



Electronic Platforms and Transparency in Public Procurement

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Abstract

Public procurement represents the largest component of public expenditures and, for that reason, is one of the most sensitive areas of the risk of corruption. There are several governmental investments in this area to accomplish the principle of integrity and to achieve more transparency.

In Portugal, in the e-government context, the strategy was the adoption of electronic platforms for procurement, as the main reinforcement measure of transparency in public procurement. Through an exploratory literature review, based on OCDE recommendations and European Union official reports, this paper aims at contributing to the discussion on the use of information and communication technology, specifically electronic platforms, in Portuguese public procurement. While the gains are potentially significant, it should be noted that the implementation of the principle of integrity implies articulated measures of technological and political dimension as well as organizational culture.

Keywords: public purchase, electronic platforms, transparency, prevention of corruption.

Resumo

As compras públicas representam a grande parte da execução da despesa pública e, nesse sentido, uma das áreas mais sensíveis em termos de risco de corrupção. Vários são os investimentos dos Governos na contratação pública eletrónica com vista à concretização do princípio da integridade, reforçando, com isso, a sua transparência.

Em Portugal, no contexto do governo electrónico, a estratégia passou pela adoção das plataformas de compras eletrónicas, como medida de reforço da transparência nas compras públicas. Os ganhos são significativos. Através de uma revisão de literatura, de carácter exploratório, focando as recomendações e relatórios da OCDE e da União Europeia, Este artigo salienta que a concretização do princípio da integridade implica medidas articuladas de dimensão tecnológica e de dimensão política e cultura organizacional. A tecnologia pode contribuir para resolver os problemas, mas isso não significa que os problemas se resolvam pelo simples facto de se usar tecnologia.

Palavras-chave: governo electrónico; compras públicas; plataformas eletrónicas; transparência; prevenção da corrupção.

1. Introduction

The literature commonly highlights the potential of information and communication technologies (ICT) in the design of new public governance models that promote transparency and accountability, which are considered critical requirements to an efficient resource management and to fight corruption. In this context, the specific sector of public procurement sector is critical, since it represents a large portion of public expenditures and is one of the most sensitive areas with respect to risk of corruption.

With a focus on enhancing transparency, several investments have been made by governments to implement e-procurement, representing one of the most relevant initiatives of digital government. Among other advantages, e-procurement can be an important tool to promote competition, to foster more transparent decision-making processes, to reduce corruption and bureaucracy, and to save time and money.

Among European countries, Portugal is considered a good example of e-procurement policies and practices and has focused on the complete dematerialization of pre-contractual procedures. The application of the Public Contracts Code (CPC) in 2009 entailed, among other measures, mandatory adoption of public procurement electronic platforms by contracting entities in support for pre-contractual procedures.

These instruments reinforce the promotion of transparency in public procurement, but can they be strengthened in another way to increase transparency? Based on an exploratory literature review on this subject, and focusing on a set of recommendations by the Organization for Economic Cooperation and Development (OECD) the European Union (EU) and the analysis of the instruments mentioned above, this article aims to discuss the contribution of electronic platforms in the increasing public procurement transparency in Portugal. It adds the identification of limitations they present and, in this sense, the presentation of guidelines to promote their use.

In what follows, Section 2 addresses the importance of public procurement and the emphasis on transparency. Section 3 discusses how e-procurement is an instrument for promoting transparency and preventing corruption. The analysis of technological instruments adopted in Portugal, namely public procurement platforms, is presented in Section 4. Section 5 deals with threats to transparency. Finally, Section 6 presents discussion topics and further work to be made.

2. Public Procurement and the Focus on Transparency

Public procurement is an important part of the European Member States' national economies. It accounts for around one fifth of EU annual GDP (EU, 2014). In the OECD area, it represents about 12% of GDP and around 4.2 billion euros in 2013 (OECD, 2016).

