

Article

Analysis of the Situation of Social Public Procurement of Works at the Valencian Region (Spain)

José Luis Fuentes-Bargues ^{*}, M^a José Bastante-Ceca , Pablo Sebastián Ferrer-Gisbert  and M^a Carmen González-Cruz 

PRINS Research Center, Universitat Politècnica de València, Camino de Vera s/n, 46022 Valencia, Spain; mabasce1@dpi.upv.es (M.J.B.-C.); pferrer@dpi.upv.es (P.S.F.-G.); mcgonzal@dpi.upv.es (M.C.G.-C.)

* Correspondence: jofuebar@dpi.upv.es; Tel.: +34-9638-77000 (ext. 85651)

Abstract: Construction is one of the most important sectors in terms of economic volume and number of employees. It represents approximately 10% of the Gross Domestic Product of the European Union and employs 7% of its total labour force. In a construction project, procurement is employed in many of the stages, so it can constitute an adequate mechanism to integrate sustainability initiatives. Research concerning economic aspects in procurement has always been present in the construction sector, whereas research related to environmental aspects has been gaining attention in the last years. Nevertheless, social aspects are still not very present in the literature on public procurement. The main objective of this research is to analyse the use of social criteria in public tendering processes of public works in the Valencian region of Spain. The results show that Valencian public entities include social criteria for the 11.7% of adjudicated public works. This value is very low when compared with other studies developed in different countries worldwide. Social criteria, just like in other cases, are used more frequently the larger the budget of the project and the longer the execution time. The average weight of social criteria for the tendering process is low (7.0 out of 100), although entities that usually consider these criteria are aware of their importance and give them a higher weight, in global terms.

Keywords: social public procurement; tendering; sustainable public procurement; social criteria; public works; Valencian region



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1. Introduction

The United Nations defined Sustainable Public Procurement (SPP) as a “procurement wherein an organization uses its buying power to signal preferences to the market with its choice of goods and services that meet sustainable criteria” [1]. Public authorities are one of the main consumers of products, services and works; considering only developed countries, public procurement can reach between 10 and 15% of the gross domestic product (GDP) [2–6].

Walker and Brammer [7] were the first authors to refer to the SPP, defining it as a concept aligned to the principles of sustainable development, to assure a strong, healthy and just society, living within the environmental limits and promoting their good functioning. SPP can become the solution to the problems generated by traditional procurement practices, since it takes into account the social, environmental and economic impact that those purchases have on the people and in the communities [8]. That is to say, it tries to optimize not only the price, the quality, the availability and so on of the products and/or services, but also the environmental life cycle impact and the social impacts related to their origin.

Construction is one of the most important sectors in terms of economic volume and number of employees. It represents approximately 10% of the Gross Domestic Product (GDP) of the European Union (EU) and employs 7% of its total labour force [9]. In a

construction project, procurement is employed in many of the stages, so it can constitute an adequate mechanism to integrate sustainability initiatives [10].

Montalbán-Domingo et al. [11] affirm that SPP in the construction sector shall be placed and understood within a three-dimensional framework: environmental sustainability, social sustainability and economic sustainability. Research concerning economic aspects in procurement has always been present in the construction sector, whereas research related to environmental aspects has increased in the last few years [12–16]. Nevertheless, social sustainability aspects are still not very present in the literature on public procurement [17,18].

Small contracting entities such as local, provincial and regional ones, are the most adequate to improve the social aspects of their citizens due to their proximity to the population. Because of this, its results are interesting to gain an insight into the way the local, provincial and regional authorities behave in this sense.

The main objective of this research is to analyse the use of social criteria in public works' tendering processes at the regional level. The results obtained are intended to contribute to a greater knowledge of SPP practices, to help the technical staff understand the current situation with a view to promoting the use of social criteria, and give more information to the administrations on the impact of public projects on the society to whom they are addressed. It will also help the promoters of the projects to align public projects to sustainable development, considering their social dimension. As a case study to illustrate this, we have chosen the Valencian region, given the availability and transparency of the data, which will enable us to have sufficient and updated information.

The main contribution of this paper is, therefore, to provide a diagnosis of the current situation of the inclusion of social criteria in public works' tendering processes, to determine if that kind of criteria are usually included in the bidding documents, for what size of projects, and what specific criteria (belonging to the "social" category) are the most usually included in other countries and regions. The research also aims to find the percentage of inclusion of social criteria, compared to the percentages of inclusion of environmental and economic ones.

The paper is structured as follows: Section 1 presents the introduction. Section 2 describes previous research on SPP and the regulatory framework in the EU and Spain and defines the Valencian regional structure. Section 3 develops the material and method, and Section 4 shows the results. In Section 5, the results of this study are discussed in light of previous SPP studies. Finally, Section 6 presents the main conclusions of the study.

2. Background

2.1. Literature Review

By 2013, Said and Berger [19] stated that social sustainability refers to the well-being of any person directly or indirectly affected by the efforts of development. Parkin [20] defined social welfare as the human feelings of security, safety, satisfaction and comfort, and human contributions such as skills, health, knowledge and motivation. Kaye et al. [21] refer to well-being in topics such as human rights, peace, safety, justice, gender, equality and cultural diversity, among others. From the construction industry perspective, social sustainability refers to the social welfare both of occupants and workers, focusing on issues such as health and safety, stakeholders' involvement, equality and diversity in the workplace and the creation of employment opportunities [22].

The inclusion of environmental considerations in awarding criteria (known as green public procurement, GPP) can play a significant role, although it is necessary to improve data availability to make GPP design and implementation more efficient [23]. Recently, Ma et al. [24] studied the role of GPP as a policy tool and driving force to improve the competitiveness of the companies. The authors concluded that policy makers should encourage public sectors to step up efforts in implementing green procurement.

Ruparathna and Hewage [10] defined social procurement as the employment of the power of purchasing to create social value, including in this concept a wide range of items

and goals related to several dimensions: health and safety, procurement at small and medium local enterprises, procurement at companies managed by women or minorities, or job creation for disadvantaged groups such as ex-prisoners, ethnics minorities, disabled people or long-term unemployed [25,26].

One of the most cited works about social procurement is the one carried out by Mc Crudden in 2004 [27]. In this work, Mc Crudden described social procurement policies from the 19th century to the early 21st century, demonstrating that social procurement has a long history, particularly in the construction sector, where the employment for disadvantaged groups has been one of the main areas of incidence.

These aspects have long been part of the procurement policies of the United States. They were also incorporated in procurement in the United Kingdom in 2012, with the enactment of the Social Value Act [28], and in the EU in 2014, with the entry into force of the 2014/24/UE Directive [29]. In Australia, they are being incorporated as job opportunities for the indigenous communities, as Loosemore's work shows [30]

Despite the normative efforts and the potential use that social procurement has in the construction sector, customers consider that it is not being promoted enough [10], and the sector is lagging in the implementation and experimentation with social responsibility issues with respect to other sectors [31].

