

DIGITISING PUBLIC PROCUREMENT SYSTEMS TO PREVENT AND COMBAT CORRUPTION

Corruption is a pervasive global challenge that undermines public trust, distorts markets, and impedes sustainable development. Public procurement, the process by which governments acquire goods, services, and works from private suppliers, is particularly vulnerable to corruption because large sums of public funds are involved, and the process often involves complex negotiations and multiple decision-makers.

Digitising procurement systems has proven to be an effective strategy in combating and preventing corruption. By building capacity, collecting the appropriate procurement data and automating processes, digitisation can assist States Parties in meeting their UNCAC and UNGASS commitments.¹

Digitisation improves competition, increases transparency and accountability and, importantly, reduces opportunities for corruption. This brief will aim to provide governments with actionable guidance on how to implement effective digitisation reforms in their procurement systems.

¹ Conference of States Parties to the United Nations Convention Against Corruption, Resolution 9/3: [Resolutions and decisions adopted by the Conference of the States Parties to the United Nations Convention against Corruption](#)

“14. Encourages States parties, where appropriate and consistent with their domestic legal frameworks, and mindful of the need to protect the rights or reputations of others, national security or ordre public, to seek to utilize information and communications technologies to strengthen the implementation of the Convention, to strengthen public awareness and to promote transparency and public reporting in areas such as public procurement, the management of public finances, and asset and interest disclosure, with a view to facilitating the reporting and detecting of acts of corruption and to supporting the criminal prosecution of corruption-related offences;”

Conference of the States Parties to the United Nations Convention Against Corruption, Resolution 3/2, para 13, UNODC, 2009. [CAC/COSP/2009/15 Conference of the States Parties to the United Nations Convention against Corruption](#): States parties to UNCAC adopted resolution 3/2 on preventive measures which invites States parties “to consider the use of computerised systems to govern public procurement”.

As UNODC explains: “The use of e-procurement is well suited to assisting countries to establish systems of public procurement based on the fundamental principles of transparency, competition and objective decision-making as required by article 9 of UNCAC” ([Guidebook on anti-corruption in public procurement and the management of public finances | UNODC](#)) at 27.

Generating market opportunities in public procurement through open contracting data can help prevent corruption by promoting transparency, competition, and vendor diversity. By making procurement data publicly accessible, open contracting data empowers private sector actors to identify potential opportunities and monitor the procurement process, fostering a more competitive marketplace.² Government agencies and civic actors can utilise the data to analyse trends, identify potential irregularities, and implement strategies to increase vendor diversity, reducing opportunities for favouritism and collusion.

The meaning of digitising procurement

Digitising procurement involves the adoption of information and communication technology (ICT) to streamline and modernise procurement processes, often referred to as an e-procurement system.

In adopting an approach to digitised procurement, a State Party may elect to purchase complete software solutions from the private sector known as enterprise resource planning (ERP), however this outsourced option may present certain challenges. ERP systems face a higher risk of failure for a number of reasons, which may include: internal capacity challenges, ineffective change management processes, budget constraints, cost overruns, system delivery delays and vendor “lock-in”.³ These failures often result from a rushed pivot to technology without first taking the time to develop an adequate strategy to address internal staffing capacity, data governance and resource needs. In turn, poorly planned ERPs may lead to wasted budgets, contract cancellations, and protracted litigation.⁴

As will be demonstrated in the best practice case studies below, the most successful transitions to e-procurement have taken place in environments where the state had its own internal digital capacity, allowing it to tailor, develop and continuously iterate a

² Open Contracting Partnership: [“Open Contracting data use cases”](#) 2022.

³ Jan Svoboda *“Public Procurement and Vendor Lock-in within the Area of Data Migration Ex Post Measures from Selected Legal Regimes of Direct Applicability and Their Effectiveness in Achieving Data Migration”* Milan Law Review, Vol.3, No.1, 2022. Bianca Sjoerdstra, [“Dealing with Vendor Lock-in”](#) University of Twente, 2016.

