

Assessment of the e-Procurement system (e-PS) -Volume II -Indicator Matrix



Pillar I. Legal, Regulatory, and Policy Framework3
Indicator 1. The legal and regulatory framework enables e-Procurement
Indicator 2. E-Procurement follows a strategy that is aligned with broader government policies 12
Pillar II. Institutional Framework and Management Capacity19
Indicator 3. The e-Procurement ecosystem has a well-established and operational governance and management structure
Indicator 4. The e-Procurement ecosystem relies on an adequate business model25
Indicator 5. The e-Procurement ecosystem has a strong capacity to develop and improve30
Pillar III. Public Procurement Operations and Market Practices45
Indicator 6. The e-Procurement ecosystem enables the achievement of the country's procurement objectives45
Indicator 7. The e-Procurement ecosystem's technical characteristics render it effective and secure
Indicator 8. The e-Procurement ecosystem takes advantage of additional technical and functional features available for a variety of procurement methods70
Indicator 9. Data from the e-Procurement ecosystem facilitates decision-making76
Indicator 10. The private sector is fully engaged with the e-Procurement ecosystem82
Indicator 11. The e-Procurement ecosystem ensures civil society engagement90
Indicator 12. The e-Procurement ecosystem enables effective treatment of risks, control and audit.
Indicator 13. The e-Procurement ecosystem facilitates the review of complaints and appeals95

Indicator 1. The legal and regulatory framework enables e-Procurement

General information on the procurement legal and regulatory framework with particular reference to e-Procurement, to provide context for analysis and explain acronyms used.¹

The primary public procurement legislation, the Public Procurement Act 2006² ("PPA"), is an Act of Parliament. The PPA provides for and is supported by secondary legislation in the form of several Regulations issued by the relevant Minister, in particular, Public Procurement Regulations 2008³ ("PPR") and the Public Procurement (Electronic Bidding System) Regulations 2015 ("EBS Regulations").⁴ The EBS Regulations were issued by the Minister of Finance pursuant to the PPA when the e-Procurement System ("e-PS") was launched.

Both the PPA and PPR are updated regularly, and consolidated versions are available to download from the Procurement Policy Office (PPO) website. In this analysis, references to the PPA and PPR are to the consolidated versions published in November 2022⁵ and the EBS Regulations (as amended in 2016 and 2022).

The PPA and PPR provide for the Procurement Policy Office to issue Directives on prescribed or specified matters, providing step-by-step instructions on particular issues. Directive No. 47 dated 21 August 2020 ("Directive No.47") mandates use of e-PS for all procurement exercises, save in exceptional circumstances, as explained below. In addition, the Procurement Policy Office issues circulars which are intended to be clarificatory in nature; guidelines on specific topics, including e-procurement; Standard Bidding Documents (SBDs), the use of which is mandatory, including a suite of e-SBDs; and User Guides, including on using the e-PS and YouTube videos accessible via the e-PS website, to assist suppliers in registering for and using the e-PS.

Sub-indicator 1(a) Regulation of the use of e-Procurement

The legal and regulatory body of norms complies with the following conditions:

Assessment criterion 1(a)(a):

The legal and regulatory framework defines and enables the use of e-Procurement across the entire public procurement cycle for all procurement methods.

Conclusion:	Substantive gap
Red flag:	No

Qualitative analysis

The legal and regulatory framework enables the use of e-Procurement across the procurement cycle for all forms of open advertised bidding, with most relevant provisions found in the Public Procurement (Electronic Bidding System) Regulations 2015 ("EBS Regulations").⁶ The term "e-Procurement" is not defined in the PPA or PPR. The

https://ppo.govmu.org/Documents/PPA/PPA.pdf

¹ For a more detailed analysis and information on the procurement legal and regulatory framework, see the approved core MAPS Assessment Report (Volume I) and Indicator Matrix (Volume II), published on the MAPS Secretariat website in November 2022 ("full MAPS Assessment Report")".

² Public Procurement Act 2006 [Act 33 of 2006] (as amended).

³ Public Procurement Regulations 2008 (as amended).

 $[\]frac{\text{https://ppo.govmu.org/Documents/Regulations/Public\%20Procurement\%20\%28Regulations\%202008\%29\%20Version\%2026\%2011\%202021.pdf}{\text{df}}$

⁴ Public Procurement (Electronic Bidding System) Regulations 2015 (as amended)

https://ppo.govmu.org/Documents/Regulations/Public%20Procurement%20%28Electronic%20Bidding%20System%29%20Nov%202016.pdf

⁵ The consolidated versions of the PPA and PPR dated 08 November 2022, referenced in this analysis, is available to download from the PPO website and by following a tabbed link from the e-Procurement System (e-PS) website.

⁶ Public Procurement (Electronic Bidding System) Regulations 2015 (as amended)

 $[\]underline{https://ppo.govmu.org/Documents/Regulations/Public\%20Procurement\%20\%28 Electronic\%20Bidding\%20System\%29\%20Nov\%202016.pdf}$

PPA and PPR were originally drafted when procurement was paper-based procurement and they are not well aligned with the now mandatory use of e-PS.

PPA s.26A (1) Electronic bidding process provides that there shall be an electronic bidding system to receive and process bidding documents for evaluation and for the award of any procurement contract, in accordance with such regulations as may be made.

EBS Regulations R.9 Procurement Request requires every public body, as far as possible, to "manage all procurement requests through the e-procurement system" (e-PS) and includes a requirement at R.12 for every public body to post on the e-procurement system "the procurements undertaken using the open advertised bidding method", "expression of interest" and "pre-qualification proceeding", with bidding documents to be made available on the e-PS "for suppliers to view and consider participation in the bidding exercise." The EBS Regulations include provisions on electronic bid preparation and submission, opening of electronic bids and allows for evaluation of bids carried out through the e-PS as well as award of the contract through the e-PS. The EBS Regulations also provide that the offer of a contract shall be accepted and communicated through the e-PS and requires every public body to keep electronic records of procurement proceedings.

The legislation allows for the possibility of exceptional use of paper-based procurements, advertised through the Procurement Portal and paper-based procurement is still often used in practice.

Directive No.2 dated 07 April 2010, requires that the Annual Procurement Plan must be posted on the public procurement website.

The core MAPS Assessment Report at indicator 1(j) highlights that the PPA and PPR read as intended for paper-based procurement and are not well aligned with the now mandatory use of e-PS. The analysis in Volume II of the core MAPS Assessment Report identifies specific provisions concerning requirements for use of the e-PS. It provides detailed examples of the lack of alignment between e-PS and the procurement legal framework in the PPA and PPR.

Analysis in this Supplementary Module for assessment of e-Procurement also flags a lack of consistency in how the e-PS has been implemented. For example, the e-PS facilitates using the "informal procurement method," however, this is not referred to in the PPA or PPR.

Gap analysis

The legal and regulatory framework for procurement does not adequately define e-procurement. The PPA and PPR are poorly aligned with the use of e-procurement and the e-PS in practice and require updating.

Recommendations

Undertake a critical review of the PPA, PPR, Public Procurement (Electronic Bidding System) Regulations 2015 and other procurement legal framework documents to include appropriate definitions and clarity of coverage of e-procurement and ensure that the legal framework documents are fully aligned with use of e-procurement and the e-PS in practice.

Assessment criterion 1(a)(b):

The legal and regulatory framework mandates all procuring entities to use e-Procurement. *

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The legal and regulatory framework mandates all procuring entities ("public bodies") to use e-Procurement. Directive No.47 requires that with effect from 1 January 2021, all public bodies must undertake all their procurement exercises through the e-PS. However, due to "exempt organisation" provisions in the legal

framework, not all competitive procurement by all public bodies must be conducted through e-PS and it is not currently possible to assess the impact of these provisions.

Mandated use of e-PS: Directive No.47 dated 21 August 2020, Mandatory Use of the e-Procurement System, ("Directive No.47") mandated use of the e-Procurement System, to be implemented in two phases. The Appendix to Directive No. 47 listed 55 high spending public bodies required to "undertake all their procurement exercises through the e-Procurement System" with immediate effect (21 August 2020). The remaining public bodies were required to "fully onboard the e-Procurement System" by 31 December 2020. In a follow-up consultation regarding the interpretation of "fully on-board," the PPO clarified, "it means that public bodies should embark on the e-PS and use it from Planning to Award of Contract." Directive No.47 also clarified that "paper-based processes may exceptionally be used where the use of the e-Procurement System is considered as not being practical for certain types of procurement such as — (a) minor works, repairs and maintenance, catering of low value; or (b) one-off procurements from non-regular suppliers."

Exemptions: As pointed out in the Core MAPS Assessment Report, PPA s.3(1) provides for some procurements by named public bodies/types of public bodies to be exempt from the full coverage of the PPA. These are referred to in the PPA as "exempt organisations" although this term is rather misleading as only one public body, the Independent Commission Against Corruption (ICAC), is fully exempt from the full application of the PPA. In the case of the other public bodies listed as "exempt organisations" (there are nine named bodies and 3 Ministries listed, plus a general reference to "any public body"), the exemption from the application of the PPA is partial. It is not an exemption for all contracts which that public body wishes to award. It is an exemption only in respect of contracts of a type or subject matter listed in Schedule 1 of the PPR and by reference to the organisation concerned, in which cases its own internal rules must be used. For all other procurements, the exempt organizations must apply the PPA when conducting procurement. Thus, for example, the Mauritius Broadcasting Corporation must follow the PPA for all procurement other than "purchase of films or acquisition of transmission rights for public broadcasting" and the State Trading Corporation must apply the PPA other than for "[G]oods purchased for resale, including services incidental to the purchase or distribution of such goods."9 Other exemptions are those commonly found in procurement legislation including those relating to national security or defence, government to government procurement as well as certain IT projects where national safety/interests issues arise.

Gap analysis

DirectiveNo. 47 mandates use of e-PS by all public bodies but the "exempt organisation" provisions in PPA s.3(1) mean that certain types or subject matter of procurement by listed organisations are carved out from application of the PPA and thus do not have to be procured using the e-PS. This could significantly impact the accuracy of national procurement spend analysis based on e-PS data, which may result in untriangulated policy decisions.

Recommendations

In order to ensure accurate assessment and analysis of national public procurement expenditure, amend legal provisions to require prompt submission of specified data to e-PS relating to procurement by public bodies

⁷ Directive No.47, dated 21 August 2020, Mandatory Use of the e-Procurement System https://ppo.govmu.org/Documents/Directives/Directives%202020/Directive%20No%2047.pdf

⁸ PPA s.3(2A) provides that "every exempt organization shall establish its own procurement rules in relation to such types of contracts as may be prescribed" and an approved copy of those rules must be submitted to the Procurement Policy Office.

⁹ The exemption for "any public body" is for "Procurement of goods, works, consultancy services or other services funded by a least 50 per cent of the estimated project value, from grant, or concessional financing as the Minister may approve, from a foreign State, where the condition imposed by that State in respect of the grant or concessional financing specifies that the supplier of goods, works, consultancy services or other services shall be from that State or from any other State which that State approves."

which falls outside the application of the PPA pursuant to the "exempt organisation" provisions in the PPA s.3(1) & PPR.

It is also recommended, with the benefit of this more comprehensive data, that PPO review and assess the impact of the exempt organisation provisions on the market and, if relevant, to consider measures to improve efficiency and effectiveness. This could include, for example, mandating publication of all procurement opportunities (including procurement falling within the "exempt organisation" provisions), on e-PS to ensure that suppliers only need to look at one source to identify all procurement opportunities.

Quantitative analysis

- * Recommended quantitative indicators to substantiate assessment of sub-indicator 1(a) Assessment criterion (b):
- Percentage of procuring entities mandated to use e-Procurement compared to total number of procuring entities.

99.5% of public bodies (procuring entities) are mandated to use e-PS. Only one public body, the Independent Commission Against Corruption (ICAC) is fully exempted from the use of the e-PS. Please refer to the analysis under 1(a)(b).

Source: Institution responsible for the e-Procurement ecosystem / Public procurement function

Assessment criterion 1(a)(c):

The legal and regulatory framework mandates the disclosure of comprehensive procurement information from the e-Procurement ecosystem in a way that is accessible through commonly used browsers.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The legal and regulatory framework mandates disclosure of procurement information including advertisement/tender notices, procurement documents and award notices. The legal framework does not, however, mandate that this information is accessible through commonly used browsers or in open data format. The disclosure requirements are not sufficiently clear or comprehensive and, in particular, do not require disclosure of contracts and contract amendments in all cases.

The e-PS is a centralized portal that provides open access to procurement notices and procurement/bidding documents. However, the e-PS runs only on computers with Windows 8 or Windows 10 and also runs on specific browser versions as specified in the System Requirements document in the e-PS portal (https://eproc.publicprocurement.govmu.org/files/masterfiles/system-requirements-V8.pdf) and the legal and regulatory framework does not mandate ease of accessibility through commonly used browsers.

Additionally, the core MAPS Assessment found that whilst sufficient information is easily available and published to allow potential bidders to determine whether to submit a bid, most documents are not in machine-readable format, e-PS does not support Open Contracting Data Standards in a structured manner and the legal and regulatory framework does not mandate disclouse in a way which is easily accessible.

Publication requirements are, for the most part, set out in the EBS Regulations. In some cases, it is difficult to establish where disclosure/publication on e-PS is mandated, for example in the case of the summary bid evaluation report.

Annual Procurement Plans: EBS Regulations R.10 on Annual Procurement Plans, requires an annual procurement plan for procurements using the open advertised bidding method to be posted on the e-PS. Directive No.2, dated 07 April 2010 also required that the Annual Procurement Plan must be posted on the public procurement website. See analysis at Pillar III, Indicator 6 on publication of Annual Procurement Plans in practice.

Advertisement/procurement notices: s.16 of the PPA provides that where the open advertised bidding method is used, the invitation to bid or the invitation to pre-qualify shall be published in a national newspaper with wide circulation. s.16 of the PPA does not refer to publication on e-PS. EBS Regulations R.11 requires every public body to prepare procurement notices through the e-PS.

Procurement/bidding documents: EBS Regulations R.12 on Release of bidding documents, requires bidding documents to be made available on the e-procurement system for suppliers to view and consider participation in the bidding exercise. The core MAPS Assessment confirmed that published information is sufficient to allow potential bidders to determine whether bidders are able and interested to submit a bid (sub-indicator 1(c, criterion (d)) and that procurement notices and bidding documents for open advertised bidding method are readily accessible from the e-PS without registration.

Bid Opening Report: EBS Regulations R.14 requires publication of the bid opening report on the website of the public body but does not refer to publication of the bid opening report on the e-PS.

Evaluation report: Summary Evaluation reports (not full Evaluation Reports) are published on e-PS. Directive No.2, dated 07 April 2010 required that the Executive Summary of the Bid Evaluation Report (as per Circular No.15 of 2009) must be posted on the public procurement website, but in practice all public bodies do not follow Directive No. 2.

Contract award notice and accompanying documents: S.40(7) of the PPA on Award of procurement contracts requires that "A public body shall promptly publish, in such manner as may be prescribed, notice of every procurement award." This flows through into R.38 of the PPR, which provides that following identification of a successful bidder, a public body "shall promptly publish notice of every procurement award as provided under [R.71 PPR 71]". R.71 of the PPR on Notice of procurement contract award requires that, in respect of contracts whose value exceeds the "prescribed threshold" of MUR 5 million, the public body shall publish an award notice on its website and on the public procurement portal within 7 days of signature of the contract (R.71 PPR), with content specified. R.71 of the PPR does not refer specifically to a requirement for publication of contract award notices on e-PS.In practice, not all public bodies publish contract award notices, and in many cases, full contract documents are not published. Contracts for the request for sealed quotations and restricted bidding also are not published.

Publication of information on contract amendments or variations during contract implementation: R.71(3) of the PPR provides that the information in the contract award notice shall be updated with amendments or variations made during the course of implementation of a contract. In practice, updating is by means of publication of a new notice published on the website of the public body and the e-PS and there is no direct linkage with the original notice, which reduces transparency and accountability. In practice, public bodies have to follow Directive 10 and Regulation 71 for both the paper-based and e-PS procedures. There are no such requirements for the lower value contracts. The core MAPS Assessment included a Suggestion for Improvement under Indicator 1(i) Contract management, criterion (b) as follows: Contract amendments: Improve transparency and accountability by ensuring that the full "life history" of the contract can be easily tracked including variations and amendments after contract award.

Gap analysis

The legal framework does not mandate the disclosure of comprehensive procurement information in an easily accessible commonly used browser and/or in open data format. The disclosure requirements are not sufficiently clear or comprehensive and, in particular, do not require disclosure of contracts and contract amendments in all cases.

Recommendations

Amend the legal/regulatory framework to mandate the disclosure of listed comprehensive procurement information in an easily accessible commonly used browser/interface ideally in open data format. It may be advisable to prepare a single consolidated list of what information must be published and when. Add requirements for disclosure of comprehensive procurement related information, in particular, publication of contract award notices, contracts and contract amendments on e-PS. Consider also measures to enforce compliance with these publication and disclosure provisions.

Assessment criterion 1(a)(d):

Model procurement documents for goods, works and services are aligned with the workflows and features of e-Procurement.

Conclusion: Substantive gap

Red flag: No

Quantitative analysis

There is an extensive collection of model procurement documents for use in e-Procurement ("e-SBDs"). e-SBDs are available to download from the PPO website direct or via a tab on the e-PS home page. Use of e-SBDs is mandatory. The e-SBDs are not all well-aligned with the workflows and features of e-Procurement as they are, essentially, prepared to reflect requirements of the current procurement legal and regulatory framework for paper-based procurement and the terminology used is sometimes inconsistent.

The e-SBDs are Word documents with fields provided for completion by the public body in order to tailor the document for a particular procurement. e-SBDs are available as web-forms and there are about 400 templates, but the templates are not packaged according to the specific procurement methods. The person who is preparing bidding documents has to choose the forms to be included or excluded in the bidding document set. Public bodies can easily make a wrong selection of the templates resulting in the failure of the procurement processes. According to discussions with stakeholders, whenever issues arise with reference to features or flows not aligned in the e-PS and e-SBDs, the issues are resolved on a case-by-case basis. (See analysis and findings in Core MAPS Assessment analysis at sub-indicator 2(b) for further information).

e-SBDs sampled ¹⁰ include instructions to bidders concerning submission of bids online through e-PS and opening of bid documents as well as references, where relevant, throughout the documents to e-PS. Introductory remarks in the e-SBDs confirm that the documents are modelled on the Standard Bidding Documents of the World Bank. Terminology used in e-SBDs for different evaluation methods, and processes might be inconsistent with the terminologies used in the legislation.

Gap analysis

e-SBDs are based on documents prepared for paper-based procurement and are not fully aligned with the workflows and functionalities of the e-Procurement System. The bidding document preparation process is cumbersome, with confusing template selection requirements and lengthy workflows.

Recommendations

The e-SBDs and the e-PS should be fully harmonized in terms of processes, flows, and the nomenclatures used

¹⁰ Sampled documents: Procurement of Goods (Ref: G/EPROC/POG1/11-21), Procurement of Works under Open National Bidding Method (to be used for online bidding for contract amount up to Rs 50 million) (Ref:W/EPROC/ONB1/12-21), Procurement of works (Large or Complex) (Ref: W/EPROC/POWLC1/12-21), Procurement of Non-Consultancy Services (Ref: NCS/EPROC/SBD11-21), e-Standard Request for Proposal – Lump sum (2nd edition) (Ref: SC/EPROC/SRFP-LS/01-22).

across the whole procurement cycle. The process of the selection and preparation of the bidding document needs simplification to achieve efficiency.

E-Proc-Sub-indicator 1(b) Elements necessary for e-Procurement

The legal and regulatory framework complies with the following conditions:

Assessment criterion 1(b)(a):

It clearly regulates the following elements in a way that enables their use in the e-Procurement ecosystem:

- electronic means of communication;
- electronic documents: and
- electronic means of authentication.

Conclusion: Minor gap

Red flag: No

Qualitative analysis

The PPA permits use of electronic means of communication including for conclusion of contracts and the Electronic Transaction Act 2000 provides the legal foundation for digital contracts and their use. The procurement legal framework does not, however, address in detail digital signature of contracts and the e-PS does not have a function to digitally sign the contract and capture the contract details, although digital signatures are used to authenticate the users in the system at earlier stages in the process before the issuance of notice of contract award.

s.50(5) PPA Duties of public bodies, provides that, subject to the PPA "all documents, notifications, decisions and other communications referred to in this Act shall be in writing."

s.50(6) PPA provides that "Where it is so prescribed, a public body may authorize the use of other forms of communication, including electronic communication, for publication of invitations to bid, transmission of bidding documents, submission of bids, conclusion of contracts and processing of payment." s.50(6) PPA provides for safeguards where other means of communication, such as electronic communication, are used including reference to record keeping, security and confidentiality.

S.26A PPA Electronic bidding process confirms that "Any reference in [the PPA] to a document which has to be submitted in writing shall include reference to a document submitted electronically under the electronic bidding system."

The Ministry of Technology, Communication and Innovation is responsible to provide the necessary legal framework for the development of ICT. The Electronic Transactions Act 2000 ("ETA") 11 was enacted "to provide for an appropriate legal framework to facilitate electronic transactions and communications by regulating electronic records and electronic signatures and the security therof". ETA allows a full-fledged use of an electronic medium for the communication, validity of documents, and authentication. ETA S.10, Validity of Contract, provides that "No contract shall be denied legal effect, validity or enforceability solely on the ground that an electronic record was used in its formation."

Gap analysis

The PPA permits use of electronic means of communication including for conclusion of contracts and the Electronic Transaction Act 2000 provides the legal foundation for digital contracts and their use. However, provisions in the procurement legal framework and the operation of e-PS processes stop at the point when a notice of contract award is sent to the best-evaluated bidder. The procurement legal framework does not, however, address in detail digital signature of contracts and the e-PS does not have a function to digitally sign

¹¹ The Electronic Transactions Act 2000, Act 23/2000

the contract and capture the contract details, although digital signatures are used to authenticate the users in the system at earlier stages in the process before the issuance of notice of contract award.

Recommendations

Amend provisions in the procurement legal framework to align with the Electronic Transaction Act 2000 and fully support the validity and authenticity of electronic means and documents, including use of digital signatures, so as to enable use of the e-PS to leverage the benefits of already available technologies.

Assessment criterion 1(b)(b):

It establishes that enrolment/registration and authentication on the digital platforms is open and accessible to all interested parties, including foreign bidders.

Conclusion: Minor gap

Red flag: No

Qualitative analysis

The legal framework provides for enrolment and registration of all suppliers, including foreign bidders, on e-PS. The CIDB Registration digital platform for Contractors is open and accessible from the CIDB website. There is no interoperability between the CIDB Registration Digital Platform and the e-PS and enrolment. The registration process on e-PS is simple but could be further improved by providing instructions to the foreign bidders on obtaining and using a Digital Signature Certificate.

Enrolment and registration on e-PS: EBS Regulations R.5 on Registration of suppliers, provides that for the purposes of e-PS every supplier (a) *shall*, in the case of an open category (i.e. a category which allows suppliers to participate in electronic bidding proceedings), make an electronic application for registration and, (b) *may*, in the case of a restricted category (i.e. a category which allows suppliers to be registered in a particular common procurement vocabulary classification system), make an application for registration. Registration of a supplier in the restricted category shall be subject to the approval of the Central Registration Board (in the case of works-related activities, this is the Construction Industry Development Board (CIDB)). Applications for registration on e-PS are in such form as the PPO may determine, and a decision on registration is made by the PPO on such terms and conditions as it may determine. The core MAPS assessment established that registration on e-PS is straightforward and does not create barriers to entry. See core MAPS Assessment analysis in Volume II at sub-indicator 1(d), criterion (b)).

The e-PS does not provide instructions to the foreign bidders on obtaining and using a Digital Signature Certificate (DSC), which may potentially discourage the participation of the foreign bidders in the procurement processes.

CIDB Registration for works related opportunities: The CIDB Registration digital platform for Contractors is open and accessible from the CIDB website by following the "Registration" tab. However, as identified in the core MAPS Assessment, legal provisions in the form of Regulations issued in 2021 by the CIDB concerning collaboration between foreign and local consultants and contractors means that access by foreign consultants and contractors is subject to legal restrictions, creating a potential barrier to entry. (see core MAPS Assessment analysis in Volume II at sub-indicator 1(d), criterion (b)). There is no interoperability between the CIDB Registration Digital Platform and the e-PS, so the verification and validation of the bidder's classification and registration are conducted using scanned copies of certificates submitted by the bidders.

Gap analysis

The enrolment and registration process on e-PS is simple, but could be improved by providing instructions to the foreign bidders on obtaining and using a Digital Signature Certificate (DSC). There is no interface built between the CIDB digital system and e-PS.

Recommendations

Guidance on enrolment and registration process for use of e-PS should be amended to include clear instruction to the foreign bidders on obtaining and using the Digital Signature Certificates (DSC). The CIDB digital platform and the e-PS should be interfaced to facilitate the exchange of registration information on works contractors between the systems, to enhance efficiency and data consistency in both systems.

