

SOLUTIONS & INTER- OPERABILITY



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EXEP Subgroup

This report is a compilation of reflections of the **subgroup Solutions and Interoperability** that is part of the Multi-Stakeholder Expert Group on e-procurement (EXEP) set up by the European Commission in October 2014.

Disclaimer:

The Multi-Stakeholder Expert Group on e-procurement (EXEP) is a consultative entity set up by the European Commission to provide advice and expertise to Commission services.

The views expressed in this report are the views of the Expert Group and do not necessarily reflect the views of the European Commission.

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Solutions & Inter-operability

EXEP SUBGROUP

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PART I: INTRODUCTION

The Multi-Stakeholder Expert Group on e-procurement (EXEP) was set up by the European Commission (COM) in October 2014. It aims to help the EU Member States (MS) with getting the electronic Public Procurement (PP) up and running and to complete the transition to e-procurement provided by the EU Directives on public procurement of 2014.

Part I of the following report provides background information on the EXEP group and the scope of this report. Part II gives a recommendation for standardizing e-procurement systems throughout Europe. Part III provides useful recommendations for CAs and their SPs in case the system fails. What are the possible work-a-rounds? In Part IV the group participants shared their views on interoperability in pre-award procurement. Part V gives a few conclusions the Solutions and Interoperability group can support.

1. Background and Composition of the Group

As described in the introduction the Solutions and Interoperability subgroup (SAI) is part of the EXEP structure that is illustrated in figure 1:

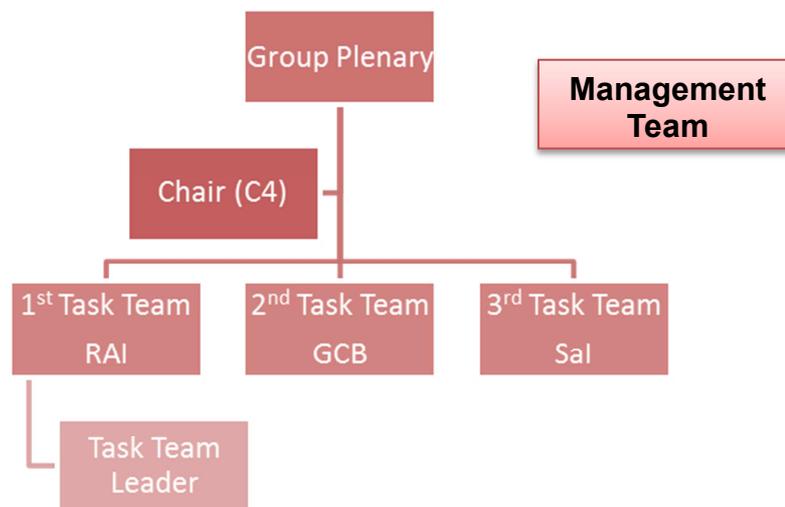


Figure 1: EXEP Organizational Structure

The EXEP¹ consists of about 80 members, including

- the European Commission services, which chair the group, meeting three times a year;
- two representatives appointed by each EU Member State;
- Representatives of the Former Yugoslavian Republic of Macedonia, Norway, Iceland; and

¹ <http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3142>

- one representative per a selection of stakeholders: Business Europe, European Committee for Standardization (CEN) and CEN/BII, Council of European Municipalities and Regions (CEMR), CPB Network, EFTA, eSENS, EUPLAT, FIEC (European Construction Industry Federation), openPEPPOL, Organisation for Economic Co-Operation, Development (OECD) and the European Parliament.

The work of EXEP is carried out by three Subgroups, covering specific domains of the transition to e-procurement:

1. RAI – Regulatory Aspects and Interpretation – who are responsible for legal aspects of e-procurement
2. GCB – Governance and Capacity Building – responsible for the governance of the transition to e-procurement
3. SAI – Solutions and Interoperability – responsible for technical and interoperability aspects in the domain of e-procurement

This report was prepared by the third Sub-Group (SAI), under the guidance of the Sub-Group Leader, Kornelis Drijfhout (representative of the CEN/BII workshop), who was elected as such at the first meeting of the Sub-Group on the 21st October 2014.

The Subgroup members are listed below, including the country and/or organisation they represent:

Country/ Organisation	Name	Country/ Organisation	Name
European Commission	Matija Matoković	Luxembourg	Marc Nosbusch
Austria	Andreas Nemeč	Malta	Fiona Cilia Pulis
Austria	Paul Humann	Malta	David Gatt
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Estonia	Maarika Tork	Poland	Anna Truchel-Kozłowska
Germany	Frank Schmitz	Portugal	Isabel Martins
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Iceland	Halldor Sigurdsson	CEN	Jostein Frømyr
Ireland	Martin Kilbane	CEN/TC440	Kornelis Drijfhout
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Lithuania	Vytautas Kovalionas	EUPLAT	Miguel Sobral

2. Objectives

For the purposes of the work of EXEP, the definition of e-procurement is based on the 2013 Communication on end-to-end e-procurement², which outlines e-procurement as everything from planning and preparation of procurement, to archiving, including therefore the full cycle encompassing both pre- and post-award.

The strategic objectives of this group are to:

- Assist and advise MS and the European Commission in implementing the provisions of the PP Directives³ that relate to e-procurement⁴
- Contribute to monitoring the uptake of e-procurement, sharing of best practices and following new developments
- Set a vision for the implementation of end-to-end e-procurement and in the long term for the transition to the implementation of the “once-only” principle in public procurement.
- Liaise closely with the European Multi-Stakeholder Forum on Electronic Invoicing (EMSFEI) and with the corresponding national forums in those MS in which those are in place. In that regard it will be responsible for ensuring the coherence between the work of EMSFEI and broader Commission policies on end-to-end e-procurement.