The use of social requirements has serious implications both for the contractors and the contracting authorities [31]. For the contracting authorities, the use of non-evaluable criteria requires a further professionalization and centralization of the contracting functions at the public administrations [32], since social criteria are more complex to define and evaluate than traditional criteria, as endorsed by the European Union in the Recommendation 2017/1805 [33], which will require an institutional change for their improvement [31]. From the contractors' point of view, it could be thought that they reject the inclusion of social aspects, but many studies show their positive attitude and how they are eager to include social considerations in their projects [34,35].

Another important point to make within the scientific literature about social aspects in procurement is the role that social enterprises play or may play. These companies are hybrid organizations with dual objectives of both social sustainability and financial sustainability, and therefore have as an objective to achieve social purposes employing disadvantaged and marginalized groups. The number of companies of this type is increasing in Australia and the United Kingdom [30,36], and their utilization as subcontracting companies may constitute an added social value to the construction companies. The empowerment of the collaboration with this type of companies, as new regulations suggest [28,29], involves, on one hand, the breaking of cultural and confidence barriers by contractors, and on the other hand, the breaking of normative and procedural barriers [26].

In relation to the barriers that currently hold back social procurement, one of them is the difficulty to establish objectives for the quantification of the social value [37]. Wouter et al. [38], in their study on community benefits in Welsh public procurement, pointed out how suppliers show their rejection with the introduction of socio-economic criteria in the tendering process, since these costs end up being passed on to the final customers or absorbed by the companies, and this entails a risk of exclusion of small and medium enterprises in public procurement. The barriers to the introduction of social criteria in public procurement could be one of the future research lines for scientific academics.

Akenroye [39] studied the use of social criteria in the public procurement process in Nigeria. This is a significant study with respect to other studies carried out in developed countries, since Nigeria is one of the most populated African countries, with greater financial resources, but with important problems of poverty, unemployment and gender discrimination. In fact, before 2007 there were neither policies for social public procurement nor regulations or guidelines on how to use public procurement to achieve social goals. The study was structured in two phases: in the first phase, an analysis of tender documents was made. The second phase was based on interviews with different stakeholders. During the

first phase, 62 documents were studied (28 of construction tenders, 16 of services tenders, 12 of consulting services tenders and 6 of project services tenders).

The main criteria used in the call for tenders were: Civic responsibility (payment of taxes to improve the economy of the country, 59 out of 62), Employee's Welfare (compensation of the employees for layoffs and contributory pension schemes, 51 out of 62), Skills development (training of employees, 23 out of 62), Anti-corruption (12 out of 62), Job creation (7 out of 62) and Community development (4 out of 62). The second phase had as objective to know the opinion of the public administrations' staff about the criteria used, and these scored in the first place the Plans to engage in community development projects, followed by Evidence of bidder's tax clearance certificate.

Hueskes et al. [40] analysed public-private cooperation projects in Flanders (Belgium). This typology of procurement is used very often for the development of big construction infrastructures (such as motorways, sport facilities, schools, tramway lines, youth hostels, social homes and so on). During the first stage of the research, 25 projects were analysed using 54 sustainability indicators (developed from the framework proposed by Devolver and Block [41]), divided into six groups: Environment and natural resources, Habitability, Health and comfort, Social justice, Community and participation, and Others. The authors reported very complex results, analysed three pillars of sustainability and used indicators in an attempt to reflect the synergies between the three dimensions, apart from the use of indicators for the political-institutional dimension.

In a second phase, the authors analysed more deeply the two case studies with the highest score in the first phase: a youth hostel and a motorway. One of the first conclusions of the study is the reference that the authors make to the award method (already embedded in the 2014/24/UE Directive [29]): the competitive dialogue where the interaction between bidders and contracting authorities would be higher, making possible the inclusion of sustainable criteria. Other authors also highlighted the importance of this award method, particularly for large projects with big budgets and/or major technical challenges [42].

Although [40] does not refer only to social criteria, but also to sustainable criteria, when analysing results by category, it can be affirmed that the influence of social criteria as award criteria is low.

After analysing the scientific literature about social procurement, Montalbán-Domingo et al. grouped social criteria into eight categories: Cultural heritage, Employment, Health and safety, Participation of local companies, Professional ethics, Public participation, Training and Users' Impact [17]. Throughout an analysis of the content of procurement specifications, 451 public works files were studied, belonging to 10 countries: Argentina, Australia, Canada, Chile, Colombia, Panama, Peru, Spain, United Kingdom and the United States. The works fell under the subsectors both of building and civil engineering, and had a wide range of execution budget, varying from budgets under €1,000,000 to projects with budgets over €10,000,000.

The main criteria used are, by far, the aspects related to Health and Safety, while items related to the Participation of local companies, Public participation and Cultural heritage are used in less than 30% of the projects. Another important conclusion is that the use of social criteria increases with the increase of project's budget. If the analysis is done by groups of criteria, issues related to Health and safety remain invariable with respect to the budget of the project, while the rest of the criteria show significant increases in their use.

These authors compare the behaviour of Anglo-Saxon countries with Spanish-speaking countries and conclude that, apart from aspects related to Health and Safety (that are shared by all countries), Anglo-Saxon countries use "Users' impact" and "Professional training" to a greater extent.

Social criteria considered by procurement specifications were grouped into eight categories (or groups of criteria), using the affinity diagram technique [43]: Cultural heritage, Employment, Health and safety, Participation in local companies, Professional ethics, Public participation, Professional training and Users' impact. Cultural heritage is focused on the protection of architectural, archaeological and paleontological resources

and on the historical, artistic and civil heritage. Employment is related with the creation and maintenance of employment through the increased labour force participation of the long-term unemployed and disadvantaged groups. The Health and Safety group focuses on the development of protocols or management plans to assess the risks associated with construction works and the use of new materials, technologies and/or methodologies. The participation of local companies includes the protection of local contractors and workers against foreign companies. The use of local people, products and services can reduce the distances travelled to the work site, reducing the inconvenience to local communities.

The construction industry needs to promote ethical values and responsibilities towards society, and public procurement can be a tool to encourage respect for human rights. Professional ethics is a group of specifications that may boost non-discriminatory practices by: hindering racial and sexual harassment and discrimination against the disabled; enhancing diversity and equal opportunities with respect to gender, age, disabilities, or cultural heritages; working towards fair wages and fair income distributions; ensuring human rights implementation and integration represented by aspects such as child labour, forced labour, freedom of association, and collective bargaining; and minimizing corruption, which has been noted by several researchers as one of the main problems in the construction industry.

Public participation should be considered to avoid project failures and to create value concerning public opinions. Training group includes the growth and development of workers by increasing their skills, knowledge and abilities.

Construction activities and the associated transport can cause neighbourhood nuisance as well as affect existing services. For this reason, measures may need to be taken to enable the communication with neighbours and ensure the proper coordination with stakeholders. It is also advisable to draw up traffic management plans that minimize possible disturbances to mobility. All these activities are included in the group Impact on Users.

2.2. Social Procurement in the Academic Literature in Spain

Research on social procurement in Spain, as at the international level, has increased in the last years, although many of the publications are focused on regulatory issues, and from the point of view of social economy, and they are not strictly related to the construction sector, as already mentioned by Montalbán-Domingo et al. [11,17] and Bernal et al. [18].

