according to a set standard.<sup>337</sup> When a provision such as Article 28 is included in a PPP agreement, the generation of wider socio-environmental benefits can be pursued over a longer period of time, given the normally extensive duration of these kind of contracts.

With regard to the service contract of 2012, signed by and between the competent contracting authority of local waste management (the *Associazione d'Ambito Torinese*) and the private and publicly held TRM company, the following terms and conditions can be mentioned. First of all, forewords 34 and 35 and Articles 6 and 10 promote enhanced and wider socio-environmental benefits. Foreword 34 requires that the service provided by the private party must comply with the set quality standards and that a monitoring system must be in place in order to verify compliance with such targets. As seen, monitoring systems are key elements of PPP arrangements as they allow - through periodic and continuous controls - the delivery of an overall sustainable project in accordance with the set output requirements. Foreword 35 and Articles 6 and 10 stress, instead, the need for the project to comply with the applicable legislative measures in the fields of environmental and social protection, thereby stimulating the generation of wider-socio environmental benefits.

Moreover, Article 5 supports the generation of accelerated delivery benefits by foreseeing financial penalties in cases of delay in the schedule that was agreed upon. Article 9 further promotes enhanced delivery benefits by requiring the achievement of high quality and efficiency targets. As already seen, the latter can be easily achieved through PPPs given the normally high budgetary

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<sup>337</sup> Specifically the UNI EN ISO 14001. The latter is an environmental management standard that sets out requirements for environmental management systems that can be implemented by any organization. It is part of the ISO 14000 series developed by ISO/TC 207.

funds available and the specific private partner's skills applicable in the implementation of the relevant solutions.

Furthermore, Articles 15 and 16 allow the generation of wider socio-environmental benefits by detailing the economic mitigating measures that the private partner must comply with in order to compensate the surrounding area for any possible negative effect generated by the PPP project on the environment. Specifically, Article 15 provides that the TRM company must provide a compensation of EURO 24,390,920.00 to the local communities of the area interested by the construction of the plant. Article 16, instead, states that the TRM company has to pay a contribution for the entire plant-life to the Municipalities of the area interested by the construction of the plant. Such contribution is paid on the basis of the following criteria:

1. number of residents in the relevant area;
2. distance between the residential areas and the plant site;
3. portion of territory in the interested area.

In addition, Articles 18, 19, 21, 22, 23 and 26 promote the generation of both enhanced and wider socio-environmental benefits. These Articles, in fact, provide for sustainable measures and monitoring systems structured upon periodical reports or inspections. The latter are aimed at guaranteeing the delivery of an overall sustainable infrastructure for the entire contract life. As seen, in PPPs, a well-functioning monitoring system represents an added value as it allows the delivery of a project that actually generates socio-environmental benefits for a long period of time, normally of 20 or 30 years. Moreover, these provisions foresee the application of financial penalties whenever the set out socio-environmental requirements are not met. In this way, the private contractor is highly incentivised to integrate sustainable concerns into the PPP's scheme. Along these lines, the mentioned Articles provide for another incentivising tool, the termination of the contract in case of breach of such requirements. The latter is an effective tool, in PPP arrangements, as the private partner needs to preserve the validity of the contract in order to recover the investments made to carry out the project.

Finally, Articles 28 and 29 support the generation of enhanced delivery benefits by providing for the termination of the contract and extra payments to the contracting authority in cases of contractual breach - by the private partner - of the output requirements, which are set out also in terms of socio environmental sustainability.

### **4.2.3 Case n. 3. The Scuola di Biotecnologie project.**

#### **4.2.3.1 Introduction.**

The *Scuola di Biotecnologie* PPP case is an example of DBFOT (Design-Build-Finance-Operate-Transfer) scheme, whereby the SPV company designs, finances, builds and manages an infrastructure and transfers it back to the contracting authority at the end of the contract-life (in this case 20 years, plus 2 years of construction).

The PPP *Scuola di Biotecnologie* concerns an urban renovation project of a University building carried out to tackle the constant growth of students' population. Through this PPP, old

University buildings were, in fact, replaced by a modern infrastructure that houses the new school of biotechnology of the University of Turin. The project was launched in 2000, when the University of Turin published a contract notice for the identification of an economic operator capable of carrying out the planning, construction and management of the new school of biotechnology. The MEAT was identified in the project proposed by the private consortium consisting of *A.E.M S.p.A.* (today *Irides S.p.A.*), *Finpiemonte Investments S.p.A.*, *DE-GA S.p.A.* and *S.IN.LOC S.p.A.*, to which the relevant contract was awarded on March 20, 2001.

On July 23, 2003, the selected private partner established a SPV, the *Società di Biotecnologie S.p.A.* (hereinafter SDB)<sup>338</sup> to design, construct and operate, for the following years, the school of biotechnology. With the establishment of the SDB all project activities began. On October 30, 2003, the concession contract was signed by and between the University of Turin and the SDB. Moreover, since the PPP project had to be carried out on a state property area given for free and in perpetual use to the University of Turin, on December 23, 2003, the State property agency, the SDB and the University of Turin, signed a deed that established a surface right in favour of the SDB on that area. Therefore, with this agreement, the State property agency granted to the SDB the right to carry out and maintain, on the mentioned state-owned area, the building that would host the school of biotechnology, in accordance with the project approved by the University for a period of 20 years from the execution date.

Taking into account the needs expressed by the school of biotechnology itself and by the increasing number of students, the University of Turin decided to extend, through the creation of a business incubator, the *Scuola of Biotecnologie* in order to make it more functional and responsive to current teaching demands. EU funds were used to carry out this extension and the execution of relevant works was awarded through a negotiated procedure without the publication of a prior contract notice (the contract modification was, in fact, of a value lower than 50% of the original amount and it was technically and economically not separated from the original project).<sup>339</sup> The SDB approved the award of the works to *DE-GA S.p.A.* and on July 19, 2005, the relevant contract was signed.<sup>340</sup> Moreover, the extension works were also agreed by the State property agency, which owns the area on which the school of biotechnology is built. In this respect, the State property agency granted an extension of the surface right in order to make it last until the end of the concession contract for the construction and management of the business incubator.

Therefore, as anticipated, the SDB SPV was responsible for the design, construction and following management of the new school of biotechnology. Its realisation is the result of a concession contract signed by the SDB and the University of Turin within a project-financing scheme. As of today, the school of biotechnology hosts approximately 1,000 students, academic and other staff. In the underground area, 140 cars and motorcycles parking spaces were built.

Specifically, the following facilities were provided:

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<sup>338</sup> Owned by *De-GA S.p.A.* 58%, *Finpiemonte S.p.A.* 30%, *S.IN.LOC.S.p.A.* 8%, *Iris Services S.p.A.* 1%, *Designers* 3%. *DE-GA S.p.A.* has operational skills and, therefore, bears the construction risk. *Finpiemonte Investments S.p.A.* has design, organizational and control skills. *Iris Services S.p.A.* has management/maintenance skills and, therefore, bears the management and maintenance risk (management contract with SDB, which provides for the management of the infrastructure, ordinary and extraordinary maintenance, cleaning of the premises, coordination and surveillance services within the structure). *S.IN.LOC. S.p.A.* has financial expertise. The *Opi* bank (now *Banca Infrastrutture, Innovazione e Sviluppo*, BIIS) is the advisor and funding entity. In 2009, the Italian PPP fund, acquired 46% of the SDB shares.

<sup>339</sup> See Article 7, para 3, letter d), Directive 93/37/EEC.

<sup>340</sup> In 2004, the extension was approved and, in 2005, the relevant concession agreement was entered into.

- classrooms and teaching laboratories (4,700 sqm for students: 3 large classrooms with 230 seats, 3 classrooms with 110 seats, 2 classrooms with 60 seats, 6 teaching laboratories);
- research laboratories (6,200 sqm for 200 researchers);
- an area dedicated to a business incubator (1,000 sqm of business incubator);<sup>341</sup>
- offices and administration (1,800 sqm);
- a courtyard, terraces and porches (4,900 sqm);
- parking lots and technical rooms (4,500 sqm).

The PPP is characterized by the fact that the private partner's revenues exclusively consist of the annual payments made by the University of Turin. The PPP contractual structure foresees two main agreements: the concession agreement and the financing agreement. The first one is a twenty-year contract that provides for the concessionaire's obligation to design, build, manage and maintain - both ordinary and extraordinary maintenance - the school of biotechnology. The University of Turin is required to pay to the private partner an annual fee for the execution of these activities of design, construction and management and to recoup the investment made - in addition to an initial contribution following the testing of the infrastructure. This fee is of approximately EURO 1.3 million. The concessionaire, however, bears part of the demand risk. The school's teaching activities guarantee, in fact, the payment of the mentioned fee. The latter varies according to the school's ability to generate revenues (e.g. the number of students enrolled). Hence, the economic and financial risk of the school management is allocated to the private partner.<sup>342</sup> The payment due to the SDB is determined according to the actual use of the school and, hence, to a parameter which is outside the private party's control. In other words, the SDB profits are based on the project's ability to generate cash flows.