To achieve these objectives and produce such deliverables it was proposed to divide the EXEP in sub-groups dealing with the following aspects:

- Regulatory aspects and interpretation (RAI)
- Governance and capacity building (GCB)
- Solutions and interoperability (SAI)

This report aims to bring together the contributions of the SAI Sub-Group, in line with the objectives for which it was created.

3. Definitions

- “eProcurement”: stands for Electronic Procurement, covering all the standard phases of a Procurement Process, from pre-award phases to post-award phases.
- “eTendering”: refers to electronic processes that support the tendering phase of procurement.
- “eTendering Service Provider”: it’s the company that is able to operate the activity of management and exploration of an eTendering platform.

² <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52013DC0453>

³ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.094.01.0001.01.ENG
<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32014L0024>

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32014L0025>

⁴ http://ec.europa.eu/growth/single-market/public-procurement/e-procurement/index_en.htm

- “eTendering Platform”: technological infrastructure that is composed by a number of applications, means and services that are necessary to support a tendering process to contract goods and services.
- “Contracting Authority (CA)”: refers to a private or public entity that uses an eTendering platform in order to execute all the tendering processes by electronic means.
- “Economic Operator (EO)”: refers to a private or public entity that uses an eTendering platform in order to participate in an electronic tender, launched by the CA. The EO is usually referred as the supplier, concurrent or competitor.
- “Submission of the proposal”: moment in which the EO completes the delivery of a proposal, after having submitted that proposal in his eTendering platform.
- “Interoperability”: refers to the capacity of the electronic platforms supporting business processes to exchange information by means of secure and reliable interfaces, keeping unchanged the meaning of the information exchanged.

PART II: COMPLIANCE AND CERTIFICATION OF PUBLIC E-TENDERING PLATFORMS

There are different levels of maturity and market traction across the several commercial-of-the-shelf e-Tendering platforms. That gap is even bigger when compared with ongoing implementations of e-Tendering. As a result, there are different interpretations of what should be the scope and service level of a public e-Tendering platform.

Both governments and CAs, when evaluating their options and defining their strategy towards implementation of public e-Tendering platforms, could profit from an accreditation standard to platform providers.

Accreditation standards should be based on the objectives of the Directive 2014/24/EU. Also taking into account that platforms provide increased value to customers (European Contracting Authorities) and to ensure legal framework, openness and access to EOs, with greater transparency, security and use of best practices. Accreditation standards stresses the most important aspects to consider when implementing the combination of technology and services that make up such platforms.

EUPLAT, the European Association of Public e-Tendering Platform Providers provides such accreditation standards. This is considered a good practice. Several other countries in Europe, e.g. Norway, are working on some kind of requirement scheme on which service providers can base their services. It is the ambition to use the requirement scheme in the qualification process.

Recommendation

Every user of a e-Tendering platform should require their provider to deliver a minimum level of functionality, security / traceability and support services. Tendering platform providers can do so by complying to international accreditation standards.

Europe would benefit from acknowledged accreditation standards. The newly formed CEN/TC440 would be the proper organisation to come up with these accreditation standards for e-Tendering systems.

It is critical to add credibility to the process by providing an independent confirmation of competence reducing the risk for the business and its customers, by assuring them that accredited certificates may be relied upon, and to provide a mechanism for safeguarding impartiality. The demonstration that the platform service meets the e-procurement standard requirements and therefore customers' expectations, could be formally recognized by an independent body (Conformity Assessment Body or accreditation body) or by an accredited independent auditor, that will attest the platform's compliance.

PART III: “MURPHY'S LAW” IN E-PROCUREMENT

IT systems, like any other complex systems are prone to risks of failure. *“Anything that can go wrong, will go wrong”*, no matter how good the system is. E-procurement systems, unfortunately, are not an exception to this rule.

Some real-life examples of such failures are:

- System or network failures that make it difficult or impossible to economic operators to submit a bid very close to the submission deadline
- Problems with access to bids for either economic operators or contracting authorities after the submission of the bid (e.g. during a public e-session)
- Inconsistencies between tender notice documents and the equivalent information in the tendering platform

These kinds of problems are quite new in public procurement because they are strictly related to the digital transformation of public procurement. Moreover, it is generally difficult to solve them applying the solutions tested in the traditional paper-based process.

This document tried to capitalize on the direct experience of members of the European Commission’s “Multi-Stakeholder Expert Group on e-procurement” to:

- gather a “list” of problems that could occur in e-procurement systems;
- outline some best practices and/or guidelines to manage these problems.

Even if there could be IT policies that can do a lot to reduce system failures (or human mistakes in the usage of the system), technical solutions to implement “failure free” e-procurement systems are out of scope of this document. This document will, however focus on organizational and process based solutions to prevent, manage and reduce the impact of unexpected events related to the “ICT layer” of the tendering process.

The aim of this document is to start a sharing process on the subject topic and to reduce “fears” for IT-related pitfalls that could affect the successful adoption of e-tendering solutions. This document can also contribute to drafting calls for tender specifications annexes or service level agreement (SLAs) with service providers. This document is primarily thought of as a guidance note to developers of e-procurement solutions, legal services and service management services.

1. Communication between EO and CA

Description

During a procurement procedure one or more EO's complain they have not received all communications from the CA. Therefore claiming they have missed important information and this effects their ability to submit an offer.

As communications is considered all forms of messages, updates and documents from CA to EO.

Context

When a CA is using a Tendering system it trusts all EOs participating in a procedure will be informed when it drafts new messages or sends updated documents. Normally this will be the case, but the system can be down or due to some unforeseen error, a message failed to reach all EO's.

Solution/Recommendation/Advice

Technical prerequisite

This recommendation has, as a pre-condition, the assumption of mandatory use of e-submission platforms.

The e-Tendering platform must have one specific embedded module to manage communication inside it, generating evidence for reception and submission whether it is before the submission of proposals or after proposals are submitted. Email may be used only as an alert mechanism and should not be the main channel used to ensure successful communication or transfer of documents between CA and EO or between EO and CA.

