

Part II: Operational Recommendations

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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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Introduction

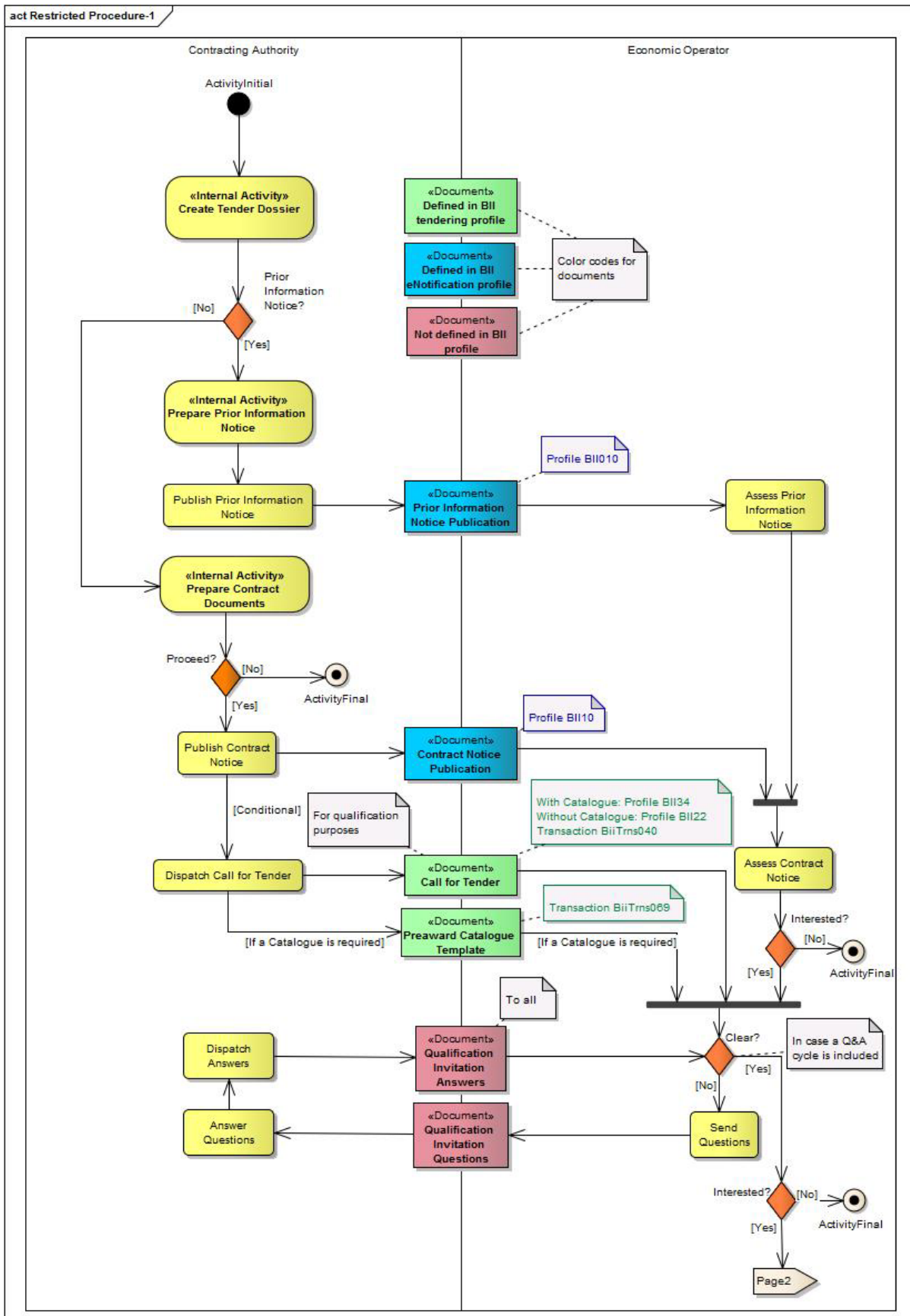
This document groups the e-TEG recommendations covering measures to be taken by the e-procurement actors – Contracting Authorities (CAs), Economic Operators (EOs), Platform managers – when designing, running and using an e-procurement platform.

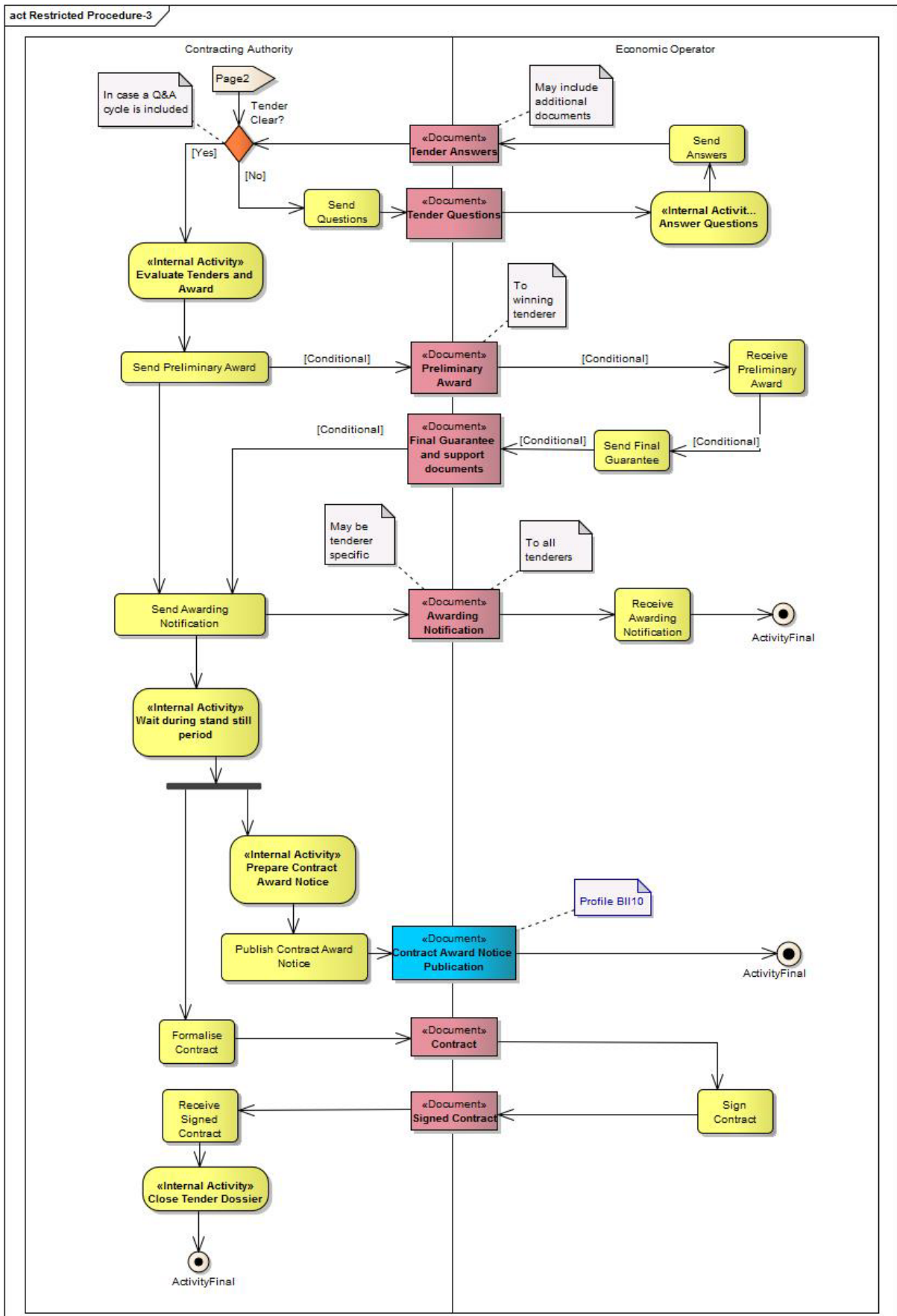
The recommendations are designed to be accessible interactively from the e-TEG webpage based on different indexes (e.g. business objectives, user profiles, plus any other criteria allowed by the logical tags that each recommendation features.)

On this document, the recommendations are presented sequentially within the standard e-procurement process model defined by CEN BII.

Overall process model

Article 28 to 34 from Directive 2004/18/EC and article 40 from Directive 2004/17/EC describe the different tendering procedures used by the contracting authorities. The following diagram shows the choreography of the restricted procedure as defined by the CEN/BII2. The restricted procedure covers all relevant steps in the pre-award procurement.





01 User registration - Report

Most e-Procurement systems include a registration module enabling the business parties that take part in a procurement process to be uniquely identified. An account is created on the system for each actor taking part in the process (e.g. the call's managers, the evaluation committee members, the EOs). Registration involves assigning a profile to the user setting out permissions to use system based on the specific role of the user. This is the basis for subsequent authorisation to be given to the users when accessing the system.

1.1 Simplified Registration and Authentication

Context: usability, registration

Business Objective: Improve usability and efficiency. An e-Tendering system should provide an adequate level of security on account of the critical information it handles. However, a system should support a different level of security in the different phases of the tendering process, in order to ensure that no excessive burden is placed on EOs to simply gather the information they need to make a decision on participation but at the same time the EOs are authenticated to the appropriate security level when they decide to prepare and submit a tender.

Recommendation:

- No registration should be required of a newcomer (an EO that is not yet registered to the platform) to access tender notices (cf 4.1).
- Registration is welcome if clearly flagged as optional and where it adds value to the supplier perspective.
- The registration should only require minimum information including a valid e-mail address. The system should verify the user's e-mail address.(i.e email verification link/url)
- Identification should be based on a 1-factor authentication mechanisms like passwords or open distributed authentication standards such as OAuth, therefore allowing using credentials from already existing providers like Twitter, LinkedIn, Facebook.
- A full-fledged registration for stronger authentication should be required only for operations linked to tender preparation and submission, requiring access to some private workspace assigned by the platform to the EO. The stronger Identification should be based on a 2-factor authentication, such as digital certificate or SMS+PIN. This kind of identification may allow registration of more sensitive data than can be used among different call of tenders, like financial or technical information about the company.

- Use of digital signature independently acquired by the EO for authentication should be required, if deemed necessary by the contracting authority based on risk analysis (or National policy), only for e-submission.

Where passwords are used as a means of authentication, they shall conform to local regulation or best practices. Various communities publish password policies. In general they all recommend a set of characters to be used, rules for changing the passwords by the users, methods to encrypt passwords, rules to reset and use of CAPTCHA.

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1.2 Federated identity management and single sign-on

Context: usability, registration

Business Objective: The EO have to have the ability to operate on multiple platforms if they want to respond to different calls for tenders. In fact, CAs publish their calls on platforms of their choice. Registering each time on a new platform is time and resources consuming. The ability to register to one platform once and being able to refer to such a registration for any subsequent access to other platforms would be extremely beneficial to the EO.

The scenario described, called Federated ID management (FIdM), can be implemented in two ways:

- e-procurement platforms agree on a standard registration format and retrieve the registration information, upon request from a user at his first-registration time, from any other platform where the user is already registered. Subsequent sign-on is handled autonomously by each individual platform;
- A single-sign on service is provided by one or more operators in the federation, handling not only the first registration but also the subsequent sign on.

In this scenario individuals won't need to create separate account for each platform they access. Users are required to remember their credential once. The single login gives them access to the resources of cooperatives e-Tendering platforms from different countries.

FIdM is built on trusted relationship between the federation participants/organizations created by legal agreements. "Federated Identity" represents mechanisms through organizations can share users' information (username, passwords, attributes, access rights) between different platforms and systems. This approach is the key point to allow users to navigate easily and to have access to various tenders from different countries.