Martínez-Fons [44] distinguishes between social clauses in a generic sense and social clauses in the proper sense. He considers social clauses in a generic sense as the conditions that obligate public contract holders to accomplish, apart from the subject of the contract, certain objectives of social policy that are considered of general interest, whereas social clauses in the proper sense are incorporated in the subject of the contract, adding to it “other obligations that are likely to mediatize it”.

Other works refer to the relation between public procurement and social economy enterprises. Social economy (or solidarity economy) is an economic trend, marked by the need to manage and organize different economic resources and institutions by prioritizing social and equitable interest.

García and Bakaikoa [45] analysed public procurement at the Basque Country, concluding that between 1.33% and 3.76% of the amounts allotted to the public procurement of the Basque government correspond to the social economy, well below its percentage of participation in the Gross Domestic Product (GDP). Erausin Tolosa et al. [46] analysed the case of the University of the Basque Country with respect to public procurement in social economy, with the aim to analyse the importance of the university in the socioeconomic development of its reference context. To do this, a search for contract files in the contractor’s profile was made, analysing a total of 172 files between 2012 and 2014. From the total, 15 of them were awarded to social economy sector entities, and only one of these was a works file, amounting to €124,033.28.

Dizand Nogueira studied how the gender perspective is considered in public procurement [47]. To do this, the authors analysed how and where it was included in the bidding procedure (in the subject of the contract, as an element of valuation or as a condition of implementation), as well as the guides on social procurement published by different regional authorities. One of the findings reported was that the inclusion of social clauses is a rare occurrence in Spanish public administrations, and that these aspects clash with other instruments of equality policies such as the impact reports or the studies including gender variables that were regulated by norms around the same dates.

Muñoz Machado [48] discusses the dichotomy produced in the regulatory framework on social aspects: on the one hand, the important advances produced in the new regulations, and, on the other hand, the failures in their implementation, highlighting the work being done by some actors through the realization of guides and recommendations that can help the public administrations to incorporate social clauses in their contracting activities.

Bernal et al. performed a study to detect and define key strategic actions for a socially and economically efficient management of public tenders in Spain [18]. This study was made using the Delphi method and involved the participation of 52 experts out of all the stakeholders concerned both in the bidding procedures and in the research of the bidding procedures: public administration, enterprises, social organizations, Non-Governmental Organizations (NGO), researchers, teachers and so on. One of the conclusions of the study was the broad consensus on the necessity of the inclusion of social aspects in the public contracts.

During the study, 35 potential actions related to the social impact of public procurement were identified. The most potentially impacting actions are the creation of instruments to improve the objectivity of criteria, limiting the discretion during the evaluation procedure; the promotion of development instruments to monitor the records of bidding companies with respect to ethically responsible companies, social balance sheets or social accountability; and the training of the administrative staff to manage the tendering procedures, giving them the knowledge of different instruments and legislation in order to keep the information updated.

Other important actions are the promotion of awareness actions to remove the administrative inertia and overcome the resistance to change; the promotion of the transparency of bidding procedures, facilitating the access to the information, and the encouragement of the introduction of new information and communication technologies (ICT) into the bidding procedures.

Mendoza-Jimenez, Hernandez-López y Franco-Escobar [49] performed an analysis of sustainable public procurement from the point of view of the social entities and public servants. This study had as objective to identify barriers and propose actions to improve the implementation of SPP. It was developed through two types of questionnaires, one directed to social entities and the other to public sector entities, and then a series of semi-structured personal interviews were performed.

The social entities contacted, social integration enterprises and the special centres for employment, are the only ones than can participate in the reserved procurement that the Law 9/2017 established in its Annex VI. Within the types of services and supplies indicated for the reserved contracts, there are none directly related to construction, but there are some complementary ones, such as transport services, cleaning services, maintenance and repair services or administrative work services.

The main results from the public sector's point of view show that there is a lack of knowledge of public servants about the social issues in the legislation and that the degree of compliance of the legislation about social issues is low. On the other hand, for public servants, the use of reserved procurement is not a difficult issue to implement, but is mainly restricted to the traditional activities of the social entities, not as a tool to develop new ones. The authors proposed improvement activities that focus on two objectives: more training to increase knowledge about social issues from the public sector and the readiness of social entities.

2.3. Social Clauses in the Framework Normative of Spain

This section describes the regulatory framework about procurement in Spain and its evolution concerning social aspects. The European Directive 2004/18/CE [50] made it possible to include social considerations into the public procurement process, either as special conditions for the execution of the contract or as a criterion used for the evaluation of offers. This Directive was transposed to the Spanish legislation through Law 30/2007 [51], and subsequent normative procedural advances were merged into the Royal Decree Legislative 3/2011 [52] of Public Sector Contracts. These regulations were in force in the moment of this research.

In 2010 the “Extraordinary Plan of social inclusion and combating-poverty” was approved, with the inclusion of social criteria into the public procurement process as one of its measures. In 2017, the National Council of Companies’ Social Responsibility established in Section 6.6.38 of the Spanish Strategy of Companies’ Social Responsibility 2012–2020 the need to foster the incorporation of social, environmental and human rights and ethical criteria into the public tenders and procurement, linked to the subject-matter [53]. This was subsequently endorsed by the Spanish Council of Ministers.

Moreover, in 2014, the European Directives 2014/23/UE, 2014/24/UE and 2014/25/UE on public procurement were enacted [29,54,55]. These directives encourage the “Strategic Public Procurement”, which means the use of the power of public procurement to achieve the goals characteristic of other public policies, such as social and labour policies, environmental policies, SME support, innovation and development, or protection of competition.

The European Directives were transposed to the Spanish legislation through Law 9/2017 [53]. Theoretically, this regulation constitutes a considerable advance for the inclusion and utilization of social issues in the public procurement procedures, since it considers them as one of the basic lines of action. Among the social issues, the law mentions the integration of disadvantaged people and/or vulnerable groups, the equality between women and men, the conciliation of personal, family, and work life, and so on.

In August 2016, the government of the Valencian community published the “Practical Guide for the inclusion of Social Responsibility clauses in contracting and in grants from the Generalitat and its public sector” [56]. The insertion of social responsibility clauses in public procurement processes and in the granting of subsidies is considered by the regional government as an opportunity to effectively integrate social, environmental and ethical criteria throughout the autonomous administration.

The objective of this document is that the contracting bodies and the bodies that prepare the regulatory bases of subsidies have an instrument that systematically structures the existing regulations at the European, state and regional level and compiles, by way of example, possible clauses of social responsibility to be included, above all, in the tendering processes (collecting real examples and recommendations).

This document defines as social responsibility clauses the social, environmental and ethical aspects. Similarly, it identifies the possibility of inclusion in various phases of the contracting process, in the contract preparation phase (object, contracting prohibitions, solvency criteria), in the award phase (award criteria, preference criteria) or in the execution phase (execution conditions).