Assessment criterion 1(b)(c):

It establishes the scope and permits use of personal data, whether automatically acquired or not.

Conclusion: No gap

Red flag: Choose an item.

Qualitative analysis

The PPA and PPR do not specifically address the scope and permitted use of personal data because the collection, processing, use, transfer disclosure of and right of access to personal data is governed by specialised legislation, the Data Protection Act 2017 ("DPA"). ¹² Personal data is broadly defined in s.2 DPA as "any information relating to a data subject." There is a comprehensive definition of "special categories of personal data."

The e-PS mandates users to accept the "Terms of Use" which includes the "Privacy and Confidentiality" Policy. The Terms of Use state that the System Usage Agreement and the Privacy and Confidentiality Policy govern the Suppliers' use of the Portal and participation in the transactions and, together, constitute the "Terms and Conditions." The Privacy and Confidentiality Policy confirms, in respect of transaction data and permitted use of data, along with confidentiality and other policies, that "MOFED will collect data from your interaction with the Portal and your use of MOFED's products and services ("Transactional Data"). MOFED will maintain such Transactional Data in strict confidence and with complete security. MOFED may make limited use of Transactional Data, consistent with the Usage Agreement. MOFED will not disclose organization-specific Transactional Data. Transactional Data will only be disclosed in aggregate form, without any information that would directly or indirectly reveal the identity of an individual firm. MOFED will disclose only historical Transactional Data. Any such disclosure will not threaten to reveal competitively sensitive information or provide the opportunity for anti-competitive behavior."

The DPA came into effect in 2018, superseding the Data Protection Act 2004, and has been drafted to align with the European Union General Data Protection Regulation (GDPR). Since its enactment, the DPA has been amended twice. The DPA provides a robust framework for the collection, storage, and use of personal data. Similar to the GDPR, the DPA requires the explicit consent of data subjects (i.e. individuals whose data is being collected, stored and processed) before collecting and processing their personal data. Controllers and/or processors have the duty to, inter alia, inform the data subject on the reasons for collecting their data and where it is being stored. The DPA also provides data subjects with individual rights such as the right to access their personal data, the right to request that inaccurate data be amended, and the right to request that their data be deleted.¹⁴

The National Open Data Policy¹⁵ provides that data is "Open By Default". Section 4 of the National Open Data Policy provides that "Data is made available as open data except when they related to personal data or have a

13

¹² Data Protection Act 2017, Act 20 of 2017.

 $[\]frac{\text{https://eproc.publicprocurement.govmu.org/files/masterfiles/System\%20Usage\%20Agreement\%20and\%20Privacy\%20and\%20Confidentiality\%20Policy e-PS GoM.pdf}{}$

¹⁴ https://practiceguides.chambers.com/practice-guides/data-protection-privacy-2023/mauritius/trends-and-developments

¹⁵ National Open Data Policy, Ministry of Technology, Communication and Innovation, May 2017.

national security dimension." Personal data is defined as per the Data Protection Act. According to the National Open Data Policy, prior to the release of datasets, public bodies must undertake a Privacy Compliance Assessment "to ensure that datasets do not contain personal data or are such that anonymized data they contain may be prone to re-identification." Disclosure of personal data will be subject to a public interest test with appropriate anonymization and/or aggregation techniques adopted.

Mauritius has a Data Protection Office and Data Protection Commissioner.¹⁶ Mauritius has been a party to Council of Europe Convention 108 for Protection of Individuals with regard to the processing of Personal Data since 2016 and ratified the Modernized Convention 108 in 2020.¹⁷

Gap analysis

Recommendations

Suggestion for improvement

To provide further clarity, consider including specific reference to DPA requirements in the PPA.

Indicator 2. E-Procurement follows a strategy that is aligned with broader government policies.

Sub-indicator 2(a)

e-Procurement strategy

Assessment criterion 2(a)(a):

There is a national strategy or a roadmap for improving the functioning and uptake of the e-Procurement across the public sector and for engaging the private sector.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

There is no dedicated national strategy or roadmap for improving the functioning and update of e-Procurement across the public sector or for engaging the private sector.

The Annual Report of the PPO for the year 2014¹⁸ included a plan for e-PS implementation in three (3) phases: Phase 1 - Implement e-PS up to and including the on-line opening of bids with a soft launch on pilot tenders identified in public body's procurement plan after the intensive capacity building of procurement cadres, suppliers, and other stakeholders, and subsequent roll out to all public bodies; Phase 2 - Implement e-PS for up the next phases of the procurement cycle: Bid Evaluation, Award of Contracts and Challenge and Appeal, with the generation of a complete Management Information System (MIS); and Phase 3 - Implement Framework Agreement, Reverse Auction and Contract Monitoring. The activities and initiatives are ad hoc and not fully supported by the program and resources.

The latest Digital Government Transformation Strategy 2018-2022 prepared by the Central Informatics Bureau (CIB) of the Ministry of Technology, Communication and Innovation (MTCI)¹⁹ emphasizes how critical it is to

¹⁶ https://dataprotection.govmu.org/SitePages/Index.aspx

¹⁷ https://www.coe.int/en/web/data-protection/-/convention-108-signature-and-ratification-by-mauritius

¹⁸ https://ppo.govmu.org/Documents/Annual%20Reports/PPO%20annual%20report%202014.pdf

¹⁹ Digital Government Transformation Strategy 2018-2022, Central Informatics Bureau, Ministry of Technology, Communication and Innovation. https://mdpa.govmu.org/mdpa/strategicplans/DigitalGovernmentTransformation.pdf

optimize, transform and create better government services and to achieve large-scale business optimization that improves effectiveness. It recommends the "e-Procurement by default" principle and provision of training and support to both public bodies and suppliers.

The government plans to enhance the e-PS based on the recommendations of the Core MAPS Assessment and this MAPS e-PS assessment.

Gap analysis

There is no dedicated national strategy or roadmap for improving the functioning and update of the e-Procurement across the public sector or for engaging the private sector.

Recommendations

The Government should prepare a comprehensive e-Procurement Strategy and roadmap incorporating the rollout plan, training and capacity building plan, sustainability plan, communication plan, and system enhancement plans with required resource commitment clearly allocated.

The e-Procurement strategy should align with the Sustainable Public Procurement Strategy and other relevant strategies aligned with broader Government policies.

Assessment criterion 2(a)(b):

E-Procurement is explicitly considered as a factor in broader policies on digitisation of the public sector.

Conclusion: No gap

Red flag: No

Qualitative analysis

e-Procurement is explicitly considered and referenced as a factor in the latest Digital Government Transformation Strategy 2018-2022.

The Ministry of Technology, Communication and Innovation (MTCI) through the Central Informatics Bureau (CIB) had formulated the e-Government Strategy 2013-2017²⁰ and proposed a number of initiatives to be put in place for improving effectiveness and efficiency of Ministries and Departments, with emphasis on service delivery to businesses and citizens. E-Procurement was implemented under the same strategy. The Latest Digital Government Transformation Strategy (DGTS) 2018-2022 prepared by the Central Informatics Bureau (CIB) of the Ministry of Technology, Communication and Innovation (MTCI) lays emphasis on how critical it is to use and reuse data to support the work of Government, to optimize, transform and create better government services and to achieve large-scale business optimization that improves effectiveness, and recommends the "e-Procurement by default" principle and provision of training and support to both public bodies and suppliers. Through harnessing of opportunities for digital transformation in the Public Sector, the DGTS is aligned with, and goes hand-in-hand with the Public Sector Business Transformation Strategy (PSBTS) for achieving Government's Vision 2030.²¹

Gap analysis

Recommendations

Sub-indicator 2(b)

e-Procurement support to government policies

The e-Procurement ecosystem enables capturing and reporting data related to the following policy areas:

Assessment criterion 2(b)(a):

Climate change mitigation and adaptation and environmental protection

²⁰ E-Government Strategy 2013-2017, Central Informatics Bureau, Ministry of Information and Communications Technology, August 2013. https://mitci.govmu.org/Documents/Strategies/eGovernment%20Strategy%20finalv1.pdf

²¹ https://cib.govmu.org/Documents/Reports/Digital%20Government%20Strategy%202018-2022.pdf

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-PS does not currently enable capture and report of data related to climate change mitigation and adaptation and environmental protection.

Mauritius is still in the early stages of development of a comprehensive strategy and practice for sustainable public procurement (economic, environmental (including climate) and social).

A National Action Plan on Sustainable Public Procurement (SPP) for Mauritius (2011-2015) was developed in 2011 under the United Nations Environment Program Mauritius, Ministry of Finance and Economic Development.²² The National Action Plan on SPP identified aims and objectives to promote and achieve SPP in Mauritius, with particular focus on the procurement of seven products and services for which sustainable criteria and alternatives are available with the potential of generating substantial sustainability impacts over the lifecycle.

One outcome of the 2021 budget process is that the PPO is required to introduce a Sustainable Public Procurement Framework to ensure public bodies consider the environmental and social impact of their procurement decisions.²³ According to the explanatory note on budgetary measures, the SPP framework was to be implemented in a phased manner, starting with procuring vehicles, cleaning materials, cleaning services, paper products, and IT equipment as of January 2022. The products and services listed were previously identified in the National Action Plan on SPP referred to above. Sustainable procurement for civil works and consultancy services was planned to be implemented as of January 2023.²⁴

Gap analysis

The e-PS does not currently enable capture and reporting of data related to climate change mitigation and adaptation and environmental protection.

Recommendations

Climate change mitigation and adaptation and environmental protection information should be incorporated in the new enhanced e-PS to capture and report data on these issues.

This will need to be aligned with the preparation of a Sustainable Public Procurement Strategy and supporting implementation plan, as recommended in the Core MAPS Assessment. In order to be meaningful and useful the data to be collected will need to link into identified SPP targets so that measurement against targets can be undertaken based on quality data collected through the e-PS. Data collection on climate change and environmental protection could, for example, cover use of climate/environmental criteria and measurement against performance targets in contract delivery.²⁵

Assessment criterion 2(b)(b):

Fostering innovation

²² https://wedocs.unep.org/handle/20.500.11822/37423

²³ https://mauritiusbudget.com/wp-content/uploads/2022/02/2021_22budgetspeech_english.pdf

²⁴ Budget Measures Explanatory Notes Main Provisions to Be Included In The Finance (Miscellaneous Provisions) Bill 2021, Annex to Budget Speech 2021.

https://mof.govmu.org/Pages/budget 2021 22/budget2021 2022.aspx

²⁵ Extensive guidance is available. See for, example, Green Flags: How open data can throw light of sustainable procurement, Step-by-step guidance, Open Contracting Partnership, November 2021

https://www.open-contracting.org/wp-content/uploads/2021/11/OCP2021-Green-Flags -How-open-data-can-throw-light-on-sustainable-procurement-.pdf

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-PS does not currently enable capture and reporting of data on procurement which fosters innovation or innovative solutions.

The e-PS does not publish the data from the procurement cycle in a machine-readable format following the Open Contracting Data Standard (OCDS), which could allow the public and private sectors to come up with different innovative ideas and innovations based on the research on the procurement data.

Use of more flexible procurement methods, which may assist in fostering innovation, is also limited.

s.15(1)(a) PPA lists eight methods for procurement of goods, other services and works, including competitive negotiations and electronic reverse auctions which were introduced in 2021, pursuant to s.73 of the Finance (Miscellaneous Provisions) 2021.²⁶ Use of these methods may open up the possibility of more innovative procurement outcomes. The legal framework allows for the use of different types of framework agreements, which are used in practice, although the focus is not on procurement of innovative solutions.²⁷

Sandbox for Innovative technologies s.25A PPA: s.25A PPA provides for use of "Sandbox for innovative technologies" permitting public bodies to request and pay for proof of concepts or prototypes for innovative technologies. Sandbox for innovative technologies is a relatively recent introduction and is in early stages in terms of experience of use for development of innovative ideas. This is not designated in s.15 PPA as a procurement method. In practice it is intended for use for a limited process to proof of concept/prototype stage only. S.25A (4) PPA refers to subsequent use of proof of concepts or prototypes in procurement using a procurement method specified under s.15 PPA.

The Government's planned review of the procurement legislation is expected to include a place for innovation. The new legislation and the e-PS may consider encouraging participation from innovative suppliers, promoting collaboration between buyers and suppliers, providing access to innovation funding, supporting the adoption of innovative procurement methods, such as design thinking and agile procurement, facilitating data-driven decision-making.

Gap analysis

The e-PS does not currently enable capture and reporting of data on procurement which supports data driven decision making and fosters innovation or innovative solutions.

Recommendations

Innovation related information should be incorporated in the new enhanced e-PS to capture and report data on these issues.

The e-Procurement ecosystem can be used to capture innovation-related data and facilitate data-driven decision-making by providing buyers and suppliers with access to data on procurement activities and performance by publishing data following Open Contracting Data Standard (OCDS). This data can be used to identify opportunities for innovation and to evaluate the effectiveness of innovative solutions.

Suggestions for improvement

²⁶ s.73, Finance (Miscellaneous Provisions) 2021, Act No.15 of 2021, Official Gazette of Mauritius No.121 of 5 August 2021.

²⁷ PPA ss.2 & 29A, Public Procurement (Framework Agreement) Regulations 2013

²⁸ Explanation on use of sandbox for innovative technologies provided Procurement Policy Office in discussion with MAPS assessment team, 17 September 2021.

In addition to capturing and reporting of data on procurement which can support data-driven decision making and foster innovation and innovative solutions, the e-Procurement ecosystem can foster innovation in a number of other ways, including:

- Encouraging participation from innovative suppliers: The e-Procurement ecosystem can be designed to
 encourage participation from innovative suppliers by providing them with a platform to showcase their
 innovative products and services. This can be achieved by allowing suppliers to submit proposals for
 innovative solutions and evaluating them based on their potential to meet the needs of the organization.
- 2. Promoting collaboration between buyers and suppliers: The e-Procurement ecosystem can be used to promote collaboration between buyers and suppliers by creating opportunities for joint problem-solving and innovation. For example, buyers can work with suppliers to identify areas where innovation is needed and develop innovative solutions together.
- 3. Providing access to innovation funding: The e-Procurement ecosystem can be used to provide access to innovation funding by creating mechanisms for buyers to fund innovative solutions developed by suppliers. This can be achieved by creating innovation funds or providing access to existing funding sources.
- 4. Supporting the adoption of innovative procurement methods: The e-Procurement ecosystem can be used to support the adoption of innovative procurement methods, such as e-reverse auctions, competitive dialogue, innovation competitions, design thinking and other agile procurement. These methods can help buyers and suppliers to collaborate more effectively and develop innovative solutions that meet their needs.

Assessment criterion 2(b)(c):

Job creation

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

Job creation data is not available in the e-PS.

Directive No. 5 (issued pursuant to section 7 of the Public Procurement Act) dated 13 March 2012 provides provisions for promoting small and medium enterprises (SMEs). The e-PS captures the SME data at the time of registration. In the 2020-2021 fiscal year, the value of Contracts awarded to SMEs (above MUR 100,000) as a percentage of Total Value of all Contracts was 12.51%.²⁹

Directive 49 on Applicable Margins of Preference promotes local sourcing through the local content from SMEs holding the "Made in Moris" Label by raising the margin of preference to 40% (from the standard 30%).

SME and local content initiatives should have a positive impact on job creation locally and assist in preparation for participation in international markets, but data on job creation is not available through the e-PS.

The bidding documents do not require bidders to indicate how many jobs (direct or indirect) will be created under a specific contract.

Gap analysis

The e-PS does not capture any data on how many jobs are created through procurement contracts.

Recommendations

Job creation information should be incorporated in the new enhanced e-PS to capture and report data on these issues. Recommendations on how the e-Procurement ecosystem can enable capturing and reporting data related to job creation include:

- (a) Data Collection:
- 1. Include fields in tender documents and contracts that require suppliers to specify the number of jobs created (permanent vs. temporary), job types, and location;

²⁹ PPO Annual Report 2020-2021 https://ppo.govmu.org/Documents/Annual%20Reports/AR2020-21.pdf

- 2. Consider industry-specific details like skill sets required;
- 3. Develop functionalities within the e-PS for suppliers to electronically report job creation data during contract fulfilment stages; and
- 4. Explore integrating the e-PS with existing government employment databases for potential verification and cross-referencing.

(b) Data Reporting:

- 1. Develop dashboards or reports within the e-PS that aggregate and analyze captured job creation data;
- 2. Allow filtering by sector, location, project type, etc., to understand the impact of procurement on job creation; and
- 3. Publish anonymized job creation data reports in an open format for public access and further analysis. This can be through adherence to Open Contracting Data Standards (OCDS) for wider accessibility.

Assessment criterion 2(b)(d):

Social inclusion (such as diversity, gender equality, worker and minority protection, etc.)

Conclusion: Minor gap

Red flag: No

Qualitative analysis

Data on SME participation is available through e-PS but it is not differentiated to permit further analysis in terms of diversity, gender equality, worker or minority protection etc.

s.26B PPA Reservation, provides for the reservation of specified contract for the microenterprises, small enterprivces and medium enterprises ("MSME"), which can help promote the development of local businesses and support employment creation. Directive No. 5 of 2012 provides provisions for promoting small and medium enterprises (SMEs).

In compliance with the legislative provisions, the e-PS captures the SME data at the time of registration. In the 2020-2021 fiscal year, the value of Contracts awarded to SMEs (above MUR 100,000) as a percentage of Total Value of all Contracts was 12.51%.³⁰ The data available through e-PS does not differentiate to permit further analysis in terms of diversity, gender equality, worker or minority protection). The e-PS system does facilitate SME participation by allowing SMEs to register and participate in procurement processes online.

Based on UNCITRAL principles, the Public Procurement Transparency and Equity Act 1999 was introduced in 1999. Equity is one of the principles of the PPA. The PPA largely addresses the aspirations of other government policies to promote greater transparency, fairness, and inclusivity in public procurement processes, such as the National Social Inclusion and Empowerment Strategy (NSIES)-2018, the National Gender Policy - 2016, Workers' Rights, and Minority Protection.

Gap analysis

Data on SME participation is available through e-PS but it is not differentiated to permit further analysis in terms of diversity, gender equality, worker or minority protection etc. This will need to be aligned with the preparation of a Sustainable Public Procurement Strategy and supporting implementation plan, as recommended in the Core MAPS Assessment. In order to be meaningful and useful the data to be collected will need to link into identified SPP targets so that measurement against targets can be undertaken based on quality data collected through the e-PS.

Recommendations

³⁰ PPO Annual Report 2020-2021 https://ppo.govmu.org/Documents/Annual%20Reports/AR2020-21.pdf

More social inclusion related information should be incorporated in the new enhanced e-PS to capture and report data on these issues. Recommendations on how the e-Procurement ecosystem can enable capturing and reporting data related to Social Inclusion (diversity, gender equality, worker and minority protection) include: (a) Data Capture:

- 1. Integrate fields into the e-PS for bidders to self-declare their diversity status (e.g., minority-owned, women-owned, employing people with disabilities);
- 2. Include standard clauses in procurement contracts that require suppliers to adhere to social inclusion practices. These clauses can encourage aspects such as:
 - Fair hiring practices promoting diversity and equal opportunity.
 - o Subcontracting opportunities for diverse businesses.
 - Meeting specific local hiring targets, or employing a certain percentage of minorities or women.
 - Compliance with labor laws and worker protection standards.
- 3. Provide flexible data submission options for suppliers. This could include:
 - o Pre-populated drop-down menus for easy selection of diversity categories.
 - Upload functionality for supporting documents showcasing social inclusion efforts (e.g., diversity reports, certifications).

(b) Data Reporting:

- 1. Develop dashboards within the e-PS to track and analyze social inclusion data. These dashboards could display metrics such as:
 - Number of contracts awarded to diverse suppliers.
 - o Percentage of workforce employed by contractors from underrepresented groups.
 - o Compliance rates with social inclusion clauses in contracts.
- 2. Generate anonymized reports highlighting the overall impact of e-Procurement on social inclusion goals.

Indicator 3. The e-Procurement ecosystem has a well-established and operational governance and management structure

Sub-indicator 3(a)

Status and legal and regulatory basis of the institution responsible for the e-Procurement ecosystem Assessment criterion 3(a)(a):

The legal and regulatory framework clearly assigns one or several government institution(s) the responsibility for regulating and setting the standards for the operation, implementation, and continuous improvement of the e-Procurement ecosystem.

Conclusion: No gap

Red flag: No

Qualitative analysis

The PPO is the normative and regulatory procurement body with responsibility for regulating and setting standards for the operation, implementation and continuous improvement of the e-PS.

s.7 of the PPA provides that one of the functions of the Procurement Policy Office shall be to: recommend, and facilitate the implementation of, measures to improve the functioning of the procurement system, including the operation of annual procurement planning, the introduction of information and communications technology and the dissemination of publications and the setting up of websites dedicated to procurement. s.3 of the PPR provides that the Policy Office shall establish procedures and mechanisms to ensure the effective and timely solicitation of points of view for development of procurement policies, regulations, procedures, documents and forms and make recommendations [for improved effectiveness] to the Minister.

EBS Regulations R.3 provides for the PPO to issue instructions to public bodies for the implementation of the e-procurement system under those Regulations.

Gap analysis

Recommendations

Suggestion for improvement

The legal and regulatory framework could be amended to *explicitly assign* to the PPO, the responsibility for regulating and setting standards for the operation, implementation, and continuous improvement of the e-Procurement ecosystem.

Sub-indicator 3(b)

Coordination between the institution responsible for the e-Procurement ecosystem and other relevant government entities

There is evidence of efficient coordination mechanisms between the institution responsible for the e-Procurement ecosystem and the following institutions:

Assessment criterion 3(b)(a):

The public procurement normative/regulatory body.

Conclusion: No gap

Red flag: No

Qualitative analysis

The PPO is the institution responsible for the Procurement ecosystem and it is the public procurement normative/regulatory body.

Gap analysis

Recommendations

Assessment criterion 3(b)(b):

Procuring entities including centralised procurement bodies, if any.

Conclusion: Substantive gap

Red flag: Yes

Qualitative analysis

Coordination mechanisms between:

PPO and public bodies (procuring entities): The PPO actively seeks and collects feed back from users through the Helpline, single points of contact, training and other sources, to inform required changes and improvement to the e-Procurement ecosystem, but there are no formal regular coordination mechanisms.

PPO and public bodies which are lead organisations: s.29A PPA on Procurement under framework agreement, permits the PPO to designate public bodies as lead organisations for procurement using framework agreements. Circular 10 of 2016,³¹ The PPO has designated the Ministry of Technology, Communication and Innovation (MTCI) as "Lead Organisation" to enter into and manage a Framework Agreement for the procurement of IT Equipment and the Ministry of Finance, Economic Planning and Development (MOFEPD) as "Lead Organisation" to enter into and manage a Framework Agreement for the procurement of Photocopy Paper A4 and Toilet Paper.³² However, the e-PS Module for framework agreements is rarely used in practice, leading to a conclusion that co-ordination between PPO and lead organisations on use of e-PS is poor.

PPO and Central Procurement Board: The coordination mechanisms between the PPO and the Central Procurement Board (CPB) in relation to the operation of the e-Procurement ecosystem appear to be weak. This is because evidence shows that the CPB still requires the hard and soft copies of the bidding documents in addition to the documents uploaded through the e-Procurement system (See Annex II of Circular No. 1 of 2023 issued by the CPB).³³ Evaluation of the bids is still predominantly off-line. Evaluators are trained regularly on using the e-PS, but the resources and trainings are inadequate.

Gap analysis

There is no evidence of robust coordination mechanisms between the PPO and public bodies, including the CPB, to interact and work together to continuously improve the e-Procurement ecosystem.

Weak coordination is confirmed by the evidence of partial use by public bodies and CPB of the e-PS and its full functionalities, as identified elsewhere in this Report.

This Gap is assigned a Red flag because it requires active cooperation with and participation by a number of institutions in addition to the PPO.

³¹ Circular 10 of 2016, Appointment of Ministry of Technology, Communication and Innovation as "Lead Organisation" for procurement of ICT Equipment under Framework Agreement.

³² Circular 8 of 2021

³³ https://cpb.govmu.org/Documents/circulars/Annex%20II%20-%20format%20of%20letter.pdf

Recommendations

The PPO should establish formal, robust coordination mechanisms and communication channels with public bodies and the CPB to facilitate regular interaction and joint working to continuously improve the e-Procurement ecosystem.

Assessment criterion 3(b)(c):

Budgetary and treasury authorities.

Conclusion: Substantive gap

Red flag: Yes

Qualitative analysis

There is a lack of effective coordination mechanism between the PPO and the budgetary and treasury authorities.

This can be seen, for example, in the lack of interface of the e-PS with the budgetary and treasury system (IFMIS) and Public Investment Management (PIM) system even though e-PS has been operational since 28 September 2015 and the use of e-PS has been mandatory for all public bodies since 1 January 2021.