The second contract is the financing agreement that provides for a total investment of EURO 19.4 million. EURO 11.9 million of this amount was borne by the private partner and EURO 7.5 million by the University. Specifically, the investment borne by the SDB was of EURO 2 million of share capital and EURO 9.9 million of bank loan obtained through a credit line provided by *Banca OPI*. The contracting authority's contribution of EURO 7.5 million was paid in two *tranches* after the testing of the infrastructure.

#### 4.2.3.2 Socio-environmental benefits generated by the *Scuola di Biotecnologie* project.

This PPP generated - and is keeping on generating - numerous social and environmental benefits. These are summarized in the Table below and are described in the following paragraphs.

Accelerated Delivery Benefits	Enhanced Delivery Benefits	Wider socio-environmental benefits
- quick and on time	- use of high quality	- significant support to

<sup>341</sup> According to the EU Commission, a business incubator is an organization that speeds up and makes systematic the process of creating new businesses by providing a wide range of integrated support services that include the physical space of the incubator, business support services as well as integration and networking opportunities.

<sup>342</sup> Interview with Mr. Paolo Badino, *Fondo PPP Italia*.

project completion	materials to carry out the works - long-lasting maintenance of the infrastructure - low management and maintenance costs	pioneer research activities - constant cooperation with the business world - virtuous model for other similar projects
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Table 18  
Socio-environmental benefits generated by the *Scuola di Biotecnologie* project.

#### 4.2.3.3 Accelerated Delivery.

This PPP delivered accelerated delivery benefits as it allowed the construction of the school of biotechnology of the University of Turin in only three years.

Works started on November 26, 2003, and were completed on August 30, 2006. The school opened officially its doors on September 1, 2006. The contractually planned schedule provided for the completion and delivery of the project by June 30, 2006. The two months difference between the actual delivery and the contractually set date is not the result of a delay in the completion of the works, but the result of a specific request of the University. In fact, the latter expressly asked the private partner to have the infrastructure ready, not as planned at the end of June 2006, but at the end of August 2006.

#### 4.2.3.4 Enhanced Delivery.

The *Scuola di Biotecnologie* PPP project generated enhanced delivery benefits. The use of excellent building materials, in fact, allowed the realization of a high quality infrastructure characterized by low management and maintenance costs.

The architectural quality of the building is represented, for instance, by a lighting system designed around the needs of students and academic staff. Glasses sensible to sun rays and working environments with the right illumination were, in fact, created. In addition, the infrastructure is well sound-proofed. An acoustic insulation system for classrooms and exterior doors provides for an effective acoustic protection from outside noise. The school has interior walls in wood and plaster to provide sound isolation. Moreover, spaces were rationalised by dividing the building into functional areas all connected with each other.<sup>343</sup> Following the main entrance, a large courtyard creates a common space separating teaching areas from those specifically dedicated to research and laboratory activities. The internal courtyard creates a friendly atmosphere where students and teachers can meet and take breaks. There are coffee areas and spaces for various activities, such as scientific research expositions. There are big classrooms that accommodate up to 230 students, open space offices, research laboratories with airy windows and an underground parking. Students' laboratories are provided with all materials necessary to carry out practical exercises in the fields of biology and chemistry. Laboratories are located around a garden covered by a glass ceiling with research and study areas devoted to practical activities for students. In addition, the school of

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<sup>343</sup> Interview with Mr. Sandro Perrone, SDB company.

biotechnology offers facilities for meetings, reading and information points as well as a business incubator. Attention was also put on the choice of colours. The building was, in fact, designed with relaxing colours. Especially thanks to the creativity of Luciano Pia, the designer of the school, the overall project is unique and was reviewed in specialized architecture journals.

Furthermore, the choice for high-quality materials allowed the creation of an efficient infrastructure also in terms of low management costs and maintenance over time. In this respect, the use of 40 kilometres of wood batons to build classroom walls can be mentioned. If one or more of these batons are ruined - once identified - they can be replaced without renovating the entire wall.<sup>344</sup> In this way, maintenance costs are reduced and the building's maintenance is eased in accordance with the aim of ensuring the infrastructure's durability over time. As of today, the excellent school maintenance is effectively supported by a system of constant monitoring of the building's conditions. This monitoring is carried out with the use of advanced technology. There is a so-called 'smart' centralized system that carries out such control. It verifies, for instance, the correct temperature of environments, detects smoke alerts or checks the conditions of research laboratories.

Finally, it can be mentioned that the school of biotechnology was created not only through the construction of new areas, but also through the partial recovery of existing historical buildings, the structure of which was further consolidated (nineteenth century buildings with brick structures). In addition, the extension of the construction project, which provided for the construction of a new underground area and the elevation of part of the over ground building, led to the creation of one unique building, functionally designed for an efficient use of the school's premises. In fact, it allowed a better and more rational use of common spaces, as well as significant savings in terms of construction and management costs, if compared to the realization of an autonomous and separate building.

#### **4.2.3.5 Wider socio-environmental gains.**

This PPP is also generating social and environmental benefits for the wider society and the surrounding area.

With regard to the benefits enjoyed by the wider community, the building hosting the *Scuola di Biotecnologie* has, on the one hand, a low environmental impact. On the other hand, the school is significantly supporting scientific research in pioneer areas related to the understanding of the molecular bases of diseases. The school is, in fact, demonstrating a positive tendency towards research activities. Molecular mechanisms lying behind the pathological processes of inflammatory illnesses and cancer diseases with a high impact on human health are studied. In addition, new technologies based on magnetic resonance that allow viewing live cellular and molecular events for diagnostic purposes are developed. Moreover, experimental immunization protocols are elaborated in order to prevent cancerous growth. Research activities go along with the creation of new bioinformatics tools and efficient software that allows the extraction of important information from a large number of data and provides key indicators for the identification of new molecules involved in critical aspects of patho-physiological processes. Therefore, the school is considered as a virtuous model for other similar projects.

With regard to the benefits enjoyed by the surrounding area, it can be mentioned that this PPP project provided an important contribution to the creation of the *Città della Salute e della Scienza* of

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<sup>344</sup> Interview with Mr. Giorgio Gallesio, *DE-GA S.p.A.*.

the city of Turin - which is the largest health care centre at national and EU level.<sup>345</sup> Moreover, the school constantly collaborates with the business world. The *Scuola di Biotecnologie*, in fact, carries out projects of R&D with pharmaceutical companies and spin-offs and has a business incubator that hosts Italian companies - not involved in research activities - operating in the field of biotechnology.

#### **4.2.3.6 Tender's strategies.**

This paragraph will offer an overview of the strategies used by the public sector to implement sustainable development considerations in the planning, construction and management of this PPP project.

First of all, the award criterion used was the MEAT, which was identified according to the following elements:

- a) contribution of the University and funding borne by the concessionaire (max weighting 50);
- b) annual fee borne by the University and adjustment method (max weighting 30);
- c) financing method of the part of the project not covered by the University's contribution (max weighting 10);
- d) duration of the concession (weight weighting 5);
- e) consideration for the creation of the surface right in favour of the concessionaire (max weighting 5).

Moreover, the University of Turin used the following aspects to specify the above:

- benefits for the society;
- technical solution offered;
- guarantees offered by the private party;
- project quality;
- functionality;
- usability of the infrastructure;
- accessibility;
- performance;
- management and maintenance costs;
- duration of the concession;
- time for the completion of the works;
- economic and financial value of the project;
- absence of impeding elements.

#### **4.2.3.7 Contractual strategies.**

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<sup>345</sup> See [https://www.cittadellasalute.to.it/index.php?option=com\\_content&view=category&id=132&Itemid=511](https://www.cittadellasalute.to.it/index.php?option=com_content&view=category&id=132&Itemid=511).

This paragraph will highlight the content of the terms and conditions, which allowed the inclusion of sustainable development considerations into the PPP structure and, therefore, support the generation of the social and environmental benefits described in the previous paragraphs.

For what concerns the PPP agreement signed by and between the University of Turin and SDB, the following clauses may be mentioned. Articles 8, 14, 16, 17, 18 and 19 support the generation of accelerated and enhanced delivery benefits. Specifically, Article 8 provides for a tight works' schedule that must be complied with by the private partner in order to avoid the application of financial penalties by the contracting authority. Articles 14, 16 and 17 require that the fulfilment by the private partner of the contractual obligations - which expressly take into account socio-environmental considerations - must be periodically monitored. In this way, the private party will deliver an overall sustainable project throughout the duration of the PPP contract, which is over a period of 20-30 years. Moreover, Articles 18 and 19 foresee the application of financial penalties as well as of the right to terminate the contract in cases of breach by the private partner of contractual requirements, which, as mentioned, contain also sustainable concerns. As seen, penalties and the contracting authority's right to terminate the contract represent effective financial tools that incentivise the private partner to deliver an overall sustainable project.

With regard to the works contract signed by and between SDB and *DE-GA S.p.A.*, the following clauses can be mentioned. Articles 33 and 34 promote the generation of enhanced delivery benefits by requiring the use of the highest quality materials and the most advanced techniques in the execution of the works as well as throughout the contract life. In this way, the private partner is supported in the delivery of an overall environmental sustainable project over a long period of time.