In relation to social aspects, the guide describes possible criteria that could be used as award criteria: suitability of products and services for disabled people (to a greater degree than the minimum required by law), the creation of employment for people with disabilities and/or with difficulties in accessing the labour market, commitments to contract more female employees in order to achieve equality between genders, the presentation of plans to reconcile work and family life for staff, and the quality of employment (stability during the object of the contract and/or indefinite contracts).

In 2018 the GVA launched a second Practical Guide [57], adapted to Law 9/2017, updating the previous recommendations to the new legal framework and introducing novel aspects, such as, for example, in the contract preparation phase, promoting the use of

labels (related to quality, environmental and/or social aspects) or, in the award phase, the use of compliance with environmental, social or labour obligations as verification criteria for abnormally low offers.

At the local level, the councils of the city of Castellon, in 2012 [58], and of the city of Valencia, in 2019 [59], issued their own instructions to achieve socially responsible public procurement. The Castellon City Council proposes in its “Instruction for the inclusion of social criteria in public procurement” a series of social criteria and makes a proposal for a scoring formula for each of them. Among the criteria are the creation of employment for people with difficulties in accessing the labour market, subcontracting with special employment centres, insertion companies and non-profit organizations, equal opportunities between men and women, quality in employment and, in the case of projects whose main purpose is socio-labour insertion, a socio-labour insertion project. The Valencia City Council, in a document called “Instruction on responsible public procurement and inclusive guide to social clauses and compliance verification system”, proposes a series of lines of award criteria, also proposing verifiers and indicators for compliance. Among the criteria are the labour insertion of people with difficulties in accessing employment; the subcontracting of special employment centres, insertion companies and social economy entities; equality between men and women; quality in employment; fair trade; job creation; social quality; protection of human rights; and responsible contracting of agri-food services and management of spaces dedicated to the supply or consumption of food.

2.4. The Structure of the Valencian Region

The Valencian region (Figure 1), made up of three provinces—Castellon, Valencia and Alicante—is located in the east of the Iberian Peninsula and represents approximately 4.6% of the surface area of Spain (23,255 km²). With a population of 4,963,703 inhabitants (in 2018) in 542 municipalities, it represents 10.6% of the Spanish population [60]. The region’s capital is in the city of Valencia, but there are three provincial councils whose mission is to provide infrastructure to lower-budget municipalities.



Figure 1. Valencian region. Location, population and number of municipalities. Source: Adapted by authors.

The public sector in the Valencian Community is organized in three levels: regional, provincial and local. The regional level is made up of the Councils (in Spanish “Consejerías”) and all the Public Business Entities, Commercial Companies and Foundations of the public sector of the Valencian Government that have their scope of action at the regional level. At the provincial level, the Provincial Councils and those public business entities, trading companies and foundations of the Valencian government whose scope of action is set in only one of the three provinces. Finally, at the local level, the City Councils and

all their local entities and public authorities are identified. The universities have been considered in this study as local authorities, and the Port Authorities of Valencia, Castellon and Alicante have also been included, since, although they depend on the government of Spain, their works have a high local impact.

The Valencian region is also structured in counties—specifically, there exist 34 counties, 8 in the province of Castellon, 17 in the province of Valencia and 9 in the province of Alicante.

3. Materials and Methods

3.1. Measurement Technique: Content Analysis

From the literature review, several methods have been used to measure the state and progress of social sustainability in construction public procurement: questionnaires [7,39], interviews [10,26] and tender analyses [10,18,39,40]. Each method shows several advantages but also some important limitations.

Interviews can offer good response rates, but the information gathered depends strongly on the judgment of the surveyor, and interviewees often exaggerate their answers [61,62]. A low response rate in the use of questionnaires can influence the representativeness of the sample [13]. Finally, tender's analysis may be strongly influenced by the researcher's interpretation if the methods of analysis are not rigorous enough [63].

The method selected to analyse the inclusion of social sustainability in construction public procurement at the regional level was based on the analysis of tendering documents, and therefore it is secondary research. Content analysis was the method used in this study, as it is a qualitative, objective and systematic method [64,65]. The researchers analysed the public tender documents obtained and quantified the results by transforming and parameterizing them into useful indicators and metrics. Content analysis is a research method that is widely used for systematically and objectively identifying characteristics of large volumes of written material [66]. To reduce the subjectivity and maximize the objectivity, the method must be adequately structured, and can therefore be reproducible [67].

The procedure was divided into five steps (Figure 2). The first step was the collection of the tender documents. After that, the second step consisted of the analysis of the content of the tender documents. This phase was divided into three sub-phases: the first sub-phase was the identification of the social criteria involved in the tenders. The second sub-phase was the analysis and classification of the social criteria, by category, subsector (building or civil engineering), contracting authority, geographical scope and project budget. The third sub-phase was the analysis of the weight of the social criteria and their classification according to subsector, geographical scope and project budget. In the third step, results were obtained. The fourth step included the discussion and comparison of the results with other studies, and, finally, the conclusions were presented in the fifth step.

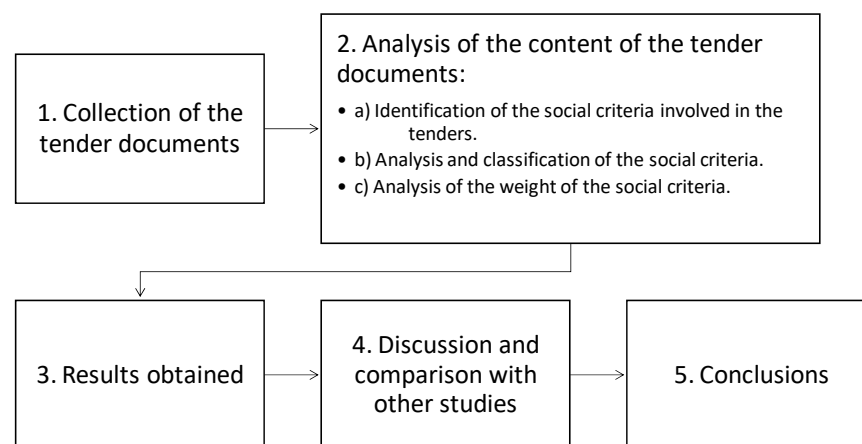


Figure 2. Employed methodology.

3.2. Sample Selection

The Spanish public administration publishes its tenders on a web portal (Figure 3). For this study, tenders were also selected from an equivalent portal belonging to the public administration of the Community of Valencia (Figure 4), and, in some cases, data were also collected from the websites of the contracting authorities (such as the city councils of Valencia and Castellon).

Figure 3. Spanish public sector procurement platform [68].

Figure 4. Valencian region public sector procurement platform [69].

The contracting type "Works" includes, as defined by European and Spanish legislation, the construction, maintenance and renovation of buildings, roads and airports in all public facilities. Tender documents dated between 1 January 2016 and 31 December 2017 were analysed according to the type of works criteria. The data collection process began in December 2017 and ended in July 2018.

The following documents were analysed: administrative specifications, tender notices and technical documents (with projects as supporting documentation). Unfortunately, it was not always possible to obtain all these documents for the procedures [70,71].