For a number of reasons, particularly for the financial flows they create and for the close links between public and private sector, public procurement is a breeding ground for corrupt practices (Boehm, 2007; Lamsdorff & Nell, 2006; Rose-Ackerman, 2002; UE, 2014; OECD, 2016), as evidenced by several studies. According to a study on public procurement indicators, corruption practices lead to a 20 to 25% increase in spending on public procurements, and in some cases may reach 50% (EC, 2011). Taking into account the principles of integrity in OECD procurement, mismanagement ("governance deficit") of public procurement undermines competition and increases the prices of goods and services purchased by public entities, thus impacting public expenditure and income from taxpayers (UE, 2014). A study on detecting and reducing corruption in EU public markets concluded that, in 2010, the overall direct cost of corruption in public markets on only 5 sectors (road and rail, water and waste, public works, training, research and development) of 8 Member States (France, Italy, Hungary, Lithuania, the Netherlands, Poland, Romania and Spain) amounted to between 1.4 billion and 2.2 billion euros (EC, 2003). In addition, more than half of the cases of foreign bribes occur to obtain public procurement contracts (OECD, 2016) and several cases of illegal financing of political parties had favorable decisions in public procurement procedures as currency of exchange (OECD, 2009).

Public procurement presents a high risk of corruption and, in recent years, Member States have adopted reforms in the public procurement field, which have made it possible to strengthen transparency, competition, and prices (EU, 2004; OECD, 2009; Boehm, 2007; Lamsdorff & Nell, 2006).

Reforms to enhance transparency are essential, since public procurement accounts for a substantial proportion of taxpayers money and therefore requires efficient management and high levels of integrity in order to safeguard public interest (OECD, 2016; Armstrong, 2005). According to Armstrong (2005), accountability, understood as reporting information on the use of public resources to stakeholders of achieving the defined objectives, brings transparency improvement. Transparency, according to the same author, can be defined as the "(...) public access, with no restrictions, to on-time and reliable information about decisions and efficiency of public sector" (Armstrong, 2005: 1). However, transparency and accountability imply integrity

and reliability, that is, honesty and trust. In brief, accountability, transparency and integrity are the essential pillars in safeguarding public interest.

In this context, OECD (2009) refers to ICT use as a fundamental instrument of reforms, especially in the area of public procurement. ICTs allow creation and strengthening of a culture of transparency, facilitating the monitoring of information as well as control of public procurement (OECD 2009; Bertot, Jaeger, Grimes, 2010). For example, "unique portals/platforms" can supplement traditional means of supporting transparency. The challenge is to ensure a degree of transparency that reinforces the anti-corruption fight, without undermining the efficiency and effectiveness of public procurement (OECD, 2009), while allowing citizens to monitor how public money is managed (Lourenço, 2013).

3. Electronic Public Procurement: A Tool for Transparency

According to the European Commission (2010), e-procurement generally means replacing pre-contractual, paper-based procedures with communication and processes based on information technologies and systems (TSI) (EC, 2004) and considers that it promotes the effectiveness of procedures and provides additional guarantees in terms of detecting and preventing corruption, since they enhance transparency, enable better application of standardized procedures and facilitate monitoring (EU, 2014).

A literature review by Ferreira and Amaral (2016) points out several benefits of ICT adoption associated with purchasing practices, highlighting: (i) the simple and efficient way of buying, allowing a reduction of transaction costs; (ii) identifying and negotiating with suppliers more efficiently; (iii) automation of workflows that can subsequently be extended to the entire supply chain and to the entire organization, enabling information sharing and integration; (iv) processing of orders, monitoring and control of acquisition activities; and (v) transformation of the way an organization conducts pre-contractual processes (Schoenherr & Tummala, 2007; European Commission, 2010).

Ronchi *et al.* (2010) focus on: (i) strategic benefits (related to comparative efficiency); (ii) transactional benefits (concerned with efficiency and effectiveness of transactional activities); and (iii) informational benefits (as well as decision support and timely communication). According to the authors, these benefits translate into financial and organizational gains, with impact on

improving governance. To these advantages, Talero (2001) adds: (i) the increase of transparency in the relations between public organisms and the market (emphasis on the G2B components). Kassim and Hassin (2010) refer to (i) value creation, (ii) increased transparency, (iii) improved information flow, (iv) support for decision-making, (v) creation of open markets in order to all suppliers be able to compete, taking advantages from the aggregated power of governments to achieve dynamic prices of goods and services and improving the purchasing cycle efficiency, like (vi) the benefits in adopting e-procurement systems.