Furthermore, Articles 36, 41, 42, 43, 44-*ter*, 48 and 53 allow the generation of both accelerated and enhanced delivery benefits. Article 36 provides for a tight deadline for the completion of works. According to Article 43, if this deadline is not complied with, the contracting authority will apply a financial penalty - for each day of delay - on the payments due to the private party. Moreover, Article 43 incentivizes not only an on-time delivery of the project, but also an earlier delivery of the latter by foreseeing an extra bonus payment for the private partner in case of delivery of the infrastructure before the due date. In addition, Article 41 provides for the termination of the contract if the private party suspends or slows down the works. Articles 42, 43, 44-*ter*, 48 and 53, then, require compliance by the private party with all the obligations set out in the contract, which take also into account socio-environmental considerations. The private party is motivated to fulfill its obligations in order to avoid the application of financial penalties by the public party, the payment of indemnifications, the termination of the contract and/or damages. Therefore, these provisions highly incentivize an overall delivery of a sustainable project by providing effective tools through which the private partner is pushed to comply with the set contractual requirements containing socio-environmental concerns.

Finally, Article 49 supports the generation of enhanced and wider socio-environmental benefits by providing for the maintenance of the infrastructure according to the output specifications laid down in the contract, thereby promoting the delivery of an overall sustainable project for the entire contract life, which covers an extended period of time. Specifically, according to Article 49, the contractor has to repair and/or replace at its own expense, as readily as possible, and with the least

disruption possible, all parts of the building that are affected by defects or flaws and do not comply with the provisions of the contract.

## 5 Conclusions to this Chapter.

This Chapter aimed at examining the spaces for sustainable development considerations that can be located within PPP schemes according to national policies and public procurement regimes of the Member States studied. Moreover, this Chapter sought to identify the practical means (i.e. tender and contractual strategies) through which public and private actors can actually integrate sustainability concerns within PPPs' structures and, therefore, deliver also socio-environmental benefits.

To this end, the room for sustainable development concerns into the public contracts and concession law regimes of the Member States studied was first of all explored. Thus, it was investigated the extent to which the relevant domestic laws and policies allow the inclusion of sustainability objectives into the structure of public contracts, hence, into PPPs. As it was seen, even though the transposition into the national legal systems of the EU 2014 public procurement Directives was carried out through diverse legislative means and within different time-schedules, it overall led to an homogenous result in terms of the inclusion of sustainable development concerns into public contracts and concession laws. All three Member States which were studied enacted policies and provisions capable of effectively supporting the EU's goal for a smart, innovative and sustainable public procurement.

Secondly, an empirical and field research was carried out in order to explore the concrete strategies through which public and private actors can implement socio-environmental considerations within PPPs' structures and, thus, foster sustainable development objectives. For each Member State, three case studies were presented. These described the socio-environmental benefits delivered by each PPP project by conceptualizing them in three macro-categories, namely, accelerated delivery benefits, enhanced delivery benefits and wider socio-environmental benefits. Moreover, the case studies identified the particular ways through which socio-environmental considerations were integrated into the considered PPP projects.

The Tables here below highlight the main features of each PPP project and summarize the socio-environmental benefits generated by each of them.

	<b>United Kingdom</b>		
	<b>Plymouth Grove</b>	<b>Barts and the London Hospitals</b>	<b>Glasgow Schools project</b>
<b>Legal scheme used</b>	PFI	DBFO	PFI
<b>Project delivered</b>	Housing regeneration project.	Hospital redevelopment project.	School regeneration project

<b>Private partner's tasks</b>	Planning, funding, refurbishment, management and maintenance.	Design, funding, building, redevelopment and maintenance.	Design, funding, construction, renovation, management and maintenance.
<b>Public partner's tasks</b>	Monitoring and payment of a pre-arranged fee.	Monitoring and payment of a pre-arranged fee.	Monitoring and payment of a pre-arranged fee.
<b>Contract duration</b>	30 years	42 years	30 years
<b>Accelerated delivery benefits</b>	Quick and on time project completion.	Quick and on time project completion.	Quick and on time project completion.
<b>Enhanced delivery benefits</b>	High-quality housing refurbishment, complete and sustainable regeneration of the estate.	High-quality building construction, sustainable buildings' regeneration and refurbishment.	Construction, extension and refurbishment of buildings according to high and modern quality standards.
<b>Wider-socio environmental benefits</b>	Improvement of local facilities, strong community involvement, increase of property values, generation of new jobs.	Improved access and high-quality health care, strong community involvement, generation of new job opportunities.	Improved learning and teaching environments, raise of educational standards.

Table 20  
United Kingdom's case studies.

	<b>The Netherlands</b>		
	<b>A12 project</b>	<b>N33 project</b>	<b>International School of Eindhoven</b>
<b>Legal scheme used</b>	DBFM	DBFM	DBFMO

<b>Project delivered</b>	Road development project.	Widening of existing motorway.	School redevelopment project.
<b>Private partner's tasks</b>	Design, funding, construction and maintenance.	Design, funding, construction and maintenance.	Design, finance, construction and maintenance.
<b>Public partner's tasks</b>	Monitoring and payment of a pre-arranged fee.	Monitoring and payment of a pre-arranged fee.	Monitoring and payment of a pre-arranged fee.
<b>Contract duration</b>	22 years	20 years	30 years
<b>Accelerated delivery benefits</b>	Quick and on time project completion.	Quick and on time project completion.	Quick and on time project completion.
<b>Enhanced delivery benefits</b>	Works conducted in a sustainable and energy efficient way.	Works conducted according to high-quality standards.	Technological innovation, environmental sustainability.
<b>Wider-socio environmental benefits</b>	Congestion reduction, low environmental impacts, stakeholders' engagement.	Congestion reduction, road users' safety, stakeholders' engagement.	High quality education, integration of expatriate families into the local life, preservation of the existing eco-system.

Table 21  
The Netherlands' case studies.

	<b>Italy</b>		
	<b>Ivrea 24 project</b>	<b>TRM project</b>	<b>Scuola di Biotecnologie</b>
<b>Legal scheme used</b>	Concession agreement.	Joint venture.	DBFOT

<b>Project delivered</b>	Building requalification.	Construction and management of waste incinerator.	University building renovation.
<b>Private partner's tasks</b>	Funding, planning, refurbishment, management and maintenance.	Design, funding, construction, management and maintenance.	Design, finance, building, management and maintenance.
<b>Public partner's tasks</b>	Monitoring.	Monitoring.	Monitoring and payment of a pre-arranged fee.
<b>Contract duration</b>	70 years	20 years	20 years
<b>Accelerated delivery benefits</b>	Quick and on time project completion.	Fast project completion.	Quick and on time project completion.
<b>Enhanced delivery benefits</b>	High-quality and sustainable building refurbishment, maintenance over time of the building.	Use of advanced and well-established technologies for the plant construction, great attention put on the integration of the structure in the local context.	Use of high quality materials to carry out the works, long-lasting maintenance of the infrastructure low management and maintenance costs.
<b>Wider-socio environmental benefits</b>	Regeneration of the estate, community involvement, generation of new jobs.	Disposal and treatment of the city's waste, production of useful resources for the community (e.g. electricity and hot water for housing-heating).	Significant support to pioneer research activities, constant cooperation with the business world, virtuous model for other similar projects.

Table 22  
Italy's case studies.

Furthermore, here below the results of a comparative analysis of the above case studies, and in particular of the ways through socio-environmental considerations were integrated into the PPP schemes studied, will be presented. Such comparative study allowed the identification of the following key tender's strategies and contractual terms and conditions that overall allowed the

private and public parties - in the considered PPP projects - to embed sustainability concerns within their structures and, thus, to generate socio-environmental benefits.

Tender's strategies.

The tender's strategies used to integrate sustainable development sustainability considerations into the PPP arrangements studied were overall the same in all case studies.

Contract notices generally required for:

- the submission of sustainable, innovative and flexible proposals;
- the delivery of projects in accordance with defined output specifications (drafted in terms of both environmental and social sustainability); and
- the submission of a comprehensive life-cycle maintenance programme that includes scheduled and reactive maintenance activities.

The criteria used to evaluate tenders were overall the following:

- quality of the project (including the use of sustainable materials in the construction phase);
- time-schedule for the completion of the project;
- performance and technical value of the project;
- usage and maintenance process;
- management plan (including an environmental and health and safety management plan);
- environmental impact of the project (including energy management initiatives);
- social benefits for the society (criterion expressively used only in the Italian PPP projects considered).

Contractual terms and conditions.

The contractual terms and conditions used to integrate sustainable development considerations into the PPP arrangements studied concern different projects' phases and have an overall common content. Nonetheless, depending on the Member State considered and on the specific project-related features, certain contractual provisions vary and provide for a different and/or additional content.

Works.

In the UK, the NL and Italy, works meet set availability criteria and the contracting authority verifies whether they are carried out accordingly. In the NL and Italy, PPP contracts additionally provide for financial penalties for every day of delay in the completion of the works.