This specific communication module must have:

- Ability to write content and attach documents;
- Ability to select recipients of the message according to the stage of the process;
- Generate automatic receipts for submission, with timestamp;
- Generate automatic receipts for reception, with timestamp;
- Generate automatic receipts for messages read;
- Send automatic emails (as alerts) to the notification emails provided by both the CA and the EO, any time a new message is received. This email is redundant, because the notification (communication) is in platform.

In case the EO has access to a platform specializing in EO-side workflow support, the EO-side platform should support structured messaging offering the above functionality and the ability to send and receive messaging over some transport-layer infrastructure.

The adoption of CEN/BII standards for structured messaging and CEF⁵ e-delivery for transport infrastructure may facilitate CA-side e-submission platforms to support this type of dialogue with

⁵ Connecting Europe Facility

the EO-side system and allow new business modes focusing on EO-side services to appear on the market while maintaining full value of the CA-side functionality.

Organizational work around (SP)

N/A

Organizational work around (CA/EO)

- It is important to ensure that information is publicly available and that all interested parties are informed under the same conditions. This includes workarounds which should be drafted and available beforehand. For example, in a case the telecom operator in a Member State was down, the CA will decide to restart the procedure in order to ensure equal treatment.
- CA could make an amendment to the procedure in order to attach documents or clarifications that should have been delivered in the communication. These solutions assure that CA have evidence that all EO were informed and have access to the updated content;
- CA could add a disclaimer in their communication with the EO stating that the EO should also check the e-procurement platform for updates.
- A hierarchy of means of communication should be defined. However, having several acceptable means of communication could cause some messages to go unnoticed. All unofficial communication that took place while the system was down should be entered into the system upon resumption of service.
- As a precaution, CAs could extract contact details of all EOs participating in a procedure as a rule, to be used in cases of a need for emergency communication.
- Generally, it is a good practice to have all information in the system. Even email communication should point users to the platform. In case of major impacts on competition, the procedure should be stopped and restarted. In less severe ones, the procedure could be extended.

Need for legal anchoring/ specify in Call for Tender

The national laws on public procurement or e-tendering platforms' certification requirements must state all phases of the procedures should be handled through an e-tendering platform. Thus ensuring reliable communication as described in the "Technical prerequisite" above.

2. Configuration problems with criteria and evaluation

Description

An EO discovers a problem in a criterion it has to answer. The problem makes it difficult for the EO to give his desired answer, or gives the EO the impression she is not treated equally.

Or

The CA discovers a problem in a criterion while evaluating all answers. The problem may result in incorrect evaluation or EOs not being treated equally.

Context

When using electronic tendering tools CAs can state exclusion grounds, selection requirements and award criteria by configuration. The tendering tool offers these criteria – via interface of xml message - to the EOs for answering and providing supportive documents. EOs then send the fulfilled criterion back to the CA for evaluation.

Criterion template -> criterion answer -> criterion evaluation.

When something goes wrong in the configuration of the criterion, this has impact in the rest of the process. If the change is discovered after the submission deadline, it can have serious consequences for the procedure.

Solution/Recommendation/Advice

Technical prerequisite

Of course tendering systems offering automated evaluation must have a very thoroughly designed and tested criterion creating and evaluation module. All configuration options, all answer options and all evaluation options must be tested and well explained to the user. The system could offer a preview to the CA that is preparing the procedure in it.

Organizational work around (SP)

The SP could play a key role as an intermediary (automatically or non-automatically) between the CA and the EO in this case. In fact, there does not need to be any direct communication between the EO and the CA. The CA does not need to know who the exact EO is at all. The system can allow a functionality that will enable the EO to submit a report that will be forwarded to the CA for analysis and reaction.

Organizational work around (CA/EO)

If the problem occurs before the deadline for submission has passed, the CA should correct and rectify the criterion. EOs must be informed, in most cases by publishing a corrigendum notice. They can adjust their answers (if needed) and resubmit. Evaluation can also be done manually.

If the problem occurs after the deadline for submission has passed, the CA must assess if the problem had effected the competition. If so, the procurement process should be stopped and started again from the beginning. If competition was not harmed, the CA can use other means (e.g. a spreadsheet program) to do the evaluation. The outcome of the evaluation should be shared with all tenderers just as if the evaluation was done by the system.

A workaround (used in Greece) is restricting the submission slot to e.g. the last 10 days. This allows 'testing' of the configuration of criteria from the time when the tender is published up to the submission slot. In case of errors the CA can easily correct without effecting already submitted offers.

Restricting the submission slot may give the wrong signal to EOs. It is better to submit early instead of waiting for the last moment. Therefore another solution could be to simulate a call for tender before it is published, to ensure the configuration is correct.

Need for legal anchoring/ specify in Call for Tender

N/A

3. Decryption tender after submission

Description

Decryption of tender, or part of it, after submission fails.

Context

It is good practise to encrypt tenders when they are submitted and stored in the tender box. After the deadline for submission has passed, the CA can open the tender box. By doing so all tenders will be decrypted by the system and readable for the CA. Exceptionally the CA, or her tendering system, is unable to decrypt a received tender, e.g. if the key gets lost or if the software solution cannot interpret the key correctly.

Solution/Recommendation/Advice

Technical prerequisite

The tender has been encrypted correctly with authorized keys.

There is no routine for secured treatment of private keys (not recommendable).

There could also be keys that work in all cases ("golden keys").

The task of decryption is SP's responsibility.

- The SP (platform) will be responsible for the custody of keys and key management;
- The SP issues a certificate for each procedure in which:
 - The public key is made available to EO for encryption of documents;
 - The private key is made available to the jury procedure whenever the application complies with the following two rules:
 1. Expected date of opening of the procedure was achieved;
 2. The request to open the procedure was made by a number of required juries;
- SPs should have key recovery mechanisms (redundancy and business continuity procedures), in order not to stop procedures in case of loss of keys.