3.3. Characteristics of the Sample

A total of 1025 procedures were collected from the work tender calls in the Valencian region during 2016 and 2017. Finally, only 967 were useful for the analysis (Named N_T at Table 1), 675 corresponding to 2016 and 292 corresponding to 2017. One hundred and forty-three different contracting authorities were identified. Three hundred and forty-two procedures were tendered by administrations in the province of Valencia, 122 in Castellon, 262 in Alicante and 241 by administrations covering the whole region.

Table 1. Contracting authorities of the studied sample with more than 10 procedures.

Id	Contracting Authorities	N_B	N_C	N_T
103	Valencia Regional Council for Housing, Public Works, and Infrastructure	17	52	69
121	Alicante Provincial Council	6	51	57
12	Alicante City Council	10	36	46
96	Council for Agriculture, Environment, Climate Change and Rural Development	1	43	44
84	Valencia City Council	16	27	43
98	Council for Education, Research, Culture and Sport	36	0	36
6	Castellon City Council	12	21	33
120	Valencia Provincial Council	0	32	32
125	Railways of the Generalitat Valenciana	5	16	21
20	Benidorm City Council	6	15	21
74	San Vicente del Raspeig City Council	8	12	20
32	Elche City Council	7	12	19
47	Lliria City Council	8	11	19
57	Onteniente City Council	5	13	18
64	Picassent City Council	5	13	18
94	City of Arts and Sciences	17	0	17
61	Paterna City Council	8	7	15
5	Alzira City Council	7	7	14
139	University of Alicante	12	2	14
59	Oropesa del Mar City Council	5	8	13
42	Ibi City Council	5	6	11
27	Catarroja City Council	5	6	11
104	General University Hospital of Valencia	10	0	10
129	Valencian Institute for Social Action	10	0	10

N_T is the total number of procedures collected from the call for tenders with all the documentation for the analysis; N_B is the number of procedures from the building subsector; and N_C is the number of procedures from the civil engineering subsector.

The construction sector is divided into two subsectors. The building subsector includes all types of buildings, while the civil engineering subsector includes roads, ports, airports, railways and water pipelines. In the sample, 395 projects belonged to the building subsector (named as N_B), and 572 belonged to the civil engineering subsector (named as N_C). The distribution for the contracting authorities with more than 10 procedures is presented in Table 1.

About the 62.8% of the sample was composed of competitive tenders (Economically Most Advantageous Tenders, EMAT)—whereas auctions formed the remaining 37.2%.

Five price intervals were established to analyse the influence of the project budget. Table 2 presents the number of projects included in each interval, both for each subsector and for the total sample.

Table 2. Distribution of the projects according to their budget and differentiating between the building subsector (N_B), the civil engineering subsector (N_C) and the total sector (N_T).

Project Budget (€)	N_B	N_C	N_T
<200,000	207	257	464
200,000–1,000,000	152	251	403
1,000,001–5,000,000	30	52	82
5,000,001–10,000,000	6	2	8
>10,000,001	0	10	10

The execution time can influence the contracting authorities when they make decisions about the award criteria. To analyse its influence, six execution time intervals were established. Table 3 presents the number of projects included in each interval, both for each subsector and for the total sample.

Table 3. Distribution of the projects according to their execution time, and differentiating between the building subsector (N_B), the civil engineering subsector (N_C) and the total sector (N_T).

Execution Time (Months)	N_B	N_C	N_T
<6	313	455	768
6–12	55	75	130
12–18	10	9	19
18–24	12	7	19
>24	2	19	21
without data	3	7	10

In accordance with Spanish public procurement regulations, a distinction is made between ordinary, urgent and emergency procedures. In the studied sample, 78.3% of the cases were processed by the ordinary procedure, while 21.5% used the urgent procedure, and only 0.2% used the emergency procedure.

Another characteristic of the tendering process is the type of procedure, according to which a distinction can be made between open procedures (all companies meeting certain requirements can participate) and negotiated procedures with or without advertising (only selected tenderers can participate in these tenders). The difference between "with" and "without" advertising is determined by the budget. In this study, 81.4% of the cases were tendered through open procedures, 4.9% used negotiated procedures with advertising and 13.7% used negotiated procedures without advertising.

To classify the scope of the project more rigorously, data were also collected on the codes of the Common Procurement Vocabulary (CPV). This is a European system for identifying and categorizing all the economic activities that can be carried out through public or competitive tendering [72]. Table 4 shows the main CPVs and the frequency with which they were used in the studied sample.

Table 4. Common Procurement Vocabularies (CPVs) of the study sample.

CPV	Frequency	Description
45,200,000	80	Works for complete or partial construction and civil engineering work
45,000,000	71	Construction work
45,233,120	41	Road construction works
45,233,222	40	Paving works
45,210,000	35	Building construction work
45,233,252	33	Street paving works
45,233,140	31	Road works
45,220,000	25	Engineering works and construction works
45,215,200	21	Construction works of buildings for social services
45,212,200	21	Construction work for sports facilities
45,215,140	20	Hospitals
45,310,000	20	Electrical installation work

4. Results

The results obtained in the analysis of the specifications indicate that 113 procedures include references to social criteria (SC_T); this represents 11.7% of the projects of the sample. If we consider only the procedures tendered using just one criterion (the most economically advantageous offer), the percentage rises to 18.6%. Within the 113 procedures (SC_T), a number of 136 social criteria have been identified, which means that in 23 of the procedures

two different types of social criteria have been included. All these projects have been tendered by Castellon council (id. 6).

Table 5 includes a classification of the social criteria identified in the studied sample (also see Appendix A), according to the categories identified by Montalbán-Domingo et al. [17], showing the number of times that these have been employed, both by subsector and in total. The criteria most often included belong to the Health and safety category, whereas criteria related to Employment and Public participation appear to a lesser extent. No social criteria related to Cultural heritage, Participation of local companies, Professional ethics and Training has been employed.

Table 5. Social criteria and number of times used in the study sample.

Description of the Social Criteria	NSC _B	NSC _C	NSC _T
Cultural Heritage	-	-	-
Employment	10	17	27
Health and Safety	45	38	83
Participation of local companies	-	-	-
Professional ethics	-	-	-
Public Participation	10	16	26
Training	-	-	-
User's Impact	-	-	-

NSC_B is the number of social criteria included in the building subsector; NSC_C is the number of social criteria included in the civil engineering subsector; NSC_T is the number of social criteria included in the global construction sector.

In 2016, the percentage of projects including social criteria amounted to 9.3%, whereas in 2017 this percentage reached 17.1%, which entails a considerable increase in the inclusion of social criteria from one year to the other.

From the 113 procedures identified including social criteria (SC_T), 56 projects belong to the building subsector (SC_B) and 57 projects belong to the civil engineering subsector (SC_C). With respect to the total number of projects in each of the subsectors, civil engineering projects with social criteria represent 10%, whereas building projects with social criteria represent 14.2%.