Recommendation: The COM is recommended to promote the implementation of the scenario described.

A wealth of resources is already available as a result of the COM CSP project Stork.

The LSP Stork has created an interoperability platform that permits a generic service provider to authenticate users via their own national e-identifier (e.g. smart-card or mobile e-ID). For example, this feature is used by the ECAS authentication system of the European Commission to avoid registration of new users and permit easy access to many European citizens with their national authentication credentials.

Additionally, Stork is also able to provide some personal attributes of the authenticated user (such as date of birth, sex, or e-mail address) and others will be added by the current LSP Stork-2.0 that will extend the infrastructure to handle also legal persons and delegation, mandates and other kinds of business-oriented attributes.

Stork could be used to federate different service providers (e.g. the various e-procurement portals) so that the bidder is authenticated with its own e-ID and its business data are automatically retrieved via Stork or Stork-2.0 when visiting different portals. In case that additional data is needed, this data could be entered at the first e-procurement portal used by the bidder and then shared among all the portals in the federation.

The setting up of a FIdM requires maximum use of Standard Meta data (such as the use of ITU-T E.164 or E.123 for telephone numbers, email addresses, URLs etc.).

In addition, an EU harmonised data-model describing the registration question set should be created as a basis for a EU standard, facilitating easier translation in to other languages, specifically (as a minimum) English. The COM has drawn up within the ISA programme a Core vocabulary, a simplified, reusable, and extensible data model that captures the fundamental characteristics of an entity in a context-neutral fashion. A Core Concept can be represented as Core Vocabulary using various formalisms (e.g. UML, XML, RDF). Domain specific specializations can be drafted on top of the core representation.

It is strongly recommended that this work is progressed up to the definition of data-model standards for the information required of a company and all profiles who are entitled to perform operations on the platform on behalf of the company.

1.3 Enable collaborative work for tender preparation and tender responses

Context: Registration

From the perspective of the economic operator, there is a need to ensure that multiple staff profiles from a company, including consultants, contribute to the preparation of a tender. If a consortium is set up to respond to a call, staff who need to work on the system may belong to different companies.

From the perspective of the contracting authority, there is a need to ensure that multiple staff profiles from a contracting authority contribute to the preparation of the tendering specifications. In addition, there is increasing resort to joint procurement as contracting authorities with similar requirements join forces to obtain efficiency and cost reduction. Thus staff who needs to work on preparing tendering specifications may belong to different organisations.

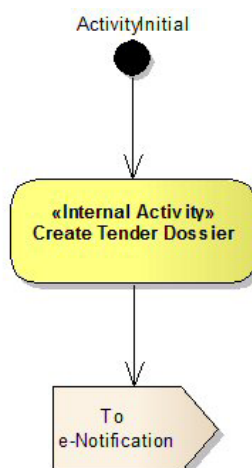
Business Objective: An EO or CA should be able to control multiple users of its organisation and/or partner organisation

Recommendation:

- A first user of an EO or CA should be responsible for Entity Information Administration, with the ability to create, update and disable user accounts for more users within their own entity, such that they, if invited, can collaborate on tender responses.
- The platform should send communications to one or more email addresses to ensure all CA and EO users (irrespective of vacation, illness etc.) are notified of tender opportunities, tender queries etc.
- The platform should allow the "owner" of tender response workspace to assign user rights for a specific tender procedure. This will allow specific users (including external users, such as consultants) to contribute to particular tenders without need to grant access to all tender information.

02 Planning and preparation of tender documents - Report

The Contracting Authority draws up the tendering documents, setting out the rules for tendering including required formats and structure of the tenders, and publishes it so that interested companies obtain all the relevant information to respond to the call for tender. Platforms support such preparations, which involve, in the simplest cases, uploading of traditional documentary materials or, on more advanced platforms, preparation and publication of structured documents. By structuring the tender, a platform enables a CA to force the EOs to return pre-defined information items. This enables greater comparison of tenders and the provision of machine-processable data which facilitates any subsequent steps including partial or total evaluation.



2.1 Enable repositories of libraries for documents, requirement templates and other digital objects

Context: Solutions should allow maximum reusability of standard requirements and category related requirements, and elements of similar tenders managed previously.

Business Objective: It should be possible for the e-procurement staff to link or copy documents, structured requirements and entire tenders from libraries and from previous tenders. When preparing a call for tender there are often previous procurement projects that are similar. Templates with structured requirements developed based on good practices could make the preparation of call for tenders more efficient.

Recommendation:

The e-procurement platforms should provide the following functionality to assist users on CA side in their preparation of the call for tenders:

- Libraries of documents, which may be linked or copied to individual tenders;
- Version control should be used for libraries, which will include version control of documents, requirement templates and other digital objects;

- Libraries of structured requirements, which may be linked or copied to individual tenders;
- Ability of users to copy entire previous tenders or parts of them as a starting point for new similar tenders;
- It must be possible to share draft tender information with colleagues and external staff, without necessarily sharing the entire tender;
- It should be possible for the CAs to assign privileged user rights to some staff to maintain said libraries and include templates based on good practices;
- It should be possible also on a platform for authorities to share market sector / MS common templates useful for all clients on the same service (e.g. to allow users access to all standard requirements set by law in the member state from a super-CA/operator level).
- The system should help the user to reuse templates, e.g. based on selection of procedure and category (work/supplies/services), derive a draft structure or requirements for the tender dossier. The system should guide the CA through these parameters and offer only the relevant fields/requirements in the tender dossier;
- The system should provide common used pre-defined terminology e.g. the Incoterms rules or International Commercial terms are published by the International Chamber of Commerce (ICC).

2.2 Enable simulations of tenders, notification information, tender responses and evaluation

Context: Supporting CA staff in their preparation of call for tenders

Business Objective:

When preparing a call for tender there are different evaluation models to use.

In order to choose the most appropriate to the case at hand, it should be possible to simulate an evaluation, using the different evaluation models

Recommendation:

The e-procurement platform should provide functionality allowing CAs to simulate tenders based on different evaluation models also allowing preview of the notification information as seen by the supplier prior to the publication.

Once complete, the simulated tenders/responses need to be removed from the system to prevent discrepancies within live tenders.

Additionally, the platform should allow the CA preview the entire tender for review prior to publication (not only parts).

2.3 Use of structured information

Context:

Use of structured information facilitates automation of the qualification and evaluation processes, supporting a transition to a system-to-system model. It minimises the risk of omissions on the EO's side, hence increasing the number of compliant tenders received by the CA.

Business Objective:

Increased interoperability is important in the procurement process. It requires increased usage of structured information which facilitates both the exchange of information and the process, including automatic evaluation.

In particular within the pre-award procurement process, structured information is insufficiently used. Pertinent standards have to be further developed and tested. Standardisation work is on-going in international standardisation bodies like UN/CEFACT, ETSI, OASIS etc. Profiles for the usages and implementation guidelines based on European requirements are developed under CEN/EBES workshop, and the current CEN project BII2.

In the draft new directives on public procurement there is an article about e-catalogues highlighting the importance to further develop standards for this. Use of common standards for structured e-Catalogues has been initiated but is not in wide use.

To allow any process improvements, structured requirements in general must be promoted together with use of e-catalogues regarding listed product and service items.

E-catalogues must contain a minimum of information in order to facilitate automatic evaluation but it is also possible to add other information to enable evaluation of the tender and facilitate post award process.

It is important to recognize the different functionalities of e-catalogues. An e-catalogue can be used :

1. By CAs who have a generic requirements catalogue in their business;
2. By CAs to produce the requirements catalogue for the items of a specific tendering process, to be priced by EOs;
3. By EOs who have a full supplier's product catalogue;
4. By EOs to send a specific product catalogue in response to required items for evaluation and use at the post award phase;
5. By EOs at the post award phase for the ordering and invoicing processes.

Main benefits of structured information rely on uses 2, 4 and 5. It may also facilitate to render tender information multilingual.

The use of structured information for requirements and for tenders and tendered products facilitates:

- Pricing and tender preparation by EOs;
- Evaluation of tenders by CAs by automated processing of selection and award criteria;
- Contract award by CAs;
- Bridge to post-award for automated ordering and invoicing by both CAs and EOs.

Recommendation:

Structured information should be supported for use on the tender systems. It is important to replace unstructured documents by structured information.

eTendering and eProcurement systems should allow the use of structured information, which should be based on international standards and use the same formats for tendering to post award phase.

In general the CA:s should use standardised, structured formats when preparing the tender documents, including providing catalogue templates, by using the CEN/BII tendering profiles, based on international standards such as UN/CEFACT, ETSI and OASIS.

This will enable further interoperability at each step of the process.

Policy makers should support and promote standardization activities.

Since the requirements vary in different sectors, implementation guidelines, code lists and common vocabularies should be developed. These guidelines could be provided by the relevant sectors in collaboration with standardisation bodies.

2.4 Enable version control, traceability and communication of changes to tender dossier

Context: Update the tender dossier both before publication (work in progress), and post-publication (amendments with notifications).

Business Objective: The CA must have the ability to modify the tender dossier and any attachments on the system prior and after formally launching the procurement process.

Recommendation:

Enable version control, traceability and communication of changes to tender dossier. The CA must not be able to modify the original tender dossier version or any attachments on the system once the procurement is launched. Should the CA need to clarify any aspect of the tender dossier this will be achieved by an amendment that clearly defines what has changed rather than replacing existing documents. Alternatively, original versions should be kept and each new version should be highlighted to the users on the economic operator side.

Registered EOs should receive information about changes to the tender dossier. Such changes should be documented/published on the platform to ensure transparency to non-registered EOs.

2.5 Insert contract notice and any public procurement notification into tender dossier, and pre-populate the notices

Context:

Requirements stated in the tender must be consistent with requirements stated in the contract notice and the contract. If there is a risk that any requirement is written in the contract notice, but not in the tender dossier, then some economic operators may miss such requirements.

Business Objective:

When creating a contract notice it is important that the content in this is identical with the information in the call for tender and viceversa. It is preferable to reuse the content from the call for tender when filling in the forms for notification.

Recommendation:

- The contract notice and any public procurement notification should always be included in the tender dossier.
- An e-tendering system should as much as possible enable pre-population of notices texts based on templates and other information already captured in the tender, e.g. tender deadline selected in the solution should be used to pre-populate the corresponding field of the notice.

2.6 Guide the setting of time-lines

Context: Compliance of timelines with regulations.

Business Objective: Setting correct timelines for a procedure is sometimes difficult. Mistakes are likely to occur.

Recommendation: The e-Tendering platform should provide functionality to warn a CA from setting timelines which are not compliant with the Directives or national laws.

The system provides guidance only and does not enforce the rules. CA is ultimately responsible for all decisions.

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2.7 Cross organisation collaboration

Context: Common purchasing, CPB purchasing

Business objective : More and more CAs purchase together or a CPB purchases on behalf of other CAs. IT can facilitate working together on one dossier from different locations. The CA should be able to purchase on behalf of other contracting authorities

Recommendation:

The system should allow more than one CA or a third party to work on the tender dossier.

It should enable:

- collaborative work within a single organisation (could include external users such as consultants, but one organisation retains overall legal responsibility).
- Cross-organisation work, e.g. joint procurement (with distinct legal responsibilities for each organisation)
- It would be beneficial for the platform to offer the means for aggregating demand and developing a unique procurement strategy.