In sum, ICT has clearly the potential to play an important role by facilitating the access of suppliers/providers of goods/services to information more easily and in real time. ICT also facilitates monitoring of the public procurement process information, as well as its subsequent execution. This aspect is crucial for public procurement control by stakeholders, characterized by a multiple network of different actors, both internal and external: (i) in the context of governance and definition of public policies; (ii) in the context of public procurement activity - relationship between contracting entity and external entities in procurement processes; (iii) in the context of public procurement activity - internal actors of contract formation processes (Ferreira, 2016).

Understanding the context of the public procurement activity is also crucial in order to reach the concept of transparency, as presented by Heald (2006; 2012): process transparency and transparency of events; macro-level transparency and micro-level transparency; real-time transparency and transparency in retrospect (Lourenço, 2013). This discussion is imperative for the purpose of determining the overall government transparency strategy for public procurement in order to enhance accountability through the use of ICT (Lourenço, 2013), always in the defense of public interest.

4. The Portuguese Case in the Use of Electronic Platforms for Public Procurement

The gains of transparency attributed to the adoption of technologies in public procurement processes are recognized in the literature. However, it is also important to take into account the costs of adopting electronic public procurement platforms, as well as their maintenance costs, which probably vary according to the size and sophistication of the electronic platform (Ferreira & Amaral, 2016; European Commission, 2010). To these, it must be added the costs of licenses, internal and external resources, security systems, implementation and maintenance, integration

solutions, process design, configurations and customization, training and communication (Ramanujam, 2012). In this context, the financial risk and risk in the development of technological solutions and legal issues, are determinant factors in electronic public procurement projects (Oliveira & Amorim, 2001) and, consequently, the increase of transparency in procurement processes.

In addition, Ferreira and Amaral (2016) advert that the simple adoption of technological components does not mean necessarily that the organization automatically reap the benefits indicated. In this respect, the European Commission (2010) identifies a number of problems that may create obstacles in the adoption of e-procurement and hence transnational participation in e-procurement procedures (European Commission, 2010): (i) inertia and fear of contracting authorities and suppliers (reorganizing costs of internal systems; lack of knowledge regarding associated advantages; risks linked to the integration of procurement technologies with existing IT systems); (ii) lack of guidelines in electronic public procurement processes (suppliers are confronted with an electronic public procurement architecture composed of different platforms and devices); (iii) costly technical requirements, especially in authentication of tenderers.

However, Heald (2013) draws our attention to the existence of certain obstacles in open government initiatives that have implications for transparency gains. Legislative initiatives, public processes and the way information is made available, does not necessarily translate into improved transparency and, consequently, have implications in terms of accountability (Lourenço, 2013, Heald, 2016). To these it is also added models for technological development of artefacts, particularly in public procurement (Ferreira, 2016). In turn, Bertot *et al.* (2010) refer to usability, issues related to acceptance and implementation of technologies, education and culture, as potential barriers for transparency, enhanced by the adoption of technology.

In order to correct these problems and to promote transparency, smart, healthy and inclusive growth, the European Commission defines in its 2020 strategy the following vision for public bodies and services: creating public value through ICT, attributing to public procurement a crucial role in the definition of policies and concrete measures in this area. However, with regard to the effective use of public electronic procurement in most of the EU countries, the global adherence remains weak (Ferreira, 2016; European Commission, 2010). Portugal, according to this same report from the European Commission (2010), constitutes an exception in the legal sphere, for the complete dematerialization of contract formation processes, through CCP application, approved by Decree-Law no. 18/2008, of January 29th, with corrections introduced by subsequent legislation, thus transposing the guidelines of Directives 2004/17/CE and

2004/18/CE into the national plan, a key tool for implementation of the defined objectives associated with the National Public Procurement System (SNCP), mainly those related to electronic public procurement (Ferreira, 2016).