In the NL, project plans are subject to a probabilistic assessment in accordance with a specific analytical method and the contractor's evaluations must prove its feasibility.

Moreover, in the UK, PFI agreements allow the contracting authority to accept an early handover of the infrastructure or service commencement, if this provides VfM. In this case, the private party is entitled to a bonus payment.

Likewise, in Italy, PPP contracts foresee that the contractor is entitled to a bonus premium for each day of early delivery of the infrastructure or service. Such bonus payment is determined according

to the benefits enjoyed by the contracting authority as a result of the early completion and delivery of the infrastructure or service.

Strict service levels and incentivisation.

In the UK, the NL and Italy, the contractor is required to comply with the applicable legislative standards and the contract's quality-related obligations. Moreover, the contractor must achieve specific performance levels. PPP contracts, in fact, provide for performance levels through the specification of output requirements.

In the UK, the contracting authority rewards events of over-performance - with respect to the set levels - through bonus payments or reward points (if over-performance offers VfM).

Dutch PPS provide as well for bonus payments, for instance, when deductions for cases of under-performances and/or unavailability are not applied on the fee paid by the contracting authority in a given period.

PPS contracts and Italian PPP agreements specifically provide that if the contractor breaches its contractual obligations and does not remedy them within a set period, the contracting authority can rectify the contractor's default itself, have it rectified by a third party or terminate the agreement. In the first two cases, the contractor must pay the contracting authority an amount equal to the payment made to the third parties or the costs borne to remedy the breach, increased by any further damage and - in case of PPS contracts - of a surcharge.

Payment mechanism.

The main differences and/or similarities in the structure of the payment mechanism are the following.

1. Clear definitions of availability and performance targets.

In the UK, the NL and Italy, the PPP contract defines the concept of availability (e.g. the conditions in which the service or infrastructure is considered available) and the levels of performance required (they can cover every aspect of the service or infrastructure). PPP contracts define which are the unacceptable levels of performance and set out the relevant thresholds. In the UK, customer satisfaction surveys are also foreseen, while this is not the case for the NL and Italy. In the UK, sanctions for poor user satisfaction may, for instance, be:

- financial deductions upon a VfM assessment or in cases of complaints or calls to a help-desk;
- a remediation plan (linked to deductions);
- a performance audit (carried out at the private party's expense).

2. In the UK, the NL and Italy, no payments are made until the service or infrastructure is completed and operational and payments are not executed prior to the period to which they refer to.

3. In the UK, the NL and Italy, cash deductions or penalties are envisaged in case of unavailability and under-performance. More specifically:

- UK's PFI agreements provide for deductions if the set performance levels or availability requirements are not met. Deductions reflect the seriousness of the failure and increase in case of further delay. The contracting authority rewards performance in excess of the set targets through bonus payments or reward points (if it offers VfM). UK contracts expressly provide for calibration mechanisms to avoid the application of high level of deductions if the overall performance is good. Moreover, UK agreements specifically provide for temporary monitoring intensifications at the contractor's expenses.
- Likewise, in Dutch PPS contracts, if the set performance levels or availability standards are not met deductions are foreseen. Deductions are equal to the number of penalty points that the contracting authority records in a certain payment period. Bonus payments are also envisaged in cases of over-performance.
- Italian PPP contracts provide for financial penalties in the event of under-performance or unavailability (and provided that the contractor has not remedied such failures within a set period).  
In addition, PPP contracts foresee that the contracting authority withholds, suspends or deducts a certain amount of the payment due to the contractor if the contractor does not comply with the contractual obligations concerning, specifically, the protection of employees (e.g. compliance with payment conditions provided by the relevant national and local collective agreements).

Overall, the payment mechanism financially regulates the consequences of service's failure. Penalty deductions vary according to the type of failure or of project-area affected. The contractor carries out performance audits.

Anyway, the functioning of the payment mechanism does not substitute claims for specific performance or injunctive relief. Moreover, the contracting authority relies on adequate termination rights in the event of unavailability or service under-performance. In addition, lenders have their own remedies.

#### Quality management.

In the UK, the NL and Italy, PPP contracts provide for a quality management strategy that allows the contracting authority to obtain the infrastructure or service in accordance with set output specifications. The contracting authority carries out periodical controls of the contractor's quality management system. Moreover, the contractor provides data, assistance and access whenever the contracting authority requires it. PPP contracts expressly provide for the submission - by the contractor - of adequate information to assess the efficiency, effectiveness and sustainability of the service's management.

In the NL, PPS contracts envisage that the contractor obtains a quality system certificate and carries out a process assessment according to specific standards.

Moreover, PPS and Italian PPP contracts foresee that the contractor's management system includes an environmental and safety management plan according to specific standards. The latter have to

specify, *inter alia*, to what extent the contractor considers safety and environmental issues and how the contractor uses verification and validation methods to demonstrate compliance with safety and environmental requirements specified in the agreement.

In addition, PPS contracts and Italian PPP agreements provide for financial and non-financial mitigating measures that have to be implemented according to a defined work protocol.

Constant improvement of the efficiency of the service or infrastructure during the contract life.

In the UK, the NL and Italy, PPP contracts expressly provide for a constant cooperation between the contracting authority and the contractor, which is aimed at identifying and improving performance, efficiency and effectiveness. In this respect, periodical efficiency reviews are carried out. Moreover, the contractor is required to submit improvement reports identifying the measures undertaken to advance effectiveness, as well as any opportunity for improvement.

Promotion of social value.

PFIs and Italian PPP contracts provide that the private party, and each contractor-related party, complies with the relevant national and EU laws in the field of social protection (e.g. non-discrimination, gender equality).

PPS contracts, instead, normally put more emphasis on the private party's compliance with the relevant domestic and EU laws in the field of environmental protection.

Moreover, PPS agreements foresee that the contractor must coordinate itself with stakeholders and provide them with timely information on the project's consequences before they are directly confronted with them. Among the stakeholders with whom the contractor is required to communicate there are, for instance, residents of the surrounding area, Councils, Provinces, local authorities, companies and institutions.

Likewise, UK's PFIs and Italian PPP contracts foresee that the contractor must take into account stakeholders' needs and provide them with any information on the conditions, quality and functioning of the service or infrastructure.

Lifecycle fund.

Only PFI agreements foresee that payments of the contracting authority may be allocated - by the private party - to cover the contractor's future maintenance costs. If this is the case, the contractor creates a lifecycle fund, which is used by the contractor to renovate or replace assets in accordance with a lifecycle maintenance plan agreed by the contracting authority. The contractor is normally required also to prepare a lifecycle funding report. All risks related to lifecycle fund arrangements - which are verified by an independent body - are borne by the contractor.

Maintenance.

In the UK, the NL and Italy, PPP arrangements provide that maintenance is a risk borne by the contractor. Maintenance is required so as to ensure that the private party keeps the infrastructure or service at the set standards and meets the specific output specifications throughout the contract life. The contractor normally provides a maintenance schedule or a plan specifying all maintenance works to be carried out. The contracting authority ensures compliance - by the contractor - with the maintenance requirements through payment and termination provisions.

# V CHAPTER - GENERAL CONCLUSIONS TO THIS STUDY

## 1 Overview of the Research carried out.

This thesis discussed the ability of PPPs to generate socio-environmental benefits, thus, their capability to promote sustainable development throughout the EU. It acknowledged PPPs as an effective public delivery means of both economic and sustainable gains. In other words, it recognised public-private arrangements as key elements, not only for the functioning of the Internal Market, but also for the generation of socio-environmental benefits, such as social justice issues and shared environmental policy purposes.

Chapter I preliminarily clarified the aim of the study and the research questions as well as the definitions used and the literature reviewed. Moreover, it explained the structure and the methodology adopted as well as the research's limitations and exclusions. Before delving into the study of the actual scope for sustainability considerations within public contracts and concessions, according to the EU public procurement regime and relevant national rules of the Member States considered, Chapter II provided an understanding of the PPP phenomenon as a whole. The concept of PPPs was investigated at both the International and EU level. It was highlighted that at both levels there is no unique or widely accepted definition of PPPs and that their actual implementation displays a heterogeneous and complex universe where a vast variety of definitions, categories and models fall within the PPP notion. The term PPP, in fact, broadly describes different types of contractual arrangements. It is understood in different ways according to the country context, the sector, the different legal, regulatory and investment considerations involved, the specific market structure, industry, organization and project-related features. The definition of PPPs used by the OECD states that PPPs are '*long-term agreements between the government and a private partner whereby the private partner delivers and funds public services using a capital asset, sharing the associated risks. PPPs may deliver public services both with regards to infrastructure assets (such as bridges, roads) and social assets (such as hospitals, utilities, prisons).*'<sup>1</sup>

PPPs come in a wide variety of models and legal types ranging, for instance, from concession contracts to joint ventures. The different levels of formalization have the overall objective of creating a partnership between public and private actors in order to deliver infrastructure and/or services to the public. The degree of involvement of the private partner depends on the specific features of the project and on the output specifications set out by the contracting authority. Moreover, PPPs imply various ideological and managerial choices that are firmly connected to the relationship established between the private and public actors involved. To sum up, they are complex transactions leading to long duration, high-value contracts in high profile sectors where normally an adequate length of time is needed to ensure the private party's investment and profit recovery. In addition, these typical long-term commitments usually represent for the public sector an incentive to choose and invest in more rational and long-term projects and, for the private partner, another reason to plan and deliver more coherent and effective public investment projects.