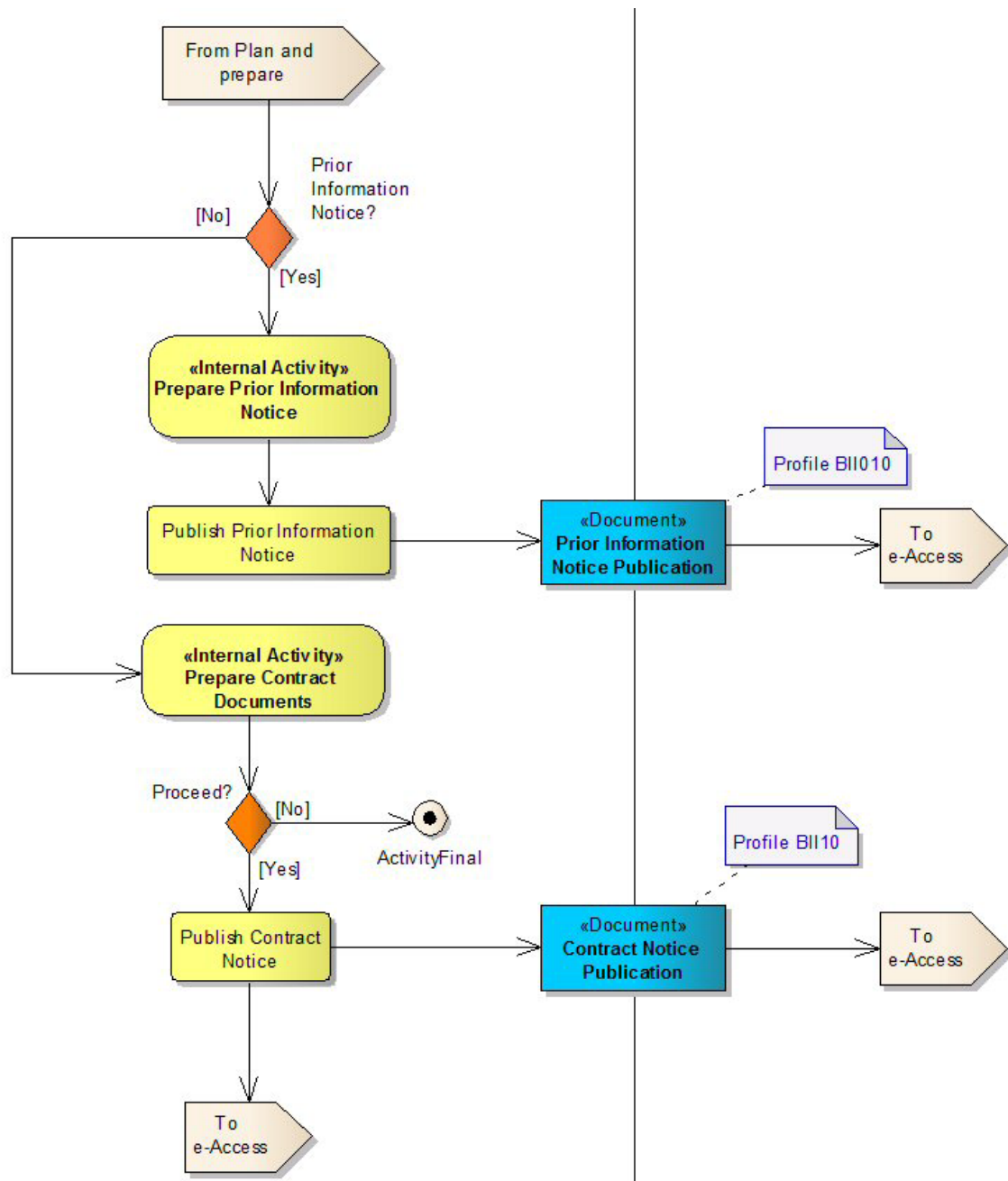
The authentication/authorisation system should enable collaborative work of users across organisation as per recommendation 1.3.

03 Call for tender publication – Report

Most e-Procurement Platforms offer means for creating and publishing the various public procurement notices. This might involve the automatic generation of an XML notice for publication in the Official Journal of the European Union (OJEU) as a result of the tendering preparation process. The Owner of the call for tender is asked to enter the call for tender data only once and the system is able to (transparently) use such data to generate the notice, together with the overall workflow for the full procedure.

Electronic publication of notices is mandatory for procurement above the thresholds set out in the EU Directives. Within this element all the standard communication types should be supported by the platform: advance notices, contract notice, contract awarded, etc.

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1. First element name in diagram (Upper Right/To e-Access) should be extended to e-Access / Assess Prior Information Notice
2. Middle element name in diagram (To e-Access) should be extended to e-Access / Assess Contract Notice
3. Final element name in diagram (To e-Access) should be extended to e-Access / Dispatch Call for Tender

3.1 Publish notices on central portals

Context: transparency and access to information

Business Objective: Economic operators (especially SME) suffer from the current lack of resources to access tendering opportunities comprehensively.

Only tendering opportunities above the threshold are published on the TED. These can only be searched using the tools offered by the TED system itself. Some CA use or run their own platform where only a small number of notifications can be found and there are no means to aggregate tendering opportunities as a result of a single query.

There is a requirement to give enterprises, especially SMEs, wide access to basic procurement information, while preserving the right (and market opportunity) for services provider to come up with advanced added value search services.

Recommendation:

While implementing the below recommendations, no barriers or restrictions should exist, for any organisation to freely access or distribute procurement opportunity information.

Platforms should make available procurement opportunity information in a standard format (as per Step 1; e-Procurement Open Data Standard Format) to enable external services to extract the data for distribution.

Single points of access to notices should be created (at least at National level) giving seamless access to business opportunities from single points of access, offering on top of that advanced profiling features to help economic operators sift through the opportunities. A directory of National single points of access should also exist.

Notices under the threshold should also be available to the single points of access, using an EC wide below-threshold standard.

Additional publication in other online or offline media should be possible.

Search tools should be provided for EOs to facilitate the searching of below threshold opportunities on other national platforms using the standard, and reciprocally provide referring links from TED to national and regional portals that house below threshold notices that make user of the standard.

The below threshold standard would be based upon the EC (preferably shortened) above threshold standard.

The following steps should be taken:

1. Link e-Procurement data in the Web of data

The international standardisation organisations in general, and particularly the future CEN/BII workshops, should elaborate a single **e-Procurement Open Data standard format**, common to all Member States and European Institutions. Our recommendation is to re-use the works developed by the CEN/BII workshops to produce a binding OWL/XML ontology.

The standard should provide for all the current types of notices, and notices should be linked e.g. award notices linked to the contract notices.

All Member States and the European Institutions could then **transform the already published contents** of their most recent electronic structured documents in the Linked Open Data (LOD) way and based on the ontology above recommended (serialization of their documents into RDF triples).

All Member States and the European Institutions should adapt their eProcurement systems in order to **automatically transform the data** they currently publish on their e-Procurement Platforms and Official Journals into the LOD format proposed. Thus, these systems could provide the data through a standard service (e.g., a SPARQL end-point).

The contents so published should **link to other data sources and resources following the W3C specification**.

All the services and data must **conform with the European Directives (namely the 2003/98/EC Directive) and the Member State's laws**.

2. Creating single points of access (SPOA) for notices

A SPOA should be public, free, and should not impose any user registration requirements. On top of the basic information, services providers would be charging companies for advanced profiling services. The SPOA should also provide enough notice detail for SMEs to evaluate if they wish to participate in the procurement process further and it should be also designed such that SMEs can discover procurement projects that are divided into individual lots.

Notification systems should support the largest possible number of the communications means so as to allow seamless access via work stations, mobile devices, tablets, etc:

- Web page (e.g. HTML, Javascript, XML)
- Text Messaging (e.g. SMS)
- E-mail (e.g. POP, IMAP, SMTP)
- RSS (e.g. RSS reader, digital signage)
- SPARQL End-points
- Social Media (e.g. LinkedIn, twitter updates)
- Web Services (e.g. XVergabe)

3. Provide efficient means to query information

CEN/ BII should define a new set of processes, document(s) and rules involved in the creation of what could be named "EO's Profile matching". The objective of this work would be to allow the EO to prepare its "company profile" once (on a standard basis) and to send it to as many different CA's Platforms and other SPOAs as possible.

Schemas and ontology artefacts should also be elaborated and freely provided.

These artefacts should be based on the standard business languages and Open Data specifications being recommended by this E-TEG group (as UBL-2.1, UN/CEFACT, RDF-based and/or JSON specifications).

CAs, software providers, and public and private e-Procurement Hubs, as the Single Point Of Access above mentioned, would then develop Matching Engines in order to match the available EO's information with public information contained in current, future and previous tenders. EO's Profile and Matching Engines should work based on the specifications from CEN/BII so as to facilitate the interoperability between different/heterogeneous Member State's Platforms.

Private Sector's software manufacturers and research programs (such as FP7) should be encouraged to deliver new products oriented to enhance the matching so as to refine the opportunities as the best ones for the Eos. E-Procurement Linked Open Data could be used as a basis for these developments.

3.2 Improve Dynamic Purchasing System notice and usage

Context: The legislative proposal for the revision of the procurement directives provides a simplified model for the Dynamic Purchase Systems (DPS)¹. These will not require anymore a publication for each single specific call that a CA makes under the DPS. However, there is always a need for a company to subscribe to a DPS at any point in time.

Business Objective: The DPS information should be available to queries on the TED (and any other source of business opportunity information) as long as a DPS is still open, to enable continuous registration of EOs.

In addition, in the current notice that issues a DPS, the following items are not applicable or are misleading: Total quantity, Duration of the contract, Limitation on the number of operators who will be invited to; Time limit for receipt of tenders or request to participate, Date of dispatch of invitations to tender or requests to participate.

Recommendation:

The contract notices for DPS should be revised. A specific notice should be used focusing only on the first phase key items and considering that it should be issued by a central purchasing body for many different contracting authorities.

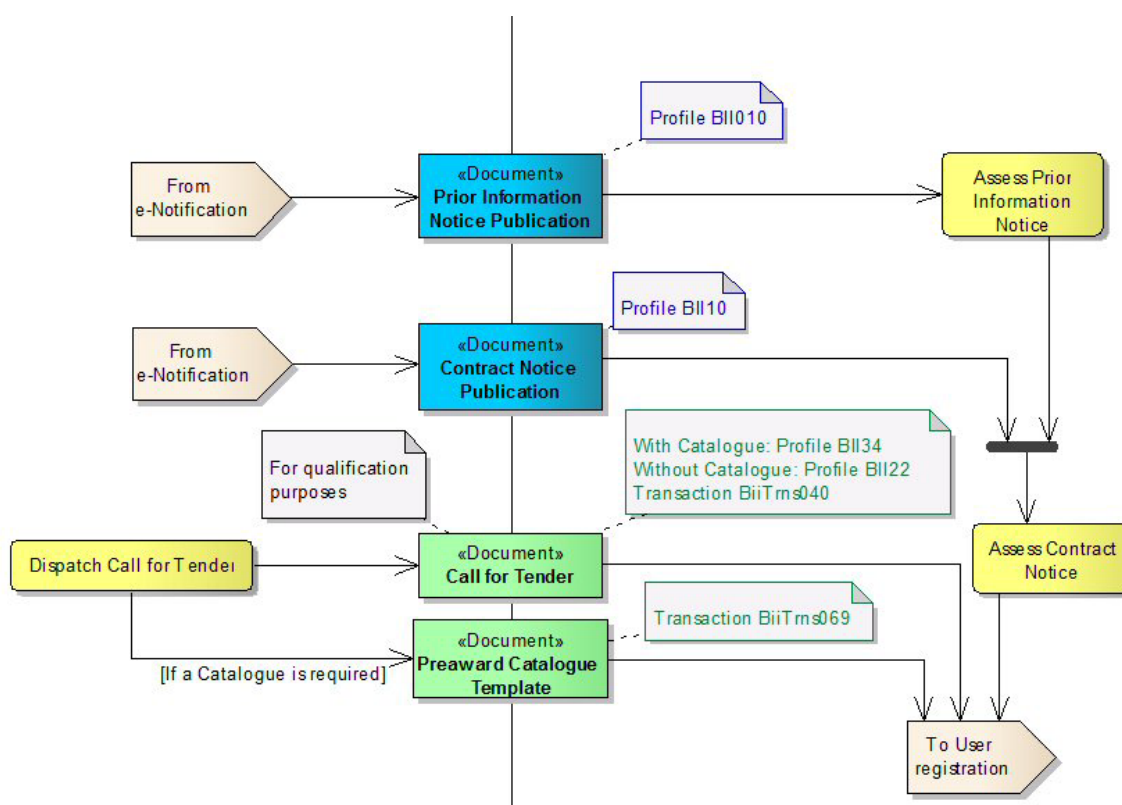
The notice should be open throughout all the period of operation of a DPS.