Gap analysis

There is no evidence of robust coordination mechanisms between the PPO and budgetary and treasury authorities, to interact and work together to continuously improve the e-Procurement ecosystem.

This Gap is assigned a Red flag because it requires active cooperation with and participation by a number of institutions in addition to the PPO.

Recommendations

The PPO should establish formal, robust coordination mechanisms and communication channels with budgetary and treasury authorities to facilitate regular interaction and joint working to continuously improve the e-Procurement ecosystem.

In particular, PPO and budgetary/treasury authorities will need to fully coordinate future developments, particularly in information systems to ensure that the updated e-PS is structured to ensure effective interface for data exchange with the budgetary and treasury system (IFMIS), Public Investment Management (PIM) System, and with the Public Sector Investment Program (PSIP).

To further enhance coordination, measures should be introduced to ensure that all Annual Procurement Plans (APP) and Contract Award information are published on the e-PS. Additionally, the downstream procurement proceedings must have a link with the approved APP. All procurements should be initiated only after the APP is endorsed, which establishes fiscal discipline and encourages planned and informed procurements. The e-Contract Management and Monitoring module should be implemented to ensure contract quality, time, and costs based on the contractual terms and conditions.

Assessment criterion 3(b)(d):

Monitoring and Audit authorities

Conclusion: Substantive gap

Red flag: Yes

Qualitative analysis

The coordination between the auditing authorities and e-PS is limited to ad hoc access to the production data.

The key monitoring and audit authorities for the purposes of public procurement related activities are the National Audit Office, Internal Audit and the Project Implementation and Monitoring Agency (PIMA). The

National Audit Office (NAO) is the supreme audit institution, an independent institution responsible for conducting audits of the government's financial transactions and operations. The office is responsible for ensuring that public resources are used efficiently, effectively, and in compliance with financial regulations. The NAO is empowered to conduct performance audits, financial audits, and compliance audits of public procurement activities.

Internal Audit: The Internal Control Unit is an independent unit functioning under the MOFEPD, which carries out internal audit reviews for all ministries and departments. The unit is responsible for auditing the government's financial transactions and operations, including public procurement activities.

Both the NAO and Internal Audit play important roles in auditing public procurement activities in Mauritius. They are responsible for conducting independent and objective audits of procurement activities to ensure compliance with financial regulations and efficient and effective use of public resources.

The coordination between the auditing authorities and e-PS is limited to ad hoc access to the production data. The auditors do not have the facility to provide their audit report and enter necessary feedback in the e-PS. The e-PS lacks interactivity in terms of monitoring and audit and does not capture audit data from the auditors. Additionally, the contract management and performance monitoring system is still not used by all public bodies for procurement and contract execution, so the monitoring and audit of procurement and contract execution could be effective.

Project Implementation and Monitoring Agency (PIMA): PIMA has been set up under the MOFEPD to work in close collaboration with ministries, public sector entities, and the private sector to address impediments in the implementation of capital projects. Accounting Officers of public bodies are required to designate public officers to report to PIMA on the implementation status of projects/programs and budgetary measures under their purview.

The e-PS provides ad-hoc access to ministries' internal auditors and the NAO on demand. The auditors get readonly access to the complete procurement proceedings from start to finish. Separate data on specialised procurement audit is not available.

Gap analysis

Co-ordination between PPO and audit authorities (internal audit and National Audit Office) is ad hoc and procurement specific. There is no evidence of robust coordination mechanisms between the PPO and audit authorities, to interact and work together to continuously improve the e-Procurement ecosystem.

This Gap is assigned a Red flag because it requires active cooperation with and participation by a number of institutions in addition to the PPO.

Recommendations

The PPO should establish formal, robust coordination mechanisms and communication channels with audit and monitoring authorities to facilitate regular interaction and joint working to continuously improve the e-Procurement ecosystem.

In particular, a comprehensive and interactive Monitoring and Audit functionality should be built in to the e-PS to facilitate the effective monitoring and audit of the procurement and contract execution in the e-PS.

The government should encourage the use of the contract management and performance monitoring system by all public bodies for procurement and also for contract execution.

Assessment criterion 3(b)(e):

The appeals body.

Conclusion: Substantive gap

Red flag: Yes

Qualitative analysis

There is a well-defined challenge and appeal mechanism and a functioning independent review body, dealing promptly with appeals, with a range of remedies (orders) available and publishing full, reasoned decisions. The Independent Review Panel (IRP) is an autonomous institution independent from the rest of the procurement system.

The review and appeal processes are critically linked to the successful completion of a procurement cycle. The e-PS Review Module is developed and available for use, but the e-PS has not enabled the Review Module. Review and appeals decisions are not posted on e-PS, although they are published promptly and available from the PPO website. Links to rules and regulations are not available through the e-PS but can be downloaded from the PPO website.

Gap analysis

There is no evidence of robust coordination mechanisms between the PPO and the Independent Review Panel. An area of particular concern is that the e-GP IRP module is not enabled in the e-PS.

This Gap is assigned a Red flag because it requires active cooperation with and participation by a number of institutions in addition to the PPO.

Recommendations

The PPO should establish formal, robust coordination mechanisms and communication channels with the Independent Review Panel to facilitate regular interaction and joint working to continuously improve the e-Procurement ecosystem.

The e-PS Appeals module should be enabled in the e-PS and the established coordination mechanism should include provision for continuous feedback and suggestions for improvement on the operation of that Module.

Assessment criterion 3(b)(f):

Digital strategy or e-government authorities.

Conclusion: No gap

Red flag: No

Qualitative analysis

There is good coordination between the PPO and the Central Informatics Bureau (CIB).

The Central Informatics Bureau operates under the aegis of the Ministry of Information Technology, Communication, and Innovation. Its main function is to promote e-Governance through the provision of project management, consultancy and advisory services to Ministries and Departments for the successful implementation of e-Government projects and on ICT matters. The CIB is actively involved with PPO in the e-PS for the Project Management role as the e-PS is under the digitization agenda of the country.

Gap analysis

Recommendations

Sub-indicator 3(c)

Capacity of the institution responsible for the e-Procurement ecosystem

Assessment criterion 3(c)(a):

The institution responsible for the e-Procurement ecosystem has the necessary funding to fulfil its objectives.

Conclusion: No gap

Red flag: No

Qualitative analysis

The institution responsible for the e-Procurement ecosystem is the PPO. According to the findings of the Core MAPS Assessment, salaries of PPO staff comes partly from PPO allocated budget and partly from MOFEPD and actual figures are difficult to establish but "budget as such is not a constraint for proper staffing". The practical constraints relate to availability of suitably qualified staff (see 3(c)(b)).

Gap analysis

Recommendations

Assessment criterion 3(c)(b):

The institution responsible for the e-Procurement ecosystem is well-staffed to fulfil its objectives.

Conclusion: Substantive gap

Red flag: Yes

Qualitative analysis

The e-PS unit at the PPO is understaffed. Out of 15 positions, only six (6) are filled. The e-procurement team heavily relies on contractual staff and there is a high risk of vendor lock in.

A Director heads the PPO, and two independent Members are appointed as indicated in the PPA 2006. The other staff supporting the Director are posted at the PPO and come from different cadres, such as Administrative, Procurement, Supply, and Analysts/Senior Analysts/Lead Analysts. The budget provision obtained from the PPO reflects only part of the salary of staff and supporting staff; for example, Analysts/Lead Analysts are paid from the budget of the MOFEPD. The senior/middle management positions are non-permanent staff (or on deputation from MOFEPD), and several vacant positions exist in key tasks like Legal matters and complaints and Capacity Building Advisory.

Human resources in the e-PS Unit are limited. The e-procurement team heavily relies on contractual staff. Out of 15 positions, only six (6) are filled. The e-PS Unit lacks different crucial positions for the business continuity and smooth operation of the e-PS system to avoid the vendor-lock situation. The following positions are currently vacant: software architect, business analysts, database administrator, web programmers and designers, quality assurance technical, change management and capacity building specialist, trainers, Communication specialist, and other supporting experts.

The e-Procurement Help Desk constantly provides ongoing support to suppliers but staffing is limited with two members of staff, one of whom works only half a day.

Support to Public Bodies is provided through SPOCs (Single Point of Contact), who are officers specifically recruited, trained, and assigned to public bodies to provide handholding support in the initial onboarding stages. There were only two (2) SPOC-Project Coordinators supporting the public bodies, but one SPOC – SPOC-SPOC-Assistant project Coordinator was recently hired, under a Maintenance and Support Agreement of five (5) years, extended for an additional year up to November 2024. The contract also states that after the 5-year maintenance & support agreement, the purchaser and vendor can agree to a yearly maintenance & support agreement for up to a maximum of three (3) years. After that, the PPO should take over the support and maintenance unless the contract is extended.

Gap analysis

The e-PS unit at the PPO is understaffed due to inability to fill vacancies. The current working staff is overloaded with multiple roles because not all planned positions have been filled. The PPO does not have a business-continuity team on standby to avoid a vendor lock in situation.

This Gap is assigned a Red flag because the significant and ongoing under-resourcing of the PPO and lack of measures to ensure business continuity present a high risk and significant impact on the effective operation of the procurement system and the solution does not lie solely with the PPO.

Recommendations

It is highly recommended that the vacant positions in the e-PS unit be filled and a dedicated business continuity technical team under the PPO be formed with all technical, administrative, and supporting expertise to ensure the smooth operation of the e-PS in collaboration with the CIB, ensure knowledge transfer and avoid a vendor-lock situation.

The recruitment and mobilization of the business continuity team is urgent. The Business Continuity team may consist of experts with skills in software architecture, business analysis, database administration, web programming and designing, quality assurance, change management and capacity building, training, Communication skills, and other supporting skills. The Business continuity technical team could be in-house or outsourced, State-owned Enterprise, Public Private Partnership (PPP)-based model, or another sustainable arrangement.

(see also Recommendations at 4(a)(b)).

Assessment criterion 3(c)(c):

The staff of the institution responsible for the e-Procurement ecosystem is required to undergo regular trainings to update their knowledge and skills.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

Staff working in the e-PS unit are skilled and knowledgeable about the e-PS.

There is no documented requirement for staff to undergo training to update their knowledge and skills, although the staff responsible for the e-Procurement ecosystem undergo training on an ad hoc basis. The support staff supporting suppliers, when recruited, are first trained in public procurement, communication skills, and using the e-PS. The PPO officers are recruited and trained as Single Points of Contact (SPOCs) to support and handhold the public bodies before onboarding on the e-PS.

Gap analysis

There is no formal requirement that the e-PS staff undergo regular training to update their knowledge and skills on e-PS, its changes, new technologies, and ways of addressing the challenges faced.

Recommendations

There should be a clearly documented requirement to undergo knowledge and skills updating training programs for all people responsible for the e-PS ecosystem.

Indicator 4. The e-Procurement ecosystem relies on an adequate business model

Sub-indicator 4(a)

Operating business model and implementation type of the e-Procurement platform

The e-Procurement ecosystem has a clear business model to operate where the following components function and interact properly, are well documented, and were chosen based on evidence and needs:

Assessment criterion 4(a)(a):

Platforms and data ownership

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-PS does not have a well documented business model for operation of the e-PS platform or a sufficiently clear policy on data control and ownership.

The e-PS Platform:

The e-Procurement System (commonly referred to as the e-PS) is a web-based procurement system (https://eproc.publicprocurement.govmu.org) hosted in the Government Cloud operated by the Government Online Center (GOC) a department of the Ministry of Information Technology, Communication, and Innovation. The Government Cloud provides Infrastructure-as-a-Service (IaaS) for the e-PS, and the GOC provides the infrastructure (data center Equipment, Operating System, network and network equipment, and data backup). The Disaster Recovery Site (DRS) is still unavailable but is planned to be opened soon at Rodrigues Island. The e-procurement system can be accessed through the Government Intranet Network System (GINS) and the Internet.

The e-PS vendor owns the source code, and the PPO has a perpetual license under the contract between the vendor and the purchaser. The e-PS software is held in escrow, in accordance with Government policy, in case the service provider cannot deliver in the future.

Data Ownership

The e-PS "Terms of Use"³⁵ include a "Privacy and Confidentiality" policy. The Terms of Use state that the System Usage Agreement and the Privacy and Confidentiality Policy govern the Suppliers' use of the Portal and participation in the transactions and, together, constitute the "Terms and Conditions." The Privacy and Confidentiality Policy includes provisions on transaction data and permitted use of data.

The e-PS platform is hosted at the GOC cloud, but the e-PS vendor has full access to the data for maintaining the e-PS and report generation purposes under the e-PS maintenance and Support contract. Even though the Terms of Use of the e-PS indicates that the data ownership lies with the MOFEPD (the PPO), the control of the data lies with the e-GP Vendor, which could present a major challenge in terms of data abuse. However, such cases were not reported thus far.

Gap analysis

The e-PS does not have a well documented business model to operate the e-PS platform or a clear policy on data control and ownership, except a few binding terms in the Terms of Use of the e-PS available on the e-PS website. There is the possibility of data abuse arising from access to and control of data by the e-GP vendor.

Recommendations

The e-PS should have a clearly documented business model and implementation strategies with clear mandate and authority for the designated agency, unit or entity to operate the e-PS platform, scope to collect, manage, use, own, and control the e-PS data.

Assessment criterion 4(a)(b):

Implementation type of the e-Procurement platform(s) and well-documented strategies to ensure future development and minimize vendor lock-in

³⁴ https://mitci.govmu.org/Pages/GOC.aspx

³⁵https://eproc.publicprocurement.govmu.org/files/masterfiles/System%20Usage%20Agreement%20and%20Privacy%20and%20Confidentiality%20Policy_e-PS_GoM.pdf

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-PS team in Mauritius does not have adequate technical capabilities to operate, manage and maintain the e-PS system independently. The PPO lacks a business continuity team and a well-written strategy document to ensure future development and minimize vendor lock-in.

Mauritius procured an e-procurement software system following an International Competitive Bidding process in 2013, preceded by a thorough assessment of acquisition and implementation models available at that time, including the possibility of a government-government cooperation arrangement and Commercial-off-the-shelf (COTS) products. E-procurement solutions such as Software-as-a-Service (SaaS) for public procurement were not available at that time, and in-house development or outsourcing to local software companies was not possible due to the lack of knowledge and skills. The Government decided to choose the COTS as the implementation type, with the system customized for local use. The business model is unlike that used in many countries, where the e-PS is government-owned and operated or in public-private partnership (PPP). The PPO has signed an agreement with the vendor, with the PPO assigned to implement the e-PS in Mauritius. According to the agreement, the e-PS vendor owns the source code, and the PPO has a perpetual license under the contract between the vendor and the purchaser. The e-PS software is held in escrow, in accordance with Government policy, in case the service provider cannot deliver in the future.

The e-PS Operation and Sustainability

The system was launched through a soft launch by operationalizing the modules in Phase 1 on 28 September 2015, with the publication of the first electronic Invitation for Bid (IFB) by the Mauritius Police Force, closely followed by four (4) additional procurement entities. Gradually, other procurement entities were onboarded on the e-PS. On 31 July 2017, the development phase was completed, and Warranty Phase began. On 1 December 2018, the Warranty Phase ended, and a 5-year Maintenance and Support Phase began. The contract also states that after the 5-year maintenance & support agreement, the purchaser and vendor can agree to a yearly maintenance & support agreement for up to a maximum of three (3) years. The first extension was agreed up to November 2024. This will occur yearly until the next e-GP vendor is appointed, following a competitive bidding process. The PPO will have to activate the exit management plan when ready. According to the agreement, the vendor will have 90 days to hand over control of the e-PS.

Vendor Lock and sustainability

Knowledge transfer is critical for the smooth operation and implementation of the e-PS. The e-PS team in Mauritius is not ready to take over the e-PS because the technical skills are not adequately instilled in the team to operate, manage, and maintain the system independently. There is a clear vendor-lock situation.

System documents

The vendor has provided the e-PS design and system documents, which the PPO maintains. The documents are not frequently updated to keep them relevant to the e-PS's regular updates. The e-PS system manual for the portal and user management and other documents are also available.

Gap analysis

The e-PS team in Mauritius does not have adequate technical capabilities to operate, manage and maintain the e-PS system independently. The PPO lacks a business continuity team and a well-written strategy document to ensure future development and minimize vendor lock-in.

Recommendations

It is recommended that the knowledge transfer process from the e-PS vendor to PPO be done regularly. This process is essential and urgent.

The PPO should establish a business continuity team with all required technical and management skills to operate the e-PS independently. To minimize the vendor lock situation, the business continuity team must work alongside the vendor's technical team in parallel in addressing the technical issues and fixing and enhancing the e-PS. The PPO should develop a well-written strategy document to ensure future development and minimize vendor lock-in.

See also, Recommendations at 3(c)(b).

Assessment criterion 4(a)(c):

The way in which the e-Procurement ecosystem may adapt to changes in legislation/regulation, market practices and technological developments

Conclusion: No gap

Red flag: No

Qualitative analysis

The e-PS is updated whenever there are relevant amendments to the procurement legal framework, in the event of changes triggered by the circular or directives, or in response to user feedback.

There is a change request process in place. A change request may also arise to modify or add functionality to the e-PS for various reasons, such as fixing defects, adding new features, improving performance, or updating the system to comply with new regulations or standards.

Upon receiving a change request from the PPO, the e-PS vendor team determines a time estimate and cost. The vendor and the e-PS unit ensure that the changes do not negatively impact the existing system by testing the system. The cost of the changes are covered by the amount allocated under the Maintenance and Support Agreement. 60% of the Maintenance and Support Agreement is reserved for addressing changes. The maintenance and support agreement is USD 307,000 yearly.

Gap analysis

Recommendations

Sub-indicator 4(b)

Funding for the e-Procurement ecosystem

The following functions are clearly assigned to one or several agencies without creating gaps or overlaps in responsibility:

Assessment criterion 4(b)(a):

The e-Procurement ecosystem has sustainable funding to operate.

Conclusion: No gap

Red flag: No

Qualitative analysis

Responsibility for funding the operation of the e-PS lies wholly with the Government of Mauritius. The e-PS system does not charge any fee to its users. The PPO provides estimates to the MOFEPD on an annual basis of the costs for the operation of the e-PS, training, enhancements, and rollout. Funding of the e-Procuremnet system appears to be sufficient to ensure ongoing operation. See analysis at 3(c)

Gap analysis

Recommendations

Assessment criterion 4(b)(b):

If fees for financing the e-Procurement ecosystem are charged to users, these must be reasonable, transparent, payable in the e-Procurement platform(s), and not be an impediment for using e-Procurement, nor any of its related services such as helpdesks. *

Conclusion: No gap

Red flag: No

Qualitative analysis

The e-PS system does not charge any fee to its users.

The only fee the bidder will incur when using e-PS is for acquiring the digital signature certificate, the cost of which are not prohibitive, ranging between ten to forty United States Dollara (USD 10 tO USD 40).

It is mandatory to apply for a digital certificate that is issued by a licensed/recognized/approved Certification Authority that is registered with the Controller of Certification Authorities of Mauritius. Currently, MauSign CA (https://mausign.govmu.org/) is the only licensed Certification Authority operating in Mauritius. The fee structure is set out in the table below (see Table 1).

Table 1: Fee structure for digital certificates

Certificate type	Cost	Validity
Citizen Certificate	500 MUR (~USD 10)	1 year
Citizen Certificate	900 MUR (~USD 20)	2 years
Organization Certificate	1000 MUR (~USD 22)	1 year
Organization Certificate	1800 MUR (~USD 40)	2 years
Server Certificate	1000 MUR (~USD 22)	1 year
Server Certificate	1800 MUR (~USD 40)	2 years

Source: https://mausign.govmu.org/apply/searchIndvdlProductList.sg.

Quantitative analysis

- * Quantitative indicators to substantiate assessment of sub-indicator 4(b) Assessment criterion (b):
 - fee type and amount charged and the basis for charging (periodic or subscription-based payment)

No fee is charged

- * Recommended quantitative indicators to substantiate assessment of sub-indicator 4(b) Assessment criterion (b):
 - % of users who find that fees constitute an impediment for using e-Procurement

Source: Survey

Since the e-PS does not charge any fee, no feedback was sought from the users.

Gap analysis

Recommendations

Indicator 5. The e-Procurement ecosystem has a strong capacity to develop and improve

Sub-indicator 5(a)

Capacity development for e-Procurement

The following elements are present in the e-Procurement ecosystem:

Assessment criterion 5(a)(a):

Substantive permanent training programmes of suitable quality and content for the needs of all the users and stakeholders (including private sector entities) of the e-Procurement systems. *

Conclusion: Minor gap

Red flag: No

Qualitative analysis

The PPO organizes training programs on use of the e-procurement system annually for suppliers, public body users, and auditors. In 2021 46.05% of procurement staff in public bodies participated in the training. The level of participation by suppliers in face to face training is low, but this may be because of the availability of the dedicated YouTube channel with videos on the Supplier Registration and bidding processes. Bidders also frequently use the help-desk services when they need support. The PPO has provided training to 40% of internal auditors in using e-PS. 61% of respondents to the survey conducted for this MAPS Assessment found the training provided by PPO to be satisfactory. The training post within the e-PS unit at PPO is currently vacant which will present challenges to the effective delivery of ongoing capacity building programmes. The PPO has received a grant from the African Development Bank which includes support for a capacity building training programme on use of e-PS.

The PPO is mandated by PPA s.7 to prepare and conduct procurement, procurement training programs for public officials, contractors, and suppliers. The PPO regularly conducts training programs for different target users (including private sector entities, auditors, evaluators, and others). The PPO organizes training programs on use of the e-procurement system annually for suppliers, public body users, and auditors. The IRP users also have been trained by the e-PS unit, although the trainers' position in the unit has not been filled yet.

The University of Technology Mauritius (UTM) currently offers a Diploma/BSc (Hons) in Procurement and Supply Management, developed in partnership with the PPO, as well as postgraduate courses such as MSc in Procurement and Supply Management and MBA in Logistics & Supply Chain Management. The PPO is in discussion with UTM in view of the recent grant from the AfDB to develop a tailor-made course on e-PS to address the needs of different users and stakeholders, including private sector entities. The Civil Service College of Mauritius frequently organizes short courses to address specific topics.

The Government of the Republic of Mauritius has received a grant³⁶ from the African Development Bank to finance the E-Procurement System (e-PS) to improve the functionality and performance of the Government e-Procurement System. The training plan for users, super users, private sector entities, and CSOs will include the following activities: (a)Tailor-made training on the e-procurement System; (b) Scaling up capacity building and training activities to procurement entities; and (c) The organization of training seminars on the e-procurement procurement System for Private Sector Entities and CSOs.

³⁶ https://www.afdb.org/en/documents/gpn-mauritius-e-procurement-system-e-ps-technical-assistance

Quantitative analysis

- * Quantitative indicators to substantiate assessment of sub-indicator 5(a) Assessment criterion (a):
 - % of procurement staff trained to use the e-Procurement systems over the total number of procurement staff.
 - % of suppliers trained to use the e-Procurement systems over the total number of registered suppliers.
 - % of auditors trained to use the e-Procurement systems over the total number of auditors.

Source: Institution responsible for the e-Procurement ecosystem.

- % of procurement staff trained to use the e-Procurement systems over the total number of procurement staff.

Training activities for public procurement staff were low in 2020 and 2021 due to limited resources available in the e-PS unit. Activity picked up significantly in 2022 (Figure 1) with 46.05% receiving training on e-PS. The number of procurement staff in public bodies rose from 449 to 515 in 2021.

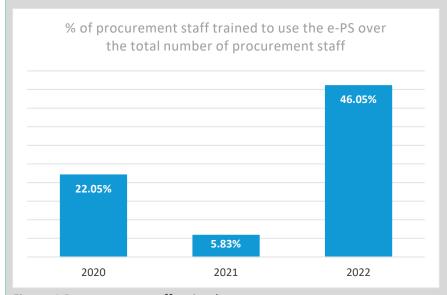


Figure 1 Procurement staff trained

% of suppliers trained to use the e-Procurement systems over the total number of registered suppliers.

In 2022, 4700 suppliers were registered in the e-PS. Formal Training such as face to face training for the registered suppliers is very low (Figure 2). Face-to-face training was provided to only 2% of the registered suppliers in 2021 and 2022. The PPO has opened a YouTube channel³⁷ with videos on the Supplier Registration and bidding processes. Bidders also frequently use the help-desk services over the phone and email when they need support on any specific issue, and sometimes, the helpdesk provides support to a walk-in supplier. The availability of YouTube training on e-PS and help-desk services could be the reasons attributed to the low % percentage of face-to-face training.