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<sup>1</sup> 'OECD Principles for Public Governance of Public-Private Partnerships' available at <http://www.oecd.org/governance/oecdprinciplesforpublicgovernanceofpublic-privatepartnerships.htm>.

After acknowledging that both at an International and EU level there is no real agreement on a single definition of PPPs, Chapter II showed that there is a wider consensus on PPPs' features and goals. It explained that PPPs are perceived as legal tools capable of delivering public infrastructure and/or services through an enhanced partnership between the public and the private sectors. PPPs, in fact, aim at obtaining an efficient project's risk management and a clear prior identification of its critical success factors, along with an adequate financial analysis according to the specific public asset and/or service that has to be delivered. One of the central goals of PPPs is to save resources and to use those available in an efficient manner. This is done in different ways. For instance, the public sector concentrates on its best skills without using its resources for the realization of projects where it has no expertise. In addition, and thanks to an effective involvement of the private sector in every project's phase, a final product with an improved overall quality can be delivered. A smart use of private sector's skills, expertise, funding, technology and innovation actually supports the achievement of high quality standards. Moreover, PPPs' risk sharing mechanisms functioning at different projects' stages normally entail fewer risks of costs overruns and projects' delays. The vital role of the private sector in the funding and provision of integrated public infrastructure or services requires a continuous coordination between the private and public actors.

Chapter II also provided an understanding of PPPs' legal background by focusing first on the International level and then on the EU level. It was acknowledged that at both levels there is no uniform or *ad hoc* set of regulation specifically dedicated to PPPs. At a supra-national level, the PPPs' legal background mainly consists of best practices, hence, guidelines, techniques, methodologies, ethics or ideas that, through experience and research, have proven to be the most efficient or prudent course of action.<sup>2</sup> At the EU level, PPPs are governed by the Treaty principles and by the relevant public contracts and concessions law regime. Treaty principles are general principles that integrate the regulation of each legal category falling within the notion of PPP. They are the first and main regulating legal framework of the PPP phenomenon. Even if general in nature, Treaty principles govern PPPs by adapting themselves to their distinctive features. They are fundamental values and criteria that characterize and integrate a uniform PPP regulation that is still missing. Along the same lines, EU public contracts and concessions law does not provide for a specific regulation of PPPs. Nonetheless, PPP arrangements do fall within the scope of the EU public procurement Directives as they represent a particular category of public contracts. Therefore, Chapter II provided a detailed overview of the reformed public contracts' award procedures and highlighted their relevance and suitability for PPP contracts' awards. Moreover, given that concession contracts are one of the main legal types through which PPPs take form, the key reasons that led to the enactment of the 2014 Concession Directive and its essential characteristics were identified. An understanding of the concept of 'operating risk' was also provided as it is highly relevant in the framework of concessions and, thus, for PPPs. Finally, Chapter II provided an analysis of the PPP phenomenon as implemented in the studied Member States, namely the UK, the NL and Italy.

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<sup>2</sup> See, for instance, the PPPIRC, World Bank guidelines available at <http://ppp.worldbank.org/public-private-partnership/overview/practical-tools/procurement-bidding/standardized-guidelines>. The PPPIRC provides sample PPP agreements and concessions, checklists and sample clauses, terms of reference, risk matrices, standard bidding documents developed by government agencies and sample PPP and sector legislation and regulation. These were designed for government officials, project managers and lawyers involved in PPP projects in developing countries. They provide for international experience and precedents to help the development of well-functioning PPPs.

As PPPs were studied from the specific perspective of sustainable development promotion, Chapter III delved into the concept of sustainable development, which is a broad and abstract term that brings together various meanings that are often understood differently among individuals, professionals, interest groups, State agencies, political leaders and NGOs. The definition of sustainable development whereby social, economic and environmental considerations are integrated with one another as inseparable and interdependent components of human progress was endorsed.

Next, the relationship between sustainable development and public procurement was analysed. The latter, in fact, is an effective tool through which sustainable development goals can be actually achieved. It is an effective and concrete policy measure through which governments can pursue socially and environmentally responsible practises through the use of public contracts. It is noteworthy that sustainable public procurement, as a specific form of development is growing in terms of both endorsement and implementation.

Chapter III further showed the spaces that EU law recognises to social and environmental aspects, or better, to sustainability objectives, understood as impacts on longer-term human and environmental welfare, within public contracts and concessions. To this end, an overview of the Treaty principles, secondary legislation, soft law and CJEU case law that allow scope for sustainability objectives into public purchasing was presented. Moreover, how sustainable development considerations can be actually integrated at each stage of the procurement process under the new 2014 EU public procurement Directives was specifically explained. Thereafter, the scope for sustainable development objectives into PPPs was investigated. How sustainability concerns can be integrated into tender procedures for the award of PPP contracts, highlighting the role played by each procurement phase in the inclusion of sustainable development considerations in such schemes, was discussed as well. Attention was paid to how the planning, award, structure, operation and management of these public-private collaborations can be shaped upon sustainable considerations. Furthermore, how public sector financial management choices may influence the integration of sustainable concerns in these complex, long-term public contracts was described as well. Overall, the focus was put on how sustainability considerations can be integrated into PPPs in order to show their potentials in the generation of socio-environmental benefits.

Chapter III showed that through an effective integration of sustainable development concerns, PPPs have the actual capability of delivering socio-environmental benefits. Moreover, it explained that the latter can be intentional or unintentional and that they vary according to the specific structure of the public-private scheme adopted and the public service and/or infrastructure delivered. In order to better identify them, socio-environmental benefits were conceptualized into three macro-categories, namely accelerated delivery benefits, enhanced delivery benefits and wider socio-environmental benefits. Then, after recalling that socio-environmental benefits can present themselves in various ways and that they can be effectively promoted by PPPs that integrate in their structure sustainable development considerations, Chapter III highlighted the difficulties related to their measurement, which still hamper their full consideration. In fact, there is no consensus on how socio-environmental benefits can best be calculated. In principle, environmental benefits are generally measurable, while social ones, instead, are by nature more difficult to measure. Nonetheless, ongoing studies and researches keep on putting efforts into finding ways through which both of them can be measured.

Finally, Chapter IV examined if the previous theoretical and academic discourse could be validated on practical grounds, namely if PPPs are actually capable of promoting sustainable

development objectives in the every-day practice through the generation of socio-environmental benefits. To this end, first, the room for sustainable development concerns in public contracts and concessions recognised by the relevant policies and national laws of the Member States studied was explored. For each jurisdiction, an overview of the legal and policy framework that allows space for sustainability considerations into public contracts was provided. Secondly, three representative case studies for each considered Member State were carried out. These are examples of PPP arrangements structured in a way that actually fosters the generation of socio-environmental benefits and, thus, promotes sustainable development objectives. This empirical research allowed the identification of the socio-environmental benefits generated by each PPP project studied as well as the tender and contractual strategies, inherent to the particular structure of the PPPs considered, which allow the generation, along with economic gains, of sustainable benefits. Thus, this study showed that PPP arrangements can effectively be structured in order to promote sustainable development goals.

A comparative analysis of the UK, Dutch and Italian case studies was then carried out. This led to the identification of the overall key contractual and tender strategies that allowed the integration of sustainability concerns within the considered PPP arrangements.

To conclude, a comparative analysis of such strategies - disengaged as much as possible from the specific context of the projects in which they were used - allowed the identification of general guidelines or reference points for public and private actors willing to award, structure and manage PPPs that promote sustainable development objectives. These will be outlined here below under paragraph 3.

## **2 Acknowledgments and Achievements of this Study with respect to the Research Questions.**

This study showed that PPPs can be considered as public services and/or infrastructure delivery models actually capable of promoting sustainable development goals through the generation of socio-environmental benefits. The following are the main reasons for this. First, (i) EU public contracts and concessions law - as well as the relevant legal regimes of the Members States studied - do allow and encourage spaces for the integration of socio-environmental considerations within public contracts and concessions.<sup>3</sup> Secondly, (ii) PPPs have attached, or better, are characterised by inherent features that - if actually endorsed to pursue sustainability goals - are capable of effectively fostering also sustainable development objectives in the delivery of public infrastructure and/or services.

PPPs represent a public procurement option, which re-emerged in the last decades. They can count on several different formalizations: numerous legal options, types, structures and strategies are available. Public-private schemes and related risks vary from place to place and from project to project. PPPs may be described as legal arrangements lying somewhere between public provision and privatization. In fact, until recently, public services and infrastructure facilities were considered public goods. Hence, they were built by the public sector, financed by taxpayers and managed by public entities. It was more or less in the 1990s that several jurisdictions began to resort to PPPs. These arrangements link together finance, construction, operation and management into one single long-term contract between the contracting authority and a private operator. During the contract

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<sup>3</sup> These spaces were explored in Chapters III and IV.

life, the private sector receives a set of revenues as compensation for the first investment, operational costs and maintenance expenses. Depending on the contract type chosen, the set of incomes may be users' fees, payments from the contracting authority or a combination of both. At the end of the contract, the asset may be transferred to the public sector.