Regarding CPV code requested in the notice form it should be possible to define the main object by several CPV codes (more than one). This happens when a central purchasing body set out a DPS concerning various objects such as office equipment (computers, notebooks, printers...).

¹ As defined in the Directive 2004/18, Article 33. A ‘dynamic purchasing system’ is a completely electronic process for making commonly used purchases, the characteristics of which, as generally available on the market, meet the requirements of the contracting authority.

04 Provide access to procurement documents and information - Report

A platform should enable free access to all the tendering documentation by any interested party wishing to gain an understanding of all the details of the call for tender. This involves downloading of the tendering documents and, if the platform supports structured tenders, the electronic templates for the preparation of the response. Either way, the CA should ensure that information offered to EO enables them to make rapid decision as to participation in the call for tenders.



4.1 Provide free of charge access to notices and tender dossiers

Context: Providing information on business opportunities

Business problem/Objective: Ensure that companies, especially SMEs, have access to business opportunities and make decisions on participation efficiently.

Recommendation:

The **system** must be available free-of-charge, unrestricted to all users/guests who merely require a device, web browser and Internet connectivity. This includes generally available software access to all information. A user should be able to have access to procurement documents and notices without the obligation to register to a system for all normal tenders (exception only for classified or NATO Restricted).

All **mandatory e-notifications** must be readable for all interested EO free of charge. All procurement and notice information should be available in common use internet formats like RSS, SMS, Social Media etc. enabling easy information aggregation from different sources. Such Internet formats shall provide information with any subset of notices information available in current OJEU format (even if only a subset of information is included below thresholds).

Tender documents for open phases of restricted/negotiated procedures or open procedures should be downloadable without prior registration. In this way all EO can check if they want to participate the procedure. It must be clear, though, that non-subscription means that the EOs won't receive from the contracting authority any updates (of any tender documents, responses to questions, or other notices).

For classified procurement processes (i.e NATO Restricted) the EO identity must be validated for security reasons. This can be done with a qualified signature. Therefore an e-Procurement Platform handling NATO Restricted procedures should provide the possibility for EOs to register them with this signature.

4.2 Improve ability to search, sort and discover opportunities by lot

Context:

In call for tenders involving lots.

Business Objective: EOs are often obliged to get the full set of tender documentation before they can identify which information is relevant to them.

The benefit will be to make it easier for EOs and especially SMEs to find and get the information relevant to them and make it faster to download it. It also reduces the data volume exchanged and archived.

Recommendation:

(1) By LOT (not possible today):

In order to improve the access to key information by the economic operator, with focus on SMEs, the structure of publications procurement notices published concerning the "contract value list" has to visualize the following information: If there are multiple lots, it is possible to visualize and search the value of the specific lots.

(2) More meta fields than CPV, NUTS, e.g. key words in descriptions. A user should be able to search effectively e-Notifications in the context of his business. Adoption of a consistent and analytic call for tender codification schemata for services, supplies and works that extend current CPV resolution.

4.3 Provide tender dossiers in a downloadable and readable format

Context: Tender Accessibility

Business Objective:

Increasingly platforms do not use documents for the dossier. As they handle unstructured tenders, for computer processing, the information lies in a database.

It is essential that the platform can extract business information for human readability.

There are conversion programs that can convert word, excel, etc to universal readable files, e.g. pdf or html.

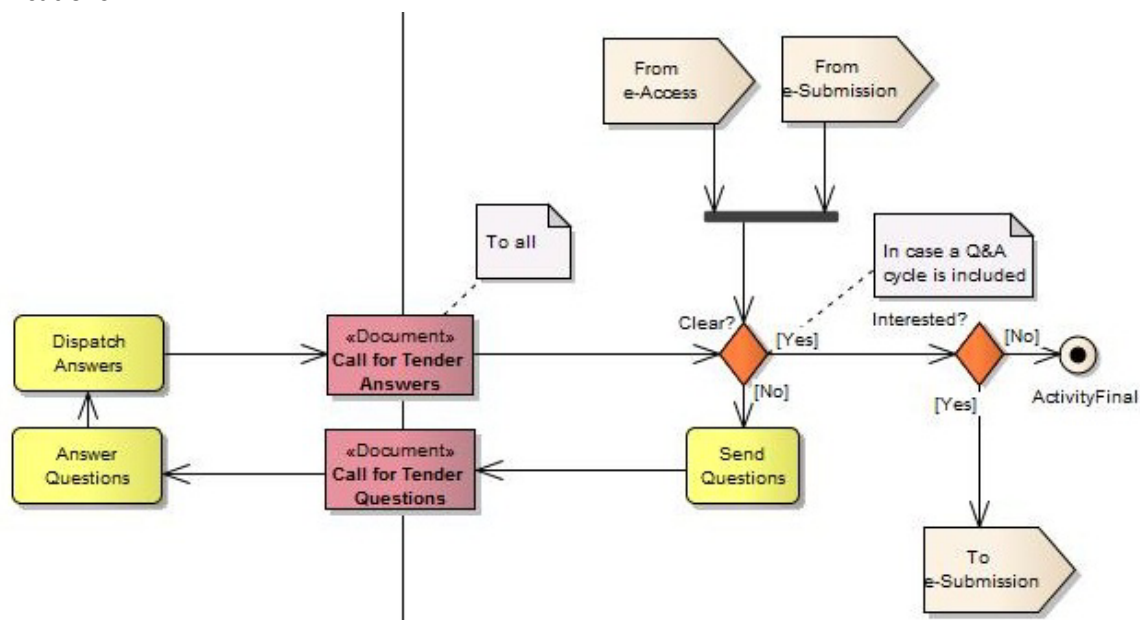
To facilitate interoperability the use of proprietary formats should be avoided since they do not support interoperability.

Recommendation: An e-Procurement platform should be able to provide tender dossiers in a downloadable and generally available format .

In an interoperability perspective between platform collaborating for tender preparation and submission (see the system-to-system model under e-submission), formats chosen should be open.

05 Enquiries on the tender requirements – Report

As soon as the complete set of tender specifications and requirements are online, EOs are entitled to ask the Contracting Authority for clarifications within a time limit set out in the tendering specifications.



5.1 Provide essential questions and answers functions

Context: transparency, communications and non-discrimination

Business Objective: CA sometimes receive privately directed enquiries. Some of them have impact to all EOs and must be answered publicly while other enquiries only need to be answered privately.

Recommendation

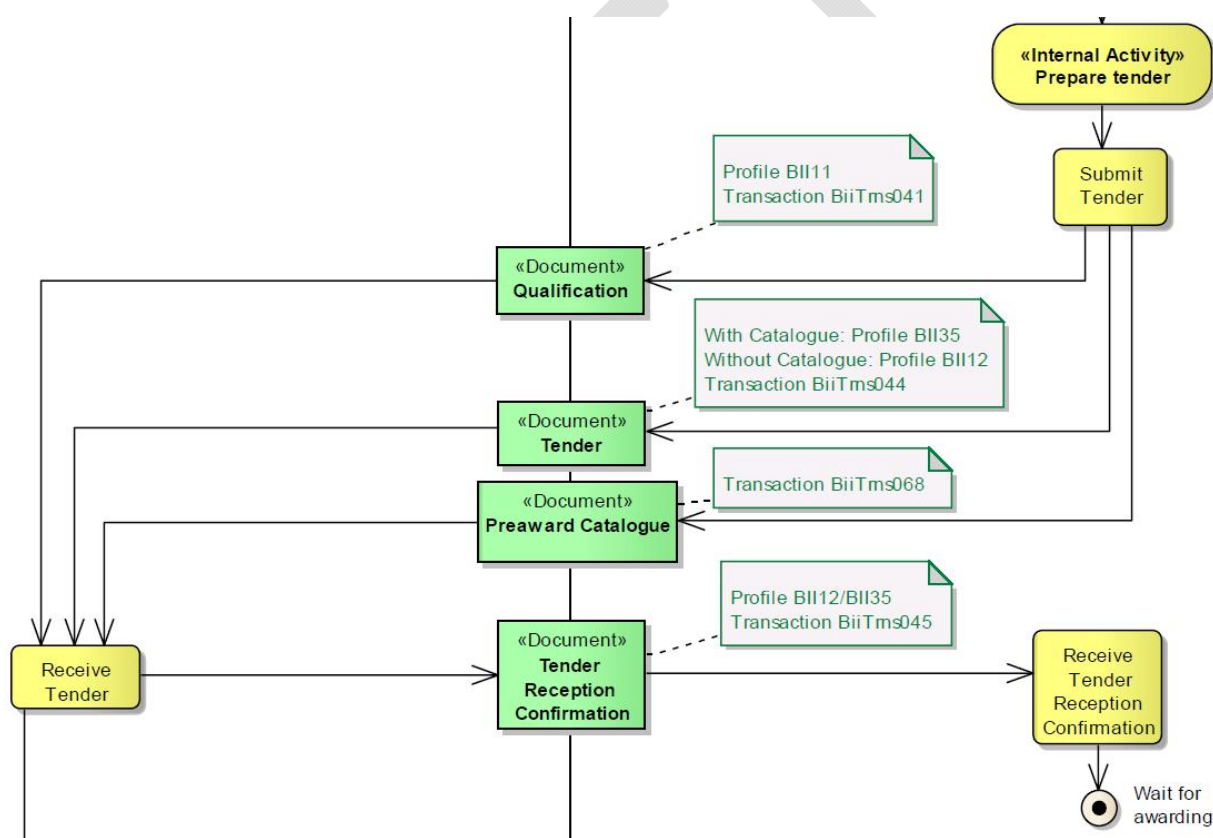
- The e-Procurement Platform must provide a questions and answers function. It should be provided prior to submission of tender response and after submission of tender responses
- There must be a deadline for directing enquiries to the CA by the EO. In paper based proceedings the deadline should be six working days before submission date, in e-proceedings it could be at least three days. It is suggested that CAs respond within reasonable time.
- Any response offline to system (fax, email, letter) shall be responded to with "Any queries relating to tenders from authority x will be responded to only if raised on the system x".
- The EO shall have the opportunity to see whether all enquiries concerning a tender have been answered.