As a result, the translation of the European policy to national laws has been marked by the definition of a technological model that includes a set of measures and projects, among which e-platforms for public procurement in support for pre-contractual procedures, of mandatory use by the contracting entities and established in terms of development in the private model: the electronic public procurement platforms. These platforms, of mandatory use by contracting authorities in public procurement processes, according to BASE Gov¹, the Online Public Procurement Portal, consist of a technological infrastructure made by a set of applications, means and services necessary for the operation of the procedures national public procurement contracts to support the operation of the phases of the pre-contractual procedures legally envisaged for the realization of public expenditure. In this sense, these platforms must support the following functions: (i) receiving of proposals, applications and solutions; (ii) opening of proposals and applications, and providing information to competitors; (iii) evaluation of proposals, according to qualitative and quantitative criteria; (iv) characterization of the procedure and aggregation of its parts; (v) publication of the procedure, or delivery of invitations, making known its contents to all interested parties; (vi) making available the parts of the procedure for consultation; (vii) receiving of requests for clarification; (viii) delivery of answers, clarifications and rectification of parts of the procedure (CCP, 2008).

In September 2017, according to data available in BASE Gov², five electronic procurement platforms and their respective management entities were licensed in Portugal. A year ago, in July 2016, 10 platforms were licensed.

The introduction of public procurement platforms resulted in substantial gains, recognized in terms of pre-contractual procedures: (i) in transparency; (ii) in trust by competitors; (iii) in construction of organizational memory; (iv) in competition; (v) in the working methods of actors; (vi) in information management; and (v) in cost reduction (Ferreira, 2016). Concerning transparency, changes potentiated by the platform in phases where the jury intervenes, often accused of being the center of corrupt practices (EC, 2014). In this context, there is a strengthening of transparency in the process (Heald, 2006; Heald, 2012; Lourenço, 2013).

¹ <http://www.base.gov.pt/Base/pt/PlataformasEletronicas/OQueSao> (last consultation: July 19th, 2016).

² <http://www.base.gov.pt/Base/pt/PlataformasEletronicas/PlataformaEletronicasLicenciadas> (last consultation: July 19th, 2016).

In short, e-platforms have contributed to improve transparency levels in the submission, analysis and evaluation phases of proposals, that is, in the phases where the jury intervenes. Thus, while in these phases the risk of corruption has decreased, in the remaining phases, especially those not supported by platforms, corruption risks have increased (EC, 2014; OECD, 2009). This may indicate that the focus on corruption has shifted from one phase to another, due to ICT introduction, which means in general terms that public procurement remains a very sensitive area in terms of preventing corruption. The question arises as to whether ICTs can contribute to enhancing transparency, and therefore to reduce the risk of corruption at all stages.

OECD (2009) stresses the importance and necessity of enhancing transparency at all stages of public procurement, in particular, at the phase of assessing needs, the phase of implementation of contracts and payments, phases not normally covered by regulation and not covered by platforms. This also occurs in the Portuguese case. Platforms support legal requirements, but fall short on OECD transversality (2009).

Considering the Integrated Management Model for Public Procurement oriented to Public Value presented by Ferreira (2016), in Portugal, e-platforms only support the contracting phase (from authorization of expenditures to adjudication and contract signature) and yet they do not present themselves as end-to-end solutions. This limitation of technological solutions, according to the same author, makes it difficult to manage public procurement processes at the organizational level.

In this context, despite good practices and considerable gains, other technological tools are needed to support a culture of integrity at all stages of public procurement, from the assessment of needs to the preparation of parts of the procedure and to the phase of implementation and payment (OECD, 2009; Ferreira, 2016), all based on a system for monitoring, managing and evaluating performances and impacts of public policies and public value based on the following modular components (Ferreira, 2016):

- (i) Management and evaluation of public policies oriented to public value:
 - a. authorization of public policies;
 - b. policy-making;
 - c. integrated management of policies, programs and projects.
- (ii) Management and evaluation of public procurement:

- a. management and evaluation of the purchasing cycle (strategically manage planned purchases with public policies, manage prior authorization process for expenditure execution, manage processes of public procurement and evaluation);
- b. manage the execution of the contract, oriented to the execution of policies, programs and projects;
- c. manage suppliers and evaluate the execution of contracts;
- d. contract evaluation: evaluate social and financial outcomes (impact on public value).