The use of PPPs will likely continue to increase. However, at times this may happen for the wrong reasons and in wrong ways. It is, for instance, the case of PPPs used to elude public finance restrictions or to pursue exclusively profit objectives without considering socio-environmental concerns. In addition, as PPPs have spread throughout the globe during the last decades, PPPs' practice went way ahead of a clear understanding of their legal, economic, political and policy implications. Governments and private actors took advantage of the opportunities offered by PPP schemes to advance their own interests and agendas. Therefore, today more than ever, there is the need to move towards a smarter understanding, use and governance of PPPs. It is within this picture that this study explored if PPPs can act as true and effective public delivery means from a sustainable point of view. This thesis investigated their ability to generate - along with economic gains - socio-environmental benefits. It was assessed that PPPs indeed have scope for large welfare and environmental gains given that their inherent features and related structures allow room for opportunism in this respect. Especially in complex infrastructure and service projects, PPPs do have the potential of playing an important and positive role in the delivery of sustainability objectives.

Overall, it was found that including sustainable development considerations within PPP schemes entails a number of conceptual and practical challenges that vary from case to case and from sector to sector. Moreover, the little agreement on the precise boundaries of the concept of sustainability may lead to uncertainties on the ways through which it should be balanced with other important objectives such as transparency, fairness and competition. Nonetheless, there is a high motivation to pursue sustainable development goals through PPPs. The Table below, displayed in Chapter III, sums up the role that the various procurement phases can play in the inclusion of sustainable development considerations into PPPs. It is a general reference framework that needs to be adapted on a case-by-case basis, tailored to the specific PPP legal type used and the project's characteristics.

Phase	Suggested measures
Budgeting and Planning	The public sector should opt for a multi-year, performance or availability budgeting and evaluate long-term sustainable needs with stakeholders and end-users. Life-cycle costs should also be considered.
Market examination	The public sector should properly advertise its needs and look for detailed input from potential private partners, consult other public authorities for advice and use the collected information to clearly identify the scope and specifications of the contract that has to be awarded. Any competitive advantage to economic operators should be avoided.
Choice of Procedure	The public sector should choose the level of interaction needed to select the best solution. The contracting authority should also verify the available time and resources and preferably opt for the competitive dialogue procedure or the CPN. The competitive dialogue procedure should be used when data from potential private partners are needed in order to draft specifications.
Technical Specifications	The public sector should lay down clear contractual requirements and, if possible, allow variants and effectiveness monitoring.

Selection	The public sector should apply selection criteria according to the specific goals that have to be achieved, verify tenderers' prior contractual performances and the content of the European Single Procurement Document.
Evaluation	The public sector should set award criteria and weightings, which adequately reflect the qualitative, environmental and/or social needs identified. The contracting authority should apply minimum scores to such criteria and use a life-cycle costing approach whenever there is available supporting data.
Contract terms	Contract terms should allocate risks to the party better capable of managing them. Standard conditions should be avoided as they may hinder the achievement of project-tailored sustainable goals.
Contract management	The public sector should apply adequate and proportionate performance indicators allowing sufficient time and resources for compliance monitoring.

Table 23  
Inclusion of sustainable development considerations into PPPs.

It has to be recalled that sustainability and innovation are overall aspects that specifically characterise the private market by feeding competition among economic operators through costs reductions and quality improvements. They allow consumers to enjoy enhanced products, infrastructure or services. Instead, innovation and sustainability are not usually a priority in public markets. In the public sector the demand is institutionalised and it normally works upon budgetary considerations, rather than on price mechanisms. Public markets are based on the achievement of specific tasks, above all, the pursuit of the public interest. Thus, products, infrastructure and services are seldom innovative, sustainable or technologically advanced and the price is mostly defined in tenders. Often innovation and sustainability do not fit well within the legal fundamentals of the procurement regime, being also expensive in terms of capital and resources needing many years to recoup the investments made. In addition, the desirability for sustainability and innovation in public contracts is hindered by the difficulties related to their regulation. They are, in fact, aspirational and intangible elements, which do not typically adapt themselves to the classic procedural uniformity of award procedures.<sup>4</sup>

Through PPPs innovation and sustainability may, however, find their way. Private partners' incentives create a favourable environment for innovation and sustainability, being the latter distinctive features of complex contractual formats. PPPs are capable of balancing price, cost, risk, quality and performance with ongoing asset's improvements in an effective way. Public-private models and mechanisms can easily be shaped upon sustainable demands. Their planning, structure and management allow potentially large spaces for the integration of sustainability considerations. Given the current inherent features of contracting authorities' structures and organizations (e.g. budget restraints, general lack of skills and knowledge in carrying out especially complex, innovative and sustainable projects), the public sector is highly interested in availing itself of private sector's advantages to pursue - in a cooperatively way - public interests' objectives, which embed also sustainable development considerations.

The following are the main PPPs' features that are capable of effectively fostering sustainable development objectives in the delivery of public infrastructure and/or services:

<sup>4</sup> See, in this respect, C H Bovis, Editorial, [2015] EPPPL.

- extra budgetary funds for investments in sustainable and innovative practices;
- private know-how and skills applied in every project's phase for sustainable and innovative solutions;
- allocation of tasks and risks to the party better capable of handling them;
- payment mechanisms based on availability and performance targets. Incentives for over performances and penalties for under-performances;
- long duration of contractual relationships. Investments are made in more coherent projects with a high level of maintenance over time.

Therefore, contracting authorities across the EU, in order to promote the submission of sustainable, innovative and flexible tenders and, thus, the structure of PPPs that effectively embed socio-environmental concerns, should exchange data on the following:

- efficient multi-year, performance or availability budgeting schemes;
- effective output specifications in terms of environmental and social sustainability;
- award criteria (and related weighting) that adequately reflect the qualitative, environmental and/or social needs identified;
- well-functioning life-cycle costing approaches and relevant available supporting data;
- contract terms that allocate risks to the party better capable of managing them;
- monitoring systems which apply adequate and proportionate performance indicators and allow sufficient time and resources for compliance monitoring.

Capacity building measures and supporting institutions, however, need to be into place and functioning. In fact, the overall ability of PPPs to integrate and promote sustainable objectives largely depends on the efficiency and innovation capacity of the private sector. Thus, an incentive-based regulation is fundamental. A system based on improved outputs that defines prices in a sustainable manner, sets boundaries to monopoly profits, increases incentives for the private sector to be more efficient and innovative, while reducing costs, should be promoted.

### **3 Conclusive Remarks and Findings.**

As above-mentioned, this thesis found that PPPs are actually capable of promoting sustainable development considerations through the generation of socio-environmental benefits.

First, the studied national public contracts and concessions law regimes do allow the inclusion of sustainability objectives into the structure of public contracts, hence, also into PPPs.<sup>5</sup> All the three Member States considered enacted policies and provisions that highly support the EU's goal for smart, innovative and sustainable public procurement. There is an overall homogenous recognition of the spaces for sustainable concerns within public contracts. Therefore, the key question becomes, rather than the identification of 'the most efficient system',<sup>6</sup> the identification of

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<sup>5</sup> See Chapter IV.

<sup>6</sup> Which would entail the measurement of outputs (i.e. socio-environmental benefits) which are by nature normally intangible and abstract concepts and on which ongoing studies and researches keep on putting efforts into finding ways through which measure them. See paragraph 5.4, Chapter III.

‘the most effective tender and contractual strategies’ capable of actually including sustainable development considerations within PPPs, allowing them to deliver also socio-environmental benefits. This cannot be anyway done aprioristically, but on a case-by-case basis taking into account all the specific project-related features and objectives.<sup>7</sup> Nonetheless, the study of the public contracts and concession law regimes of the Member States considered showed that the UK and the NL could learn from the Italian experience. As seen, the Italian legislator - while transposing the 2014 EU public procurement Directives - enacted an *ad hoc* regulation specifically dedicated to PPPs, which supports, *inter alia*, the inclusion of sustainable development considerations within these public contracts. Therefore, the UK and the NL could follow the Italian example and foresee an *ad hoc* regulation of PPPs, which would increase legal certainty in a field characterised by a high level of complexity.

Secondly, PPPs have attached, or better, are characterised by inherent features that - if actually endorsed to pursue sustainability goals - are capable of effectively fostering sustainable development objectives in the delivery of public infrastructure and/or services.

Thirdly, an empirical and field research showed that PPP projects can be structured in a way that potentially largely embeds sustainability concerns and, thus, fosters the generation of socio-environmental benefits.<sup>8</sup> Moreover, the PPP case studies presented in this thesis allowed the identification of the specific tender and contractual strategies through which sustainability considerations were integrated in the PPPs considered, thereby allowing the generation of socio-environmental benefits.