³⁷ https://www.youtube.com/channel/UCvRL6pkqOeJMi78nMXEISwg

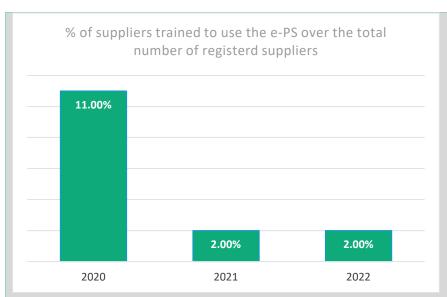


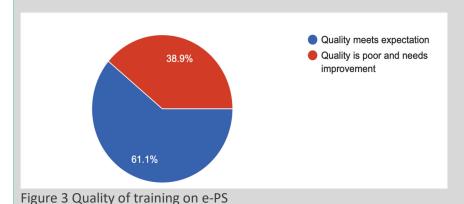
Figure 2 Registered suppliers trained in e-PS

- % of auditors trained to use the e-Procurement systems over the total number of auditors.

The e-PS provides ad-hoc access to the Internal control officers from the ministries and departments. An authorized auditor will have full access to the complete bidding process and the documents in a read-only mode. The registration of the auditors in the e-PS started in 2020, but the training was conducted only in 2021. The PPO has provided training to 40% of the total internal auditors using e-PS. Still today, the public bodies do not use all the modules of the e-PS, so the audit of those public bodies is carried out outside the system.

- * Recommended quantitative indicators to substantiate assessment of sub-indicator 5(a) Assessment criterion (a):
- % of users who are satisfied with the quality and content of the training on e-Procurement. Source: Survey.

A survey was conducted with the bidders and public body users by sending questions using Google Forms. A total of 88 responses were received. 18 out of 88 responders had participated in the training programs conducted by the PPO on the e-PS. 61.1% of participants are satisfied with the quality and content of the training on e-procurement (See Figures 3 and 4). 38.9% of the participants were of the opinion that the quality is poor and needs improvement, and training requires more content. 66.7% of the participants expressed the view that that the duration of the training was sufficient, and 33.3% felt that the training was too short (Figure 5). The duration of the training on the e-PS is two and a half days (2.5 days).



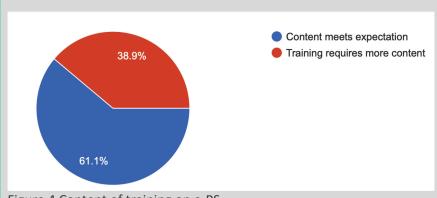


Figure 4 Content of training on e-PS

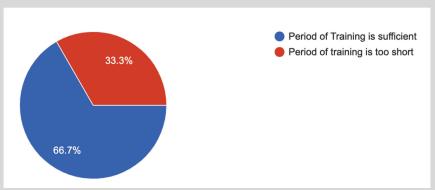


Figure 5 Period of training on e-PS

Gap analysis

The training post within the e-PS unit at PPO is currently vacant which will present challenges to the effective delivery of ongoing capacity building programmes.

Recommendations

Substantial efforts should be made to fill the e-PS training post.

Assessment criterion 5(a)(b):

Routine evaluation and periodic adjustment of training programmes on the e-Procurement systems based on feedback and need.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

Training programs and their contents are not evaluated and adjusted periodically based on feedback and need.

There is no comprehensive routine evaluation and monitoring scheme to assess the effectiveness of the capacity-building program against performance indicators. Presently, information gathered from the NAO report, the decisions of the IRP, complaints, e-PS Help feedback, and frequently asked questions is used to adjust training programs through the periodic review at the UTM.

The last update to the FAQ was on 26 Sep 2015. The user manuals have not been updated since they were provided by the vendor from 2015 to 2017 (as there was phase-wise delivery of modules over the development period, the manuals were also provided phase-wise until the end of the development period in

July 2017). The training materials were updated on 23 Feb 2019. The trainers are using the same training material. The duration of the training for the e-GP user is two and a half days, which was felt to be too short by a significant minority (33.3%) of e-PS users responding to this question in the survey.

Gap analysis

There is no process in place to evaluate and adjust the training programs and their contents periodically based on feedback and need. The FAQ, training material, and user manuals are not updated on a regular basis.

Recommendations

There should be a process in place to evaluate and adjust the training programs for their quality, time and content. FAQs, user manuals, and training material should be updated in a routine manner to reflect the feedback and needs of the users.

Sub-indicator 5(b)

Advice and assistance

Assessment criterion 5(b)(a):

The e-Procurement ecosystem has multi-channel helpdesk(s) available for all users at least during usual working hours

Conclusion: Minor gap

Red flag: No

Qualitative analysis

The PPO provides a helpdesk to provide technical support to users of the e-PS during office hours, with initial contact from suppliers made by e-mail only. There is no telephone based hotline/helpline.

The Procurement Policy Office has set up a Help Desk to provide technical support to users of the e-Procurement System. Two people work at the helpdesk, but one of them works only for half a day. Supplier support is provided through the e-Procurement Help Desk. Help desk support is available during office hours between 09 00 and 16 00 hrs MUT (Mauritian Standard Time) on working days, Monday through Friday. The contact details are available on the home page. Users may contact the Help Desk team at the email address eprocdesk@govmou.org. Emails received outside working hours will be given attention on the next working day. Users often complain about not getting support beyond business hours, as the bidders work at their convenience. There is no telephone based hotline/helpline and users commented that this would be useful to have.

In their email requests for help desk support users should provide a brief description of the issue, all relevant information e.g., the IFB reference number (if available), and their contact details for a prompt response. Bidders are informed that they should not reveal the bid price or other confidential information to the Help Desk agents. If the users provide their contact details in the email, they will be responded to through email and guided over the phone. If they give view-only access to their computers remotely, the TeamViewer software will be used for handholding in critical situations. If the problems cannot be solved from the helpdesk, the issue is escalated to the Vendor's technical support team. The Quality of Service (QoS) Agreement is part of the Maintenance and Support Agreement with the e-PS vendor.

Support to Public Bodies is provided through SPOCs (Single Point of Contact), who are officers specifically recruited, trained, and assigned to public bodies to provide handholding support in the initial onboarding stages. There were only two (2) SPOC- Project Coordinators supporting the public bodies. However, one SPOC – Assistant Project Coordinator was recently hired.

Gap analysis

The Helpdesk operates only during business hours on working days, which has a negative impact on some users who prepare bids and conduct other activities outside of government business hours. A telephone hotline/helpline is not available thus reducing accessibility of the support service.

Recommendations

The Helpdesk operation should operate 24/7 and be a component of consideration in the business model decision for the future implementation of e-PS. The PPO should also consider providing phone-based hotline/helpline support.

Assessment criterion 5(b)(b):

Quality of Services agreements are established, tracked, and monitored to guarantee for an optimal operation of the helpdesk(s). *

Conclusion: No gap

Red flag: No

Qualitative analysis

All the queries are recorded in the issue tracking tool by the Helpdesk agents, and the system allows tracking the resolution status of the queries. According to the queries recorded in the issue tracking software, 100% of the queries were resolved in 2022.

A Service Level Agreement is established under the Maintenance and Support Agreement with the vendor with the e-PS vendor regarding issues that are escalated to them if the Helpdesk Agents are unable to resolve them. The PPO informed that the SLA defines terms and conditions for the maximum time to respond to the issues raised and also classifies the nature of issues based on their severity impacting the operation of the e-PS. Penalties are also imposed if the service is not delivered.

Quantitative analysis

- * Quantitative indicators to substantiate assessment of sub-indicator 5(b) Assessment criterion (b):
- % of requests answered or issues resolved during the last calendar year.
- % of requests resolved on time according to the agreed Quality of Services agreements

Source: Institution responsible for the e-Procurement ecosystem.

- % of requests answered or issues resolved during the last calendar year.

According to the queries recorded in the issue tracking software, 100% of the queries were resolved in 2022.

Table 2 Issues resolved

Recommended Quantitative Indicators	Year		
kecommended Quantitative indicators	2020	2021	2022
% of requests answered or issues resolved during the last calendar year.	99%	99%	100%
Issues	140	562	589
Solved	139	558	589
open	1	4	0

^{- %} of requests resolved on time according to the agreed Quality of Services agreements

The records in the Issue Tracking system reveal that 100% of requests were resolved on time in 2022 according to the agreed Quality of Services agreements.

Table 3 Resolution of the Issues on Time

Recommended Quantitative Indicators			
Recommended Quantitative indicators	2020	2021	2022
% of requests resolved on time according to the agreed Quality of Services agreements.	99.29%	100.00%	100.00%
No of tickets for the year	140	562	589
Resolved on time	139	562	589
Not resolved on time	1	0	0

^{*} Recommended quantitative indicators to substantiate assessment of sub-indicator 5(b) Assessment criterion (b):

% of users who are satisfied with the service level of the e-Procurement's helpdesk(s).

Source: Survey.

The survey result (Figure 6) reflects that about 10% of the respondents feel that the service level is "Excellent" Regarding Response time and solving of Issues, and 8% of respondents on Quality of Service. On average, 40% of respondents are satisfied with the Response time, Solving issues, and Quality of Service.

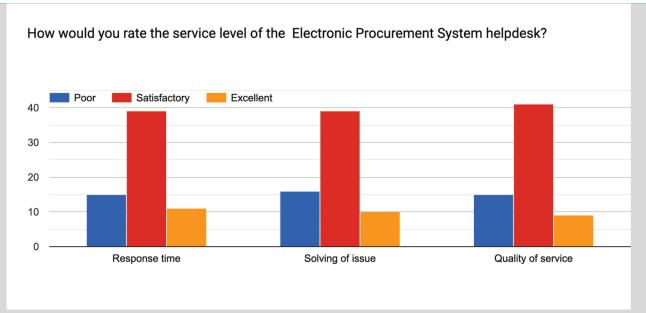


Figure 6 Level of satisfaction with the service leve of the e-PS helpdesk

Gap analysis

Recommendations

Assessment criterion 5(b)(c):

The helpdesk staff is trained on regular basis and relies on up-to-date scripts to answer questions and provide support.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

Helpdesk staff had initial training before they started to provide support on e-PS, but there are no planned regular and ongoing training programs for these staff and there are no documented scripts for answering user questions and providing support.

Helpdesk staff had initial training before they started to provide support on e-PS, but there are no planned regular and ongoing training programs for these staff. They do receive system updates when system changes are made. There are no documented scripts for answering user questions and providing support.

The PPO, vendor technical support team, and the technical persons in the e-PS Unit provide ad-hoc guidance to helpdesk staff and SPOCs to answer questions and provide support, especially when critical responses are required.

Gap analysis

There are no planned regular and ongoing e-PS training programs for helpdesk staff. There are no documented scripts for answering user questions and providing support.

Recommendations

To improve e-PS user support, the PPO should establish a regular training program on e-PS for Helpdesk staff and for SPOCs (Single Points of Contact). The PPO should develop documented scripts and a knowledge base

for common issues. In preparing and delivering training, scripts and knowledge base the PPO should collaborate with the vendor for training materials and leverage their support resources. User inquiries should be monitored regularly, and training and resources should be refined based on information gathered from those inquiries and user feedback.

Assessment criterion 5(b)(d):

Users can rely on readily available and up-to-date information to use the e-Procurement ecosystem in an optimal manner, whether from manuals, online training material, frequently asked questions, or other similar sources.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The users can access the manuals, FAQs, and training material, including videos and other resources, from the e-PS homepage Figure 7) but the FAQ 38 and other material is not updated regularly.

The last update to the FAQ was 26 Sep 2015. The user manuals have not been updated since they were provided by the vendor during 2015 to 2017 (as there was phase-wise delivery of modules over the development period, the manuals were also provided phase-wise until end of the development period July 2017). The training materials were updated on 23 Feb 2019. Some information is inaccurate, for example, the cost of Digital Certificate mentioned is MUR 1300 plus VAT, whereas the MAURIGN the digital signature provider displays MUR 500.³⁹ There are no manuals for the IRP process, for Auditors or other stakeholders.

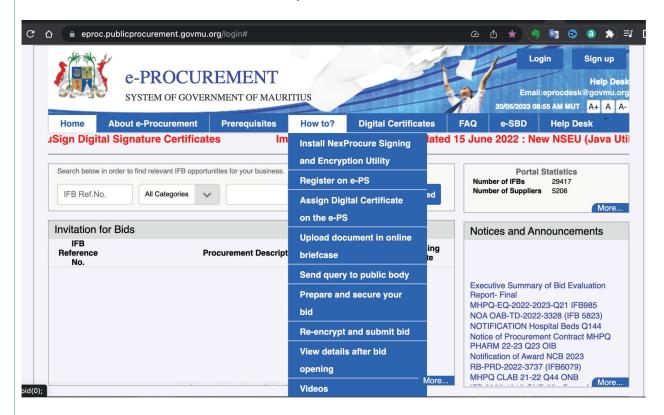


Figure 7 Access to resources for users

³⁸ https://eproc.publicprocurement.govmu.org/files/masterfiles/FAQ.pdf

³⁹ https://mausign.govmu.org/apply/searchIndvdlProductList.sg

Gap analysis

The FAQs, manuals and other resources have not been updated since they were first developed or delivered and do not cover the manuals for the IRP process, or for auditors and other stakeholder other than suppliers and the public bodies.

Recommendations

The FAQ, manuals and other resources should be reviewed and updated on a regular basis to ensure their reliability and authenticity for all users and stakeholders. Review and updating should include analysis of data from the issue tracking software database to enhance the support material to be provided to the users. Additionally, manuals for the Challenge and Appeal, Auditors, and other stakeholders should be developed and made available on the e-PS.

Sub-indicator 5(c)

Performance monitoring

Assessment criterion 5(c)(a):

The performance of the e-Procurement ecosystem is measured and serves to its continuous improvement.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The PPO does not have any indicators in place to ensure ongoing and regular measurement of the performance of the e-Procurement System and performance of the e-PS is not measured on an ongoing or regular basis.

The PPO does not have any indicators in place to ensure ongoing and regular measurement of the performance of the e-Procurement System. However, it appears that there have been some elements of performance testing. In 2019, the PPO commissioned PwC to carry out a Performance Testing of the e-Procurement System, with the final report provided in Aug 2019.

Feedback from the users in the survey conducted as part of this MAPS e-Procurement assessment confirmed that the performance of the e-PS is not satisfactory.

Gap analysis

Performance of the e-PS is not measured on an ongoing or regular basis.

Recommendations

Introduce performance measurement of e-PS on an ongoing and regular basis. A comprehensive tool with Key Performance Indicators (KPIs) for measuring performance of e-PS should be developed which can be used to gather data with the aim of improving system performance on a continuous basis.

Assessment criterion 5(c)(b):

User feedback is considered and used to improve the e-procurement ecosystem.

Conclusion: No gap

Red flag: No

Qualitative analysis

The PPO collects user feedback through the Helpdesk when issues are raised by the e-PS users and acts on the feedback received. Using the Helpdesk for collecting user feedback is a correct decision, as the Helpdesk has first-hand communication with users experiencing challenges with using e-PS.

Gap analysis

Recommendations

Suggest for improvement

PPO to consider an online public procurement discussion forum and suggestion boxes to further assist in effectively gathering feedback from e-PS users and potentially capturing a wider range of user experiences and suggestions, leading to a more comprehensive set of feedback for improving the e-PS.

Assessment criterion 5(c)(c):

e-Procurement is increasingly adopted for all public procurement*.

Conclusion: Substantive gap

Red flag: Yes

Qualitative analysis

The Government of Mauritius has shown leadership and a strong desire to reform the public procurement sector and use e-procurement as the tool for such transformation. From 1 January 2021, all public bodies have been mandated to use the e-PS. There has been a significant rise in the number of procurements being carried out through the e-PS. In 2021/2022, a total of 4783 procurements out of 7666 were carried out through the e-PS, which accounts for 62% of the total number of procurements. However, analysis of procurement using e-PS by spend reveals that only 7% of total procurement value was carried out through the e-PS in 2021/2022, signalling an alarming situation in the public procurement sector. It indicates that most large value procurements are carried out outside the e-PS, and only small value procurements are conducted through the e-PS.

The Government of Mauritius has shown leadership and a strong desire to reform the public procurement sector and use e-procurement as the tool for such transformation by conducting the Core MAPS Assessment in 2022, and now the focused assessment of the e-PS using the MAPS Supplementary Module on e-Procurement. The Government of Mauritius has already created an enabling environment for the use and implementation of e-PS at all levels of government. The country has gone through a major phase of transition from paper-based procurement to electronic procurement starting in 2014, leading to mandatory use of e-PS for all 205 public bodies, effective from 1 January 2021.

A process for onboarding and implementing the e-procurement System at a public body was devised by the Procurement Policy Office. This process is controlled and audited as a process for the Procurement Policy Office's ISO 9001:2015 certification program. The Procurement Transformation Index (PTI), was devised to measure adoption of the e-procurement System within public bodies. PTI for ministries and departments is measured every quarter by the Public Sector Business Transformation Bureau and reported to the Cabinet.

Supplier support has been constantly provided through the e-Procurement Help Desk with support to Public Bodies provided through SPOCs (Single Point of Contact) who are officers specifically recruited, trained, and assigned to public bodies to provide handholding support in the initial stages of onboarding. The PPO has provided training on e-procurement processes through its dedicated training center and other government training centers such as the Civil Service College and Mauritius Polytechnics. Further -on-the-job training was provided by the SPOCs.

It should be noted that of the 205 public bodies, procurement by the 57 top spending public bodies represents 95% of Invitations for Bids and 98% of total procurement spend. (see Figure 8)

The quantitative analysis below shows both a substantial increase in the number of public bodies using e-PS and increased numbers of procurements conducted using e-PS, which are positive developments (see Figures 9 & 10).

However, the quantitative analysis also reveals that the total value of procurement carried out through e-PS is very low (7%) indicating that e-PS is used predominantly for low value procurements, with comprehensive use of e-PS apparently resisted by public bodies (see Figure 11). This flags significant concerns in terms of efficiency and transparency of the procurement system as a whole.

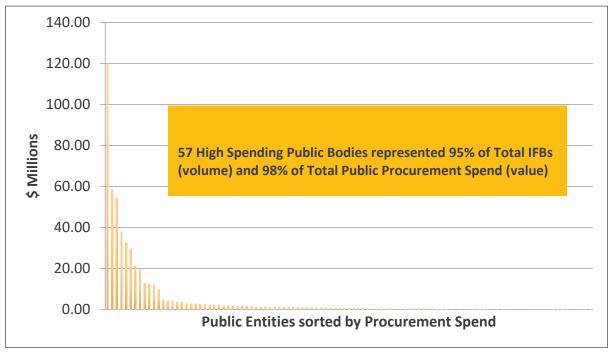


Figure 8 Distribution of public entities according to procurement spend

Quantitative analysis

- * Quantitative indicators to substantiate assessment of sub-indicator 5(c) Assessment criterion (c):
- Percentage of procuring entities using e-Procurement compared to total number of procuring entities mandated to use e-Procurement.
- % of procurements carried out through e-Procurement out of the total number of procurements done in the last year.
- % of value of procurement carried out through e-Procurement out of the total value of procurement spend in the last year.

Source: Institution responsible for the e-Procurement ecosystem

Since the announcement of the mandatory use of the procurement System, there has been a substantial increase in the number of public bodies that use the system and the number of procurements carried out through the e-PS. (Figures 9 & 10).

- % of procuring entities using e-Procurement compared to total number of procuring entities mandated to use e-Procurement.

In the 2020/2021 Financial year, out of 205 public bodies, 83 public bodies used the e-Procurement System, and in 2021/2022 it rose to 91 (44% out of mandated public bodies). In 2023, it was expected to rise to 105 public bodies. The remaining 100 public bodies either procure through line ministries or procure rarely. As noted above, the 57 high spending Public Bodies represented 95% of Total Invitations For Bids (volume) and 98% of Total Public Procurement Spend (value).

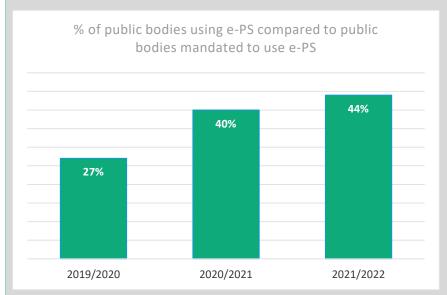


Figure 9 Public bodies using e-Ps compared to public bodies mandated to use e-PS

- % of procurements carried out through e-Procurement out of the total number of procurements done in the last year.

There has been a significant rise in the number of procurements being carried out through the e-PS. In 2021/2022, a total of 4783 procurements out of 7666 were carried out through the e-PS, which accounts for 62% of the total procurements. Mandatory use of e-procurement for all public bodies applied from the mid-year point of the financial year 2020/2021, i.e. January 1, 2021.

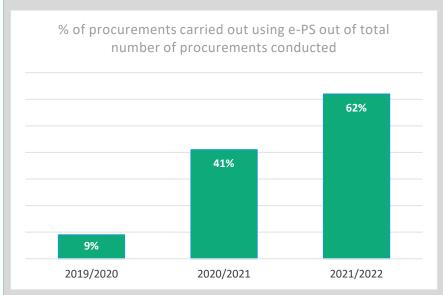


Figure 10 Percentage of procurements carried out through e-PS

- % of value of procurement carried out through e-Procurement out of the total value of procurement spend in the last year.

The total value of public procurement carried out through the e-PS in 2021/2022 amounted to MUR 1,476,935,582 out of the total amount of government procurements of MUR 21,666,839,034. This reveals that only 7% of total procurement value is carried out through the e-PS, signalling an alarming situation in the public procurement sector. It indicates that most large value procurements are carried out outside the e-PS, and only small ones are conducted through the e-PS.

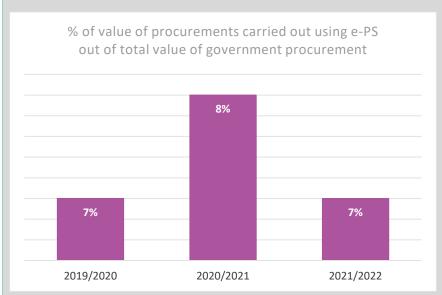


Figure 11 Percentage of value of procurements carried out using e-PS

On the one hand, the rise in the number of procurements carried out through the e-PS shows an encouraging trend, on the other hand, the use of e-PS for large-value contracts is extremely nominal. The quantitative analysis shows the adoption of the e-PS by all public bodies for all public procurements is deterred by significant resistance at the public bodies level. This could be the consequence of the opacity of the procurement plans, the inability to publish the annual procurement plans, and the failure to start procurements following the approved procurement packages in the e-PS.

Gap analysis

Adoption of the e-PS appears to be very selective, despite its use being mandated in the legal framework. Public bodies are not using e-PS for all procurements, especially large-value procurements. The Assessment reveals that only small-value procurements are carried out through the e-PS. Public bodies rarely publish annual procurement plans and the e-PS is not linked with those plans, thus further hindering the ability to identify and track procurements.

This Gap is assigned a Red flag because of the significant and cross-cutting impact of deliberate failure to use e-PS for the vast majority of government procurement (when measured by total value) and requirement for high level Government intervention in support of the PPO.

Recommendations

A high level, comprehensive policy review and intervention is urgently required to: understand reasons for non-compliance and the highly selective use of e-PS; and identify legal and practical measures to resolve the problem. This is likely to require change management and incentive programs to ensure full and consistent

implementation of the Government's policy and legal requirement for all public bodies to use the e-PS on a mandatory basis.

Indicator 6. The e-Procurement ecosystem enables the achievement of the country's procurement objectives

Sub-indicator 6(a)

Planning in the e-Procurement ecosystem

The e-Procurement ecosystem supports the following elements and procuring entities use them:

Assessment criterion 6(a)(a):

The creation of annual or multi-annual procurement plans. *

Conclusion: Substantive gap

Red flag: Yes

Qualitative analysis

The e-PS does not support the creation of annual procurement plans (APP). APPs can be uploaded to the e-PS in PDF format, but in practice they are prepared offline and rarely published on e-PS.

R.10 of the PPR requires that a public body, at the beginning of every financial year, prepare an Annual Procurement Plan (APP), publish it on its website and periodically update and revise it, except for low-value and restrictive procurements. Directive No.2, dated 07 April 2010, required that the APP be posted on the public procurement website. EBS Regulations R.10 on APP requires an APP for procurements using the open advertised bidding method to be posted on the e-PS.

In practice, APPs are prepared offline and rarely published on e-PS. The e-PS is not designed to allow public bodies to prepare their APP using the e-PS. It allows only for uploading the APP, which is posted under the Notices and Announcements Section of the e-PS (Figure 12). The format used for the APP is Form B—Procurement Plan template. The public bodies upload the plan in PDF format (Table 3). APPs can be found only if someone searches the platform with known parameters.

Table 4 APP Format

Indicative Procurement Plan for Financial Year 2021-2022 F									
(Procurement to be undertaken through Open Advertised Bidding)									
S.No.	Type/Nature of Procurement	Procurement Details	Procurement Method to be used	Expected Date of launching of Bid					
1	Goods	Supply, Installation, Configuration and Commissioning of a Storage Area Network & Servers Solution for the Government Online Centre	ONB	July 2021					
2	Goods	Supply, Delivery, Installation and Commissioning of Hyper-Converge servers at the Government Online Centre (Servers for eHR project)	ONB	September 2021					
		Renewal of existing hardware support on the Backup appliance and the renewal of the existing 20TB Capacity based license							
3		Regularising the additional 19TB consumed up to 31 Dec 2021	ONB	October 2021					
	Goods								

The MAPS Assessment team found only 10 APPs uploaded to the e-PS. No evidence was found showing that the public bodies had any demand management or risk assessment on the manual or the electronic platform.