The highest number of social criteria appears in the projects with an execution time inferior to 6 months (64 out of the 113 identified), followed by the projects with a range of execution time varying between 6 and 12 months (27 out of 113 identified). Both intervals represent a 92.9% of the total projects of the sample. If the analysis is made according to the number of projects included in each interval, in the interval with the execution time between 12 and 18 months, 47.4% of the projects include social criteria, while in the interval with the execution time between 18 and 24 months, the percentage reaches 63.2%. Finally, analysing the results depending on the subsectors, for the building subsector, the percentages for these two intervals are even greater, reaching values of 60% and 100% for the intervals with execution times of 12–18 months and 18–24 months, respectively.

The distribution of the projects that include social criteria in the Valencian region by geographical scope of the contracting authority is presented in the Table 6. As can be observed, the provincial/local authorities of the province of Alicante present the lowest implementation of social criteria.

Table 6. Social criteria by geographical scope of the contracting authority (GSCV) in the Valencian region.

Geographical Scope in the Valencian Region of the Contracting Authority (GSCV)	SC	SC/N (%)
Alicante province	10	3.8
Castellon province	29	23.8
Valencia province	16	4.7
Valencian region	58	24.1

Table 7 shows the distribution of the projects that include social criteria according to the geographical scope of the contracting authority and its percentage with respect to the total number of procedures for each subsector. The results show that regional contracting bodies use social criteria more than local and provincial authorities. Another aspect that can be observed is that social criteria are used slightly more often for the local and regional authorities in the building subsector. The use of social criteria by the provincial authorities is very low, and used mainly in the civil engineering subsector.

Table 7. Social criteria by geographical scope of the contracting authority and by subsectors.

Geographical Scope of the Contracting Authority (GS)	Building Subsector			Civil Engineering Subsector				Total	
	SC _B	SC _B /N _B (%)	SC _B /SC _T (%)	SC _C	SC _C /N _C (%)	SC _C /C _T (%)	SC _T	SC _T /N _T (%)	SC _T /∑SC _T (%)
Local	24	10.6	51.1	23	6.4	48.9	47	8.0	41.6
Provincial	1	1.9	12.5	7	8.1	87.5	8	5.8	7.1
Regional	31	26.7	53.4	27	21.6	46.6	58	24.1	51.3

SC_B is the number of procedures including social criteria in the building subsector, whereas SC_C is the number of procedures including social criteria in the civil engineering subsector; SC_T is the number of procedures that include social criteria in the global construction sector; ∑SC_T is the total number of procedures including social criteria in the global construction sector (in this case 113 procedures); N_B is the number of procedures in the building subsector; N_C is the number of procedures in the civil engineering subsector; N_T is the number of procedures in the global construction sector.

Table 8 identifies the main contracting bodies that have included social criteria, the number of times and the percentage with respect to the number of specifications of that contracting body in the studied sample, both by subsector and globally.

Table 8. Distribution of social criteria by contracting authorities and by subsectors.

ID	Contracting Authorities	GS	SC _B	SC _B /N _B (%)	SC _C	SC _C /N _C (%)	SC _T	SC _T /N _T (%)
103	Valencia Regional Council for Housing, Public Works, and Infrastructure	R	12	70.6	18	34.6	30	43.5
6	Castellon City Council	L	10	83.3	16	76.2	26	78.8
98	Council for Education, Research, Culture and Sport	R	13	35.1	-	-	13	35.1
121	Alicante provincial Council	P	-	-	7	13.7	7	12.3
125	Railways of the Generalitat Valenciana	R	-	-	6	37.5	6	28.6
123	Infrastructure Office of the Generalitat	R	6	85.7	-	-	6	85.7
141	Polytechnic University of Valencia	L	4	100	-	-	4	80
142	University of Valencia	L	4	100	-	-	4	100
96	Council for Agriculture, Environment, Climate Change and Rural Development	R	0	0	3	7.0	3	6.8
21	Betxi City Council	L	2	100	0	0	2	50
30	Denia City Council	L	-	-	2	50	2	50
130	Valencian Institute of Modern Art	L	2	100	-	-	2	100
16	Bellreguard City Council	L	0	0	1	50	1	25
38	Gandia City Council	L	0	0	1	20	1	16.7
46	La Nucia City Council	L	-	-	1	100	1	100
66	Quart Poblet City Council	L	0	0	1	100	1	50
72	San Rafael del Río City Council	L	1	100	-	-	1	100
92	Xirivella City Council	L	1	50	-	-	1	50
109	Valencia 2007 Company	L	0	0	1	33.3	1	25
114	Requena Health Department	P	1	100	-	-	1	100

GS: geographical scope of the administration; L for local, P for provincial, and R for regional.

The contracting authority with the largest number of files that include social criteria is the “Valencia Regional Council for Housing, Public Works and Infrastructure” (id. 103), with 30 projects, followed by the “Castellon City Council” (id. 6), with 23, and the “Council for Education, Research, Culture and Sport” (id. 98), with 13. Entities as the “University of Valencia” (id. 141), the “Infrastructure Office of the Generalitat” (id 123) and

the “Polytechnic University of Valencia” (id. 141) present high percentages of use of social criteria in their contracts. The case of the “Castellon City Council” is remarkable, with a percentage of 78.8% and with many projects. It can be noted that only 20 out of the 143 contracting entities of the Valencian region have included social criteria in their procedures, and just 12 of them more than once.

Table 9 shows the relationship between tenders with social criteria, the manner in which bidders participate in the tender and the type of administrative procedure. Results show that social criteria are mainly employed in ordinary processing by regional authorities and in urgent processing by local authorities (this fact is explained because the Castellon City Council has processed using urgent processing 23 of the total files, including social criteria).

Table 9. Social criteria according to the type of administrative procedure, participation approach and geographical scope.

Type of Administrative Procedure	GS	Tenders with Social Criteria	Total Tenders	Tenders with Social Criteria/Total tenders (%)
Ordinary	L	21	403	5.2
	P	8	127	6.3
	R	57	227	25.1
Urgent	L	26	184	14.1
	P	0	12	0
	R	1	12	8.3
Emergency	L	0	0	-
	P	0	0	-
	R	0	2	0

Method of Participation	GS	Tenders with Social Criteria	Total Tenders	Tenders with Social Criteria/Total Tenders (%)
Open	L	46	435	10.6
	P	7	113	6.2
	R	58	239	24.3
Negotiated with advertising	L	0	41	0
	P	1	5	20
	R	0	1	0
Negotiated without advertising	L	1	111	0.9
	P	0	21	0
	R	0	1	0

Regarding the participation method, social criteria are employed more in open procedures, mainly by the regional authorities, followed by the local and provincial ones.

From the total of 967 procedures in the sample, 422 award prices are available. For each of the procedures, the bidder’s drop D_i has been determined. It is the discount or bid reduction on the tender price of a contract (P_t) submitted by a given contractor i for a tender. It is mathematically expressed as:

$$D_i = \left(1 - \frac{B_i}{P_t}\right) \cdot 100 \quad (1)$$

where:

D_i is the Drop of bidder i (expressed in %)

B_i is the Bid (expressed in €)

P_t is the Tender price (expressed in €)

Results show that the average drop of the entire sample is 27.8%. With respect to the tenders with social criteria, award prices are available for 73 procedures, obtaining an average drop of 16.4%.

With the available data and considering the weight that social criteria have, it can be indicated that the works that use social criteria have a higher award price.