- After a public enquiry has been answered all registered EO taking part in the tender should be informed automatically. After a public enquiry has been answered the system shall automatically alert all registered EO taking part in the tender by electronic means.
- The e-Procurement Platform should expose structured Q&A content (as a minimum to include dates, time & categorisation) to facilitate ease of searching, indexing etc.
- CAs should provide a clear policy of a) the likely time-frame for the CA to respond to EO questions and b) the 'closing' date for questions before the submission deadline – this timeline should also be sufficiently before the tender deadline to allow EOs to revise their bids to reflect the Q&A response information circulated.
- If a CA or EO makes an inquiry the e-Tendering platform should send an e-Mail automatically to the receiver. As e-mail is not a reliable communication channel the receiver has no claim to get one.

06 Submission – Report

This is the phase where the economic operators prepare and submit their offer before submission deadline. In the restricted procedure, negotiated procedure, dynamic purchasing system and competitive dialogue, submission is split in two phases. The Economic operators firstly submit qualification documents, thereby requesting to participate. Secondly, if selected, they can submit their offer. In an open procedure Economic operator submit their qualification documents only if they are awarded the contract, attaching to the tendering bundle a self-declaration.

Economic operators must submit their offer according to the instructions provided by the Contracting authority in the Call for Tender. The following diagram illustrates the e-submission process as defined by CEN BII specifications:



Offers may contain documents meant for human reading or a structured format allowing Contracting authority to receive, accept and process it in compliance with the legal requirements.

For e-submission, three submission models have been identified:

1. Online model implies that EOs can manipulate (create, modify, review and/or send) the tender content directly on the web platform, using a web browser. They may be allowed in some cases to download files before final submission, edit them on local machines and return to the platform. Therefore, the platform must provide some sort of isolated and secured “sand-box” to guarantee the privacy of tenders at any time in their life-cycle (eg.

take care of temporary files/data and encryption between saved sessions for example). The main benefit for bidders would be better flexibility to carry out their tender preparation and submission (just a web browser required).

2. Offline model implies that bidders prepare, review and encrypt the bid SOLELY on their own machines – using tools offered by the platform (e.g. via Java applets or tools that are made available for downloading) - and finally transfer/send the encrypted bid to a platform server (in this case, as long as the files containing the bid are encrypted, there's no need to provide such "sand-box" secured environment on the server, but a way to guarantee no decryption is carried out by non-authorized personnel and never before deadline expires). The main benefit for bidders would be a highest level of technical security (especially when using asymmetric encryption).
3. System-to-System model implies trusted communication between platforms. The tendering process would be run on one platform, but an EO would not necessarily need to use the e-submission tool offered by that platform, having the ability to prepare a tender on another platform. Once completed, the tender would then be sent to the platform where the tendering process is run. This model, still in its infancy, holds the promise of decoupling the tendering preparation environment from the tendering submission environment, providing greater efficiency to EOs who would always use one single user interface irrespective of the platforms where the tendering processes are run at any one time. The eTEG supports the development of this model.

Note that models may coexist on the same procurement platform; for example, an open procedure which involves an offline e-submission of tenders, may imply a final phase of electronic auctions which will be performed exclusively online (then, offline + online processes are covered by the same procedure although at different stages). Also on many cases, bidders may choose between available options (depending on platform capabilities).

The system-to-system model

Decoupling the CA's and EO's systems requires interoperability between the systems focussing on the definition of common interfaces. New standard specifications should be defined:

- A legal/contractual framework should enforce a clear subdivision of responsibilities between the parties involved in the exchange;
- An exchange protocol. The EO's client will be able to send a request to the CA's platform to receive a call for tender package, and send to the platform the EO's submission and receive the acknowledgement. This protocol has already been piloted in the XVergabe project [See description below. A white paper in English can be found under: <http://www.xvergabe.org/confluence/display/xv/XVergabe+Whitepaper>]. The basic transactions at that level of interoperability should include all the steps defined by CEN BII;
- Tender package structure. Both from the CA and from the EO, each procedure includes sending structured information (or document packages). Easy or automated use of these

documents requires that they would be organized in a clear commonly defined structure allowing direct access and processing.

- Though standardized information elements are available for this level, no applicable international standard is currently available. It is recommended to launch the project at international level and start European implementation verifications as soon as possible, using XVergabe as the basis.
- Technical interoperability – The system should be able to interoperate over an e-delivery platform ensuring end-to-end connectivity.

The XVergabe project: an example of an existing system to system solution

The XVergabe project was started by the Federal Ministry of the Interior in Germany (FMI) and its Procurement Agency at the end of 2007. Participants are CAs, federations as well as solution providers of eTendering platforms. The goal of this project is to create a sustainable basis for electronic interoperability between EOs and CAs in the pre-award phase. The tenderer's interface of XVergabe makes it possible to use a unique bid client to enable an EO to access all compatible eTendering platforms. Instead of learning 330 platforms the EO has to learn only one. This will lead not only to a much higher satisfaction on the side of an EO but also on CA's side.

The tenderer's interface covers all necessary steps in the pre-award phase. Standard web security features are used and the interface is simple in its design for wide usage.

It covers:

- eSubscription: An EO can subscribe through its tool to a certain procedure
- eAccess: An EO can download the tender documents
- eEnquiry: Questions and Answers can be dealt with throughout the procedure
- eSubmission: An EO can submit a tender with its interface (incl. resubmission and withdrawal)
- eAward: An EO receives an award notice

6.1 Simplify Submission of Qualification Information

Context: The economic operator is preparing the qualification documents as proof to the exclusion and selections criteria. This might be before requesting to participate in a restricted, negotiated or competitive dialogue procedure, or before submitting a tender in an open procedure, or on request as the winner of a tender.

Business problem/objective: In most of the tenders all Economic operators have to prove that they are not in one of the situations in which Economic operators shall or may be excluded and they meet all selection criteria. These documents are typically reusable. Requesting, submitting and evaluating the same documents over and over again is the biggest administrative burden for Contracting Authorities and Economic operators.

Recommendation:

There are three recommendations to address these issues:

- Besides the approach of the proposed new Directive - where Contracting Authorities shall promote the use of self-declarations and shall require the evidences only from the winning tenderer and shall not be allowed to require any other documents that are not contained in e-Certis - reuse of qualifying documents is very important.
- An Economic Operator should be able to create and store a profile (including reusable documents). This profile should be managed on a national level, like a national registry or a national VCD storage. Economic operators should be able to use this profile while submitting qualifying documents.
- Instead of requesting official documents from the Economic Operator, CAs should be able to request official information concerning the economic operator directly from the Public Administrations/Authorities that provides it.

More information on PEPPOL VCD can be found at the following link:

http://www.peppol.eu/peppol_components/virtual-company-dossier

6.2 Submit tender in standardized structured format

Context: The economic operator has accessed a structured call-for-tender and in response to that is preparing its tender.

Business problem/objective:

A standardized structure facilitates the submission phase. It supports the EO in preparing and submitting the tender, is also a precondition for the system-to-system submission model and allows interoperability between systems from different member states in Europe.

Recommendation:

EOs should be supported in four ways:

- Structure the tender into one or more envelopes according to the needs of the CA. Some countries request envelopes for administrative, financial and technical information.
- Enable simulations if the CA gives calculable criteria.
- Support the EO during completion (see 6.3)
- Let the EOs use their preferred tools.

In order to submit tenders in a structured format it is inevitable that the CA is preparing the call for tender in a structured format (see 2.3).

6.3 Support during tender completion

Context: The economic operator is preparing/finalizing its offer and is about to submit its tender.

Business problem/objective: In a large and complicated tender it is easy to make a clerical error, therefore forcing the Contracting Authority to exclude a tender from the tender process. This is very inefficient and costs economic operators a lot of money. When completing a tender submission economic operators need visibility of the level of completeness and if the form is expected to validate correctly. These visual indicators can be used to help the economic operator properly assess the amount of time and effort required to complete the procedure.

Some procedures are built around lengthy or complex forms - sometimes requiring the completion/population of a high number of fields, and perhaps the upload of additional documentation. Complex forms can take a long time to complete, and it may not be possible for an economic operator to do so in a single user session.

Recommendation: The e-Tendering system or tools should optionally offer the EO to validate the tender before submission to ensure completeness of its tenders. The validation doesn't concern the content of the tender. It could check that no required fields are empty, the completeness of the tender, the correct use of formats such as currency, numbers, email, etc. The e-Tendering system should warn the economic operator if the validation shows any clerical errors but not prevent it from submitting.

During longer form completion processes it is recommended that systems provide tools in order that economic operators can save and refine their submission until they make a final submission and/ or the tender closing date is reached. Furthermore session timeouts should be set to be a period that does not impact the normal user experience; limited by the security risk of a too long session timeout. The system could alert that a web page is doing something (i.e. notifications before timeouts) or includes time to timeout countdowns.

6.4 Certainty after submissions

Context: The economic operator has submitted its offer and needs to have proof of successful submission. Prior to the submission time limit contracting authority staff should not have access or knowledge of the tenders submitted.

Business problem/objective:

Economic operators seek assurance that their tender has been successfully received by the contracting authority and within the time limit for submission. Economic operators are inclined to submit their tender at the latest possible time, risking submission after the time limit has passed. They do this because they don't have trust in the CA for not viewing the Tender box prior to the tender opening.

Recommendation:

An advantage of e-Tendering compared to paper based bids is that an economic operator can receive clear electronic receipts the moment the bid was successfully submitted. The receipt should have a unique reference number and date/time approved by a qualified timestamp.

See also (a) the exact time and date of the receipt of tenders, requests to participate and the submission of plans and projects can be determined precisely from Annex IV.

The e-Tendering system must provide functionality to maintain an anonymous list of tenders/opt outs prior to the tender box being opened – the contracting authority cannot see who has tendered. Each economic operator that has submitted a tender should be informed, the system could send the message to the economic operator without revealing its identity to the contracting authority.

See also (b) it may be reasonably ensured that, before the time limits laid down, no-one can have access to data transmitted under these requirements from Annex IV.

6.5 Support for EOs prior to deadline

Context: Hours or minutes prior to the submission deadline when multiple economic operators are trying to submit the tender.

Business problem/objective: The time limit to submit a tender is very strict. Bids from economic operators who are seconds late will not be accepted. The hours or minutes prior to this deadline are crucial in the process. Economic operators should be able to rely on the capacity of the system, support of the helpdesk and accessibility of the contracting authority. Because multiple economic operators can participate and the scope of their tenders is unknown the load on the system is unpredictable.

The economic operator may encounter technical problems while submitting its tender. The contracting authority system can be the reason of this problem, but not in all cases. Only if the contracting authority system failed may the contracting authority postpone the deadline to submission, in all other cases not. Therefore it is very important to know if the contracting authority system failed or if the problems occurred due to other reasons, e.g. a slow internet connection on economic operator side.

Many CAs currently set their deadline before noon.

Recommendation:

To ensure accessibility of contracting authority staff and the support of the helpdesk it is very important to set the time limit for submission during the time that CA's staff or platform provider is available to support EOs for submission.

CAs should ensure consistency between their expected deadline hours and the Service Level Agreement of their providers in terms of support.

- Service Level Agreement could include the following indicators: Availability in % during normal office hours. Suggested formula: $\text{Availability \%} = \frac{\text{Time System is Available during service hours}}{(\text{Service Time during agreed service hours} - \text{Agreed Downtime})}$.
- Availability in % during non-office hours and weekends, public holidays in the MS of the CA.
- Availability (maximum downtime) in case of disaster (Disaster Recovery), especially if less than 24 hours (should be required only if volume of tenders justify).
- All availability shall be measured.
- Response times for set web pages.
- Response times for 1st line support queries by telephone, and any other channels agreed. (Less than 20 seconds rarely required, and may incur unnecessary costs).
- Response times for issues reported through other channels than phone.