Figure 12 APPS listed on e-PS under Notices and Announcements

Quantitative analysis

- * Quantitative indicators to substantiate assessment of sub-indicator 6(a) Assessment criterion (a):
- % of procuring entities that created their annual or multi-annual procurement plans through the e-Procurement platform(s)

Source: Institution responsible for the e-Procurement ecosystem.

0% because Annual Procurement Plans are not prepared through the e-PS.

Gap analysis

Annual Procurement Plans and multi-year annual procurement plans are not created in the e-PS, and only a handful of public entities upload their APP to the e-PS in a pdf version.

This Gap is assigned a Red flag because it impacts the overall effectiveness of the procurement system and inhibits the proper functioning of both internal and external control systems.

Recommendations

The APP and the multi-year procurement plan should be created in the e-PS and public bodies should be mandated to do so, with publication monitored and enforced. APPs should be integrated with downstream activities and budget information.

Assessment criterion 6(a)(b):

The planning of individual procurements and linking to corresponding budget information. *

Conclusion: Substantive gap

Red flag: Yes

Qualitative analysis

The e-PS does not support the planning of individual procurements and is not linked to corresponding budget information or budget treasury systems (IFMIS). (see analysis at indicator 3(b)(c)).

The preparation of the Invitation to Bids or preparation of the bidding document does not start from selecting the procurement package from the approved Annual Procurement Plan (APP). The Invitation of Bids or the preparation of the Bidding document can be started without any procurement package from the plan. The APP has no connection to or trail with the downstream procurement proceeding. The planning of individual

procurement packages is not linked to budget information. There is lack integration of the system from budget preparation to planning treasury operations for payments in e-PS, even though e-PS is operational since 28 September 2015 and use of e-PS is mandatory since 1 January 2021.

This anomaly leads to i) non-alignment with the legislative mandates/provisions, ii) inconsistency between the APP and actual procurement, iii) encourages maverick procurements and systemic corruption, iv) deters transparency, v) bidders (market) cannot predict, and prepare capacity and resources for the upcoming business.

Quantitative analysis

- * Quantitative indicators to substantiate assessment of sub-indicator 6(a) Assessment criterion (b):
- % of procurements for which the planning stage was carried out on the e-Procurement platform(s) Source: The PPO

0% as e-Ps does not support planning of individual procurements.

Gap analysis

The e-PS does not support the planning of individual procurements and is not linked to corresponding budget information or budget treasury systems (IFMIS).

This Gap is assigned a Red flag because linkage to corresponding budget information or treasury systems requires inter-nstitutional cooperation which lies outside the procurement sphere.

Recommendations

e-PS should be used to plan individual procurements to tie in both with Annual Procurement Plans and corresponding budget information.

Sub-indicator 6(b)

Selection and contracting in the e-Procurement ecosystem

The e-Procurement ecosystem supports the following elements and procuring entities use them:

Assessment criterion 6(b)(a):

The use of all procurement methods and types of contracts that the legal/regulatory framework establishes should be carried out through e-Procurement.

Conclusion: Minor gap

Red flag: No

Qualitative analysis

The e-PS does not allow for use of all procurement methods described in the legal/regulatory framework.

A review of the Procurement methods listed in s.15 of the PPA and the e-PS reveals that some of the procurement methods listed in the PPA are not implemented in the e-PS. The procurement methods set out in the PPA are listed below and those methods not implemented via e-PS are indicated.

Goods, other services and works:

- (i) open advertised bidding; (prequalification or post-qualification, one stage or two stage)
- (ii) restricted bidding;
- (iii) request for sealed quotations;
- (iv) direct procurement;
- (v) community or end-user participation **NOT AVAILABLE**
- (vi) departmental execution NOT AVAILABLE
- (vii) competitive negotiations **NOT AVAILABLE**, or
- (viii) electronic reverse auction **NOT AVAILABLE (Awaiting clearance from the Government Online Center (GOC))**

Consultancy services:

- (i) request for proposals on the basis of—
- (A) quality and cost;
- (B) quality alone;
- (C) quality and fixed budget; or
- (D) least cost and acceptable quality;
- (ii) direct procurement; or
- (iii) open advertised bidding.

Gap analysis

The e-PS does not cover all listed procurement methods. The following methods are not catered for within the e-PS: community procurement, competitive negotiations, departmental execution, and e-Reverse auctions. The E-Reverse Auction module has been developed but is yet to be enabled in the system.

Recommendations

All the procurement methods and types of contracts that the legal/regulatory framework establishes should be available for use through the e-PS, with any necessary amendments made to the legal/regulatory framework. The use of the E-Reverse Auction method should be implemented as soon as possible as that module is ready.

Assessment criterion 6(b)(b):

The use of model procurement documents or templates for standard contract clauses to facilitate the creation of procurement processes.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-PS allows for use of model procurement documents but the documents are numerous, with potential for incorrect application, and the workflow is modelled on paper-based procurement and not fully aligned with the workflows and functionalities of the e-PS.

There are standard contract conditions for most types of contracts and General Conditions of Contract, and their use is mandatory. EBS Regulations R.12 on the Release of bidding documents, requires bidding documents to be made available on the e-PS for suppliers to view and consider participation in the bidding exercise, and the documents are adequately published.

All of the current standard bidding documents, templates or standard contract clauses are converted into web forms, and electronic templates (e-SBDs). There are about 400 templates in the e-PS which can be used for procurement methods available in the e-PS. However, as noted in the analysis at 1(a)(d), e-SBDs are based on documents prepared for paper-based procurement and are not fully aligned with the workflows and functionalities of the e-PS. The bidding document preparation process is cumbersome, with inconsistent terminology, confusing template selection requirements and lengthy workflows.

Gap analysis

As noted in the analysis at 1(a)(d), e-SBDs are based on documents prepared for paper-based procurement and are not fully aligned with the workflows and functionalities of the e-PS. The bidding document preparation process is cumbersome, with inconsistent terminology, confusing template selection requirements and lengthy workflows.

Recommendations

The standard model documents and templates and their creation process are in the system, but their presentation should be re-engineered to facilitate effective use (see also, recommendation at 1(a)(d)).

Assessment criterion 6(b)(c):

The linkage of procurement processes with planned procurements disclosed in their annual or multiannual procurement plan. *

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-PS does not provide the facility to create the Annual or multiannual procurement plans, and thus does not provide linkage between planned procurements and procurement processes.

Gap analysis

The e-PS does not provide the facility to create the Annual or multiannual procurement plans, and thus does not provide linkage between planned procurements and procurement processes.

Recommendations

The e-PS should be updated to permit preparation of Annual Procurement Plans in the e-PS and the downstream process for individual procurement processes should be linked to the disclosed plans.

Assessment criterion 6(b)(d):

The management of procurement processes, from drafts to definitive tender documents.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The system supports bid preparation and submission for the single-stage method to a limited degree. For the two-envelope method, the system only supports bid submission. The e-PS does not fully or effectively support the efficient preparation of bid documents.

There are various problems encountered in preparation of bid documents using e-PS including: non-alignment with terminologies used in the PPA and PPR, use of partial structure of Common Procurement Vocabulary (CPV) to classify the procurement items. The e-PS does not generate bidding documents based on data and information input into relevant data-capturing templates. Instead the e-Ps provides multiple forms to be selected by public bodies and e-SBDs which are based on documents prepared for paper-based procurement and are not fully aligned with the workflows and functionalities of the e-PS. (see analysis at 6(b)(a)). There were cases in the past when the wrong templates were chosen, unnecessary templates were added, or required templates were missing, which caused unnecessary clarifications, cancellation of the whole procurement process, and challenges in bid opening, evaluation, and awards. In practice, bidding documents are commonly prepared offline and uploaded to e-PS as supporting documents.

Gap analysis

The preparation of bid documents is not fully or effectively supported by the e-PS, with significant potential for selection and use of incorrect bid documents.

Recommendations

The e-PS should be structured so as to generate the bidding documents based on the data and information entered online by public bodies in the relevant data-capturing templates and then the bidding documents should be made for users to download. The nomenclature used in the e-PS should align with the PPA and PPR.

Assessment criterion 6(b)(e):

The handling and logging of all communication, including questions, requests for clarifications from interested parties as well as answers from procuring entities.

Conclusion: No gap

Red flag: No

Qualitative analysis

The e-PS allows for handling and logging of communications, including questions, requests for clarification and responses.

The e-PS allows bidders to communicate with public bodies through their user dashboard. Potential bidders can request a clarification of the procurement documents before the closing of the bid submission deadline. The public body must respond in a timely manner, making the response available to all bidders using the e-PS. The bidders will be notified through email alerts on clarifications/amendments issued to an IFB only if the bidder has responded to and indicated its participation in the procurement. Bidders can send the Request for Clarifications anonymously. The system also allows bidders to attach a document. The View and Ask icon on the user dashboard allows bidders to submit queries and view the responses to the queries received from the public body. All communications are done only through the e-PS system, and the bidder can view the communication thread. The e-PS displays all critical notifications about the specific IFB in the Alerts section of the Dashboard and also sends the same alert to the bidder's registered email, although it appears that e-mails are not always received or may go into spam boxes.

Gap analysis

Recommendations

Suggestions for improvement

Consider including a message on the e-PS system for users to check the spam folder if emails are not received in their inbox. It may also be appropriate to consider enabling SMS alerts and provide for users to opt into SMS alerts.

Assessment criterion 6(b)(f):

The establishment of requirements to define the qualification of interested bidders, as well as the award criteria to be used for evaluation.

Conclusion: Minor gap

Red flag: No

Qualitative analysis

Bidding documenst include a section for the establishment of requirements to define the mandatory eligibility criteria, qualification criteria, as well as the award criteria to be used for evaluation but the terminology used is not sufficiently well aligned with the legal framework.

The preparation of IFB and Bidding document includes a section for the establishment of requirements to define the mandatory eligibility criteria, qualification criteria, as well as the award criteria to be used for evaluation. The e-PS allows Public Bodies to choose evaluation methods, but the names assigned to the

evaluation methods indicated in the system and their interpretation are confusing, and they do not fully align with the methods defined in the PPA and the PPR.

Gap analysis

The names assigned to the evaluation methods in the e-PS are not well aligned with the PPA and PPR.

Recommendations

The names used for different processes, functions, methods and items in the e-PS, should be fully aligned with the PPA and PPR.

Assessment criterion 6(b)(g):

The submission of bids.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

e-PS supports submission of bids but there are critical issues to resolve including the redundant decrypt and encrypt requirement for bidders after the closing of the bid submission date. In addition, e-PS does not support two-stage bidding. Bid security submission is inefficient as it does not permit direct interface with the banks.

The bidders start the bid preparation by downloading the IFB from the e-PS through their dashboard. The bidders complete all the bid forms and encrypt the bid on their local computer using the encrypt button in the e-PS. The bidder can update the bid forms again by using the decrypt function until the bid closing date. The bidder can upload supporting documents, including the scanned copy of the bid security. The bidder receives the bid submission notification on the dashboard.

The submitted bids remain in the e-PS bid vault completely encrypted until the bids are opened at the stipulated bid opening time. The bids are not automatically opened. The public body does not see the names of the bidders who participated in the bidding process until the bids are opened. The bid submission is not considered complete until the bidder again performs the decrypt and encrypt process after the bid opener completes the closing process.

The bid Preparation and Submission module and Bid Closing and Opening Module have critical issues to be resolved as follows:

- i. There is a separate bid closing process, and an authorized person from the public body should log in to the system and close the bidding process at the stipulated bid closing time when bidders have already submitted their bids. Bid submission is not closed automatically;
- ii. After the bid closing process is complete, there is a redundant process, where all the bidders are required to bring their bids back to their computers, first decrypt the bids, then encrypt them again, and re-submit to the e-PS. The process is almost like bid withdrawal and, again, a substitute for the bid. This is a critical algorithmic design issue. If a public body authorized person does not close the bidding process or the person is late or absent, it will remain open. If a bidder fails to download the bid and complete the process of decryption and encryption, the bid submitted earlier will not be considered for evaluation. These processes do not align with the PPA and the PPR and creates challenges in the bidding process;
- iii. The e-PS supports only single-stage submissions with a single or two envelopes. Two-stage submissions are required for complex procurements but the e-PS does not have a facility to support two stage submissions; and
- iv. The original bid security should be submitted before the bid submission deadline. Bidders are required to physically submit the original bid security by dropping it in the tender box. The bank module with e-Guarantees and payment options has not yet been developed, and banks are not interfaced with the system.

Some public bodies at this point stop using the system, and evaluation and the award of contracts are carried out offline.

Gap analysis

There is a redundant decrypt and encrypt process requirement for bidders who submit their bids after the closing time of the bid submission, creating an unnecessary burden. The e-PS does not support two-stage bidding. Bid security submission is inefficient as it does not permit direct interface with the banks.

Recommendations

The Bid submission module should be re-engineered to make it more efficient and hassle-free for the bidders. This includes removing the additional process of decrypting and encrypting before bid opening, aligning with the spirit of the PPA and PPR. The e-PS should have a facility to use Two-stage/multi-stage bidding for complex projects.

The bid security submission should be automated through the e-Guarantee module facilitating integration with the banks (see Analysis, Gap and Recommendations at 7(a)(a)).

Assessment criterion 6(b)(h):

The evaluation and awarding of contracts.

Conclusion: Substantive gap

Red flag: Yes

Qualitative analysis

The Bid Evaluation Module available through e-PS is well-built, with the potential to work well. In practice, however, bid evaluation is carried out predominantly offline, hindering the end-to-end usage of the e-PS. The contract award module is not often used. In practice, the Contract award notice is prepared offline and rarely published.

The system allows the forming of the Bid Evaluation Committee (BEC). The BEC Chairperson gets access to bids and other members will not have access. The system allows for nominating all members, but currently, the practice is that only the Chairperson of the BEC is nominated, and the rest of the process is conducted offline. All the members of the evaluation committee sit in the same room, and undertake the evaluation. There is only one evaluation entry in the e-PS from the BEC. Resulting in group evaluation instead of individual evaluations by its members. The PPO has not issued any guidelines on how the BEC should be formed and how the evaluation should be carried out using the e-PS.

Summary Evaluation reports (partial Evaluation Reports) are published on the e-PS. Directive No.2, dated 07 April 2010, requires that the Executive Summary of the Bid Evaluation Report (as per Circular No.15 of 2009) be posted on the public procurement website, but not all public bodies comply with this requirement.

The contract award module is not often used. In practice, the Contract award notice is prepared offline and rarely published. When it is published, the award notice is listed under the Notice Announcement section. The Award Template is available, but the system does not automatically populate it through the Evaluation Report, with manual input required.

Gap analysis

Most of the public bodies carry out the evaluation process and awarding process outside the e-PS. There is no dedicated section for the Evaluation Report and Contract awards in the e-PS and this information is rarely published.

This Gap is assigned a Red flag because failure to conduct evaluation and award through the e-PS and publish the outcomes has a negative impact on the procurement system as a whole in terms of efficiency, consistency and transparency of process.

Recommendations

To improve efficiency and consistency, evaluation should be carried out using the e-PS, with evaluation results properly entered into the e-PS. To enhance transparency and ensure the end-to-end usage of the e-PS, the public bodies should prepare and publish the Summary of the Evaluation Report and the Contract Award Notices using the e-PS.

Sub-indicator 6(c)

Contract management in the e-Procurement ecosystem

The e-Procurement ecosystem supports the following elements and procuring entities use them:

Assessment criterion 6(c)(a):

The generation of electronic contracts based on the selection and contracting data available. *

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-PS does not support the generation of electronic contracts.

See also analysis at 6(b)(a).

Quantitative analysis

- * Quantitative indicators to substantiate assessment of sub-indicator 6(c) Assessment criterion (a):
- % of the value of contracts generated in the e-Procurement ecosystem over the total value of contracts of the last calendar year.

Data not available in the e-PS

- % of the number of contracts generated in the e-Procurement ecosystem over the total number of contracts of the last calendar year.

Data not available in the e-PS.

Source: The PPO.

Gap analysis

The e-PS does not support the generation of electronic contracts.

Recommendations

For data consistency and ease of use, contract templates in the e-PS should be automatically populated with data already captured, and all documents comprising the contract should be bundled when generating the electronic contract. The PPO should ensure that public bodies use the Electronic Contract Module.

Assessment criterion 6(c)(b):

The management of amendments, extensions, and contract follow-up and oversight, as well as information including overruns and reasons for delays and terminations. *

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The PPO has already developed the e-Contract Monitoring Module, but it is not in activated for use in operations.

Quantitative analysis

- * Quantitative indicators to substantiate assessment of sub-indicator 6(c) Assessment criterion (b):
- % of the value of contracts managed in the e-Procurement ecosystem over the total value of contracts of the last calendar year.

0% as e-Contract Monitoring Module not activated.

- % of the value of amended or extended contracts that were modified in the e-Procurement ecosystem over the total value of amended or extended contracts of the last calendar year.
0% as e-Contract Monitoring Module not activated.

Source: The PPO.

Gap analysis

The PPO has already developed the e-Contract Monitoring Modules, but it is not activated for use in operations.

Recommendations

The e-Contract Monitoring Module should be activated for use in the management of amendments, extensions, and contract follow-up and oversight, as well as information including overruns and reasons for delays and terminations.

Indicator 7. The e-Procurement ecosystem's technical characteristics render it effective and secure

Sub-indicator 7(a)

Architecture of the e-Procurement ecosystem

There are standards in place and practical evidence that demonstrate the following:

Assessment criterion 7(a)(a):

The architecture of the e-Procurement platform(s) facilitates interoperability with other relevant platforms including those used for budget, treasury/payment, tax, business registers, invoicing, and bid securities.

Conclusion: Substantive gap

Red flag: Yes

Qualitative analysis

The e-PS does not interface with any external e-Services, despite the availability of the Government's InfoHighway interoperability framework.

The e-PS does not interface with any external e-Services, which is essential for the efficiency of the data capturing process by getting data from the source, data consistency, validity, and authenticity. Bidders provide all data, information, and scanned copies of credentials and certificates. Bidders' credentials, bid

security/guarantee, and tax status documents are all in the form of an attachment. Budget commitment for the procurements, invoicing, and payments are all done manually.

The government has implemented the interoperability framework, namely, the Info-Highway (https://ih.govmu.org/), (IH). IH is operated and maintained by the IH Team at MITCI, for government-wide interoperability of government IT systems. However, the e-PS has not been integrated into the Information Highway.

Gap analysis

The system is not interfaced with any external e-service services, such as the budget, treasury/payment, tax, business registrar, invoice, and banks for bid securities. There is no automated exchange of data and documents with any external systems.

This Gap is assigned a Red flag because it requires high levels of inter-institutional cooperation and inter-institutional interoperability of IT information systems.

Recommendations

The use of the government's interoperability framework, namely, the Info-Highway (https://ih.govmu.org/), should be leveraged to facilitate data sharing among public bodies. All interoperability with the e-PS should go through the Information Highway.

An integration plan should be prepared, approved, and implemented by the Procurement Policy Office to integrate the e-procurement System with, as a minimum: the information system of the Corporate and Business Registration Department (Registrar of Companies) for supplier information and Beneficial Ownership information; Mauritius Revenue Authority (Tax Authority) for verification of tax clearance status of bidders; Budgeting and disbursement system from the Ministry of Finance (IFMIS) (see analysis and recommendations at 3(b)(c); all commercial banks, to enable an authorized bank officer to upload digitally signed bank guarantees/Securities following a bidder's request. The cooperation of the Bank of Mauritius and the Banker's Association should be sought before engagement with the commercial banks.

Assessment criterion 7(a)(b):

The e-Procurement platform(s) capture data in an automated way that enables business intelligence analytics.

Conclusion: Substantive gap

is inconsistency in available data for analysis.

Red flag: No

Qualitative analysis

The e-PS does not capture data in an automated way that enables business intelligence analytics. The e-PS is able to capture data but the way in which the process and documents/forms are currently set up and used, including requiring significant levels of user choice, means that there are reliability issues and data is inconsistent and incomplete.

The e-PS has about 400 templates prepared from different bidding documents and procurement processes to capture data. The forms do not have proper validations in all the fields, in terms of data format value range and thresholds or formats, and options for selection. It is common practice for forms to be downloaded and completed off line. The contract preparation page is primarily a manual entry, it is not populated from the data already available in the system from the IFB, bidding document, and bid evaluation reports. The data is entered manually. It may create inconsistency between the data in the e-PS and the data in the contract. The myriad data choices and data formats as well as offline completion mean that it is highly likely that there

Data is not available or incomplete in the e-PS for many processes, as many public bodies do not use the modules in the e-PS after the bid opening or evaluation. The e-PS has an MIS module, but the reports are limited and based on a pre-defined set of report formats. The e-PS does not support the Open Contracting Data Standard (OCDS), so the data is not stored, disseminated, or published in a machine-readable format. The e-PS lacks a comprehensive business intelligence analytics tool.

Gap analysis

The e-Ps does not capture data in an automated way that enables business intelligence analytics. The e-PS is able to capture data but the way in which the process and documents/forms are currently set up and used, including requiring significant levels of user choice, means that there are reliability issues and data is inconsistent and incomplete.

Recommendations

The data-capturing forms must be critically reviewed to reduce the number of available forms and have proper validation at the field level and also at the form level. Measures should be implemented to ensure that public bodies use e-Ps for all stages of the procurement process, including planning and contract delivery, and to limit opportunities to prepare documents outside the e-PS, so that comprehensive and reliable data can be collected for data analytics purposes. The data and information in the e-PS should be published in machine-readable data format following OCDS. The e-PS should include a comprehensive Business Intelligence tool to process data and generate procurement insights for informed decision-making.

Sub-indicator 7(b)

Infrastructure of the e-Procurement ecosystem

There are standards in place and practical evidence that demonstrate the following:

Assessment criterion 7(b)(a):

The e-Procurement ecosystem has a reliable infrastructure. *

Conclusion: Minor gap

Red flag: No

Qualitative analysis

The e-procurement System is hosted in the Scalable Government Cloud operated by the Government Open Center (GOC).⁴⁰ The GOC operates the Government Data center through which hosting services are provided to Ministries and Departments. The Government Cloud provides Infrastructure-as-a-Service (IaaS) for the e-PS, and the GOC provides the infrastructure (data center Equipment, Operating System, network and network equipment, and data backup). The e-procurement system can be accessed through the Government Intranet Network System (GINS) and the Internet. Reliability and data security of the e-PS infrastructure should be ensured by establishing a data warehouse, Disaster Recovery Site (DRS) and business continuity plan. The Disaster Recovery Site (DRS) is still unavailable but will soon be opened at Rodrigues Island.

The Government Datacenter ensures the high availability of the e-PS. A server architecture diagram (see Figure 13) shows the redundancy maintained on its servers and equipment. The diagram does not show the firewalls and Intrusion Prevention System (IPS) and all other equipment, but there is security equipment such as firewalls and IPS that filter all traffic. The Datacenter architecture for e-PS follows a high availability setup designed to minimize downtime and ensure continuous operation. It typically involves redundant components and failover mechanisms to provide resilience and minimize service disruptions.

⁴⁰ https://ncb.govmu.org/ncb/govtcloud.html

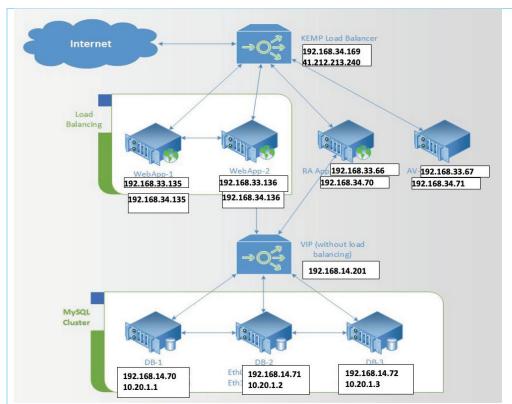


Figure 13 Data Center Architecture

A HA (High Availability) setup is in Active-Active mode to achieve high availability. In this mode, two nodes are actively processing requests and serving traffic simultaneously. Each instance shares the load and operates independently. If one instance fails, the other instances continue to handle requests, ensuring uninterrupted service. Active-Active mode distributes the workload effectively and improves performance by leveraging the collective processing power of all active nodes. Active-Active mode provides better scalability and higher performance due to load distribution among multiple active instances.

The DB VMs (Database Virtual Machines) are in a DB (database) cluster. The diagram represents only the e-PS production environment, there are also separate VM for the Staging environment, 1 (one) VM for the Testing Environment, and one VM for the Training Environment. Each VM runs a web application and Database concurrently. Only in the production environment are are the web application and the database in separate VMs.