⁴ See, for example, Mark Ressler, Jason Takenouchi [“ERP Implementations in the Public Sector: Special Challenges \(Contributed\)”](#) GovTech 18 October 2018.

procurement system to suit its own strategy and needs – placing an emphasis on the user rather than the system itself.⁵

An e-procurement system may consist of modules which are designed and built to cater for different phases of the whole procurement cycle (planning, tender, award, contract and implementation).⁶ For example: suppliers who provide goods and services to the state may be required to register on a central database for government suppliers (supplier registration); state tenders may be advertised on an online platform (tender publication); suppliers may be able to submit their bids online (bid submission portal); various bids may be evaluated and the outcomes published (evaluation and award); post award, payment orders may be tracked and processed (invoicing and payment) and; information may be published to inform users and allow them to track the progress of contract delivery (contract performance).⁷

Benefits of digitising procurement for corruption prevention

The modules described above generate considerable volumes of data. An effective data strategy ensures that information can be shared between the modules without risking the duplication of data. This is also referred to as data standardisation. When data is standardised and the modules properly integrated, the information can be used to perform a host of sophisticated analytics. In preventing corruption, this may include early risk indicators, “red flags”, which focus on detecting irregular bids, previously disqualified suppliers and conflicts of interest.⁸

As illustrated above, an effective e-procurement system can play a crucial role in preventing corruption by addressing the key vulnerabilities which exist within traditional

⁵ See, for example, Sean Boots [Rule number one: Avoid vendor lock-in | Sean Boots](#) 12 May 2021.

⁶ Open Contracting Partnership [“Open Contracting Playbook: A practical guide to smarter, better procurement reform through open data & stakeholder engagement”](#) November 2019 at 23

⁷ See, for example, Asian Development Bank [“e-Government Procurement Handbook”](#) 2013, at 32-35; See also, Organisation for Economic Co-operation and Development (OECD) [“Checklist for Supporting the Implementation of OECD Recommendation of the Council on Public Procurement”](#) 2016 at 2.

⁸ United Nations Office on Drugs and Crime [“The future is here - How technology can help prevent and counter corruption in public procurement”](#); Open Contracting Partnership [“Open Contracting Playbook: A practical guide to smarter, better procurement reform through open data & stakeholder engagement”](#) November 2019 at 29-30.

procurement systems. The following points highlight the functions and benefits of e-procurement in this context:⁹

- 1) **Transparency and accountability:** Digitisation allows for real-time tracking and monitoring of procurement activities, making it difficult for corrupt practices to go unnoticed. Transparent procurement processes enhance accountability and encourage civic participation in public service delivery.
- 2) **Reduced human intervention:** Automation minimises the need for manual intervention in procurement processes, reducing the scope for corrupt practices such as collusion, bribery, favouritism and embezzlement.¹⁰
- 3) **Data analysis for anomaly detection:** As illustrated in the discussion above, e-procurement systems enable the use of data analytics to identify irregularities and suspicious patterns in procurement activities, facilitating early intervention and prevention of corruption.
- 4) **Enhanced competition:** e-procurement platforms have the potential to significantly broaden the pool of potential suppliers, promoting healthy competition and preventing collusion or favouritism in the selection of vendors.
- 5) **Improved audit trails:** e-procurement facilitates the creation of detailed and immutable audit trails, making it easier to trace transactions and verify compliance with procurement regulations.

Implementing digitisation reforms: a step-by-step guide

Governments looking to digitise procurement processes for purposes of corruption prevention should follow a systematic approach. The following step-by-step guide outlines key actions:

⁹ Open Contracting Partnership "[Open Contracting Playbook: A practical guide to smarter, better procurement reform through open data & stakeholder engagement](#)" November 2019 at 20, 24-25.

¹⁰ United Nations Office on Drugs and Crime: "[Guidebook on anti-corruption in public procurement and the management of public finances | Good practices in ensuring compliance with article 9 of the United Nations Convention Against Corruption](#)" September 2013 at 27.

- 1) **An effective strategy:** Prioritise a successful e-procurement initiative by following a structured approach. Begin by clearly defining reform goals and securing political buy-in. Focus on developing specific, actionable problem statements and theories of change. Establish a robust political mandate with high-level leadership and dedicated resources. Form a strong reform team, including decision-makers, domain experts, technical leads, and project managers. Conduct thorough user research, engaging stakeholders for co-designing reform goals. Define use cases for information, identifying key priorities and data requirements. Agree on key performance indicators to measure progress and outcomes effectively. Embrace an "open-by-design" digitisation approach, ensuring that procurement systems support broader public financial management goals.¹¹
- 2) **A clear legal framework:** Ensure that any envisaged e-procurement system is sufficiently supported by laws and regulations that explicitly cater for and regulate the use of digital technologies in procurement.¹²
- 3) **Uniform data standards:** It is critical to adopt a uniform standard for procurement data which should apply throughout the public authority. For example, the Open Contracting Data Standard (OCDS) is a free and open global standard for public contracting. It facilitates the disclosure of data and documents at all stages of contracting, providing a common data model and recommended fields. The OCDS supports transparency, enabling diverse users to analyse contracting data effectively.¹³
- 4) **Capacity building and training:** Develop the necessary internal digital capacity, train procurement officials and relevant stakeholders on the use of digital tools and technologies. It is also important to foster a culture of compliance and ethical behaviour through awareness campaigns and training programs.¹⁴

¹¹ Open Contracting Partnership "[Open Contracting Playbook: A practical guide to smarter, better procurement reform through open data & stakeholder engagement](#)" November 2019 at 9-16.