- Fault resolution time (for different severity levels To Be Defined), escalation procedures and times (where "Fault" is defined to be including non-compliance with any requirements, e.g. non-compliance with new version of java on EO client in Offline Submission Model).
- Accessibility requirements should perhaps also be published for EOs.

To prevent debate between economic operators and the contracting authority about availability at the deadline the service provider should provide functionality to ensure that where a clearly detectable technical error occurs during submission, the system warns the contracting authority and offers the possibility to postpone the submission deadline.

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6.6 Handling late submission

Context: Reaching the deadline for submission

Business problem/objective: The deadline for submission plays an important role in the procurement process. Submissions after the deadline are not acceptable.

Recommendation:

The problem can be handled in two ways:

- 1) The e-Tendering system could provide functionality to ensure that the tender box locks automatically when the deadline is reached and any tenders that are part way through being uploaded will be rejected. An EO cannot upload any documents after the deadline. This approach simplifies the opening phase as there are no late tenders to be handled but affects the flexibility for the CA in case of technical malfunctioning of the system.
- 2) The system accepts late offers but tracks using time-stamping the submission. This means that late submission will be detected and formalised through the opening process. This approach offers an easier demonstration against claims from later submitters that the system did not allow submission before deadline. It also allows accepting late submissions that are exceptionally allowed by CAs to make up for system failures.

The e-Tendering system should provide functionality to produce reminders to registered EOs that the tender time is ending; e.g. 3 days before and 1 day before the submission deadline. The reminders should be configurable, and make use of standard non-proprietary messaging channels such as email and/ or SMS.

6.7 Confidentiality of Tenders

Context: The economic operator has to submit the tender documents according to tender rules and specifications set by the CA in order to be awarded a public contract.

Business problem/Objective:

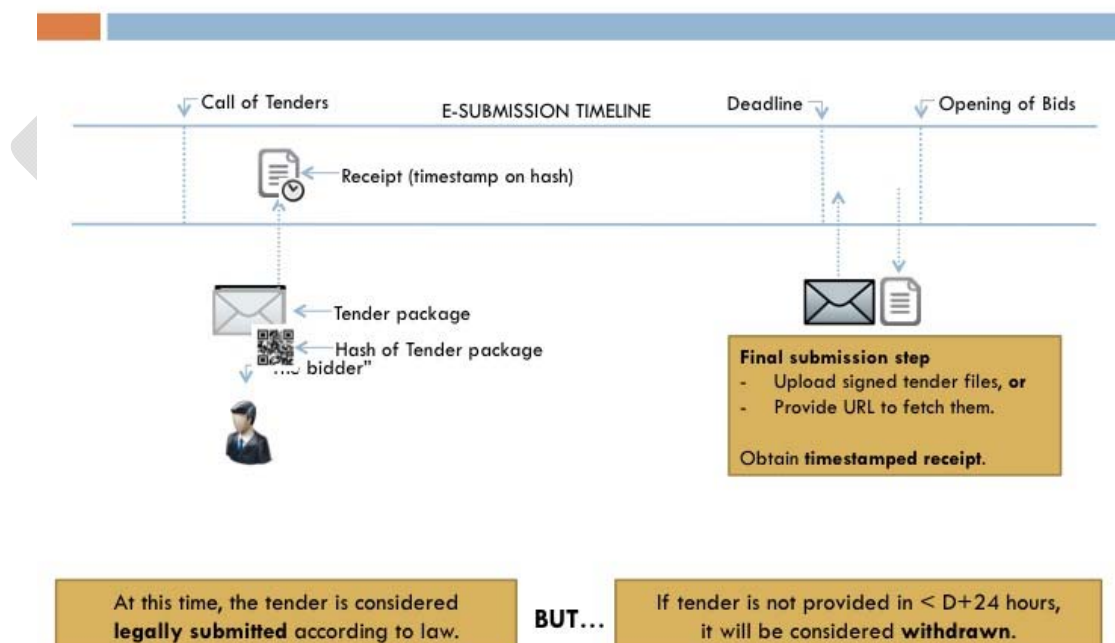
As per procurement Directive, the system must guarantee that no access to tender documentation can be achieved by anyone before the deadline. The challenge here is to provide a robust design so the confidentiality of the tenders is guaranteed.

Mainstream approach: tenderers encrypt their tenders using public key cryptography and transmit the complete tenders to the platform. This method reasonably ensures that no one can access data transmitted before the deadline. In fact the process places the responsibility on the CA in charge of opening the tenders (tenders cannot be decrypted unless their private keys are used).

Recommendation:

To address the fear of EOs that the tender can be accessed by CA staff with an interest to tamper with the process, while at the same time reducing congestion at the submission deadline, in some MS platforms use an alternative to the mainstream approach in the design (see diagram below).

Split of e-submission (hash + tender files)



Instead of sending the complete bid by the deadline, the tenderers just send the hash of the tender package before deadline. After the deadline and prior a short time interval (ie 24 hours, to be chosen

by CA and specified in tender documents), the bid contents matching the hash (ie. ASIC package) must be digitally signed and delivered by the EO within this period.

This approach ensures confidentiality by design for off-line and system-to-system communication.

Although the hash of the tender package ensures that the tender package remains unchangeable, some Member States regard this method as incompatible with the public procurement legislation because the tender, in fact, is not sent at the submission deadline but is uploaded at a later stage. It is recommended that the Commission verifies the compatibility of this method of submission splitting with the procurement legislation.

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6.8 Digital Signature of the tender to provide legal value of signature and non-repudiation

Context: to enforce a model for submission of digitally signed tenders that does not create barriers to cross-border e-submission

Business problem/Objective: e-Procurement platforms today use national implementations of PKI standards that **are** often incompatible with technology available to foreign EOs. Often platforms are built on top of established national security infrastructures, designed to serve specific communities. Foreign EOs may experience access limitations.

The challenge for e-TEG is to come up with recommendations to policy makers and systems designers and planners in such a way as to enforce design practices enabling cross border access (i.e. any company in the single market can submit a tender using the tools available to them) while meeting the local security policies.

The legislative way forward proposed by the Commission within the procurement directives' revision can be summed up as follows:

- CAs are free to adopt any technology, including a simple user-ID / Password-based authentication mechanisms with a prior registration process;
- it is the responsibility of the CA to ensure by design that foreign contracting operators are not prevented by the e-submission tool from submitting a proposal;
- if a contracting authority requires the use of any type of advanced e-signature, the e-submission platform shall be designed in such a way as to enable submission of tenders accompanied by a qualified electronic certificate as confirmed by a Trusted List as defined by Commission Decision 2009/767/EC as amended.

Recommendation:

If a CA (for its own choice or to comply with National legislation) elects to have the tender signed with a qualified electronic signature or advanced electronic signature based on qualified certificate, giving legal and non-repudiable value to the tender being submitted, it should use a platform which enforces a standard e-Submission model based on the Trusted List that can be used by all EOs in the MS.

In such a case, the CA should:

- Specify in the Call for tenders that the tenders will be accepted if signed with a signature supported by a Qualified electronic certificate as confirmed by the Trusted List of any MS as evidenced in the list of the lists maintained by the European Commission;
- Require in the Call for tenders that incoming files comply with one of the formats defined by latest ETSI Standards (CAAdES, PAdES, XAdES baseline profiles), depending on the underlying

file format chosen for the tender, according to the technical rules specified in the annex to Commission Decision 2011/130/EU;

- Avoid imposing additional security requirements on top of those identified in the bullets above;
- During the signature verification phase:
 - Verify that the status of the electronic Certificate of the tenderer is valid (i.e. it is not revoked or expired)
 - Verify that the Certificate is a Qualified Certificate issued by a certificate service provider in the Trusted List;
 - Verify that the Certificate is a Qualified Certificate issued by a certificate service provider in the as confirmed by a MS Trusted List;
 - Accept all tenders that conform to the above requirements

To support the above process in the smoothest possible manner, platform managers should consider offering a signature and verification facility on their system based on DSS (Digital signature service), an open source software made available by the COM at:

<http://joinup.ec.europa.eu/software/sd-dss/release/20>

The DSS provides both for the signing and the verification functionality using the TLS as specified in these recommendations. Therefore using SSD at both ends ensures high reliability for the whole process.

Using this reference software would also ensure a common validation policy that complies with the current legal framework for e-signatures, the technical specifications of ETSI (for advanced e-signature formats, verification process) and allows to base the verification on Trusted Lists and use a reference validation report (simple end user report + more detailed technical report). The latter (simple end user validation report) should be implemented at latest by mid 2013.

If the option of using DSS is available on the platform it uses, a CA which requires advanced electronic signature should use it.

6.9 Security policy for the e-submission system

Context: to enforce a model for submission of digitally signed tenders that while ensuring an adequate level of security does not create barriers to cross-border e-submission

Business problem/objective: The use of public internet technologies to provide accessible, inclusive and interoperable e-submission tools creates a different security risk profile that should be considered during the design and operation of such tools. The challenge is to introduce appropriate levels of security that allows the securing of data, the identification of users, protection of confidentiality and improvements to procurement neutrality, without becoming too expensive to implement and/ or cumbersome for the user.

The key issue is to enforce best security practices that protect both users and data but do not create unnecessary overheads or barriers to use.

Recommendation:

Platform operations should enforce best practice security practices that protect both users and data but do not create unnecessary overheads or barriers to use. They should perform preliminary risk analysis and use wide-spread security standard ISO 27.000

CAs should require a precise SLA from the platform operators.

ISO 27001 should be used as a basis for the security of a platform upon which platform managers can adopt further member state specific requirements (such as ENS in Spain, ILx in the UK, VAHTI in Finland etc.). Platform operations should implement an Information Security Management System (ISMS) that defines the scope of service, details of who has access to what data, staff vetting procedure, details of support channels, policies on the maintenance and development of the service and a risk assessment (SOA) against common threats.

CAs should ensure that the platform they use secures (and clearly indicates) the confidentiality of data concerning the commercial confidentiality of competing tenders, bids & clarifications, the identity of bidders (even the existence thereof), the specific technical detail of bids (where it could expose a security vulnerability) and personal information (Refer to ISO 27 001).

To remove barriers to SMEs, improve cross border trading and reduce technical/ operational complexity to CAs, the Commission should encourage member states to re-evaluate if digital signatures are strictly necessary at the tendering stage, and that Member States to consider signing of contracts at the award phase. Where digital signing of bids is deemed unavoidable, as per a preliminary risk analysis, the ETSI baseline methods (such as XAdES, CAdES, PAdES, ASiC baseline profiles) should be used providing they do not restrict document/file types (docs, pdf, XML, etc.). Furthermore the level of authentication factors required should be differentiated depending on the users involved, the sensitivity of data and specific tender parameters (such as value, procedure, timescale, nature of goods/ services etc.).

Finally, platform operating organisations should commit to regular (minimum annual) security or penetration testing on their systems to evaluate system safety from real life security threats. Such tests should use trusted processes such as OWASP (Open Web Application Security Project), ISSAAF (Information Systems Security Assessment Framework) or OASIS WAS (Web Application Security).

From the perspective of the CAs using the platforms, with increasing use of procurement platforms comes the need to make sure that the software and related infrastructure meets acceptable levels of performance as expected from business critical software and infrastructure. Should platforms not meet acceptable levels, this will at best create barriers to uptake and use and, at worst, expose CAs to legal challenges arising from system failures during the procurement workflow.

CAs should require new (and legacy) systems to establish formal Service Level Agreements that comprise best practice in the running of High Availability business critical systems, and implement robust and regularly tested Disaster Recovery (DR) plans. Systems (comprising software, hardware and connectivity) should be designed (or retro engineered) to reach sufficient availability and adopt best practice on the use of distributed (and redundant) architecture to remove single points of failures.