There is no data warehouse for the e-PS. So, MIS (Management Information System) SPP reporting and audit trails are run against the same transactional DB. Thus, getting these reports and audit trails is time-consuming during business hours.

Quantitative analysis

- * Recommended quantitative indicators to substantiate assessment of sub-indicator 7(b) Assessment criterion (a):
- Share of time that the system was unavailable during the past calendar year

There were no recorded incidences of system unavailability.

Table 5 Share of time the system was unavailable

	Quantitative Indicators (Minimum)	Recommended Quantitative Indicators	Year			
Sub indicator			2019/2020	2020/2021	2021/2022	
7(b) Infrastructure of the e- Procurement ecosystem	7(b) Assessment criterion (a):	Share of time that the system was unavailable during the past calendar year	4	11	0	

- Frequency of backups (Recovery Point Objective or RPO)

RPO: Full backup is carried out every 8 hrs. and incremental backup every 1 HR

- Time needed to recover from an incident (Recovery Time Objective or RTO)

RTO: it takes 44 hours to recover from an incident.

Source: The Procurement Policy Unit (PPO)

- * Recommended quantitative indicators to substantiate assessment of sub-indicator 7(b) Assessment criterion (a):
- % of suppliers that express that they were unable to bid due to technological issues within the e-Procurement ecosystem

The Survey for this assessment revealed that 42.9% of the bidders had experienced technological issues in submitting bids (Figure 14). Feedback was that the system downtime was sometimes too long and slow, especially when uploading documents and in decryption and encryption procedures after bid closing.

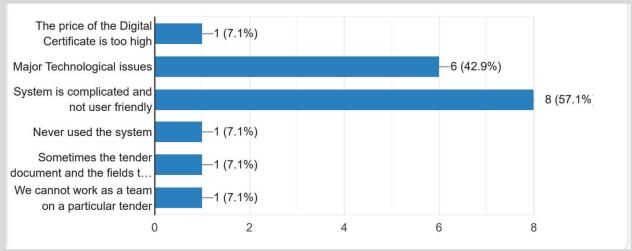


Figure 14 e-Ps Survery on the reason of being unable to bid

Source: e-PS Feedback Survey (2022-2023)

Gap analysis

The e-PS does not have a data warehouse, so the resource-consuming audit trails and report generation slow the system.

Disaster Recovery Site (DRS) is a crucial component for risk management and business continuity strategy. It ensures that critical systems and data can be quickly restored, minimizes downtime, protects against data loss, and helps maintain the organization's operations and reputation during unexpected events. Despite having a robust primary data center infrastructure, the DRS is not available and also there is no data warehouse established in Mauritius, which poses a risk of data security and business continuity.

Recommendations

Reliability and data security of the e-PS infrastructure should be ensured by establishing a data warehouse, Disaster Recovery Site (DRS) and business continuity plan.

Assessment criterion 7(b)(b):

The e-Procurement ecosystem's telecommunications and connectivity are reliable.

Conclusion: Minor gap

Red flag: No

Qualitative analysis

The e-PS is hosted in the Government Open Center, the national data center of the government of Mauritius. GOC is connected to the Internet via two (2) redundant connectivity with route diversity. However, the connectivity is from a single supplier, i.e. Mauritius Telecom.

Mauritius generally has a well-developed internet infrastructure and relatively high levels of internet connectivity. The government and private sector have made significant investments in improving internet access and expanding broadband coverage across the country. The country is connected with multiple fiber optic undersea cables, such as, LON (Lower Indian Ocean Network), SAFE (South Africa-Far East), and METISS (MElting poT Indianoceanic Submarine System). The country does not face serious internet and connectivity issues, except in remote rural areas and last-mile connectivity at few metropolitan areas.

Gap analysis

The Internet to the Data Center comes from a single source. However, for the sake of redundancy, reliability, and high availability of the data center, internet connectivity from multiple sources is required.

Recommendations

To ensure the availability of the Internet in the data center, the connectivity should come from two different sources. Last-mile connectivity should also be easily accessible and affordable.

Assessment criterion 7(b)(c):

The e-Procurement ecosystem has contingency plans that are applied and includes periodic data backup, recovery policies, and policies on virus management.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-PS does not have a well-documented contingency plan and a policy on virus management. A Server-based virus scanner is installed in the GOC data center.

However, periodic data backup is carried out, and a recovery policy is in place. The recovery policy is bound by the SLA of the e-PS vendor Maintenance and Support Agreement, which expired in November 2023 and was renewed until November 2024. The policy covers full and incremental backup. Full backup captures the entire data state at a specific time and provides a baseline for restoring the system in case of data loss or system failure. The incremental backup captures and stores only the files and data that have been modified, added, or deleted since the last backup.

Gap analysis

The e-PS ecosystem does not have a well-documented contingency plan, virus management policy and other policies for data backup, archiving and access.

Recommendations

The PPO should develop an actionable contingency plan, virus management policy, and other policies for data backup, archiving, and access. The Data backup must be tested from time to time to ensure the data backed up can be retrieved when the system is in trouble.

Assessment criterion 7(b)(d):

Firewalls have been set up to guarantee the e-Procurement's ecosystem's security and files uploaded to the platforms are routinely scanned for viruses. *

Conclusion: Minor gap

Red flag: No

Qualitative analysis

A server architecture has been designed to maintain the redundancy on its servers and equipment. GOC has confirmed that there is security equipment such as firewalls and IPS which filter all traffic. The GOC has installed CLAMAV Antivirus on the web application servers, and every file uploaded to the server is scanned for viruses. The PPO and the data center do not have a written policy on virus detection, and how the documents or bids will be treated in case the bidder file contains a virus.

Regarding the virus scanning of the files uploaded to the e-PS, the GOC has installed CLAMAV Antivirus on the web application servers, and every file uploaded to the server is scanned for viruses. The GOC also states that the scanning of files uploaded onto any hosted system rests upon the anti-malware software installed on the client's platform – which is under the responsibility of the client and his/her supplier. However, as a best practice, the data center runs a server-based anti-virus server process to scan for viruses in the files uploaded by the users.

In a few countries, the files are immediately purged/deleted, while in other countries, the files are quarantined to minimize infection to other files in the server. The bidders are notified about the virus detection, and based on the country's policy, the bid of that particular bidder will be treated (according to the specific country policy on virus management).

Users, especially the bidders, encrypt the data and files on their client computer before the bid submission. The server-based virus scanner may not be capable of detecting the virus in the encrypted files, as it may require decryption.

The encrypted file cannot be opened until the bid opening time and date. There should be a clear policy on handling the bid and or files in the e-PS bidding process. But when opened and a virus is detected, as the "Terms of Use" of the e-PS has a policy written under the system integrity section, "The Supplier hereby agrees not to tamper in any way with the software or functionality of the Portal. Without limiting the foregoing, the Supplier agrees not to put any computer programs, information, or data into the Portal that contains any viruses, time bombs, trojan horses, worms, cancelbots, or other computer programming

routines that may damage, interfere with, intercept, or expropriate any system, data or information." The users are bound to the Terms of Use for using the e-PS.

Quantitative analysis

- * Recommended quantitative indicators to substantiate assessment of sub-indicator 7(b) Assessment criterion (d):
- Number of known security breaches on the e-Procurement ecosystem during the last year.
- 0. No such incidences have been encountered so far.

Source: The PPO.

Gap analysis

The PPO and the data center do not have a written policy on virus detection, and how the documents or bids will be treated in case the bidder file contains a virus. The server-based virus scanner may not be capable of detecting viruses in encrypted files submitted by bidders, as it may require decryption.

Recommendations

There should be a written and approved virus management policy to manage situations of any virus infection in the documents uploaded to the e-PS. The Policy should also inform users about the consequences of virus-affected bids and documents.

Assessment criterion 7(b)(e):

Technical audits are carried out periodically to guarantee that the ecosystem complies with relevant security best practices. *

Conclusion: Minor gap

Red flag: No

Qualitative analysis

Technical audits are comprised of e-PS functional, performance, and security audits. There have been three IT security audits. Following the most recent IT security audit by the IT Security Unit (ITSU), their recommendations for resolution of issues identified have been implemented. A Functional audit has not been carried out.

Technical audits are comprised of e-PS functional, performance, and security audits. There has not been any functional system audit. However, three (3) IT security audits of the system were carried out: by the vendor in 2015, PwC in 2017, and IT Security Unit (ITSU), a government department under MTCI, in 2021. The ITSU Security Audit final report was provided in May 2021, which identified a number of security issues. A committee was set up under the chairmanship of the Director, PPO, to resolve the issues.

Key issues identified were:

- 1. Use of Google Drive as storage of operational & training documents about the e-Procurement System
- 2. Access to the backend by e-PS developers
- 3. Physical security of the premises at PPO
- 4. Update of the IT Security Policy

For each issue, recommendations for resolution were provided and have been implemented. For example, Google Drive storage has been replaced by local NAS storage, the IT Security Policy was updated, and the main PPO premises (where the Help Desk and SPOCs are housed) are now under Access Control. Access to the backend is controlled by VPN (with GOC having the details of the developers and a signed NDA with them).

However, access could not be restricted on a needs basis (as recommended by ITSU) because GOC could not guarantee a specified time when developers would be provided access if requested (the main reason is that the data center is not manned 24/7).

Quantitative analysis

- * Recommended quantitative indicators to substantiate assessment of sub-indicator 7(b) Assessment criterion (e):
- -Number of technical audits of the e-Procurement ecosystem's platform(s) carried out during the last three years.

Table 6 Technical audits

	Quantitative Indicators	Recommended Quantitative Indicators	Year		
Sub indicator	(Minimum)		2019/2020	2020/2021	2021/2022
7(b) Infrastructure of the e- Procurement ecosystem	7(b) Assessment criterion (e)	Number of technical audits of the e- Procurement ecosystem's platform(s) carried out during the last three years.	None	By the IT Security Unit (ITSU) of the Ministry of Information Technology, Communication and Innovation on 20 MAY 2021	None
Previous Technical Audit on the e-PS	By the supplier of e-PS Vendor 22.09.2015	By Price WaterHouse Coopers 30 MARCH 2017			

Source: The PPO.

Gap analysis

A comprehensive tool with KPIs for measuring performance (System and functional) and IT system security is not available. A Functional audit has not been carried out.

Recommendations

A comprehensive tool with KPIs for measuring performance (System and functional) and IT system security should be developed to be used for measuring and security audits whenever any significant changes in the system are made.

The functional audit should be carried out to ensure compliance of all the functions and processes with the PPA and PPR, and the system and security should adhere to best practices.

A third party should periodically audit the e-PS to guarantee that the ecosystem complies with relevant security best practices. The audit should include performance, security, and functional audits.

Sub-indicator 7(c)

User interaction

There are standards in place and practical evidence that demonstrate the following:

Assessment criterion 7(c)(a):

The e-Procurement ecosystem allows the use of digital workflows.

Conclusion: Minor gap

Red flag: No

Qualitative analysis

The e-PS is designed in compliance with the PPA and PPR and follows the same manual workflow converted into the digital workflow (Figure 15). All the processes in the e-PS are based on the digital workflow, which is hard-coded in the system. The workflows are not configurable.

The e-PS is designed in compliance with the PPA and PPR and follows the same manual workflow converted into the digital workflow (Figure 15). All the processes in the e-PS are based on the digital workflow, which is hard-coded in the system. The workflows are not configurable. In the workflow there is a process initiator, multiple reviewers, and a final approver. The system is designed to match the roles in the manual system with nominal re-engineering. Based on the user feedback in the survey, the "processes are too lengthy" and cumbersome. The design of the system is compliance-centric.

The digital workflow allows the task escalation upstream and downstream, and at every stage of the process, the user selects the next actor for action. The next actions are displayed at the end of the screen. The e-PS allows one to see the status of the activity on the workflow, but it does not send any follow-up alerts or notifications if any actor on the workflow holds the action or the task is pending. There is also no automatic escalation function configured.

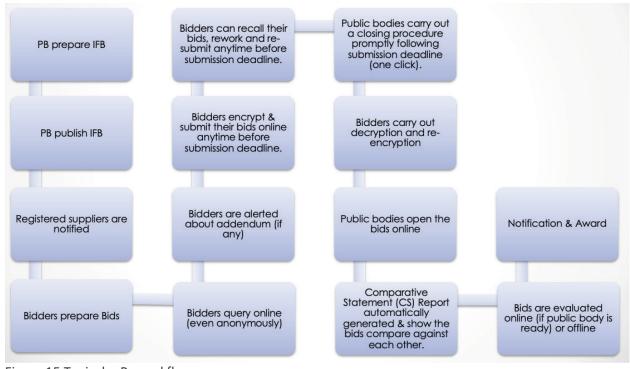


Figure 15 Typical e-Ps workflow

Gap analysis

The workflow is compliance-centric and largely compliant with the processes defined in the PPA and PPR and applied in a paper-based environment. However, processes are not well re-engineered to make them efficient and simple in the e-PS context. Currently, the processes are lengthy and cumbersome. The digital workflow is not configurable with processes hard-coded in the e-PS application.

Recommendations

The e-PS digital workflow should be configurable and efficient and should not be hard-coded in the application.

Assessment criterion 7(c)(b):

The e-Procurement ecosystem has complete and up-to-date terms of use that users must agree to in order to use the platform.

Conclusion: Minor gap

Red flag: No

Qualitative analysis

The e-PS has Terms of Use that users must agree to in order to use the platform. The Terms of Use comprise the System and Privacy and Confidentiality Policy of the e-PS platform. The Terms of Use have not been updated since the e-PS was launched.

Under the System Usage Agreement, the Terms of Use cover the issues related to the Supplier's warranty, user ID, password and digital certificates, Transaction on the Portal, Upgrading and the Modifications on the portal, Minimum system requirements, email alerts, stage completion, Transaction Fees, Audit Trails, Good Faith and Fair Dealing, Information Published on the Portal, Compliance with the Law, Intellectual and Informational Property Ownership, System Integrity, Confidentiality, License, Relationship, Termination, Statute of Limitations, Dispute Resolution, Notices, Governing Law and Jurisdictions, Indemnification, Limitation of Liability, Miscellaneous Provisions, and Copyright and Trademark Notices.

Gap analysis

The Terms of Use have not been reviewed and updated since the e-PS was launched.

Recommendations

In order to ensure that the Terms of Use remain fit for purpose they should be reviewed to ensure that they are up to date, reflecting all relevant developments in the operation and use of e-PS.

Assessment criterion 7(c)(c):

The e-Procurement ecosystem is accessible through common web browsers and mobile devices and does not require installing additional software. *

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

Accessibility to the e-Ps is subject to limitations resulting from software and browser issues and the e-PS cannot be used for any transacions on mobile devices. User satisfaction level on accessibility is low.

The e-PS has limitations, as the system usually runs properly only on client computers with Windows 8 or Windows 10 operating systems and also runs on the specific browser versions of Google Chrome, Microsoft Edge, and Mozilla Firefox as specified in the requirements document in the e-PS portal (https://eproc.publicprocurement.govmu.org/files/masterfiles/system-requirements-V8.pdf).

The system cannot be used for any transactions on mobile devices.

A Digital Signature Certificate (DSC) is mandatory to sign digitally, encrypt, and decrypt bid documents and other documents. Bidders must install Java and Java-based Utility software (NSEU) for signing, encrypting, and decrypting to be able to use their DSC.

Quantitative analysis

- * Recommended quantitative indicators to substantiate assessment of sub-indicator 7(c) Assessment criterion (c):
- % of users who are satisfied with the accessibility of the e-Procurement ecosystem.

Survey results revealed that 66.7% of users who participated in the survey expressed their dissatisfaction with the accessibility of the e-PS. A few of them also mentioned that the e-PS is not compatible with Window 11.

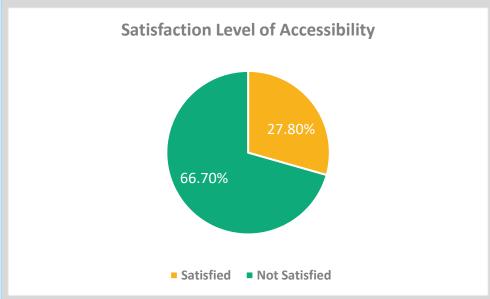


Figure 16 Satisfaction level of accessibility

Source: Survey on the use of e-PS (2022-2023)

Gap analysis

The e-PS is not browser-independent and cannot process transactions through mobile devices.

A Digital Signature Certificate (DSC) is mandatory to sign digitally, encrypt, and decrypt bid documents and other documents. Bidders must install Java and Java-based Utility software (NSEU) for signing, encrypting, and decrypting to be able to use their DSC.

Recommendations

The system should be browser-independent and provide easy access to users from any browser on desktops, laptops, and mobile devices without the installation of additional software.

Assessment criterion 7(c)(d):

The e-Procurement ecosystem requires a single sign-on for the e-Procurement platform(s).

Conclusion: No gap

Red flag: No

Qualitative analysis

The e-PS uses single sign-on.

The e-PS is designed using monolithic architecture, and there are no independent modules linked to it. It uses a single sign-on. To access the e-PS, users log in using their username and password and encrypt and decrypt their digital signature.

Gap analysis

Recommendations

Suggestions for improvement

Regular monitoring, updates, and security assessments should be performed to maintain the integrity and effectiveness of the Single Sign-on (SSO) infrastructure.

Assessment criterion 7(c)(e):

The e-Procurement ecosystem is built using responsive web design.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-PS was designed using traditional old versions of web design tools and languages, which do not support the responsive web design facilities and features that the latest tools and languages provide.

Gap analysis

The e-PS does not use responsive web design to ensure a seamless user experience across all devices.

Recommendations

The e-PS should be designed using responsive web design.

Sub-indicator 7(d)

Integrity of the information

There are standards in place and practical evidence that demonstrate the following:

Assessment criterion 7(d)(a):

For the case of tenders, once the deadline for submission has passed, no changes to the submitted bids are permitted.

Conclusion: No gap

Red flag: No

Qualitative analysis

No changes to submitted bids are permitted once the deadline for submission is passed.

Public Procurement (Electronic Bidding System) Regulations 2015, R.13 (2) states that every bid shall be prepared and submitted through the e-procurement system by the closing date and time set for submission. R.13 (3) states any bidder who has submitted a bid may, at any time before the closing date and time set for the submission of the bid, rework the bidding document or withdraw the bid.

The e-PS is designed to comply with the requirements of the PPA and the PPR. Bidders can only modify their Bids before the bid submission deadline.

Gap analysis

Recommendations

Assessment criterion 7(d)(b):

Bids submitted are encrypted and not accessible until the bid opening.

Conclusion: No gap

Red flag: No

Qualitative analysis

Bids are encrypted by the bidders on their own computer before submission and remain encrypted until the bid opening. However, the e-PS bid Preparation and Submission module and Bid Closing and Opening Module have two critical issues to resolve covering the bid closing process, which is not automatic, and a redundant process after bid closing requiring bidders to first decrypt the bids, then encrypt again, and re-submit to the e-PS.

Bids are encrypted by the bidders on their own computer before submission and remain encrypted and not accessible until the bid opening. However, the e-PS bid Preparation and Submission module and Bid Closing and Opening Module have two critical issues to be resolved, as follows:

- i) There is a separate Bid closing process, an authorized person from the public body should log in to the system and close the bidding process at the stipulated bid closing time when bidders have already submitted their bids. Bid submission is not closed automatically; and
- ii) After the bid closing process is complete, there is another redundant process, where all the bidders should bring their bids back to their computers, first decrypt the bids, then encrypt them again, and re-submit to the e-PS. The process is almost like the bid withdrawal and, again, a substitute for the bid (although changes cannot be made at this stage).

This is a critical algorithmic design issue. In the case of the bid closing process, if a person authorized by a public body does not close the bidding process or the person is late or absent, it will remain open.

In the case of bid submission, if a bidder fails to download the bid and complete the process of decryption and encryption, the bid submitted earlier will not be considered for evaluation, even if the bidder had earlier submitted the bid. The PPR have been amended to legitimize the design of the e-PS in terms of requirements for decryption, encryption and resubmission (PPR R.13(4)). The MAPS Assessment also found, through survey results, that the encryption and decryption are sometimes too slow. That could be because of the size of documents encrypted or decrypted.

Gap analysis

Recommendations

Suggestions for improvement

To provide necessary certainty, amend the operation of the system to ensure that bid submission is closed automatically at the stipulated bid closing time. To streamline bid submission, remove the additional process requiring bidders to decrypt their bid, re-encrypt it and re-submit it to the e-PS after the bid closing.

Assessment criterion 7(d)(c):

Decisions throughout the procurement process carry a time stamp, the responsible user name and the device

identification information, and this information may not be altered.

Conclusion: Minor gap

Red flag: No

Qualitative analysis

Decisions throughout the procurement process carry a time stamp and credentials and information cannot be changed. The e-PS does not capture device information.

The e-PS is designed based on workflow, and decisions are made at different stages of the workflow process by different actors based on their authorized roles. The system captures their credentials and the time stamp of the decisions /activities made within the workflow and stores in the audit log. However, the e-PS does not capture the device information. The information cannot be changed. Additionally, all the users in the e-PS must use a Digital signature to have access to the system and authorized workflow.

Gap analysis

The e-PS does not capture device information. Capturing device information in the e-PS provides a record of user activity for security, compliance, and troubleshooting.

Recommendations

The device information should be captured by the e-PS to record user activity for security.

Assessment criterion 7(d)(d):

An audit log is available to check the activities taken by users over time.

Conclusion: No gap

Red flag: No

Qualitative analysis

The e-PS maintains the Audit log to check the activities taken by users over time.

The audit log is stored in the same database as the e-PS, along with all other production data. Since the audit log is updated frequently, it should be stored in a separate instance of the database, which will provide security as well as the processing in the production will be much faster when doing different operations. The e-procurement system uses a Digital Certificate, also called a Digital Signature Certificate (DSC), for signing and encryption/decryption of data filled on the e-procurement system. The Terms of Use of the e-PS state, "Audit Trails as a part of the workflow, the System has a feature of maintaining an audit trail of

state, "Audit Trails as a part of the workflow, the System has a feature of maintaining an audit trail of transactions executed and activities carried out by the Supplier by way of operating on the Portal. All the transactions executed and activities carried out in the System are time and date-stamped. In the event of any dispute between the public bodies and/or MOFED and the Supplier, the audit trail of the System will form a basis of resolution of the dispute."

Gap analysis

Recommendations

Suggestions for improvement

The audit log should be isolated from the same production database to avoid unauthorized access and damage.

Assessment criterion 7(d)(e):

Public buyers and suppliers are authenticated to minimise the risk of fraud or repudiation of their actions. *

Conclusion: No gap

Red flag: No

Qualitative analysis

The e-PS uses digital certificates/signatures to authenticate Public Buyers and Suppliers and minimize the risk of fraud or repudiation of their actions.

To use the Digital Certificate, a user must have a Digital Certificate issued in his/her name. The digital Certificate is to be installed on the browser of a User's computer system and assigned with the Username that is to be used for accessing the e-Procurement System. The e-PS provides inbuilt security controls as per the government security policy enforced by the IT Security Unit. The PPO has developed an IT Security Policy for the e-PS.

Quantitative analysis

- * Recommended quantitative indicators to substantiate assessment of sub-indicator 7(d) Assessment criterion (e):
- % of users who trust that actions are truly carried out by the person that claims to have done so in the e-Procurement ecosystem.

Not assessed by the survey.

Source: Survey.

Gap analysis

Recommendations

Sub-indicator 7(e)

Confidentiality of the information

There are standards in place and practical evidence that demonstrate the following:

Assessment criterion 7(e)(a):

Bidders are allowed to mark parts of their bids as confidential.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-PS does not provide the facility for Users to mark parts of their bid as confidential. However, once Bids are submitted, the whole bid is kept confidential in the e-PS server.

Gap analysis

There is no option for bidders to mark parts of their bid as confidential.

Recommendations

The e-PS should allow bidders to mark portions of their bids as confidential to protect proprietary information, innovations, business secrets, and bidder privacy.

Assessment criterion 7(e)(b):

Confidential technical elements of the bids are blocked from view for persons who are not part of the evaluation committee, even after bid opening.

Conclusion: No gap

Red flag: No

Qualitative analysis

The bids are blocked from view for persons who are not part of the evaluation committee, even after the bid opening.

Only the chairperson has access to the bids after opening. The Chairperson shares the bids with the evaluation committee members for the evaluation, and they perform the evaluation together. Along the workflow, the bid can be viewed in read-only mode, only by those authorized to have access to those documents.

Gap analysis

Recommendations

Assessment criterion 7(e)(c):

Information regarding the evaluation of bids is kept confidential before the conclusion of the evaluation is disclosed.

Conclusion: No gap

Red flag: No

Qualitative analysis

Information regarding the evaluation of bids is kept confidential before the evaluation report is approved and the summary report is published.

Gap analysis.