If the analysis is performed from the point of view of the project budget (see Table 10), it can be affirmed that social criteria are more often used in both construction subsectors for projects with budgets between €1,000,001 and €10,000,00. It can also be concluded that social criteria are included more often in the building subsector than in the civil engineering subsector. For projects under €100,000, the use of social criteria is residual independently of the subsector.

Table 10. Distribution of social criteria by project budget and by subsectors.

Project Budget (€)	SC _B /N _B (%)	SC _C /N _C (%)	SC _T /N _T (%)
<200,000	7.3	7.4	7.3
200,000–1,000,000	16.5	10.0	12.4
1,000,001–5,000,000	43.3	23.1	30.5
5,000,001–10,000,000	50.0	0.0	37.5
>10,000,000	-	10.0	10.0

During the period included in the study, contracts for works with an estimated value of more than 5,225,000€ are called harmonized regulation contracts (SARA contracts, in Spanish) and must be subject to the procurement regulations of European Directive 2014/24/EU.

In the study sample, 18 contracts have been identified as being subject to harmonized regulation. Of these 18 procedures, four present social criteria, all related to Health and Safety during the execution of the work. The weights of the criteria are two points out of 100 in one procedure, and five points out of 100 in the other three procedures. These data show us that contracts subject to harmonized regulation do not have a major influence on the use of social criteria in the contracting of works.

According to the CPVs, there are 15 procedures with social criteria under the code 45,000,000 (which amounts to 21.1% of the total procedures with this code), followed by code 45,233,252, with 10 procedures (30.3%), and code 45,233,222, with nine procedures (22.5%). There is no relationship between the specified CPVs and social criteria.

For the 113 projects identified, the weight of the social criteria is 7.0 points out of 100. The maximum weight of the social criteria was 20 points out of 100 in four projects of the Castellon Council, all with a project budget below €200,000. The most common weight is five points out of 100, used in 36 procedures of the analysed sample.

Figure 5 shows that the weighting range for social criteria varies between 0 and 4.9 points out of 100 for the civil engineering subsector and between 5.0 and 9.9 points out of 100 for the building subsector.

If the same analysis of the social criteria is performed according to the project budget instead of according to the construction subsector (Figure 6), some important results can be observed. First, there are not many procedures with social criteria with a budget larger than €5,000,000. Secondly, there are not many tenders with social criteria in projects with a budget below €200,000, but if social criteria are used in this range, they have an important weight (higher than 10 points out of 100). In projects with a budget between €200,000 and €1,000,000, the social criteria are more often used than in other budgets' range, but with a low importance (weight between 0 and 4.9).

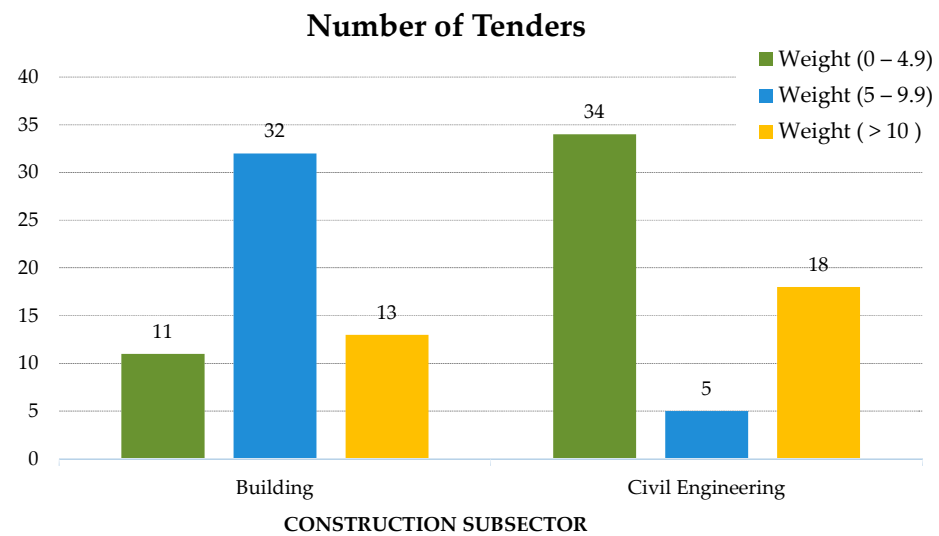


Figure 5. Number of tenders according to the weighting of social criteria by the construction subsector.

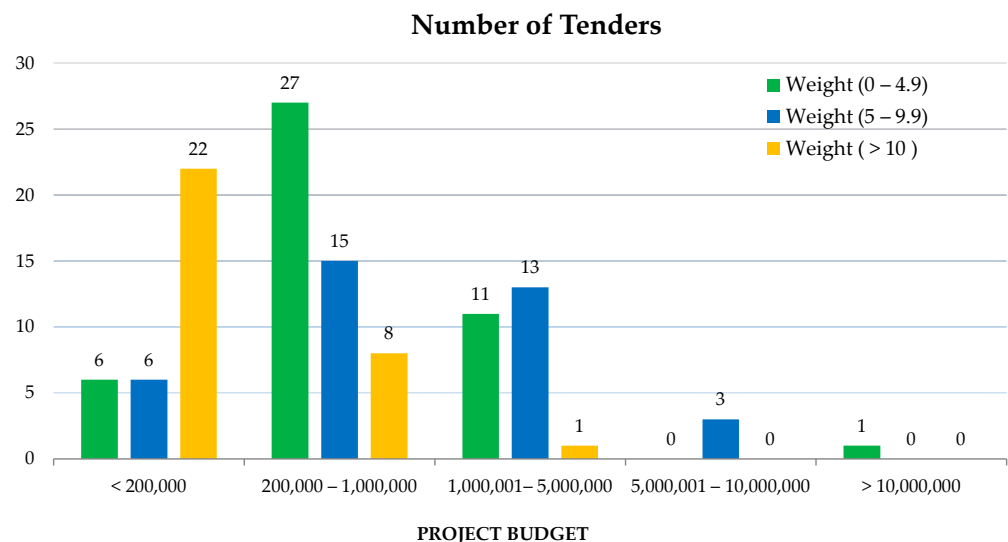


Figure 6. Number of tenders according to social criteria weighting by contract size (in euros).

5. Discussion

The administrations in the Valencian region used social criteria when contracting 11.7% of the construction projects, showing a significant increase in 2017 with respect to 2016 (17.1% versus 9.3%). These are very low values compared to other studies where the use and frequency of social criteria in public procurement have been analysed [17], although results are similar to other studies that have analysed the use of sustainable criteria, in particular environmental criteria [40].

The main social criterion employed in the studied sample is Health and safety, as in the results obtained by Montalbán-Domingo et al. at [17] in a study in 10 countries, four of them Anglo-Saxon countries (USA, UK, Canada and Australia) and the other six Spanish-speaking countries (Spain, Argentina, Chile, Colombia, Panama and Peru). Nevertheless, there is a significant difference between both studies, since in our study the frequency of use of this criterion is 8.6%, whereas in the study of Montalbán-Domingo et al. the frequency reaches 100%. This difference may be explained by two aspects. First, the sample studied by Montalbán-Domingo et al. included 451 projects, mainly projects with a bigger execution budget. The second aspect is procedural: in our study, we have considered as “social criteria” the award criteria with their own entity within the administrative specifications,

with no consideration of small references to “Health and safety” that could be made in other criteria, such as “Analysis of the project” and “Description of the construction process”.