Organizational work around (SP)

The service provider should go through the following check points:

- Is it the correct password for accessing the private key?
Solution; find the correct password.
- Is it the correct key?
Solution; find the correct key.
- Is the key lost?
Solution: SP must warn CA that they are not able to decrypt received tenders. For EOs actions, see below.

The SP (either the tender system or the external encryption service) must establish and communicate to the CA the process to recover the private key. This process should be audited by an independent entity to ensure security in the process.

Depending on the key recovering process, EOs might have to submit their tender once more with a new key provided them by the SP. All EOs who have submitted must be given the opportunity and information on how to do it. This can happen only if the submission deadline has not passed.

If the submission deadline has passed, the CA must initiate the process to recover the private key, according to the process that has been published by the SP.

Organizational work around (CA/EO)

CA must ask a technical report from the SP that states the difficulties in using the original private key. If the key is lost, there is no turnaround, because all the tenders should be received in the electronic platform.

Need for legal anchoring/ specify in Call for Tender

- To enable the EO to encrypt, the SP must include information/instruction on how to encrypt in a standardised way in the tender document
- Agreement on EU-level on which algorithm to be used, preferably AES 256 which would prevent possible complications with a lot of different algorithms.

4. Differences in notice and tender system

Description

An EO informs the CA about differences between information in the notices that were published in an official journal and information he sees in the tendering system. The differences make him wonder which information is relevant and which ones she should use as a base for submitting his offer.

Context

With electronic tendering, CAs enter all information about the procurement project in a system. Normally EOs can access this system when they prepare their offer. At the same time another process takes place. CAs create notices and tender documents that are published on national or EU notification portals. EOs have access to this source of information as well. It often happens that these two sources of information for the EO are not entirely aligned.

Solution/Recommendation/Advice

Technical prerequisite

CAs should use the same system to create notices and tender documents and to give access for EOs to prepare their offer. This means the source for notices, tender documents and offers are the same i.e. a master source of data, making it almost impossible to have differences.

Obviously full interoperability between a tendering system and a notification platform is necessary to avoid loss of data in the process.

Organizational work around (SP)

N/A

Organizational work around (CA/EO)

If the differences are noticed before the deadline for submission has passed, the CA can correct, clarify if needed and publish a correction. EOs must be informed. They can adjust their answers (if needed) and resubmit.

If the differences are noticed after the deadline for submission passes, the CA must assess if the problem effected competition. If so, the procurement process should be stopped and start again from the beginning. If competition was not harmed, the CA can proceed with the evaluation.

Need for legal anchoring/ specify in Call for Tender

Best practice is to have a formal statement in all tendering documents stating which information source prevails.

In some countries (Portugal, Italy) this statement is part of national legislation. In Estonian law it is stated that information in a published Contract Notice prevails over other contract documents.

But it is a good point that the relationship of documents vs. system should also be specified if tender documents are not prepared or delivered from the system.

5. Failure with third parties like time stamping, signature validation, SMS services

Description

The third party service is not available.

Context

Solution/Recommendation/Advice

Technical prerequisite

The tendering system should have a good relationship with the third party service provider. The third party service provider is compliant with the level of service provided by the tendering platform.

Reduce the dependency on third parties. E.g. consider maintaining two contracts with official time stamping companies, in parallel one back-up of the other.

Organizational work around (SP)

The EO should be able to inform the helpdesk.

Design an alternative way into the system: if the basic third party is not available, this should not block the procedure. The CA should be left to handle the situation. The CA is always responsible. Via the agreement and SLA with the SP there should be rules of how to handle the situation when a third party provider service is not available. The third party provider can be a SP under the platform SP or a separate, but also then there should be rules regulating these situations. The SP should assist the CA in how to handle the situation, even if it is up to the CA to take decisions like extending the deadline.

Error situations should be logged.

Organizational work around (CA/EO)

The CA could consider extending the deadline or accept alternative routes to submit the offer which should be drafted and available beforehand.

The EO should ensure that they have all necessary information in advance.

Need for legal anchoring/ specify in Call for Tender

If third party services are included in general procedures (e.g. in national laws), and not specifically in a call for tender, instructions for tenderers should specify how to handle when such support services fail (e.g. digital signature).

6. Giving commercial information to helpdesk

Description

The EO provides the helpdesk operator with her login credentials or secret information to be submitted like prices.

Context

Due to the fact the EO faces difficulties using the e-tendering platform, she decides to call the helpdesk and, in good faith and under pressure, decides to provide the user credentials or prices so that the helpdesk operator submits the proposal on his behalf or even sends the bid to the helpdesk.

Solution/Recommendation/Advice

Technical prerequisite

The e-Tendering platform provider should make use of remote access tools in order to provide efficient support to EOs, especially because support requests are done quite close to the e-submission deadline by EOs requiring an immediate solution.

These solutions allow the support operator to see the user's screen and guide her through the procedure without acting on her behalf and without actually seeing information on the actual bid.

Due to the fact this type of tools may provide the helpdesk operator access to secret information during the support, the platform provider should implement security procedures in order to assure that:

- it is forbidden to take screenshots of the client's computer/workspace/area;
- it is forbidden to perform actions during the remote access on behalf EO or CA;
- the tools of remote access are restricted to the helpdesk operators and provided to those with more experience and always being monitored by their supervisors;
- all helpdesk operators must sign an NDA with the platform operator;
- before starting to answer calls the helpdesk operators must have a training sessions about information security;
- periodically the helpdesk operators are audited and have awareness/training refresh sessions about information security;
- the platform operator must define an internal inquiry procedure in order to deal with situations like this (e.g. calls to helpdesk);

Organizational work around (SP)

To help the EO user verify if the most frequent problems faced by users in the same circumstance are applicable, like:

- problems with the internet connection or configurations,
- problems with the computer's operating system settings,
- Problems with digital certification (if applicable).