Recommendation

Indicator 8. The e-Procurement ecosystem takes advantage of additional technical and functional features available for a variety of procurement methods

Sub-indicator 8(a)

Procurement methods

If the legal and regulatory framework for procurement in the assessed jurisdiction allows for their use, the following procurement methods are carried out through e-Procurement:

Assessment criterion 8(a)(a):

Electronic reverse auctions.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The legal framework allows for the use of electronic reverse auction. The e-PS module for electronic reverse auctions has been developed and is available in the e-Ps but it has not yet been activated and is not operational due to server resource issues.

PPA s.25C⁴¹ provides for the use of Electronic Reverse Auction as a method of procurement. It states that a public body may resort to the electronic reverse auction method of procurement for goods, works or non-consultancy services through the electronic procurement system, provided that the procurement is accurately specified; and the subject matter of the purchase and requirements are suitable for simple bidding processes where evaluation is solely in terms of price. A procurement which includes multiple variables and qualitative factors shall not be subject to electronic reverse auctions.

Phase 3 of the development of the e-Procurement System which was completed in 2017, included the development of modules for framework agreements, electronic reverse auctions, contract monitoring and online prebid meeting. The electronic reverse auction module has been developed and is already available in the e-Procurement system, however, it is not yet activated and operational. While the e-PS already includes the e-Reverse Auction module, enabling it requires additional server resources for real-time bidding. The Procurement Policy Office (PPO) is currently awaiting approval from the Government Online Center (GOC) for these resources. Once approved, the electronic reverse auction module will be available to system Users.

Gap analysis

The e-PS module for electronic reverse auctions was developed in 2017, but it is not activated yet.

Recommendations

The PPO should review the e-Reverse Auction module to ensure that the functionalities built into the module are still relevant. If the module requires updates, PPO should make the necessary changes before activating the module and making it available to system users.

Assessment criterion 8(a)(b):

Electronic purchases from catalogues, including those based on framework agreements, or dynamic purchasing systems.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The legal framework allows for the use of framework agreements and they are already in use in Mauritius. The e-PS has a framework agreement module, which is activated, but it is not commonly used. The legal framework does not include provisions on use of e-catalogues or dynamic purchasing systems.

PPA s.29A provides for procurement by a public body or lead organisation using framework agreements. Framework agreements are already in use in Mauritius, with the PPO reporting that during the period 2020-2021 it assisted 14 public bodies in structuring and implementing Framework Agreements.⁴² This is in addition to existing frameworks established and used by public bodies. Phase 3 of the development of the e-

 $^{^{\}rm 41}$ inserted by s. 73 of Act 15 of 2021 w.e.f. 5 August 2021.

⁴² Annual Report of PPA- https://ppo.govmu.org/Documents/Annual%20Reports/AR2020-21.pdf

Procurement System which was completed in 2017, included the development of a module for framework agreements. The framework agreement module is activated but it is not commonly used by public bodies.

The legal framework does not include provisions on use of e-catalogues or dynamic purchasing systems and the e-PS does not have e-catalog and dynamic purchase modules developed.

Gap analysis

e-Catalog and dynamic purchasing systems are not available in the e-PS.

Recommendations

The legal framework may need to be amended to include provisions permitting use of e-catalogues and dynamic purchasing systems.

The e-Catalog should be introduced to facilitate low value and high volume purchases, including through framework agreements, with relevant amendments made to the legal and regulatory framework. The e-Catalog should be built with commonly used items following the CPV or the UNSPSC catalog classification and codification standard, and should be integrated with the Framework agreement, and other future modules like the e-reverse auction, e-market place.

Dynamic purchasing can be introduced for flexibility and efficiency in procurement which allows for a constantly updated pool of qualified suppliers and faster turnaround times for finding the best deal on frequently bought goods and services.

Assessment criterion 8(a)(c):

Tenders for contracting of PPPs and concessions.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

There is currently no module for procurement of PPP in the e-PS. Procurement of PPPs is not covered by the PPA but is separately regulated in specialized legislation. No PPP/BOT projects have been conducted through e-PS.

Procurement of PPPs is separately regulated with specialized PPP and BOT legislation and a dedicated BOT Projects Unit, assigned with the responsibility of developing policies and supporting the implementation of PPP and BOT Projects. s.4 BOT Act⁴³ and s.3 PPP Act⁴⁴ provide that the BOT Projects Unit shall be within the Procurement Policy Office. However, this creates the potential for conflict of interest between the Procurement Policy Office and the BOT Projects Unit in terms of the project specific advisory activities of the BOT Projects Unit. Consequently, there was an internal agreement for the BOT Projects Unit to work under the aegis of the Ministry of Finance. There is currently no module for procurement of PPP in the e-PS.

Gap analysis

PPP is not regulated through the PPA, and so the e-PS is not used for the tenders for contracting PPPs and concessions.

Recommendations

Consider developing a module to be used for the conduct of tenders (solicited and unsolicited proposals) for PPP contracts. This may require amendment to the legal framework.

The Government of Mauritius may consider amending the relevant legislation to ensure alignment regarding placement of the BOT Projects Unit.

https://bot.govmu.org/Documents/PPP%20Act%202004%20-%20version%205%20August%202021.pdf

⁴³ The Build Operate Transfer Projects Act 2016 No.1 of 2016, Government Gazette of Mauritius No.29 of 2016 https://bot.govmu.org/Documents/BOT%20Projects%20Act%202016%20-%20version%205%20August%202021.pdf

⁴⁴ Public Private Partnerships Act 2004 No.37 of 2004

Sub-indicator 8(b)

Functionalities

The e-Procurement ecosystem supports the following:

Assessment criterion 8(b)(a):

Classification of goods, works and services based on international standards.

Conclusion:Minor gap

Red flag: No

Qualitative analysis

The e-PS supports the classification of goods, works and services based on the standard Common Procurement Vocabulary (CPV) codes but use of this classification is partial and is not applied throughout the procurement cycle.

The e-PS uses the Common Procurement Vocabulary (CPV) as the standard for the classification of goods, works and services. The CPV is a classification system primarily used in public procurement within the European Union (EU). It classifies goods, works, and services into categories and subcategories, facilitating standardized procurement processes across EU member states.⁴⁵

The e-PS uses only the two top levels in the CPV hierarchy to assign IFB classification, but CPV coding is not used throughout the procurement cycle, such as in the planning process or to record contract termination. The coding standard used in the IFMIS system is not the CPV and so the classification codes will have to be mapped for IFMIS.

Gap analysis

The use of the Common Procurement Vocabulary (CPV) in the e-PS is partial and does not cover the entire procurement cycle, thus reducing the quality of data, in particular for tracking procurement processes and outcomes and improving consistency and data analytics.

Recommendations

Establish data input requirements to ensure consistent use of the Common Procurement Vocabulary (CPV) to cover the entire procurement cycle and align with the IFMIS system.

Assessment criterion 8(b)(b):

Two-stage bidding procedures for complex contracting.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

PPA permits use of two stage bidding (PPA s.15(1)(a)). In practice multi-stage procurements are not used and the e-PS does not support two stage bidding procedures.

Gap analysis

The e-PS does not support two stage bidding procedures.

⁴⁵ There are a few popular international standards commonly being used in procurement systems around the world, i.e., The UN Standard Product and Service Code (UNSPSC), Common Procurement Vocabulary (CPV), North American Industry Classification System (NAICS), Central Product Classification (CPC), and European Standard Classification of Products by Activity (CPA). The most common e-Procurement systems are the UNSPSC and the CPV. The UNSPSC is a hierarchical classification system that provides a global standard for categorizing products and services. It covers various industries and sectors and is widely used in e-Procurement systems worldwide.

Recommendations

The e-PS should be developed to support two stage and multi-stage procedures to facilitate the efficient procurement of complex projects.

Assessment criterion 8(b)(c):

Bid acceptance and handling of joint ventures and other joint supplier structures, with information collected from individual suppliers as well as from the joint structure.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-Ps does not facilitate handling of joint ventures online.

The e-PS provides templates where the bidder provides all information about the joint venture. The lead bidder of the joint venture will respond to the Invitation for Bid with information collected from individual suppliers. The joint-venture formation process is not in the system. The process is completed outside the e-PS, and only the JV agreement and the details from the suppliers are entered into the e-PS.

Gap analysis

The JV formation process is not in the-PS. The e-PS should allow for incorporation of specialized sub-contractors for specialized works contracts.

Recommendations

Enhancements to the e-PS should include a JV formation process, along with facilities to search for joint venture members, invitation to join the JV, include member profile and their experience, through the system. It should also facilitate incorporating specialized sub-contractors.

Assessment criterion 8(b)(d):

Submission of bids with prices provided at the unit level.

Conclusion: No gap

Red flag: No

Qualitative analysis

The e-PS provides templates for all the price forms, and the templates enable provision of the prices at the unit level. In a few of the templates, there is no field-level validation to control the data consistency. The unit-level submission of data facilitates extensive spend analysis using different data analytics tools.

Gap analysis

Recommendations

Suggestions for improvement

Review all e-PS forms to ensure that there is field-level validation to control the data consistency in all cases.

Assessment criterion 8(b)(e):

Submission of bids in different currencies and display of information in multiple languages.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-PS is designed to accept multiple currencies. The e-PS is only available in English.

The e-PS is designed to accept multiple currencies, a different currency can be used at the item level. The currencies are converted into the local currency for evaluation purposes. The conversion rates are taken from the Bank of Mauritius, which is the Central Bank of Mauritius.

There are a number of languages used in Mauritius. Mauritian Creole, a French-based Creole, is spoken by around 90% of the population. French and English languages are also spoken in Mauritius, with English being the official language in Parliament. The e-PS is designed only in the English language, and the information is displayed only in English.

Gap analysis

The e-PS is designed only in the English language and it does not currently support multiple languages. This could have a negative impact on market competition, in particular for MSMEs which may not have the necessary language skills to easily engage in the English language only. Having an e-PS in the English language only could also adversely impact transparency and accountability for those wishing to use available data to monitor procurement activity.

Recommendations

The e-PS should be developed to support multiple languages, including Mauritian Creole and French, to facilitate access to the e-PS for the majority of the population.

Assessment criterion 8(b)(f):

Acceptance of bid securities and bonds.

Conclusion: Substantive gap

Red flag: Yes

Qualitative analysis

The e-Ps does not facilitate acceptance of bid securities and bonds using the efficiencies available from an IT based solution.

Acceptance of the bid securities and bonds and their authenticity has been a huge challenge in the bidding process. As a solution, the e-PS, at the moment, accepts a scanned copy of the bid security with the bid submission. It also accepts Bid Securing Declarations, but in practice, this is not used. The e-PS is not integrated with financial institutions, so the electronic submission of the bid security or bonds is not available.

Gap analysis

The banks are not interfaced with the e-PS to enable the electronic acceptance of the bid securities and bonds. Bid Securing Declarations are not in use in Mauritius.

This Gap is assigned a Red flag because it requires engagement and cooperation with non-governmental third parties (including commercial Banks and Banker's Association).

Recommendations

Automating the acceptance of the bid security and the bonds through direct interface with the financial institutions (i.e. Banks) is essential in the e-PS. An integration plan should be prepared, approved, and implemented by the Procurement Policy Office to integrate the e-Procurement System with all commercial banks to enable an authorized bank officer to upload digitally signed bank guarantees/Securities following a

bidder's request. The e-Guarantee module should be developed and financial institutions should be brought into the e-PS as soon as possible, subject to necessary discussion, consents or authorisations from, for example, the Bank of Mauritius and the Banker's Association. (see also wider recommendation on integration at 7(a)(a)). Bid securing declaration (BDS) could be used for low risk/low value procurement processes. BSDs eliminate the need for bidders to tie up capital in the form of bid securities. This makes it easier for SMEs to participate in public tenders.

Assessment criterion 8(b)(g):

Electronic acceptance of products for effective inventory management.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-PS does not support the processes of electronic acceptance of products for effective inventory management. The e-Contract Monitoring module is developed, but the module is not activated in the e-PS.

Gap analysis

There is no function and there are no tools enabled in the e-PS ecosystem to handle the acceptance of products and record them for effective inventory management.

Recommendations

The e-Contract Monitoring module should be enabled and functions for product acceptance and managing the inventory should be incorporated in e-PS.

Assessment criterion 8(b)(h):

Electronic invoicing.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-PS does not provide tools for electronic invoicing.

Gap analysis

The e-PS does not provide tools for electronic invoicing, which has a negative impact on the efficiency of the procurement ecosystem.

Recommendations

The electronic invoicing tool should be developed and used along with the e-Contracting module.

Indicator 9. Data from the e-Procurement ecosystem facilitates decision-making

Sub-indicator 9(a)

Open data

Assessment criterion 9(a)(a):

Data stored in the e-Procurement ecosystem is disclosed as machine-readable open data in a website for anyone to download, use and share, with the appropriate license for use, and without incurring any fees.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

Data stored in the e-Ps is not disclosed as machine-readable open data on a website for anyone to download.

The e-PS does not incorporate a designated standard for storing, publishing and disclosure of data in machinereadable format. Notwithstanding the Open Data Policy availability in the country, access to procurement data and dissemination of that data is limited and the failure to provide available information in open machinereadable data format means that there is a significant absence of transparency.

Gap analysis

The e-PS does not store and disclose data in a machine-readable open data format on the website for anyone to download, use and share, with the appropriate license for use. The lack of publicly available data limits transparency and opportunities for data to be collected, analysed and used for a range of purposes to improve the public procurement system as a whole, including improvements to: inform policy making; identify patterns of poor procurement, performance or prohibited behaviours leading to measures for improvement; improve quality in public spend datasets to support decision making; and increase transparency and accountability.

Recommendations

The Open Contracting Data Standard (OCDS) is a commonly adopted standard for data transparency, storing and publishing procurement and contract data in a machine-readable format.

It is recommended that the e-PS incorporate the Open Contracting Data Standard (OCDS) as the backbone for the storage and timely publishing of accurate data for the complete life-cycle of the procurement process, from planning to contract execution. Comprehensive data should be available to all stakeholders to permit analysis, and particularly for measuring, monitoring, and evaluating procurement performance. The roll out of publication of OCDS data from the e-PS must be supported by a program to build capacities for procurement data use and analysis with suitable quality and content adjusted for the differing needs of all the users, including suppliers, public bodies and civil society.

Assessment criterion 9(a)(b):

Data from the e-Procurement ecosystem is published in a timely manner and provides accurate information and enough coverage of the whole procurement system. *

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

Procurement data covering the whole procurement system is not available and the e-PS does not publish data in machine-readable open format.

According to results of the survey conducted for the purposes of this MAPS Assessment, satisfaction levels in terms of timeliness, accuracy and coverage of data published from the e-PS is low.

Quantitative analysis

- * Quantitative indicators to substantiate assessment of sub-indicator 9(a) Assessment criterion (b):
- % of procurement disclosed as a share of the total value of procurement Data not available.
- % of procurement disclosed as a share of the total number of procurement processes Data not available.

- Frequency of open data publication and update0% as Data not available in open machine-readabale format.

Source: The PPO

- * Recommended quantitative indicators to substantiate assessment of sub-indicator 9(a) Assessment criterion (b):
- % of users who are satisfied with the timeliness, accuracy and coverage of data published from the e-Procurement ecosystem.

Source: Survey.

Results of the survey conducted for the purposes of this MAPS Assessment reveal that 9.23% of of users are very satisfied. Just Satisfied users are 67.69% and 23.08% are not satisfied at all in terms of timeliness, accuracy and coverage of data published.



Figure 17 Satisfaction level with the timeliness, accuracy and coverage of data published

Gap analysis

Data from the e-PS is not published in a timely manner and does not provide accurate information and enough coverage of the whole procurement system, reducing the overall transparency of the system.

Recommendations

See combined Recommendations at 9(a)(a).

Assessment criterion 9(a)(c):

Open data is used by stakeholders for analysis, and particularly for measuring, monitoring, and evaluating procurement performance.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

Open data is not published in the e-PS.

Gap analysis

Open data is not published in the e-PS and data is not available to stakeholders for analysis.

Recommendations

See combined Recommendations at 9(a)(a).

Assessment criterion 9(a)(d):

A program to build capacities for procurement data use and analysis is implemented with suitable quality and content for the needs of all the users. *

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

There is no program to build capacity for procurement data use and analysis.

Quantitative analysis

- * Quantitative indicators to substantiate assessment of sub-indicator 9(a) Assessment criterion (d):
- Number of government officials trained in the use and analysis of procurement data
- Number of suppliers trained in the use and analysis of procurement data
- Number of citizens, academics and journalists trained in the use and analysis of procurement data

Data not available

Source: Institution responsible for the e-Procurement ecosystem

- * Recommended quantitative indicators to substantiate assessment of sub-indicator 9(a) Assessment criterion (d):
- % of users who are satisfied with the capacity building program to use and analyze procurement data from the e-Procurement ecosystem

Survey results reveal that only 12.3% of users are satisfied with the capacity building program to use and analyze procurement data from the e-PS. 63.1% of users indicated the use and analysis of procurement data are not applicable to them, and 24.6% of users are not satisfied. Given the lack of a dedicated capacity-building program for procurement data use and analysis, respondents may have considered general capacity-building programs in their responses.

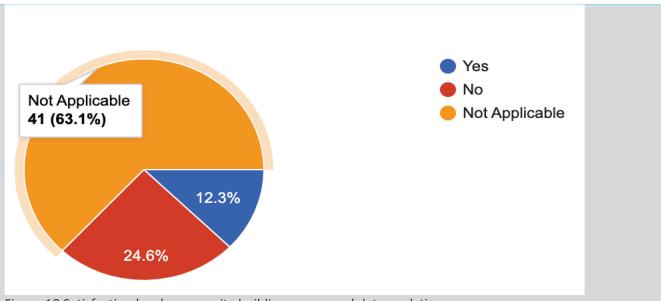


Figure 18 Satisfaction level on capacity building on use and data analytics

Source: Survey.

Gap analysis

The e-PS ecosystem does not have any program prepared or planned for building capacity among the users of the e-PS on use of procurement data and carrying out data analytics. Satisfaction level is low with respect to current capacity building programs.

Recommendations

See combined Recommendations at 9(a)(a).

Sub-indicator 9(b)

Data access and presentation

Assessment criterion 9(b)(a):

Procurement data may be easily searched, filtered, and downloaded in bulk.

Conclusion: No gap

Red flag: No

Qualitative analysis

The e-PS provides search functionality from the homepage, and also an advanced search with a few filters. Advance search does not allow Users to create complex queries with AND, OR and XOR and using other filters.

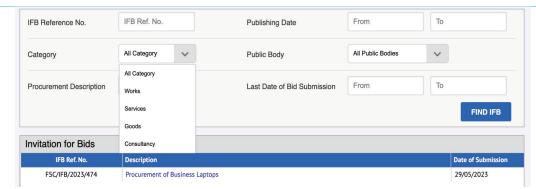


Figure 19 Advance search

The e-PS provides functionality to provide procurement data through pre-configured MIS reports (no ad-hoc reporting feature). The e-PS provides tools for search with filters and it also allows bulk data download from the MIS report module. Use of the MIS report is easy, albeit time-consuming during working hours. For example, downloading bulk data (such as number of bids received from 2015 to 2023) may take 8-10 hours.

Gap analysis

Recommendations

Suggestions for improvement

The e-PS should be structured to provide a comprehensive search tool with compound filter facility.

Assessment criterion 9(b)(b):

Proper documentation about the procurement data is provided and kept up to date.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

Only very limited documentation about procurement data is available and the MIS reporting feature has not been updated.

There is no documentation available on procurement data except those data prepared and published in the PPO's Annual Report.⁴⁶ Minimal documentation was provided by the vendor and the MIS reporting feature has not changed over the life-time of the e-PS implementation.

Gap analysis

Very limited documentation about procurement data is available and the MIS reporting feature has not been updated, potentially providing a misleading picture.

Recommendations

The documentation about procurement data should be prepared and the MIS reporting feature should be updated on a regular basis.

Assessment criterion 9(b)(c):

Procurement data is presented through relevant and up-to-date data visualisations.

Conclusion: Substantive gap

⁴⁶ https://ppo.govmu.org/Documents/Annual%20Reports/AR2020-21.pdf

Red flag: No

Qualitative analysis

There is no data visualization feature provided in the e-PS System.

The e-PS homepage displays just the following statistics without any visualization. If you click more, it displays data in a tabular format without any description.

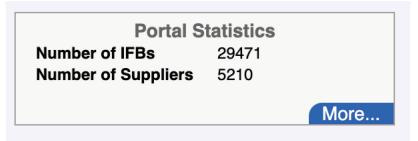


Figure 20 Portal statistics

Management Information System Reports can be provided in the form of a list or table in a pre-defined set of information.

The data should be cleaned using custom-made Python-scripts. Visualizations are prepared through Excel or Python using matplotlib and seaborn visualization libraries by the experts who have knowledge in programming.

Gap analysis

There is no data visualization feature provided in the e-PS.

Recommendations

Update the e-PS to facilitate data visualization of procurement and contract data from different perspectives.

Indicator 10. The private sector is fully engaged with the e-Procurement ecosystem

Sub-indicator 10(a)

Dialogue between the public and private sectors

Assessment criterion 10(a)(a):

The government encourages an open dialogue with the private sector to improve the e-Procurement ecosystem.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

There is no formal forum for open dialogue with the private sector on e-PS.

A joint Public Private Sector Steering Committee was established in 2015 for the e-PS implementation support. Following the launch of the e-PS, there is no evidence that the Committee is active.

During the launch of the e-PS, the private sector partners had agreed to assist with scaling up e-procurement training to reach a wider private sector supplier base.

The online survey response from private sector entities is very low, which characterizes the private sector's perception and participation in procurement initiatives. However, the PPO occasionally holds meetings with the Building and Civil Engineering Contractors Association (BASECA https://baceca.org/) and the Mauritius Chamber of Commerce and Industry (https://www.mcci.org/en/).

The MAPS Core Assessment concluded that there is a lack of trust, transparency, communication, and there are limited opportunities for capacity building among private companies and SMEs.

Gap analysis

There is no formal forum for open dialogue with the private sector on e-PS, thus hindering opportunities to engage with users in a wider forum and learn from their expressed views and feedback on the operation of the e-PS

Recommendations

A formal forum for regular open dialogue with the private sector should be established, supported by an outreach campaign to ensure wide engagement. This will be with the aim of instilling long term collaborative working and full, transparent engagement, to support the continued adoption and improvement of the e-PS in the country, for the benefit of all stakeholders.

Sub-indicator 10(b)

Private sector's use of the e-Procurement ecosystem

Assessment criterion 10(b)(a):

The e-Procurement ecosystem contains or links to a register of suppliers. *

Conclusion: No gap

Red flag: No

Qualitative analysis

The e-PS maintains a Supplier register in its database.

All suppliers must be registered to participate in any procurement opportunities. The register is available to public bodies as well as from their user dashboard. A review of the Suppliers registered in the last three years shows that the supplier adoption of the e-PS is slow (Table 6), as it was 389 In 2019/2020, 1572 in 2020/2021, and it dropped to 811 in 2021/2022.

The e-PS captures the bidder type as either SME or not. In total 476 SMES registered in 2019/2020, 452 in 2019/2021, and 231 SMEs in 2021/2022. (Table 7)

Quantitative analysis

- * Quantitative indicators to substantiate assessment of sub-indicator 10(b) Assessment criterion (a):
- Number of suppliers registered in the last three years

Table 7 Supplier registration

Sub indicator	Quantitative Indicators	Recommended	Year		
	(Minimum) Quantitative Indicators		2019/2020	2020/2021	2021/2022
10(b)Private sector's use of the e- Procurement ecosystem	10(b) Assessment criterion (a)	Number of suppliers registered in the last three years	389	1572	811

- Number of SMEs registered in the last three years

Table 8 SMEs in e-PS

Sub indicator	Quantitative Indicators	Recommended	Year		
	(Minimum) Quantitative Indicators	2020	2021	2022	
10(b) Private sector's use of the e- Procurement ecosystem	10(b) Assessment criterion (c)	Number of SMEs registered in the last three years	476	452	231

Source: The PPO

Table 9: Supplier registration Financial Year 2022-2023

SUPPLIERS REGISTRATION STATISTICS					
	DOMESTIC	FOREIGN	TOTAL		
Goods	2500	300	2800		
Works	1090	110	1100		
Non-consulting services	750	110	860		
Consultancy Services	300	200	500		
TOTAL	4740	1120	5860		

Gap analysis

Recommendations

Suggestions for improvement

Enhance the register of suppliers with information about the SME status, classification from CIDB, geotags, and other credentials.

The PPO should develop a comprehensive outreach campaign to register local and foreign bidders in the e-PS, including by mobilizing public bodies and use of social media.

Assessment criterion 10(b)(b):

The e-Procurement ecosystem contains or links to an up-to-date list of debarred suppliers and measures are taken to prevent procuring entities from awarding contracts to debarred suppliers. *

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The e-PS does not list debarred suppliers. The list of suspended/debarred/disqualified is available only on the PPO website.⁴⁷ The e-PS does not provide a direct link to the list of debarred suppliers on the PPO website.