Routine and preventative maintenance (that impacts users) must be conducted after adequate notice has been given, and should be scheduled out of normal business hours. Furthermore, the architecture of these systems should ensure that, wherever possible, full systems are not taken off line during such tasks and reduced capacity (or DR) services be provided instead.

Robust monitoring of system availability (to include the logging of all outages) is critical for the correct operation of platforms. Should failures occur monitoring should be used to invoke (automated or manual) procedures to notify impacted users and offer advice to mitigate the impact of the outage (to include extended submission deadlines if appropriate).

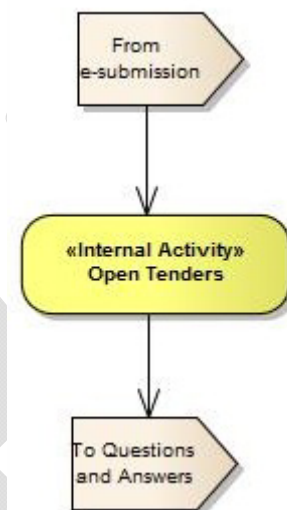
Performance of solutions needs to be monitored, and when needed, improved as systems grow and scale. Page load times should be optimised for the lowest common denominator of user (e.g. low-bandwidth users) and key tools (such as searches and document uploads) and user journeys (such as registration, notice searching & tender submission) should be regularly tested.

Finally, documented and highly visible support channels, and related processes need to be provided for all users. This might include telephone, email, web (including FAQs and user guides) that should be available as a minimum within normal working hours. CAs may wish to also canvas opinion of users post contract award such that their feedback on performance can be used to continually improve the services provided.

07 Opening of Tenders – Report

Once the deadline for submission has expired the opening process begins, causing:

- All tendering documents to become visible to designated people within the Contracting Authority's organisation (i.e. tendering evaluators and administrative staff).
- Verification of completeness of the information included in each tender e-package submitted which may result in rejection of incomplete proposals, to be handled as part of the workflow. Verification may be required also in the case of systems supporting structured tenders, despite their intrinsic ability to prevent submission of incomplete information. A CA might find it appropriate to leave the responsibility with the tenderers to submit compliant tenders.
- Communication to all participating tenderers of the winning tenderer(s), and all other information that tenderers are entitled to know about their competitors.



7.1 Unlocking tender box

Context: an opening committee is set up by the Contracting Authority in charge of disclosing the bids and accessing certain envelopes/documentation in order to perform qualification or evaluation.

Business problem/objective: as per procurement Directive, the system must guarantee that:

- simultaneous action by authorised persons must give access to data transmitted only after the prescribed date;
- data received and opened in accordance with these requirements must remain accessible only to authorised persons.

Recommendation:

The e-Tendering system must provide functionality to ensure that at least two separate users with two different logins may unlock the tender box and decrypt the tenders. Public-key cryptography should be used to guarantee the identity of authorised users in charge of unlocking/decrypting the tenders.

DRAFT

7.2 Tender Envelopes

Context: an opening committee is set up by the Contracting Authority in charge of disclosing the bids and accessing certain envelopes/documentation in order to perform qualification or evaluation.

Business problem/objective: as per procurement Directive (annex IV, item g), "data received and opened in accordance with these requirements must remain accessible only to persons authorised to acquaint themselves therewith".

Recommendation:

The e-Tendering system must provide functionality to ensure that authorised persons have access only to relevant content sufficient to adequately perform their evaluation tasks (either administration, financial or technical document evaluation).

7.3 Opening notification

Context: an opening committee is set up by the Contracting Authority in charge of disclosing the bids and accessing certain envelopes/documentation in order to perform qualification or evaluation.

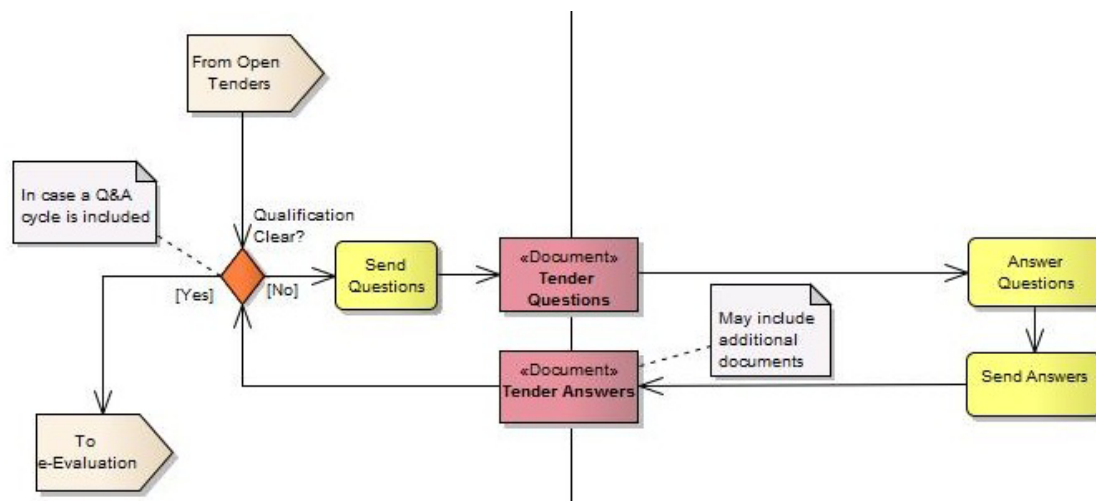
Business problem/objective: in order to improve transparency and accountancy through e-tendering process, EOs should be able to know the status of their tenders.

Recommendation:

The e-Tendering system should allow the CA to communicate to the EOs about processing steps of their submissions (such as opening, completeness assessment...).

08 Enquiries on the bids – Report

The evaluation panel may decide during the evaluation to ask certain bidders for clarifications on some elements of their tender that may be unclear.



8.1 Clarifications after submission

Context: After submission CAs must ensure the principle of equal treatment towards the bidders

Business problem/Objective: After submission enquiries should be limited in order to avoid advantages for one EO over the others.

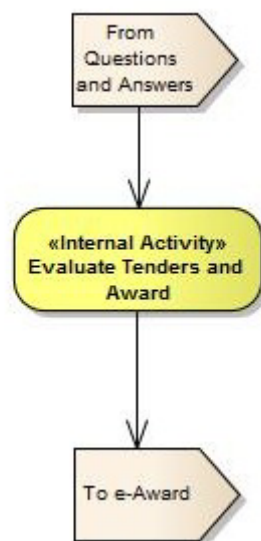
Recommendation: After submission the CA shall be allowed to clarify ambiguities in the tenders through the e procurement system. The EO shall not be allowed to direct enquiries at this stage. After enquiry the EO shall answer privately through e-procurement platform.

All the communication should be tracked by the e-procurement system in order to promote transparency and accountability.

09 Evaluation of tenders - Report

Tendering evaluation is the process by which a panel of experts appointed by the contracting authority assign values, supported by the platform, to the elements of the tenders against the evaluation criteria set out in the specifications in order to come up with a candidate contractor.

In principle, a platform can offer full automatic evaluation if it handles structured tenders and the procurement at hand is about common goods as well as non-configurable services – typical situation suggesting e-catalogue use. It is up to the CA at the tendering preparation stage to define the tender structure in such a way as to break, as far as possible, the tender contents down to information items that can be expressed in numeric form, thereby enabling a high degree of automation in the evaluation.



9.1 System to verify completeness of tender

Context: CAs can reject the EO if the tender is formally incomplete or incorrect.

Business problem/Objective: In order to promote transparency and accountability during the evaluation phase, the system should verify the formal correctness of the bids, i.e. that all information requested by the CA in the tendering specification is provided by the bidder.

Recommendation: The e-Tendering system should provide functionality to ensure that the system verifies the tender to check completeness but never automatically rejects the EO. The CA is always in charge of rejecting an offer.

9.2 Automatic evaluation

Context: the CA evaluators will face an increase in the number of bids received.

Business problem/objective: In order to promote transparency and accountability, new e-Tendering systems could include tools to assist the automatic evaluation of tenders, where relevant.

Recommendation:

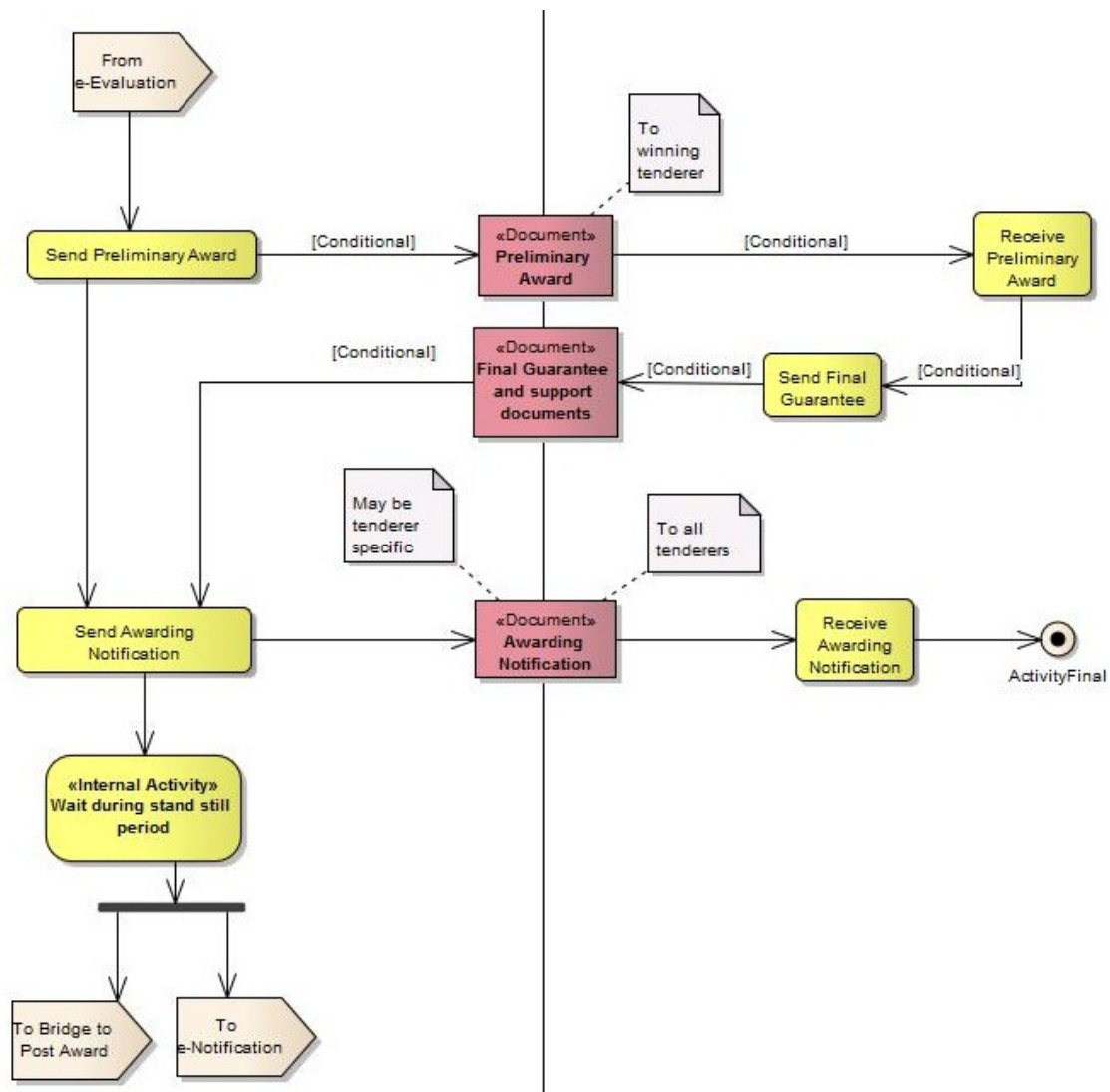
The e-Tendering system may provide functionality to assist the evaluation of bids. This functionality should:

- Provide an automatic score based on questionnaires and rules previously defined during the preparation phase.
- Automatically propose/classify bids in groups, e.g. rejected/non-rejected/abnormally-low.
- Show the bids sorted by score.
- Where automatic evaluation is not possible, platforms should provide functionality to allow electronic evaluation based on human input.
- Allow side-by-side comparison of scoring results (by category/section).