Organizational work around (CA/EO)

In the case of a problem related to the e-Tendering platform:

- The EO should immediately inform the CA about the difficulties she has faced, either through the platform or (in case of total unavailability) by email or by phone.
- The platform operator should formally inform the CA about the problem, by sending a report about the situation.
- The CA decides whether to extend the due date or not.
- As a good practice, the economic operator should give consent to members of the helpdesk to access information on the tender.

In case when the platform owner is also the awarding authority, the roles should be clearly defined. The helpdesk function could also be outsourced.

Need for legal anchoring/ specify in Call for Tender

N/A

7. Giving sensitive information to wrong EO after deadline

Description

The CA noticed commercially sensitive information about a tender was sent to an organisation or person who is not involved in the procedure. E.g. the price offered by economic operator A was accidentally sent to economic operator B.

Context

In an electronic system messages are sent and received by multiple parties. It could happen that IDs from parties get mixed up and a message is received by the wrong party.

Solution/Recommendation/Advice

Technical prerequisite

Of course all tendering systems and message services from tendering systems must take the utmost care of sending and receiving messages to the correct parties. Thorough testing must ensure that systems perform as designed.

Organizational work around (SP)

Service providers must take measures to ensure that commercially sensitive information is not publicly accessible. The user interface of the e-Tendering platform should always clearly indicate the economic operator that is currently in focus. All fields that can be filled in automatically should be filled in such as way.

If accidentally messages got mixed up, these messages, logs and copies must be deleted immediately.

Organizational work around (CA/EO)

A potential solution could be to include a default disclaimer at the bottom of each message saying something along the lines of "If you are not the intended recipient of this message, please ignore."

Need for legal anchoring/ specify in Call for Tender

N/A

8. Identification of users and login constraints

Description

Problems with the login in the e-Tendering platform because the user forgot her credentials (user name & password) or the password has expired.

Context

Problems in accessing the e-Tendering platform very close to the deadline. The EO might not have time left to submit proposals.

This recommendation has, as a pre-condition, the assumption of having a CA that uses an e-Tendering platform without a credentials recovery process in case of malfunction. Alternatively, a single sign-on or federated authentication mechanism may be implemented to accept trusted identities and/or credentials issued outside the e-Tendering platforms

Solution/Recommendation/Advice

Technical prerequisite

The e-Tendering platform must have a simple, immediate and secure procedure to recover user credentials, namely the password. When a user wants to recover her password, the SP sends an automatic email, to the email address assigned to that user, with the procedure to recover the previous password or generate a new password.

The user and credential management is a cumbersome process that inflicts costs and administrative burden on tendering platforms but also EOs. The implementation of single sign-on or federated authentication mechanisms should be encouraged, particularly since the eIDAS regulation provides a legal anchor for this type of operation when accredited identity providers are used.

Organizational work around (SP)

If contacted by the EO, the helpdesk support should inform the user about an alternative, which is to suggest:

- The registration of a new user linked to that same EO,
- After the new registration the user should ask for administrator's activation in the EO's back office (if applicable).
- Submit the proposal using this new user credentials.

Organizational work around (CA/EO)

The EO should register a new user linked to that same EO, ask for administrator's activation in the EO's back office (if applicable).

Best Practice:

- Redundancy: Have more than one user created and with active access (applicable to both CA and EO);
- Anticipation: The EO should ensure all credentials to accesses the platform are properly functioning and ok at least 3 days before due date for e-submission.

Need for legal anchoring/ specify in Call for Tender

National laws of Public Procurement or the e-Tendering platforms' certification requirements must state that simple, immediate and secure procedure for certification should be implemented. For example, it could be a mobile number.

9. Installing additional software, like applets for signatures

Description

The EO face difficulties related with the installation of software components (like applets for signatures - e.g. JAVA) required to prepare proposals, submit proposals, make use of digital certificates or digital signatures of proposals.

Context

Requiring the installation of software on user's computers may cause several impacts on the EO, related with the need for updates, difficulties in assuring administration privileges on computers, software failures, etc.

These difficulties may result in a late submission of proposals (after the deadline) or even in non-submission of proposals and consequent contentious disputes.

The future use of standardized, structured system-to-system communication between EO-side and CA-side platforms, where the EO is in control over its own system, will minimize or even eradicate the existence of such problems.

Solution/Recommendation/Advice

Technical prerequisite

It is recommended to use digital certification solutions and e-submission solutions that does not require installation of software on the users' PC.

One of the solutions for digital certification is the use of cloud signature or delegated signature.

The international best practices (European Directives and Golden Book of e-Procurement Good Practice of the European Commission) advise against installing software on user computers. The approach should be to implement administrative simplification provided in EU Directives, including the setting of security controls at the level of risk transactions. This is a solution already implemented or under implementation in several member states of the EU:

- centralized signature in the cloud (centralized signature using installed certificates - or delegated signature - a trusted third party, whose access requires user authentication through digital mobile key service) and;
- beginning of a gradual adoption of the law eIDAS (electronic identification and trust services).

Organizational work around (SP)

To have a checklist with actions for the helpdesk to perform in order to detect if there are problems with installation or execution of additional software:

- ensure that the browser supports the software in question;
- test the software execution (in case of JAVA, through to java.com);
- ensure if the software is updated;

- anti-virus / permissions on the computer blocking the execution of the software;
- check that it is not necessary to put platform sites in the software exception list;
- check if the user has an administrator profile in the computer.

Organizational work around (CA/EO)

- Login in a PC where the user has administration profile.
- Request that the internal system administrator of the EO/CA to manage the software installations or updates.