Section 53 of the PPA 2006 makes provision for the suspension and debarment of suppliers. The list published by the PPO of suspended/debarred/disqualified suppliers includes details of the period for which suppliers will be ineligible and the reasons for their suspension, debarment or disqualification. Public bodies manually verify whether firms are debarred at the time of contract award. The e-PS does not automatically verify against the list.

Quantitative analysis

- * Recommended quantitative indicator to substantiate assessment of sub-indicator 10(b) Assessment criterion (b):
- Percentage of suppliers in the e-Procurement ecosystem's debarred supplier list as a share of the total number of debarred suppliers.

Source: Institution responsible for the e-Procurement ecosystem

The e-PS does not keep records of debarred suppliers.

Gap analysis

The e-PS does not contain a record of debarred suppliers, thus reducing efficiency of the process for verifying eligibility.

Recommendations

The e-PS should be improved to include the functionality to record debarred suppliers, and the list should be automatically verified by the e-PS at the time of bidder registration, bid submission and award time to eliminate participation until the debarment lapses.

Assessment criterion 10(b)(c):

No systemic constraints such as the ones listed below inhibit private sector access, including from foreign suppliers, to e-Procurement: *

- Internet access and connectivity issues
- Data literacy
- Problems in the design and user interface of the platforms integrating the e-Procurement ecosystem

⁴⁷ https://ppo.govmu.org/Pages/Suspended-Debarred-Disqualified-Suppliers.aspx According to the PPO list, there are in total four (4) debarred firms listed.

- Technological issues of the platforms integrating the e-Procurement ecosystem
- Burdensome or costly process to register as a supplier and bid
- Burdensome or costly process to receive training and guidance to use e-Procurement
- Difficulties particular to foreign suppliers, including those related to bidding in different currencies, access to information in multiple languages, etc.

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

The results of the survey conducted during this MAPS Assessment identifies a number of systemic constraints inhibiting private sector access to e-Procurement. Of particular note are issues with lack of data literacy, e-PS browser dependency.

Systemic constraints:

The quantitative analysis shows that the participation of the bidders in a tender on average is 2.74 in manual processes and 4.53 in case of e-PS in 2021/2022. The data shows (Figure 21) a declining trend of bidder participation in e-PS in the last three years:

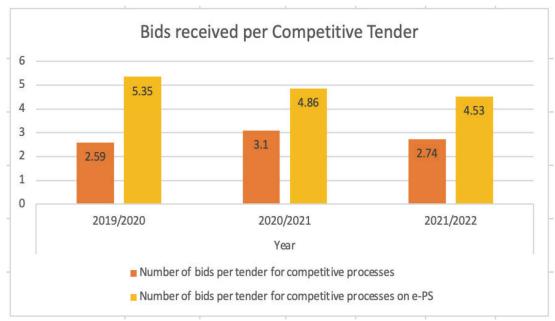


Figure 21 Bids received per competitive tender

Contract awards are growing, with 1184 in 2019/2020, 2484 in 2020/2021, and 2932 in 2021/2022. The number of foreign suppliers using the e-PS was 291 in 2019/2020, 328 in 2020/2021, and 202 in 2021/2022.

Feedback on specific issues raised in the survey conducted during the MAPS Assessment is as follows:

• Internet access and connectivity issues - Mauritius generally has a well-developed internet infrastructure and relatively high levels of internet connectivity. The government and private sector have made significant investments in improving internet access and expanding broadband coverage across the country. The country is connected with multiple fiber optic undersea cables, such as, LON (Lower Indian Ocean Network), SAFE (South Africa-Far East), and METISS (MElting poT Indianoceanic Submarine System). The country does not face serious internet and connectivity issues, except in remote rural areas. (see recommendation at 7(b)(b) concerning e-PS over-reliance on a single internet provider)

- **Data literacy**: There is a lack of Data literacy (which is essentially being able to read, work with, and understand data to make informed decisions) among e-PS users as there is no capacity building program to educate them on data and its use. (see recommendations on capacity building at 5(a)(a) and 9(a)(d))
- Problems in the design and user interface of the platforms integrating the e-Procurement ecosystem: The users feedback suggests that one of the factors inhibiting access to the e-PS is the browser dependency of the e-PS. The computer systems today use modern browsers with responsive design and more interactive features. Users keep updating their computers and laptops with new versions of browsers, and the newer versions of the browsers do not support the e-PS which as a result does not work correctly.
- Technological issues of the platforms integrating the e-Procurement ecosystem: Some of the complaints on the technical issues of the e-PS are that the e-PS is slow to load, slow in encrypting and decrypting bid documents, sometime the e-PS is down/not working, the processes in the e-PS are too lengthy, templates are too cumbersome, bids submission is challenging as the bidder has to complete two steps to submit the bid, and other issues. Besides that, integration with the business registrar, banks, tax as well as the Independent Review Panel module are expected to facilitate efficiency, integrity and transparency.
- **Process to register as a supplier and bid:** The bidder does not pay any fee for registration in the e-PS. The only cost incurred is the cost of the digital certificate that should be paid to the DSC provider, the fee is nominal.
- Training and guidance to use e-Procurement: Trainings are provided free of charge but getting training may be a challenge, the challenges could be the timing, forming a cohort, finding a convenient schedule for the training and other factors.
- Difficulties particular to foreign suppliers, including those related to bidding in different currencies, access to information in multiple languages, etc: The e-PS allows to bid in foreign currencies, and the language of the e-PS is English. The e-PS does not have dedicated instructions for the bidders for registration, obtaining DSC, participation in the bids, and other policies of the government. (see recommendations at 1(b)(a) and 8(b)(e))

Quantitative analysis

- * Recommended quantitative indicators to substantiate assessment of sub-indicator 10(b) Assessment criterion (c):
- Number of bids per tender for competitive processes

Table 10 Number of bids per tender

Sub indicator	Quantitative Indicators (Minimum)	Recommended	Year		
		Quantitative Indicators	2019/2020	2020/2021	2021/2022
10(b) Private sector's use of the e- Procurement ecosystem	10(b) Assessment criterion (c)	Number of bids per tender for competitive processes	2.59	3.1	2.74
		Number of bids per tender for competitive processes on e-PS	5.35	4.86	4.53

⁻ Number of suppliers that were awarded contracts in the last three years

Table 11 Number of suppliers that were awarded contracts

Sub indicator	Quantitative Indicators	Recommended Quantitative Indicators	Year		
			2019/2020	2020/2021	2022
10(b) Private sector's use of the e- Procurement ecosystem	70 N	Number of suppliers that were awarded contracts in the last three years		2484	2932

- Number of registered foreign private sector users in the last three years

Table 12 Number of foreign suppliers

Sub indicator	Quantitative Indicators (Minimum)	Recommended Quantitative Indicators	Year		
			2020	2021	2022
10(b) Private sector's use of the e- Procurement ecosystem	10(b) Assessment criterion (c)	- Number of registered foreign private sector users in the last three years	291	328	202
		No of supplier participating in bids	3415	5858	6233

Source: The PPO

- % of private sector users who express that there are constraints that inhibit private sector access to the e-Procurement ecosystem.

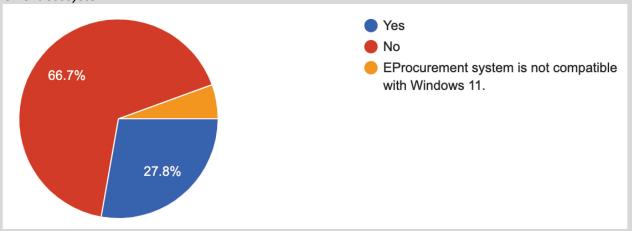


Figure 22 % of private sector users who express constraints in access to the e-PS ecosystem

Source: Survey.

Gap analysis

User feedback suggests that a significant factor inhibiting access to the e-PS is its browser dependency.

^{*} Recommended quantitative indicators to substantiate assessment of sub-indicator 10(b) Assessment criterion (c):

Computer systems today use modern browsers with responsive design and more interactive features. Users keep updating their computers and laptops with new browser versions, and the newer versions of the browsers do not support the e-PS which results in the e-PS not working correctly.

Some complaints about the technical issues of the e-PS are that it is slow to load, slow in encrypting and decrypting bid documents, sometimes the e-PS is down/not working, the processes in the e-PS are too lengthy, templates are cumbersome, bid submission is challenging as the bidder has to complete two steps to submit the bid, and other issues.

There is a need for integration of the e-PS with the business registrar, banks, tax (see Recommendation at 7(a)(a)) as well as Review Panel module, in order to facilitate efficiency, integrity and transparency.

Recommendations

The technical and functional process challenges should be resolved to boost user confidence in the e-PS. Some of the challenges that should be addressed immediately are:(i) resolving browser compatibility, (ii) removal of the requirement for a second-time decryption and encryption requirement, (iii) integration with the external systems (i.e IFMIS, tax, business registrar, banks, etc.), (iv) developing and making available the IRP module, (v) simplification of the e-SBDs and templates, (vi) simplification of process workflow, and (vii) server resource management for resource consuming processes of the e-PS.

Sub-indicator 10(c)

Use of e-Procurement for specific sectors

Assessment criterion 10(c)(a):

e-Procurement is used for key sectors associated with the government's priority areas

Conclusion: Substantive gap

Red flag: No

Qualitative analysis

Key sectors and related strategies are not identified by the government, and risk associated with sectors are not assessed.

Gap analysis

The government does not have a classification for key sectors and does not have strategies for them thus reducing the opportunity to promote and improve markets in the government's priority areas.

Recommendations

Based on government's priority spending areas, key sectors associated with the procurement of goods, works and services should be identified and risk assessed and the information gathered used to conduct targeted engagement with relevant sector markets with participation of the private sector.

Indicator 11. The e-Procurement ecosystem ensures civil society engagement

Sub-indicator 11(a)

Dialogue between government and civil society

Assessment criterion 11(a)(a):

The government encourages an open dialogue with civil society to improve the e-Procurement ecosystem

Conclusion: Substantive gap

Red flag: Yes

Qualitative analysis

Civil society is not actively engaged by government to facilitate the monitoring and improvement of the public procurement system in general or the e-PS in particular.

There are no civil society groups in Mauritius that have a procurement focus within their agendas and/or actively provide oversight and exercise social control that would improve integrity in public procurement. The legal/regulatory and policy framework does not provide for citizens participation in procurement processes. There is not much evidence of participation of citizens in procurement through consultation, observation or monitoring. Based on discussions with CSOs during the core MAPS assessment, CSOs do not consider that their views are taken into account while formulating changes to the public procurement system. CSOs consulted during the MAPS assessment, expressed a need for training and capacity building of CSOs.

The e-PS can bridge this gap between the CSOs and public procurement by: i) incorporating OCDS in the e-PS and disseminating the data and information in machine-readable format as well as having a dedicated section in the e-PS for CSOs and the general public with comprehensive data analytics on the procurement data and with infographics to help CSOs and the general public better understand the information. With that CSOs can contribute to enhancing the e-PS as well. It will also strengthen citizen engagement in the e-PS; ii) creating a public forum on the e-PS, where CSOs can discuss the different issues related to the e-PS, and the PPO can respond and participate in the discussion; and iii) re-activating the steering committee for the implementation of the e-PS and including the representation from CSOs as well as other private sector and key stakeholders.

Gap analysis

Civil society is not actively engaged by government to facilitate the monitoring and improvement of public procurement.

This Gap is assigned a Red flag because it significantly impedes the objectives of improving accountability and improving effectiveness and efficiency of the procurement system through meaningful civil society engagement. In order to be fully effective it requires inter-institutional cooperation and allocation of resources and policy decisions which go beyond the sole remit of the PPO.

Recommendations

Combined recommendations for 11(a)(a), 11(b)(a) and 11(b)(c)

The e-PS should be structured to provide a comprehensive search tool with compound filter facility so that data can be easily accessed and analysed. Government must provide resources and expertise to ensure that relevant authorities are able to prepare and deliver a comprehensive and ongoing training programme and capacity building for CSOs. This should start as soon as possible, to build the capacity of civil society to understand the public procurement regime, both the legal framework and operation, to facilitate the role of civil society in monitoring public procurement activity. This must include provision of information and practical understanding of the e-PS and guidance on what information is available on-line, how it is accessed and how it can be analysed.

A formal forum should be established for dialogue between the government and the CSOs to improve the e-Procurement ecosystem. This increased capacity building through engagement with civil society should be supported by introduction of a simple system to ensure that input, comments and feedback is sought from civil society on a regular basis and no less than once a year, including potentially, through a feedback mechanism available through e-PS for both individual citizens and civil society organisations. To increase accountability and transparency, the Government should consider input received from citizens and civil society organisations, publish its reasoned responses promptly together with an action plan with timelines for implementation. Data should be collected on the nature and extent of citizen/CSO access to and use of e-PS data.

Sub-indicator 11(b)

Direct engagement from civil society

Assessment criterion 11(b)(a):

The e-Procurement ecosystem allows citizens to access and search information of all stages of the procurement process and all procurement methods in accordance with the legal/regulatory framework.

Conclusion: : Substantive gap

Red flag: Yes

Qualitative analysis

The e-PS allows searches of all the IFBs on goods, works, services and non-consulting services using the open competitive bidding procedures from the search function on the homepage of the system. It does not allow selection of a filter based on the stages of the procurement process and procurement methods.

In practice, comprehensive data is not available through e-PS due to limited online use of e-PS, as analysed elsewhere in this MAPS Assessment. There is no comprehensive search tool with different filters and features for combining filters using AND, OR, XOR and other logical operations in the e-PS.

Gap analysis

The e-Ps does not provide a comprehensive search tool with filters and features which allow citizens/civil society to access and search information on all stages of the procurement process and all procurement methods. This Gap is assigned a Red flag because lack of provision for access to information on procurement by the public significantly hinders and impedes the objectives of improving transparency, accountability, effectiveness and efficiency of the procurement system.

Recommendations

The e-PS should be structured to provide a comprehensive search tool with compound filter facility. See combined recommendations at 11(a)(a)

Assessment criterion 11(b)(b):

The e-Procurement ecosystem allows citizens to provide comments and feedback at the stages of the procurement process where this is allowed by the legal/regulatory framework.

Conclusion:: No gap



Red flag: No

Qualitative analysis

Not applicable as the legal/regulatory framework does not specifically allow for citizen engagement in the conduct of the procurement process and for provision of comments and feedback during the stages of the procurement processes. (see analysis and recommendations at 11(a)(a) to promote citizen/CSO engagement)

Gap analysis

Recommendations

Assessment criterion 11(b)(c):

There is evidence that citizens use the opportunities available to access information of, and provide comments and feedback to specific procurements by means of the e-Procurement ecosystem. *

Conclusion: : Substantive gap

Red flag: No

Qualitative analysis

There is no evidence that citizens are using the opportunities available to access information, and provide comments and feedback to specific procurements by means of the e-PS.

Quantitative analysis

- * Quantitative indicators to substantiate assessment of sub-indicator 11(b) Assessment criterion (c):
- Number of downloads of procurement data
- Number of comments from civil society users in the last calendar year
- Number of users who accessed the e-Procurement portal(s) in the last calendar year

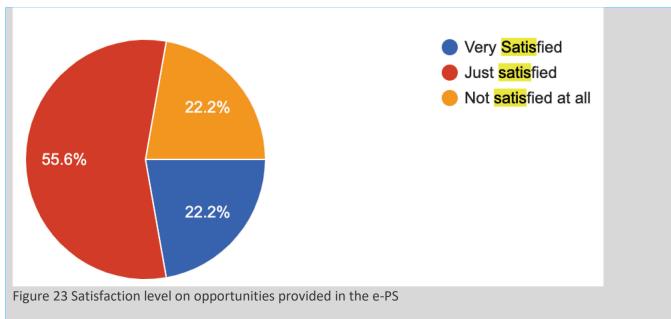
Source: institution responsible for the e-Procurement ecosystem.

Not applicable: and data not available: The CSOs have not yet been introduced to the e-PS system and also do not have access to the system.

- * Recommended quantitative indicators to substantiate assessment of sub-indicator 11(b) Assessment criterion (c):
- % of users who are satisfied with the opportunities provided in the e-Procurement ecosystem to access information of, and provide comments and feedback to specific procurements.

The results of the survey conducted for this MAPS assessment reveals that 22.2% of the respondents are very happy, and the same % of respondents are not at all just satisfied. A large % of respondents, 55.6% respondents are just satisfied.





Source: Survey.

Gap analysis

There is no data showing that citizens are using the opportunities available to access information of, and provide comments and feedback to specific procurements by means of the e-PS.

Recommendations

See combined recommendations at 11(a)(a).

Indicator 12. The e-Procurement ecosystem enables effective treatment of risks, control and audit.

Sub-indicator 12(a)

Internal and external control

Assessment criterion 12(a)(a):

There is evidence that the e-Procurement ecosystem facilitates internal control.

Conclusion: : No gap

Red flag: No

Qualitative analysis

There is evidence that the e-PS facilitates internal control as the e-PS can provide access to internal auditors on an ad hoc basis. Internal auditors can get access, upon request, to all the documents, content and processes of specific bids on a read-only basis. A few Ministries and departments have carried out internal audit using the e-PS data.

Gap analysis.

Recommendations



Assessment criterion 12(a)(b):

There is evidence that e-Procurement ecosystem facilitates external control. *

Conclusion: : Substantive gap

Red flag: No

Qualitative

The e-PS provides ad-hoc access to the NAO (National Audit Office) on demand as an external controller. The auditors have read-only access to the complete procurement proceedings from start to finish. In practice no external controls using e-PS have been carried out so far by NAO meaning that there is currently not evidence that the e-Procurement ecosystem facilitates external control.

Quantitative analysis

- * Recommended quantitative indicator to substantiate assessment of sub-indicator 12(a) Assessment criterion (b):
- Percentage of audits focused on procurement which used data from the e-Procurement ecosystem. There are no such external controls carried out so far by the NAO, the agency responsible for external audits in the country.

Source: The PPO.

Gap analysis

The e-PS provides only ad hoc access to procurement proceedings on demand. The system does not provide a dedicated tool for External control/audit and there is no evidence of the National Audit Office using e-PS to carry out procurement audits.

Recommendations

The e-PS should develop a dedicated tool for the external auditors, facilitating auditors to use the e-PS for financial and procurement audits.

Sub-indicator 12(b)

Identification and treatment of risks

Assessment criterion 12(b)(a):

Ex-ante controls and algorithms are in place in the e-Procurement ecosystem and used to detect risks and possible wrongdoing. *

Conclusion: : Substantive gap

Red flag: No

Qualitative analysis

There are no ex-ante controls and algorithms in place in the e-PS used to detect risks and possible wrongdoings. Incorporating ex-ante Red Flags on the different events and stages of the procurement process facilitates detection of risks and possible wrongdoings

Quantitative analysis

* Recommended quantitative indicator to substantiate assessment of sub-indicator 12(b) Assessment criterion (a):



- Number of processes identified as outliers or possible wrongdoing by the algorithms set in place by public institutions.

Source: Ministry of Finance / Supreme Audit Institution

0%. There are no algorithms in place.

Gap analysis

There are no ex-ante controls and algorithms in place and available in the e-PS for use to detect risks and possible wrongdoings.

Recommendations

The e-PS should incorporate ex-ante red flags at different events and stages of the procurement process, to identify non-compliance, malpractices, maverick procurements and ensure accountability and integrity of the users.

Assessment criterion 12(b)(b):

Ex-post investigations and risk analysis are regularly conducted using data from the e-Procurement ecosystem.

Conclusion: : Substantive gap

Red flag: No

Qualitative analysis

There is no ex-post investigation and risk analysis regularly conducted using data from the e-PS.

Ex-post analysis can be carried out using the existing data from the e-PS to detect weaknesses, risks and wrongdoings, which informs future procurement interventions.

Gap analysis

Ex-post investigations and risk analysis in e-procurement analyze past purchases to identify weaknesses and prevent future issues, basically learning from past mistakes to improve future processes. There is no ex-post investigation and risk analysis regularly conducted using data from the e-PS.

Recommendations

PPO to Introduce a system of regular ex-post investigation and risk analysis to facilitate data driven analytics to identify patterns of behaviour and risks, using data from the e-PS.

Indicator 13. The e-Procurement ecosystem facilitates the review of complaints and appeals

Sub-indicator 13(a)

E-complaints

Assessment criterion 13(a)(a):

Complaints and/or appeals can be lodged through or linked to the e-Procurement systems. *

Conclusion: : Substantive gap

Red flag: No



Qualitative analysis

Challenges (complaints) and Applications for Review (appeal) cannot currently be lodged through the e-PS and are not linked to the e-PS. There is an e-PS Challenges and Appeals module but it has not yet been activated.

Challenges (complaints) are submitted to the public body pursuant to s.43 of the PPA. Bidders can challenge procurement decisions by public entities if they believe the process violated regulations (PPA). They must file a written complaint within strict timeframes (5-7 days) directly to the public body, not the oversight board. The public body then has a week to respond. The e-PS does not yet provide a challenge (Complaint) function. Currently, the e-complaint module is being designed and tested.

Applications for Review (appeal) are submitted to the Independent Review Panel pursuant to s.45 PPA. The challenge and appeal module of the e-PS is not available. Applications for review by the IRP cannot be lodged through the e-PS and are not linked to the e-PS. However, the IRP decision is published on the PPO website.

There is an e-PS Challenge and Appeal module but it has not yet been activated.

Quantitative analysis

- * Quantitative indicator to substantiate assessment of sub-indicator 13(a) Assessment criterion (a):
- % of e-complaints out of the total number of complaints in the last year.0% as there is no e-complaint or e-appeal function available.

Source: appeals body

Gap analysis

Challenges (complaints) and Applications for Review (appeal) cannot currently be lodged through the e-PS and are not linked to the e-PS. An e-PS Challenge and Appeal module was developed but it has not yet been activated. This reduces both accessibility of the complaints and review system and the efficiency and transparency of the procurement system as a whole.

Recommendations

Combined Recommendations for 13(a)(a), 13(a)(b), 13(a)(c), 13(a)(d)

The e-PS Challenge and Appeal module should be activated and its use should be mandatory.

The Challenge and Appeal module should be tested as soon as possible to ensure that the workflow is consistent with the process used to handle appeals.

The IRP should be provided access to the e-PS so that the review process can be conducted using the e-PS, relevant information can be accessed direct by the IRP, decisions of the IRP are published on the e-PS and information on remedies and tracking compliance are reflected in the e-PS.

Assessment criterion 13(a)(b):

The appeals body has access to the e-Procurement systems and uses its information for decision making.

Conclusion: : Substantive gap

Red flag: No

Qualitative analysis

The IRP does not have access to the e-PS and thus does not use information obtained directly from the e-PS for decision making. The IRP continues to rely on hard copy documents.

The Challenges and Appeals module is built but not fully functional. Testing and integration with the e-PS are needed before the IRP can use it to conduct reviews.

Gap analysis

The IRP does not have access to the e-PS and thus does not use information obtained directly from the e-PS for decision making. The IRP continues to rely on hard copy documents.

Recommendations

See combined Recommendations at 13(a)(a)

Assessment criterion 13(a)(c):

The e-complaint workflow is consistent with the process used to handle appeals, including standstill periods for review, if any.

Conclusion: : Substantive gap

Red flag: No

Qualitative analysis

The Challenges and Appeals module is not yet available for use and so workflow compliance was not assessed.

Gap analysis

The Challenges and Appeals module is not yet available for use and so workflow compliance was not assessed.

Recommendations

See combined Recommendations at 13(a)(a)

Assessment criterion 13(a)(d):

Remedies are reflected in the e-Procurement systems.

Conclusion: : Substantive gap

Red flag: No

Qualitative analysis

The e-PS complaints module is not available.

Gap analysis

The Challenges and Appeals module is not yet available for use and so remedies are not reflected in the e-PS.

Recommendations

See combined Recommendations at 13(a)(a)

Assessment criterion 13(a)(e):

Complaints and decisions of the appeals body are published as open data.

Conclusion: : Substantive gap

Red flag: No

Qualitative analysis

The Challenges and Appeals module is not yet available for use.

Challenges by bidders and decisions by public bodies on challenges are not published as open data.



IRP decisions are published and available to download free of charge from a dedicated tabbed page on the Procurement Policy Office Website.⁴⁸ Decisions are not published in a structured machine readable format. (For more information, see core MAPS Assessment analysis at sub-Indicator 13(c)).

Gap analysis

Challenges by bidders and decisions by public bodies on the challenge are not published as open data, reducing the overall transparency of the challenge and review processes.

Recommendations

Challenges by bidders and decisions by public bodies on challenges should be published as open data.

The Challenge and Appeal module should be used, and all decisions should be linked to the supplier and procurements or contracts in the e-PS system.

See also combined Recommendations at 13(a)(a)

⁴⁸ For example: 2021 Decisions: https://ppo.govmu.org/Pages/Independent%20Review%20Panel/Decisions-2021.aspx accessed 26 September 2021.