Furthermore, it is stated that the model of development and implementation of technological solutions on the field of public procurement is presented as a limitation to the development of electronic solutions based on the above referenced view.

In Portugal, the model of development of electronic platforms of public procurement, as previously mentioned, is the private model. I.e., technological development tasks and risks are assumed by private entities, managing bodies of the platforms (Ferreira, 2016; Oliveira & Amorim, 2001).

In this sense, will this private model be an obstacle for the implementation of the integrity principle and enhancing transparency in the procurement process? Will the private entities be willing to take risks in developing solutions that are not included in the legal plan, but considered key to foster an appropriate degree of transparency and integrity in all phases of the procurement cycle to ensure a fair and equitable treatment of potential competitors and contractors?

These issues need to be discussed and reflected, since these depend on new measures to strengthen transparency, fundamental to reduce risk of corruption (OCDE 2009, US, 2014).

5. Threats to Transparency

According to Ferreira, Cunha, Amaral and Camões (2014), with respect to Portugal, the high degree of implementation of e-procurement and the consequent gains in terms of transparency are not yet reflected in the perception of corruption indicators. Their data supports shows that the levels of perceived corruption remain high.

At the European level, Eurobarometer data on corruption (EU, 2014) revealed that more than 50% of companies report corruption in public procurement as a common practice. Results from this survey show that: (i) 32% of companies that submitted tenders in the context of public procurement claim that corruption prevented them from obtaining their tenders; (ii) bureaucracy (21%) and criteria that seem to have been designed to match certain competitors (16%) are identified as the main causes why companies do not compete for public procurement; (iii) more than 40% of companies report there are several illegal practices in public procurement.

In this alignment, the First Anti-Corruption Report of the European Union (2014), which devotes a chapter to the issue of corruption in public procurement, identifies as main problems: (i) specifications drafted with intention of favoring certain competitors; (ii) conflicts of interest at various levels and in various stages; (iii) disproportionate and unjustified award criteria; (iv) unjustified exclusion of competitors; (v) undue recourse to urgent procedures; (vi) insufficient analysis in case of abnormally low prices; (vii) excessive weight of the lowest price criterion (to the detriment of criteria regarding quality of goods/services and execution capacity); (viii) unjustified exemptions from publicizing procedures. This report also concludes that the main risks in terms of corruption are focused on the needs assessment, procurement planning and strategies, definition of evaluation criteria and selection of proposals and management of contract performance.

All these threats to the promotion of transparency and good governance add to the restricted vision of the procurement process underlying the design of e-platforms, fragile organizational culture and learning, disaggregation between legislation and platform functionality; the costs of access to platforms by suppliers (Ferreira, 2016; Ferreira & Amaral, 2016).

As can be seen from the problems and risks pointed out, the need to strengthen transparency is transversal to the whole process, including work practices and organizational behavior and requiring intervention beyond ICT. Therefore, it is concluded that reinforcement of transparency requires intervention at the ICT and decision-making level.

6. Discussion

Based on the Portuguese reality and the recommendations and reports of the OECD and EU, this article discusses the use of ICT as a means of strengthening and promoting transparency in public

procurement. It seems consensual that the Portuguese case revealed gains in terms of transparency, at least in certain stages of the public procurement process, namely in submission, opening, analysis and evaluation phases of the proposals.

Since, as highlighted in several reports, platforms do not yet cover all the stages of the procurement process, several problems and risks remain though. Moreover, the risk areas still need to be addressed.

Public procurement has a technical dimension, where ICTs are very useful, but one must not forget the political dimension, the decision-making plan. Technology can help solve problems, but that does not mean that problems are solved solely the use of technology. The fulfillment of the integrity principle and, thus, improvements of transparency on public procurement policies requires the coordination of technological, political and cultural measures.

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