Need for legal anchoring/ specify in Call for Tender

N/A

10. Multiple bids

Description

Impossibility to correct information in an already submitted proposal or having more than one proposal to submit for the same procurement procedure (if applicable).

Context

The EO may have the following needs when submitting a proposal:

- To correct information in an already submitted proposal;
- To have more than one proposal to be submitted at the same time, in order to present to CA an alternative proposal besides the base proposal. (if applicable: e.g. if the CA wants to buy pens of a certain brand, the EO can submit a base proposal with the prices of the requested pens and alternatively another proposal – variant proposal – with prices of pens of others brands).

This recommendation has the assumption of mandatory use of e-submission platforms. It is also important to note the time when the bid(s) was (were) sent as well as when they were received.

Solution/Recommendation/Advice

Technical prerequisite

To face both needs of replacing a proposal or submitting several proposals, e-Tendering platform operators should implement the following functionalities:

- If an EO needs to correct a submitted proposal, e-Tendering platforms shall implement a functionality enabling the EO to withdraw proposals submitted, thus avoiding misunderstandings to the CA. This functionality allows the EO to withdraw the incorrect proposal and submit another one. The incorrect proposal is then removed from the procedure, thus it will not be available for the CA when they open and decrypt the procedure. Proposals can only be withdrawn until the defined date of submission.
- When the CA is setting up the procedure and is willing to receive variant proposals, the platform must have an option to allow that, giving the CA's user clear identification of the main proposal and the variant one. If the CA wants to receive variant proposals, the EO can submit one base proposal and additionally the amount of variant proposals he wishes; If the CA does not want to receive variant proposals, the EO can submit only one base proposal.

Organizational work around (SP)

N/A

Organizational work around (CA/EO)

In case the CA did receive multi bids from one and the same EO, and neither of the bids are indicated as variants, a shared best practice is that the last received bid (as evidenced by time-stamped acknowledgement of receipt) will be the one that is taken into consideration by the CA. Again this needs to be known of EOs.

Need for legal anchoring/ specify in Call for Tender

N/A

11. Failure during submission

Description

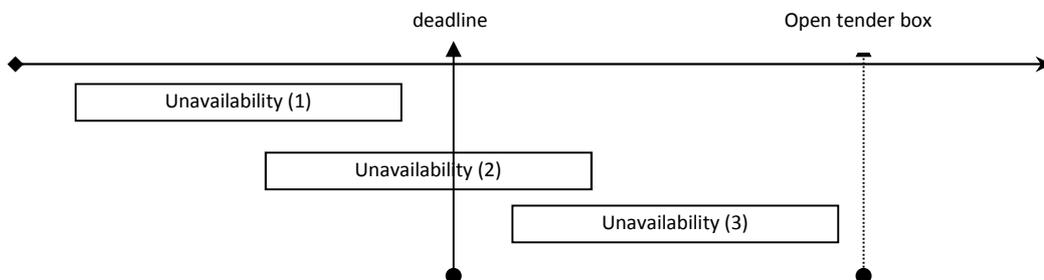
The EO is not able to complete the tender submission process due to unidentified technical issues. This could be malfunctioning of the tendering system or unavailability of the network/internet. Helpdesk receives a lot of calls users are not able to use the system.

Context

Submission of tenders is obviously the most critical step in the procurement procedure. Unfortunately it happens that also during this step the system goes down. For the EO, it then becomes impossible to submit the tender on time.

The reason for which the system went down is often not easily detectable at the time of the problem. It could be due to heavy traffic on the tendering system (a lot of EOs wanting to submit the offer at the same time) or it could be completely unforeseen (the internet is down in a certain part of the country). It could very well be that some EOs are still able to submit and others experience severe problems.

If we take the deadline of submission as a set point in time, a system failure relates to this point in three ways:



1. Close before the deadline: the system is unavailable close to the deadline. EOs experience problems and call the helpdesk/CA. The issue is solved and the system is up again before the deadline passes. Maybe EOs can still submit their bids. The SP determines unavailability of the system prior to the deadline.
2. During deadline: the system goes down before the deadline. EOs experience problems and call the helpdesk/CA. The issue is solved but the system is up again after the deadline. EOs were unable to submit bids. The CA is unable to open the tender box immediately after the deadline. The SP determines unavailability of the system during deadline of submission.
3. Close after deadline: The system goes down after the deadline. EOs did not experience problems at all, but the CA is unable to open the tender box immediately after the deadline. The issue is solved and the system is up again. The CA is able to open the tender box. The SP determines unavailability of the system after deadline of submission.

Obviously the duration of the unavailability is important. Any unavailability longer than 5 minutes is relevant. Just as the closeness of the failure to the submission deadline. It should be considered relevant if the failure occurs within the last two hours before the deadline and up to one hour after the deadline.

This recommendation takes into account once the CA opens the tender box and have knowledge of its content, it becomes impossible to respond to any kind of system failure.

Solution/Recommendation/Advice

Technical prerequisite

Good traceability, able to determine all EO actions. The SP should inform the CA about difficulties EO's have while trying to submit their bid, at the time that they happen. The CA must be informed if the technical difficulties were experienced by only one EO or by more than one EO in the context of the specific tender.

The tender systems are able to trace every action connected to changing/editing on stored elements.

It should be an obligation to the tender system to issue an independent full report of all the actions executed in the context of a tender, including the tender receipt. This report should be emitted by the electronic platform, but the process that the tender system uses to issue the report has to be audited by an external entity in order to ensure the trust of the report.

The tendering system should enable the CA to prolong the deadline for submission in case problems occur. The tendering system should inform the CA about any issues before the CA opens the tender box. Once the tender box is opened, the CA cannot postpone submission deadlines any more. The tender system should not accept the submission of a tender after the tender box has been opened.

Organizational work around (SP)

The EO must prove he is unable to submit and it must be provided with clear protocols to communicate this inability with the platform. SP should provide reports for such situations. The SP must report the technical difficulties and any possible irregularities to CA for assessment and further actions before the submission time.