The e-Tendering system should provide functionality to ensure that the system verifies the tender to check completeness but never automatically reject bids. The CA is always in charge of rejecting an offer.

10 Awarding - Report

Awarding involves all the communications required by law to the winner and other participants on the awarding decisions made by the awarding authority. Awarding ends with the preparation of contractual records, containing all elements and characteristics of the supply that is forwarded to the selected tenderer for final contract signing. This then marks the end of the pre-award phase of procurement.



10.1 Obtaining evidence that supports selection criteria

Context: When all tenders have been evaluated based on self-declarations, the CA evaluators may need to verify the selection criteria of the winning tender before final awarding.

Business problem/Objective: Improve usability and efficiency obtaining additional pieces of information from selected EO prior to confirming selected EO status

Recommendation: The e-Tendering system should provide functionality to request for and receipt of evidence that supports selection criteria from the EO. This could include a mechanism confirming that qualification evidence is sufficient to reassure the CA that it can proceed to Bridge to Post award. There also should be available the functionality to deal with the insufficient evidence and to move to the second ranked EO as selected EO.

10.2 Standstill Period Warnings for CAs

Context: Awarding

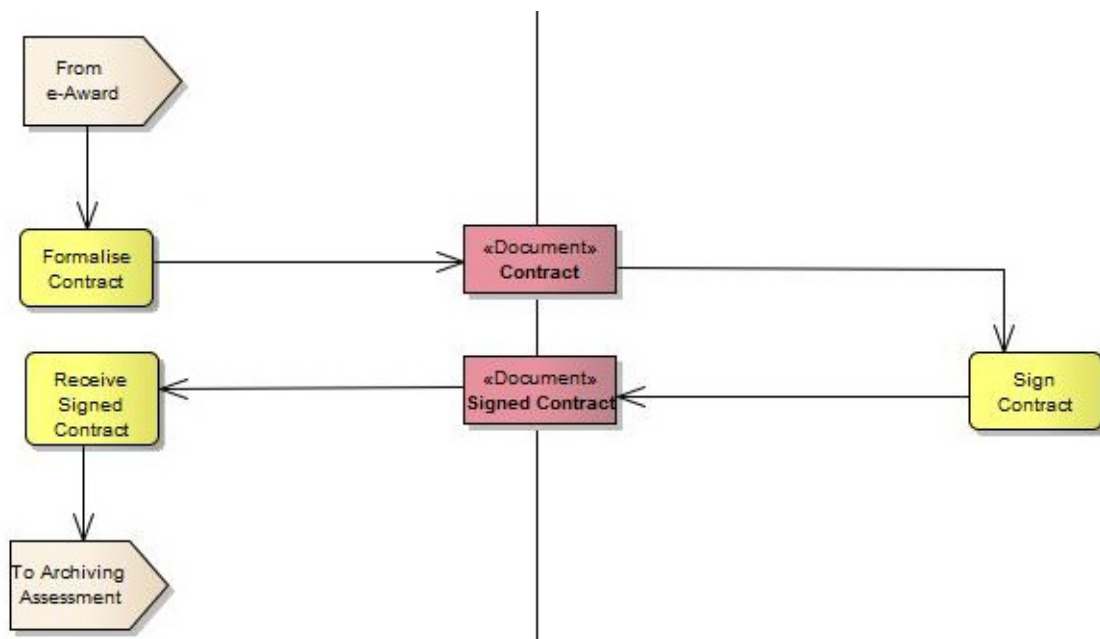
Business problem/Objective: According to the European Directives on public procurement, contracting authorities shall as soon as possible inform each candidate and tenderer of decision reached concerning the conclusion of the tender. An e-Tendering system provides functionality to enable the CA to inform each individual EO, selected and non -selected EOs, about the results of the procedure. This communication sets the beginning of the standstill period.

It is necessary to ensure legal certainty and confidence for CA that the CA doesn't accidentally proceed to "Bridge to Post award" prior to the mandatory standstill period completing.

Recommendation: The e-Tendering system should provide guidance and warnings to prevent a CA from progressing to "Bridge to Post award until any mandatory standstill has completed.

11 Bridge to post award - report

As soon as a procurement process is completed, the pre-awarding module transfers all the resulting data (i.e. data and documents on the selected contractor, the e-catalogue describing the product/services incorporated in the contract and all the supporting documents, the original tendering documentation for archiving/auditing purposes, the draft contract, etc.) to the post-awarding system of the procurement authority that carried out the process on the pre-awarding facility.



11.1 Signing contract electronically

Context: after award, both parties (CA and EO) need to sign the contract

Business problem/Objective: Most of the e-procurement systems available today do not support all the procurement phases, often forcing economic operators to move, during the post award phase, to paper based procedures. The effect is an increase of costs and barriers for economic operators, especially in cross-border transactions. In this context it would be very helpful to facilitate cross-border bidding by reducing and simplifying the contract signing.

Recommendation: the procurement system should provide functionality to allow CAs and EOs to share the contract, sign it electronically and archive it. This will provide greater streamlined procedure in the post award phase, especially for cross border bidding, allowing savings in time and costs.

11.2 Information from the procurement phase also used in post-award phase

Context: E-procurement platforms facilitate reusing information from notification to the awarding phase.

Business problem/Objective: Today, there are often no connections ("bridge") between procurement platforms (pre-award phase) and ordering-invoice solutions (post-award process). The relevant information such as catalogue information that might need to be extended and other information about the contract and the party details should improve usability and efficiency.

Recommendation:

In order to facilitate contract management during post-award phase (including framework agreements) the information about the contract and the conditions should be available and searchable in the e-Procurement system and transferred to the order-invoice system (post-award system) so end users in the organisations can do the call offs to framework agreements/contract. This should include the product information, even if it might need to be completed with more information in order to work practically with contract management, execution and monitoring (prices or price calculation schemes, logistics information required by the contract e.g. about unit packages etc.)

Usage of structured information is recommended to facilitate the reuse of the information.

It is recommended to harmonize efforts on post-award phase procedures and documents with the works of the European Multi-Stakeholder Forum on Electronic Invoicing, to ensure e-tendering post-award phase solutions are compatible with private e-Invoicing framework in EU.

If the platform deals with contract management, it should have functionality for collecting comments regarding the compliance with the contract during the execution. For example it can be regarding capacity of delivering the goods or services, changes to the price and conditions other than that allowed. This information is helpful for the preparation of future tendering processes.

11.3 Gathering feedback on e-Tendering platform

Context: After the contract has been awarded and in parallel to contract execution.

Business problem/objective: e-Tendering will bring in lots of benefits in terms of cost-savings, efficiency, effectiveness and transparency, but also will challenge status-quo, paper-based procurement process. To foster e-Tendering adoption, it is important to gather feedback from all actors involved, especially the EOs and make sure the service is rolled out efficiently.

Recommendation: Once standstill period is completed, feedback should be (possibly anonymously) gathered from EOs and CAs staff participating in the e-tendering process. This is essential to evaluate the performance of e-procurement platform (eg. possible usability issues).

This allows all participants to send their views and to enable CAs to improve the platform features. This feedback should be gathered via simple questionnaires, including number-based questions (so automatic analysis can be conducted) and free-text fields for comments.

12 Miscellaneous

12.1 Multilingual User Access and Tender Information

Context: To facilitate cross-border and SME participation in public procurement, language barriers should be reduced, where possible.

Business problem/objective:

In public e-Procurement Platforms, language considerations should include:

- Multilingual User Access – the need to provide a user interface in the member state official language(s), as well as other regional or minority languages.
- Multilingual Tender Information – the need to provide services for non-legally binding translation of certain tender information (object of the contract)
- Standards – standards for (potentially multilingual) structured and unstructured content used within e-procurement platforms.
- Capability - The skills and competences of persons designing, managing or using these systems/tools/platforms and using their content.

Recommendation:

e-Procurement platforms should embrace the best practice language-independent tools, services and design principles developed by the language industry, and at least be capable of handling multilingual data efficiently and enable the use of multilingual user interfaces, e.g. for the most relevant languages used in neighbouring countries.

Furthermore adoption of International and European standardized or standards based structured content should be used whenever possible, and when unstructured content is unavoidable, such content should be divided into logical and where possible, semantic data parts, to facilitate translation and localization.

12.2 Accessibility of Persons with Disabilities

Context: use of e-procurement platforms by Persons with Disabilities

Business problem/objective:

Improving web accessibility is one of the actions of the European Disability Strategy 2010-2020. This is important to allow the participation of persons with disabilities on similar bases with others in e-procurement.

The Public Procurement Directive currently into force (Directive 2004/18/EC) already includes provisions on accessibility criteria². These provisions refers not only to the products and services subject to the public procurement, but also to the accessibility of the ICT systems used for e-Procurement and to the accessibility of the content handled by these systems, where this is possible.

The Commission's proposal to modernise public procurement Directives makes compulsory – except in duly justified cases - the inclusion of accessibility criteria in the technical specifications for all procurement which is intended for use by natural persons, whether general public, or CA staff.

In 2005, the Commission issued a mandate (M/376) to the European Standards Organisations for a standard specifying the functional accessibility requirements for ICT products and services, including web content to be used in public procurement. The final standard draft is expected to be available for adoption towards the end of 2012.

Recommendation:

- In the technical specifications of the e-procurement platform CAs should refer to web accessibility harmonised standards; in their absence they should refer to European standards (like for example the one that will result from Mandate 376) and, in their absence - to International or ICT standards.
- In the absence of a EU detailed regulatory framework or national legislation, CAs should set the level of web accessibility at level AA of the above mentioned standards that are based on the guidelines of W3C/ WCAG 2.0. However this should not prejudice the possibility for public authorities to require a higher level (AAA) or define themselves more demanding requirements to address the needs of particular categories of disabled persons.

² The Public Procurement Directive currently into force (Directive 2004/18/EC) already includes provisions on accessibility at Article 23(1). See also Article 40 (1) of the Commission's proposal for a Directive of the European Parliament and of the Council on public Procurement.

12.3 Records Management and Archiving

Context: Pre-award, post-award, and post-post-award.

Business problem/objective:

Many e-Procurement, Notification and Case Management Systems do not manage the electronic documents as records but as mere objects or data gathered in a data base or digital repository. This may pose serious problems at many levels (authenticity, security, traceability, preservation), is a great obstacle to document life cycle management (both pre and post award) and may violate the law currently in force in some Member States.

Recommendation:

E-procurement platforms should implement record management and archiving functionality compliant with international specifications and standards, such as ISO 15489 and MoReq's (Modular Requirements for Records Systems) specifications issued by the European Commission, which approaches the interoperability issues from the European Interoperability Strategy and Framework perspective and provides a common and stable glossary resulting from many years of continued work.