With respect to the case studies presented in this thesis, it may be argued that they lack a ‘generalization attitude’ and, hence, that they do not allow general conclusions to be drawn. However, the following aspects have to be taken into consideration:

- i. a comparative analysis of the above-mentioned tender and contractual strategies - disengaged as much as possible from the specific context of the projects in which they were used - does allow the identification of general key tender and contractual strategies. These will be presented here below and aim at serving as guidelines or as reference points for EU public and private actors willing to award, structure and manage PPPs capable of actually promoting sustainable development objectives;
- ii. moreover, three case studies per each Member State considered allowed the provision of sufficient evidence to support the statement according to which if PPPs integrate in a smart way sustainability considerations within their structures by implementing, on a case-by-case basis, the identified strategies, a link between the perceived cause (i.e. the PPP) and the perceived effect (i.e. the generation of socio-environmental benefits) can be drawn;
- iii. furthermore, the ability of PPPs to deliver socio-environmental benefits ultimately varies according to the extent to which they integrate sustainability concerns within their structures and, thus, according to how the means provided by the applicable laws are implemented. In this respect, public procurement regimes have shown to be - in the Member States studied - overall homogenous with respect to the recognition of spaces for sustainable concerns within public contracts and concessions. Moreover, PPPs’ features

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<sup>7</sup> Overall strategies that can serve as reference models in this respect will be highlighted here below.

<sup>8</sup> These were identified, for each case study, in Chapter IV.

that - if actually endorsed to pursue sustainability goals - are capable of effectively fostering sustainable development objectives, are typical of any PPP model. Therefore, three case studies per Member State were deemed sufficient to identify overall tender and contractual strategies that - if effectively integrated into PPP schemes to pursue sustainability goals - allow the delivery of socio-environmental benefits;

- iv. finally, any research has to set its boundaries and identify its limits. Therefore, also this thesis had to, *inter alia*, limit the number of case studies per Member State in the light of the scope of this research. In this respect, three case studies per country were deemed sufficient to, on the one hand, pursue one of the main research objectives of this thesis (i.e. the identification of the concrete strategies through which public and private actors can actually integrate sustainability concerns within PPPs' structures and, therefore, deliver socio-environmental benefits); and, on the other hand, draw concrete conclusions to this research without leaving it on a mere academic and theoretical level.

To conclude, hereunder key general tender and contractual strategies, which may allow the inclusion of sustainable development concerns into PPPs will be outlined. These emerged from a comparative analysis of the specific strategies used in the PPP projects presented in Chapter IV and aim at serving as guidelines for public and private sectors across the EU in the award, structure and management of PPPs capable of promoting sustainable development objectives.

Tender's strategies.

Tenders' strategies that allow the embedding of sustainability considerations into PPPs overall consist of the following. Contract notices that require:

- the submission of sustainable, innovative and flexible proposals;
- the delivery of projects in accordance with defined output specifications (drafted in terms of both environmental and social sustainability); and
- the submission of a comprehensive life-cycle maintenance programme that includes scheduled and reactive maintenance activities.

Moreover, criteria used to evaluate tenders that concern the following:

- quality of the project (including the use of sustainable materials in the construction phase);
- time-schedule for the completion of the project;
- performance and technical value of the project;
- usage and maintenance process;
- management plan (including an environmental and health and safety management plan);
- environmental impact of the project (including energy management initiatives);
- social benefits for the society.

## Contractual strategies.

The contractual terms and conditions that generally allow the integration of sustainability considerations into PPP arrangements concern the different project's phases and can overall be described as follows. Depending on the country and/or the sector involved and/or the specific legal scheme chosen to carry out the project under a PPP, certain contractual provisions may vary and provide for a different and/or additional content.

### Works.

Works must meet set availability criteria and the contracting authority verifies whether they are carried out accordingly. Additionally, PPP contracts should provide for financial penalties for every day of delay in the completion of works.

In DBFM contracts, normally project plans are subject to a probabilistic assessment in accordance with specific analytical methods and the contractor's evaluations must prove their feasibility. PFIs generally allow the contracting authority to accept an early handover of the infrastructure or service commencement, if it provides VfM. If this is case, the private party is entitled to a bonus payment. Concessions contracts may also foresee that the contractor is entitled to a bonus premium for each day of early delivery of the infrastructure or service. Such a bonus payment is determined according to the benefits enjoyed by the contracting authority as a result of the early completion and delivery of the infrastructure or service.

### Strict service levels and incentive mechanisms.

Overall, the contractor must comply with the applicable legislative standards and the contract's quality-related obligations. Additionally, the contractor must achieve specific performance levels that were set in advance. PPP contracts should provide for performance levels through the specification of output requirements.

In PFIs, the contracting authority normally rewards events of over performance - with respect to the set levels - through bonus payments or reward points (if over performance offers VfM). DBFM contracts generally provide as well for bonus payments, for instance, when no deductions for under-performance are applied on the payments made by the public party in a given period. DBFM and concessions contracts may provide that if the contractor breaches its contractual obligations without remedying them within a set period, the contracting authority can rectify the contractor's default itself, have it rectified by a third party or terminate the agreement. In the first two cases, the contractor must pay the contracting authority an amount equal to the payment made to the third parties or the costs borne to remedy the breach, increased by any further damage and of a surcharge.

### Payment mechanism.

1. Clear definitions of availability and performance targets.

PPP contracts have to define the concept of availability and the levels of performance required. They must detail which are the unacceptable levels of performance and set out the relevant thresholds. In PFIs, customer satisfaction surveys may be also foreseen, while this is normally not the case for DBFM and concessions contracts.

2. No payments are made until the service or infrastructure is completed and operational and payments are not executed prior to the period to which they refer to.
3. Cash deductions or penalties have to be envisaged in case of unavailability and under-performance. The payment mechanism has to financially regulate the consequences of service's

failure. Penalty deductions may vary according to the type of failure or project area affected. The contractor has to carry out performance audits.

4. The functioning of the payment mechanism should not substitute claims for specific performance or injunctive reliefs. Furthermore, the contracting authority has to have the possibility to rely on adequate termination rights in the event of unavailability or service underperformance. In addition, lenders must have their own remedies.

#### Quality management.

PPPs have to provide for a quality management strategy that allows the contracting authority to obtain the infrastructure or service in accordance with set output specifications. The contracting authority has to carry out periodical controls of the contractor's quality management system. Moreover, the contractor must provide data, assistance and access whenever the contracting authority requires it. The contractor must submit adequate information to assess the efficiency, effectiveness and sustainability of the service's management.

Generally, in DBFM contracts the contractor has to obtain a quality system certificate and carry out a process assessment according to specific standards. DBFM and concession contracts normally foresee that the contractor's management system includes an environmental and safety management plan according to specific standards. Additionally, they provide for financial and non-financial mitigating measures that have to be implemented according to defined work protocols.

Constant improvement of the efficiency of the service or infrastructure during the contract life.

PPP contracts should expressly provide for a constant cooperation between the contracting authority and the contractor, which is aimed at identifying and improving performance, efficiency and effectiveness. In this respect, periodical efficiency reviews may be carried out. Moreover, the contractor should be required to submit improvement reports identifying measures undertaken to advance effectiveness, as well as any opportunity for improvement.

#### Promotion of social value.

Overall, PPP contracts should provide that the private party, and each contractor-related party, complies with the relevant national and EU laws in the field of social protection. DBFM contracts normally emphasise more the private party's compliance with the relevant domestic and EU laws in the field of environmental protection. Moreover, DBFM contracts foresee that the contractor must coordinate itself with stakeholders and provide them with timely information on the project's outcomes before they are directly confronted with them. Likewise, PFIs and concessions contracts generally foresee that the contractor must take stakeholders' needs into account and provide them with any information on the conditions, quality and functioning of the service or infrastructure delivered.

#### Lifecycle fund.

PFIs may foresee that contracting authority's payments are allocated to cover the contractor's future maintenance costs through the creation - by the private party - of a lifecycle fund. The latter anticipates the relevant future maintenance expenditures. The contractor renovates or replaces assets by tapping into the lifecycle fund in accordance with a lifecycle maintenance plan agreed upon by the contracting authority. The contractor must prepare also a lifecycle funding report. All risks related to lifecycle arrangements - which are verified by an independent and external body - are borne by the contractor.

## Maintenance.

PPP arrangements should provide that maintenance is at the contractor's risk. Maintenance is required to ensure that the private party keeps the infrastructure or service delivered at the set standards and that it meets the specific output specifications throughout the contract life. The contractor should be generally required to submit a maintenance schedule or a plan specifying all maintenance works to be carried out. The contracting authority then ensures compliance - by the contractor - with maintenance requirements through payment and termination provisions.

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## 1. WHAT IS THE SOCIETAL AND ECONOMIC RELEVANCE OF THIS THESIS?

The research questions addressed by this thesis are the following. Can PPPs be considered as public services and infrastructure delivery models actually capable of promoting also sustainable development goals through the generation of socio-environmental benefits? Which are the spaces for sustainable development concerns that can be located within PPPs' structures according to EU public contracts and concessions law? Which are the spaces for sustainable development considerations that can be located within PPP schemes according to public contracts and concessions laws of the Members States studied in this thesis? Through which means (i.e. tender and contractual strategies) public and private actors may actually integrate sustainability concerns within PPPs' structures and, therefore, deliver also socio-environmental benefits?