If technical difficulties are experienced by EO after the submission hour, these should be reported to the CA so that further actions can be taken, before the opening of the tenders.

Organizational work around (CA/EO)

It is advisable that the EO submits the tender during working hours, so the SP helpdesk can give support for technical difficulties. CA should not set the submission deadline during weekends or holidays.

The CA must assess the information provided by the SP about the malfunction and the unavailability of the system. The CA must assess if all EOs had equal chances to submit their bids.

If equal competition was harmed, the best practice is to prolong the deadline by at least 24 hours and inform all participating EOs about the new deadline.

Because the CA cannot prolong change the parameters of the procedure after opening the tender box, it is recommended to introduce a "buffer zone" between 'deadline of submission' and "opening of the tender box". This buffer zone is needed to assess the information provided by the SP and to ensure competition was fair.

Best practice in more detail:

Provide traceability of actions by EOs for procurement competitions. It should be possible to audit each step before tender closing. The e-Tendering platform could have these distinct stages which will show activity of the EO:

- Publish Notice
- Invites sent simultaneously as publication of notice (for EOs with business alerting enabled on their account profile)
- Notice Accessed/Viewed
- Expressed Interest in RFT
- Response Prepared/Uploaded
- Response Submitted
- Electronic Tender box closed

In the event of failure in public internet access, the traceability outlined above will assist the CA in making a proportionate response to EO(s) who were unable to submit a tender before the closing deadline. For example, if the network failure happens 5 minutes prior to closing and the EO has not expressed an interest in the tender competition, it would be proportionate to ignore such a response. However, if the EO has prepared/uploaded a response and the network failure happens prior to closing time preventing submission of a response. Consideration should be given to postpone the deadline . Access to the uploaded response can be audited to determine last amendments to response documents.

There are a number of prerequisites which must be in place which will provide transparency and equal treatment for all EO.

Step by Step Guide

Each contract notice should contain advice to EOs about giving adequate time for electronic submissions, the file sizes accepted on the platform and most importantly, a step by step guide to submit a response.

Terms and Conditions

The 'acceptance of use' for the platform should include a disclaimer in relation to responsibility for tender submission where the technical failure is a local computer issue for the EO. There should be clear lines of demarcation. In the event of a failure in public internet access, an appeal mechanism should be outlined which will provide guidance around reporting of internet failure.

Postpone the deadline

The e-Tendering platform should allow the CA to postpone the submission deadline to enable all EOs to (re)submit their bids.

Buffer Zone

There should be a buffer zone after the official closing deadline and before the tender opening process. This ensures equal treatment for all EOs as the response documents are made available to the CA at the same time.

If technical difficulties were experienced by the EO and it turns to be the responsibility of the SP, decision must be taken by the CA, supported by the SP technical report.

Ultimately, if completion was unacceptable harmed, the tender process might be terminated and a new one can be created.

Need for legal anchoring/ specify in Call for Tender

Need for clear regulation that enable CAs to prolong the deadline, even very shortly before deadline.

Need for legal anchoring of the "buffer zone". A "buffer zone" is created to allow the CA to check that everything is correct, before the bids are opened. This is not a uniform practice across the EU Member States, as a matter of fact in some countries it may not be legally possible. However, there are some best practices. For example, if the EO is unable to submit, and the system has determined that there was a failure, the deadline can be extended. The buffer zone can be used to assess the eligibility of communication. If the EO is able to demonstrate that there were technical problems with the submission, the deadline or late submission can be allowed.

If the EO justifies its attempt and failure to submit a tender, with technical problems, the CA might ask the SP a full technical report of the submission process. As a recommendation, it should not be possible to submit a tender by other means outside the tender system.

12. Uploading files, e.g. types and file

Description

The file size or type prevent the file from uploading in the tendering system.

Context

Due to limitations of the tender system, the CA is not able to post all the tender documentation or the EO is not able to upload his tender within the deadline, or upload it at all.

Solution/Recommendation/Advice

Technical prerequisite

File types and maximum file size in the tendering system and/or transport infrastructure are identified and communicated to EO. If the type of files is not supported, a common compression type has to be used, like the .zip.

Organizational work around (SP)

The tender system should publish all the file types and maximum size supported in the platform, both for the CA and EO.

Alternatives should be given (example: compressed file types (.zip)) to CA and EO, so the CA can predict possible issues.

The system should automatically give an understandable failure message to the EO trying to submit. The message should also contain instructions on what is to be corrected by the EO to be able to submit.

A best practice could be not to postpone submission to the last minute. SP should issue guidance to their customers that a “last minute practice” excludes the possibilities to correct or adjust a submission or to clarify by the CA what alternatives can be given.

Organizational work around (CA/EO)

To give instructions, within the tender documents or in the tender system, about the supported file types, maximum sizes and possible alternatives.

Need for legal anchoring/ specify in Call for Tender

Acceptable file types and size must be defined in the tender documents and in the tender system.

13. User error

Description

Users complain to the CA they were unable to participate properly in the procurement procedure because the system did not allow them. On closer inspection the users did not operate the system correctly. It was clearly a user error.

Context

Tendering systems offer a lot of functionalities and handle complex procedures. It is common that new users have issues not fully understanding how the system works. This results in user errors due to lack of knowledge.

Solution/Recommendation/Advice

Technical prerequisite

Service providers should make their systems as user friendly as possible. Usability testing helps to identify potential user errors. User guides and manuals need to be updated all the time.

Organizational work around (SP)

Service providers could help to identify the problem by inspecting log files and track the users' behaviour. Clear log files can help settle disputes between CAs and EOs.

It is very beneficial to have a helpdesk.

Organizational work around (CA/EO)

CAs should act proportionately and with equal treatment of the EO:s. If the error could be fixed easily the CA should allow this and not be too strict in following the rules of the procedure. If the error has impact on the competition or the error was made by someone who should know better, different actions are appropriate.