In the studied sample, no criteria associated to Cultural heritage, Participation of local companies, Professional ethics and Training have been used. Criteria related to Employment and Public participation have been used slightly. This shows the wide range of opportunities that Valencian administrations may use to include social criteria within their procurement procedures, as other administrations worldwide [10,17,40]

The use of social criteria is greater in regional entities than in local and/or provincial entities, both in the building subsector and in the civil engineering subsector. This fact, as the environmental criteria, may be the result of a better education and training of the staff of these entities with respect to the utilization and valuation of social criteria [31–33]

No conclusions on the use of social criteria can be associated with the geographical distribution of the administrations within the region; it can only be concluded that there are administrations that use social criteria often in their projects, such as the “Valencia Regional Council for Housing, Public Works and Infrastructure” or the “Castellon city council”.

The CPV code, the method of participation and the type of administrative processing have no influence on the use of social criteria in the contracting process, although it is usually easier to find social criteria in open procedures and ordinary processing.

The use of social criteria is habitual in projects with a bigger execution budget, consistent with the countries analysed at the study of Montalbán-Domingo et al. [17]. This situation is strongly reflected in the data of the study about Valencian administrations: 867 out of 967 projects have an execution budget below €1,000,000, and just 84 of them use social criteria, which represents 9.7%, while 28 of the 100 remaining projects with a budget over €1,000,000 use social criteria. These results enable us to confirm, at least for one of the Spanish regions, the conclusions obtained by Montalbán-Domingo et al. [17] with respect to the increase in the utilization of social criteria as long as the execution budget of the project increases, since all the 94 projects studied by the authors had a budget over €1,000,000.

The studied sample has a large percentage of projects with an execution time inferior to a year (92.7%), and, despite this, projects with an execution time superior to a year present a larger percentage in the use of social criteria, demonstrating that the longer the execution time, the larger the extent to which contract authorities use social criteria [17].

The average weight of social criteria in this study was 7.0 points out of 100. Unlike for the environmental criteria, there are not many studies in the scientific literature that have analysed the weight of the social criteria within the global procurement process, and the few that exist have done it through the lens of sustainable criteria. Hueskes et al. [40] determined that 19 out of 24 projects included in their study had a weight of sustainable criteria under 10%.

A remarkable result of this study is that social criteria are not very used by Valencian administrations in projects with a budget under €200,000. However, when used, the weight of these criteria is superior to 10%. This allows us to conclude that when an administration applies social criteria in its procurement procedures, it is aware of their importance and gives them a major influence.

6. Conclusions

Public entities can act as driving forces for the inclusion of social aspects within the contracting and procurement process, due to the high economic volume that their contracts and purchases constitutes. To this end, the current situation must be analysed, as well as the evolution of social public procurement within its range of operation, in order to develop the best strategies, taking advantage of strengths and exploring the opportunities that an analysis such as this one offers.

Valencian public entities include social criteria in 11.7% of the adjudicated public works. This value is very low when compared with other studies developed at different countries worldwide.

From the analysis of the results obtained in this work, it has been concluded that the use of social criteria is higher at regional bodies than in local and/or provincial ones, where the education and training of the staff with respect to the inclusion of social criteria is more intense. This may indicate that one way to promote the inclusion of these criteria at the local and provincial level could be the development of handbooks and training programmes for the staff of entities, particularly at the local and provincial level.

The main social criterion used for the contracting of public works in the Valencian region is Health and safety, followed by criteria related to Employment and Public participation. Other criteria such as Cultural heritage, Participation of local companies, Professional ethics and Training are not used.

Social criteria, just like in other cases, are more frequently used the higher the budget of the project and the execution time. The average weight of social criteria for the tendering process is low (7.0 out of 100), although entities that usually consider these criteria are aware of their importance and give them a higher weight.

Future research lines could extend this analysis to other public administrations, from Spain and/or other countries, in order to compare the current status of SPP, analyse the effect of the application of new regulations and develop new tools to improve social performance in the construction process for public works. Moreover, it could be interesting as a future line of research to determine the influence of the current law for the introduction of social criteria. The main limitation of this study is that, in some tenders, the social aspects may have been indirectly assessed in other award criteria, such as the "Description of the construction process" or the "Work programme".

As a general conclusion of this research, that may constitute a future research line, the results obtained from this study will constitute the basis for the development of tools to help public bodies to act as driving forces to the inclusion of social aspects within the procurement and contracting procedures. To do this, studies such as this one can help them to develop best strategies, taking advantage of strengths and exploring the opportunities offered by the results and the proposals emerging from these analyses.

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Appendix A

Table A1. Description of some social criteria identified in the sample.

Criteria	Description
Health and Safety	<p>Specific report on health and safety prevention on the site.</p> <p>Organization of prevention and safety on site: preventive organization chart, preventive resources, coordination with subcontractors and self-employed workers.</p> <p>Systems for participation of contractor and subcontractor personnel.</p> <p>Training and information processes to be developed.</p> <p>Review of the Health and Safety Study with indication of deficiencies and possible improvements.</p> <p>Analysis of possible emergency situations: measures to be adopted, relations to be organized with external services to guarantee their speed and efficiency.</p>

Table A1. Cont.

Criteria	Description
Health and Safety report	The systems of staff participation, the training and information processes which are carried out at the expense of the bidder during the work, the internal establishment of the safety and health measures of the proposed contractor and subcontractors will be assessed. Likewise, the analysis of the Health and Safety Study carried out by the bidders will be assessed, as well as the improvements proposed, which, in the event of the contract being awarded, must be compulsorily incorporated into the Health and Safety Plan.
Job creation for people with difficulties to access to the labour market	In this section the bidder will indicate the number of people he undertakes to hire for the execution of the contract, indicating the full working days for which each of them will be hired, and meeting the following requirements: <ul style="list-style-type: none"> - Persons who are unemployed for at least 3 months or are first-time job seekers. - People with a disability equal to or greater than 33%. - Young people between 18 and 25 years of age - Recipients of minimum insertion income. - Women who are victims of male violence. - Homeless people or in the process of social accompaniment by public resources.
Social Communication	In this section the bidders shall indicate the amount they undertake to allocate for the social communication of the work, which may not exceed 1% of the amount of the material execution of the work. This communication will be destined for the maintenance of uninterrupted information to all those affected by the works in order to cause the least harm to the citizens and to the good execution of the works (mobility, accessibility, effects on third parties, environmental effects, etc.).
Number of unemployed or disabled people to be hired	Without description
Health and Safety	Improvements in health and safety and traffic safety, above and beyond the legal or normal conditions for the correct execution of works.
Health and Safety	Report setting out the measures proposed by the company to improve health and safety on the site.
Technical and auxiliary resources and prevention measures	Without description

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