Therefore, the focus of this thesis lies on the study of the scope for sustainable development considerations within PPPs according to EU and national public contracts and concessions laws of the considered Members States. Moreover, this thesis aims at investigating the concrete strategies through which PPPs can embed sustainability considerations within their structure and, thus, generate socio-environmental benefits fostering sustainable development objectives.

The societal and economic relevance of this thesis follows primarily from the circumstance that its research questions relate to a pressing current-day challenge in the field of public services and infrastructure delivery: the need to boost economic growth and the functioning of the Internal Market along with the other equally important goals of socio-environmental sustainability. The thesis has established that the applicable public procurement regime as well as the inherent PPPs' features and mechanisms indeed allow public and private actors to shape PPPs upon both economic and sustainable demands. PPPs are capable of effectively balancing price, cost, risk, quality and performance with on-going assets' improvements. Moreover, PPPs create a favorable environment for innovation and sustainability. This PPP ability constituted an important justification to further investigate the tender and contractual strategies that can actually be used to embed socio-environmental concerns within their structures and, thus, to promote sustainable development.

A second comment on the societal and economic relevance of this thesis relates to the legal basis of sustainable development. Article 3 of the TEU specifically foresees that the Union should work for its realization in the context of Europe. Therefore, the principle of sustainable development must guide Members States in the definition and implementation of the Union's policies and activities. This shared legal basis is directly connected with the EU's ambition of achieving and promoting the functioning Internal Market within the EU (Article 3 TEU; Articles 26 and 113 TFEU). Since, sustainable development consists of the establishment of a synergy between the economic, environmental and social dimensions of human life in order to move towards a new approach of human progress, by working for the sustainable development of Europe the functioning of the Internal Market is promoted at the same time.

Taking into account the positive impact that the promotion of sustainable development may also have on the functioning of the Internal Market, the study of PPPs as effective public delivery means capable of supporting also sustainable considerations constitutes a research subject with broad, EU-based societal and economic relevance.

It is also for this reason that this thesis has explored the various strategies, which may enhance, through PPPs, the generation of socio-environmental benefits and, thus, the promotion of sustainable development throughout Europe.

## 2. TO WHOM MAY THE RESEARCH RESULTS BE OF INTEREST?

The research for this thesis has, amongst other matters, provided insight into the legal background of PPPs at an International, European and Member States' level. In that regard, the research results may be employed by various International organizations active in the field of PPPs or by the EU and national legislative bodies which are looking for a uniform or more comprehensive regulation of PPPs, an ambition which is at the forefront of EU policymaking especially following the EU Commission's Communication of 2009 'Mobilizing private and public investment for recovery and long-term structural change: developing Public Private Partnerships' (COM(2009)615final). The thesis identifies, in the absence of an *ad hoc* and comprehensive PPP's legal regime in most legal systems, the current norms of positive (EU and national) public contracts and concessions law applicable to PPPs. A comprehensive review of their regulation could start from here. Further, the research has discussed the (legal) spaces for sustainable development considerations within EU and national public contracts and concessions laws, which have the potential of allowing PPPs to promote sustainable development through public service and infrastructure delivery. Particular attention may be devoted to such findings in order to shape public contracts' legal regimes to better embed sustainable development concerns.

Besides (EU and national) legislative bodies, there are various other parties and/or institutions to whom the research results may be relevant. First, since the thesis has explored and has identified the various tender and contractual strategies (e.g. defined output specifications, payment mechanism) which can support the generation of socio-environmental benefits through PPPs, the outcomes of the research may be of particular interest for the public and private sectors engaged into innovative and sustainable PPPs. In fact, the thesis clarifies how PPPs can be awarded, structured and managed in a way that allows the promotion of sustainable development gains, along with economic objectives. Second, such a research outcome is relevant also for practitioners and legal experts in the field of complex public contracts. The considerations outlined throughout the research constitute a comprehensible theoretic and practical foundation for practitioners and legal experts whenever they are engaged in the support of the private sector involved in PPP projects. Finally, the thesis, by focusing on a subject (i.e. promotion of sustainable development through PPPs) which until now has not been systematically addressed by scholars and academics in the legal field, provides them with a foundation for further research into the PPP phenomenon as an alternative public service and infrastructure delivery method that can also effectively promote sustainable development considerations. In this regard, various starting points for further and future research are raised throughout the research.

## 3. INTO WHICH CONCRETE PRODUCTS, SERVICES, PROCESSES, ACTIVITIES OR COMMERCIAL ACTIVITIES WILL THE RESEARCH RESULTS BE TRANSLATED?

Firstly, the author's intention is to adapt the thesis into a commercial edition, which is to be marketed by an internationally operating publishing house. This will allow the research results to be properly distributed amongst the various interest groups mentioned under point (2) above (i.e.

International organizations active in the field of PPPs, legislative bodies, public and private sectors, practitioners and legal experts, (EU) public contracts scholars). By means of the commercial edition, the author intends to maximize the (potential) legal, societal, environmental, economic and academic impact and relevance of the research results.

The thesis identifies various tender and contractual strategies, which can be employed to award and structure PPPs capable of promoting sustainable development. Thus the research results can be employed as guidelines by entrepreneurs and public servants to identify which are - on a case-by-case basis - the most effective strategies which allow socio-environmental considerations to be embedded within PPP structures. Subsequently, award procedures and contractual schemes can be adjusted upon the identified sustainable development considerations. Therefore, by means of the research results, the thesis allows both public and private actors to support the generation of socio-environmental benefits through PPPs. This will enhance the promotion of sustainable development in the EU. Even though the ultimate decision to translate the research results into concrete adaptations or revisions by current (EU and national) public and private actors remains at their discretion, the thesis has provided them with the essential instruments to do so.

In any case, the research results of the thesis incentivize private entities and civil servants to work together towards a more precise balancing of the economic, environmental and social dimensions of human life.

#### 4. TO WHAT DEGREE CAN THE RESEARCH RESULTS BE CALLED INNOVATIVE?

The research results are innovative because PPPs, understood as effective public service and infrastructure delivery means capable of delivering also socio-environmental benefits, have not yet been addressed in a structural or in-depth way by scholars and academics in the legal field - even though the promotion of sustainable development through public procurement represents a pressing current-day challenge within the EU. Thus, the subject matter of the thesis can be regarded as a new research area, which relates to a largely unexplored feature or ability of the PPP phenomenon.

The thesis has unveiled that PPPs are actually capable of promoting sustainable development within the EU if they are effectively shaped upon socio-environmental considerations, from the pre-procurement to the maintenance phase. The underlying research processes have, therefore, led to new insights and conclusions which, in conjunction with each other, contribute to a move towards a new understanding of PPPs as effective public delivery means of also socio-environmental benefits (i.e. accelerated and enhanced delivery benefits, wider socio-environmental gains).

#### 5. HOW WILL THE VALORIZATION OF THE RESEARCH RESULTS BE SHAPED?

As addressed in point (3) above, the author intends to distribute the research results as widely as possible. One intended initiative to this end is the publication of a commercial edition through an internationally operating professional publisher. In addition, the author will be pro-actively involved in (EU) public contracts and focused academic gatherings such as seminars, conferences and symposia. These initiatives will contribute to spread the research results and possibly their translation into concrete guidelines and/or practical handbooks. Further, they will allow the research results to be tested, evaluated and, ultimately, to be supplemented or even revised. This will ensure that the thesis results will effectively contribute to 1) the promotion of sustainable development within the EU through PPPs and 2) the academic progression in the legal field of innovative and complex public contracts.

## CURRICULUM VITAE

Annalisa Aschieri was born on September 8th, 1988 in Torino. After graduating from high school (Liceo Classico - Collegio San Giuseppe) in 2007, Annalisa earned bachelor and master degrees in Law at the University of Torino, graduating in 2012. During her masters, in 2010, she studied Comparative and International Law at the Centre for Transnational Legal Studies (Georgetown University Law School program) in London and, in 2011, she deepened her knowledge of Comparative and European Law at the Faculty of Law of Maastricht University within an LLP/Erasmus program with the University of Torino. She later graduated in Private Comparative Law magna cum laude at the University of Torino in July 2012 with a thesis drafted entirely in English declared as worth publishing. As of February 2012, Annalisa began practicing law in a renowned Italian law firm in the corporate and M&A department. She continued to work in the field of company law, national and international contract drafting, both in Italian and in English, at a different law firm based in Torino. In 2014, she entered a joint doctoral research program in European Public Law at the Faculty of Law of the University of Maastricht and University of Torino, engaging in research activities in relation to this dissertation until 2016. At the same time, Annalisa tutored at the Master of Laws (LL.M.) in International Trade Law, Contracts and Dispute Resolution at the International Training Center of the International Labor Organization (United Nations) based in Torino. Annalisa's tutoring tasks were performed in English. In 2017, Annalisa made a career switch as an in-house lawyer specialized in national and international contract drafting, both in Italian and English, at a Torino based company.