Need for legal anchoring/ specify in Call for Tender

Clearly state in all your tendering documents which systems should be used and where new users can learn how to operate the system.

PART IV: SCOPE OF THE INTEROPERABILITY IN THE PRE-AWARD

Based on their experience, e-tendering system providers advise that interoperability in the pre-award should focus on the initial phases of e-notices and e-access and should exclude the phase of e-submission. The main argument is that the e-submission phase is desirable to be based on structured data, in order to improve efficiency in the evaluation phase, and that interoperability among electronic platforms is based only on PDF files (unstructured data), forcing the platforms to abandon the innovative services associated to a structured tender.

Additionally, there are some standards that mature platforms can use right now. In the short term, interoperability should focus on transactions that are already tested and that achieve bigger results. For example, e-submission is expected to take more time to implement, because it is the most complex transaction and the current tests are based on PDF files. According to e-tendering providers, implementation of interoperability should focus on the functionalities that will be the most useful to end users of different platforms.

Some examples are already in use in EU Member States. For example, single-sign on. Italy, Austria and the Netherlands have examples with e-ID. However, a clear time scale for implementation of various interoperability services and a priority list is still not defined. Of course, any prioritisation would require clear business requirements and a definition of business needs.

Some EU MS' experience with solving interoperability issues are described below:

1. Austria:

At the moment there are 10 different official notification platforms and there is no fully automated centralized collection of statistical data.

The questions that the Austrian authorities have posed in the realm of interoperability are:

- a. On which level and in which phase should different installations interact? This is not only a technical issue. Also legal and organizational questions must be addressed.
- b. Central technical information about eTendering application in the field: Which standards and methods are accepted by each eTendering service?
- c. Automatic readable information about eTendering search and meta-data: Similar to the internet; do we need eTendering register and dictionary information for running eTendering procedures?
- d. How do we handle the eSens-4-Corner model for the transaction of "eSubmission" from legal point of view?
- e. Who is liable in case of a fault with regards to interoperability?

2. Norway:

The Norwegian concept for e-procurement is based on the four-corner-model with an eco-system of solutions provided by the market for both CA and EO. A crucial issue for succeeding is to ensure there is a sufficient number of solutions for establishing adequate competition with a wide range

of services and complexity able to meet the needs of different stakeholders in the procurement process. To enable this Norway is working in parallel with following approaches:

- a. Open and free accessible tool kit for service providers developing solutions for both CAs and EOs. The tool kit, which contains components for transport infrastructure, authentication, confidentiality of the documents and establishing evidences, reduces the development costs for the service providers dramatically.
- b. Interoperability through use of European standards and structured information on core transactions, leaving the service providers with resources to compete on quality, flexibility and price. This element has dependency to the level of maturity on both the transactions and the players, but the notification schemas, the ESPD, the pre-award catalogue and automated qualification are good examples of transactions within the reach of automation.
- c. Encouraging the CAs to start working on identifying and describing their needs for system support, and actively ask for the needed services in the marked.

3. Portugal:

Framed in the new national legislation for pre-award public eProcurement, a new regulation is being written, establishing the conditions that must guarantee interoperability between national eProcurement platforms. These provisions for interoperability aim to facilitate the access of all EOs to all tenders occurring in any licensed platform. The interoperability model for the internal market is expected to be compatible with the European interoperability initiatives.

PART V: NEXT STEPS

In the scope of discussions on interoperability in this subgroup of the EXEP, the main conclusions are:

- a) Projects like E-SENS are currently testing the e-submission use case, framed within the 4-corner-model, whose results could contribute to the discussion.
- b) Countries that are considering interoperability within national platforms should consider options to interoperability within different countries, when establishing the legal framework to national models for e-tendering electronic platforms.
- c) The definition of the scope of interoperability in pre-award is already happening in Europe and service providers should be part of the definition of the standards and services. A catalogue of services in pre-award should be identified, so that priorities are set. Countries should consider starting with transactions and services that will have the most impact and more advantages.
- d) Some countries already have interoperability in notices, in access to tender documents and other services. It is important not to exclude transactions from the interoperability scenario, but to prioritize interoperability implementation in those transactions, starting with the ones already tested and with more expected practical results. It must be avoided that services should be excluded from interoperability.
- e) Economic operators in countries like Germany are asking for the interoperability among tendering platforms, in a way that they should not have to subscribe all the tendering platforms. The German law might come to force the electronic platforms to be interoperable. Moreover, CEF (Connecting Europe Facility) is willing to finance the interoperability implementation across the European countries.
- f) The next step should be to define the main goal of interoperability and to obtain a full picture of issues that are faced by different countries when implementing electronic procurement, so a survey that summarizes the legal requirements and actual business requirements should first be done.

The following questions were proposed for further investigation

1. How does each country rank the concerns (EOs and CAs) to be faced by “interoperability” in the pre-award phase?
1. Does each country see other issues that interoperability could/should solve in pre-award?
2. Which other interoperability solution could be adopted to simplify EOs’ and CAs’ activity both in pre and post award phases (ex. Interoperability between e-tendering platforms and e-Certis, e-tendering and transparency portals etc.)
3. Which, if any, interoperability solutions are in place in each country (short description; template)?

ES

4. ANNEX 1: List of abbreviations

CA – Contracting authority

CPB – Central Purchasing Body

COM – European Commission

GCB – EXEP subgroup on Governance and capacity building

EO – Economic operator

EMSFEI – European Multi-Stakeholder Forum on Electronic Invoicing

EXEP – Multi-Stakeholder Expert Group on e-procurement

MS – Member States

PP – Public procurement

RAI – EXEP subgroup on Regulatory aspects and interpretation

SAI – EXEP subgroup on Solutions and interoperability

SP – Service provider

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