¹² Open Contracting Partnership "[Open Contracting Playbook: A practical guide to smarter, better procurement reform through open data & stakeholder engagement](#)" November 2019 at 26.

¹³ Open Contracting Partnership: [Open Contracting Data Standard](#) (accessed 23 November 2023).

¹⁴ United Nations Development Programme: "[Public Procurement Capacity Development Guide](#)" October 2010;

- 5) **Pilot projects and stakeholder engagement:** Implement pilot projects to test the effectiveness of digitised procurement processes. Engage with key stakeholders, including vendors, civil society, and the public, to gather feedback and address concerns.¹⁵
- 6) **Continuous monitoring and evaluation:** Establish mechanisms for continuous monitoring and evaluation of the e-procurement system. Regularly update and enhance the system based on feedback and emerging technologies.¹⁶
- 7) **Publish procurement data, including planning and post-award information:** publishing information, including planning and post award information, increases competition, assists vendors in developing better proposals and allows stakeholders to monitor the results. Collectively, these interventions bolster transparency and accountability and reduce opportunities for corruption.¹⁷

International Best Practices

Several States Parties have successfully implemented digitisation reforms in their procurement systems, demonstrating their effectiveness in combating corruption:

One State Party effectively utilised e-procurement measures to combat corruption during the COVID-19 pandemic. The national procurement agency embraced transparency by publishing and tracking all COVID-19 contracts in real time, allowing public oversight. With a robust open data infrastructure, the state could implement new regulations and tools, including an online store for procurement, resulting in a tenfold decrease in protective equipment prices and a tenfold increase in procurement speed. Open data facilitated citizen oversight and journalistic investigations, leading to the exposure of irregularities and resignations of authorities involved in corrupt practices.¹⁸

¹⁵ See, for example, Kaye Skylar, Oscar Hernández and Mariana Lopez: [Peddling openness: Mexico City's journey to procure a better bike share system](#) 27 January 2022.

¹⁶ Sascha Haselmayer "[Serving the Citizens – Not the Bureaucracy: A Strategic Vision for City Procurement](#)" The Chicago Council on Global Affairs June 2021 at 25; Open Contracting Partnership: "[Open Contracting for IT procurement](#)" 2019 at 4.

¹⁷ Open Contracting Partnership [Open Contracting Quickstart Guide | 15 practical strategies for open, fairer, and better public procurement](#) September 2021 at 21.

¹⁸ Romina Colman [Calling for accountability: how Paraguay's open emergency procurement can help restore public trust](#) 3 May 2021.

Another State Party responded to citizen demands for accountability and anti-corruption measures by reforming its public procurement system. Key reforms included adopting an e-procurement system, leading to increased competition, decreased direct contracts, and more bidders. Case studies showcased positive outcomes, including improved competition and transparency. The data-driven approach aided evidence-based decision-making and strategic policy alignment.¹⁹

Data shows 57% of bribes are linked to winning public contracts. In the EU, corruption costs around €120 billion yearly. Widespread illegal practices include tailored specifications (57%), conflict of interest (54%), collusive bidding (52%), and unclear criteria (51%). Implementing open contracting laws exposes corruption cases. In Latin America, data facilitated breaking a \$22 million price-fixing scheme and increasing meal suppliers. In another example, the e-procurement system flagged 21,000 tenders in three years, leading to resolutions, revisions, charges, and sanctions. Another State Party cancelled over \$2 million in COVID-19 contracts due to investigations. A civil society platform developed in Africa is capable of reviewing contracts and exposing irregularities. In South East Asia, civil society, using open contracting data, identified issues in Covid-19 procurement. In Europe organisations used government data to monitor public contracting, submitting suspected corruption cases.²⁰

¹⁹ Open Contracting [Open for business: Colombia's data-driven procurement reforms increase competition](#) 16 July 2020.

²⁰ Open Contracting Partnership: [Evidence - Open Contracting Partnership](#) (accessed 28 November 2023).