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e-Catalogues Gap Analysis

between pre-awarding business requirements and the post-awarding implementation in e-PRIOR

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EXECUTIVE SUMMARY

The origin of this gap analysis between the pre- and post-awarding usage of e-Catalogues is the IDABC e-Invoicing and e-Ordering project, which included a pilot on e-Catalogues with a number of suppliers, in a post-awarding context. The goal of this pilot was to get real-life experience with e-Catalogues at DIGIT. It was run on the e-PRIOR platform of the European Commission.

The e-Catalogues Feasibility Study, also delivered as part of the IDABC project above, as such already revealed that there were possibly significant gaps between the usage of e-Catalogues in a pre- or post-awarding context. The e-Catalogue serves different purposes in pre- and post-awarding and needs to comply with different requirements.

When mapping the e-Catalogue features of e-PRIOR and its Central Catalogue Management System (which are post-awarding) to the functional requirements of the e-Catalogue study vol III drafted for DG MARKT in 2007 (which are pre-awarding), the existence of significant gaps has been confirmed. The reason behind this is that basically the pre- and post-awarding e-Procurement processes are very different themselves.

In a pre-awarding context, the contracting authority aims at finding suitable economic operators through an e-Publication / e-Tendering process that needs to comply with the applicable legal requirements for public procurement. The end-result is an "awarding" of one or more contracts to the economic operator. e-Catalogues in this context are supporting the e-Tendering process and hence need to comply also with those public procurement requirements.

Once awarded, we enter the post-awarding process, and a relation has been established with the economic operators. e-Catalogues in this context aim at executing the contract and relate to mainly to the ordering process.

e-PRIOR is designed to work in a post-award context. However, after having performed this gap analysis, it seems like that certain components can be re-used in a pre-awarding procurement environment, interfacing the different subprocesses (e.g. an e-Tendering front-office with a back-office procurement system for e-Awarding).

This gap analysis confirms a number of significant gaps, but also some matches:

- The most significant gaps are related with everything that has to do with the core e-Tendering process, such as the submission of tenders (and e-Catalogues), the opening of tenders following the four-eyes principle or the evaluation procedures of public tenders
- The most significant matches are related to the existence of a (standard) catalogue message, tools for technical verification and the use of classification schemes.

1. INTRODUCTION

1.1. Purpose

The purpose of this document is to make a gap-analysis of the differences between the use of electronic catalogues in a pre-awarding context (e-Catalogue prospectus) and the use of electronic catalogues in a post-awarding context.

1.2. Approach and scope

In order to make this gap analysis, we will map the features of the e-PRIOR e-Catalogues solution, which operates in a post-awarding context, to the functional requirements for e-Catalogues in a pre-awarding context, as defined of the e-Catalogue study vol III drafted for DG MARKT in 2007. This approach fits in the overall e-PRIOR strategy where

- The definition of project priorities is strongly benefits driven
- Preference is given to build further on existing work and real-life implementations
- Certain pragmatism leads to results that can be immediately re-used.

The initial basis for this gap analysis is the e-PRIOR e-Catalogues Feasibility Study and the related e-PRIOR use cases for e-Catalogues, where we ask ourselves whether the envisaged post-awarding e-Catalogues solution would also work in a pre-awarding e-Catalogues context. This implies that the scope restriction for the e-PRIOR e-Catalogues Feasibility Study also applies in this gap analysis study, namely focussing on framework contracts at DIGIT covering computers, IT goods and IT services (hardware, software and related services, including telecommunications).

The following e-Procurement definitions apply:

- **Pre-awarding:** the process of publication of call for tenders, the submission of tenders, their evaluation and awarding. In the context of e-Catalogues:
 - Defining e-Catalogue templates
 - Creation of e-Catalogues
 - Submitting e-Catalogues
 - Uploading of e-Catalogues in the buyer's systems
 - Evaluation of the e-Catalogues
- **Post-awarding:** the process of executing awarded framework contracts by means of requests, orders and invoices. In the context of e-Catalogues:
 - Maintaining e-Catalogues
 - Ordering through e-Catalogues
 - Invoices referring to order lines and e-Catalogue items
- The focus of this analysis is on framework contracts without re-opening of competition between contractors on multiple framework contracts. The context of Dynamic Purchasing Systems (DPS) is out-of-scope.

Just reading the e-PRIOR e-Catalogues Feasibility Study as a preliminary gap analysis already revealed significant gaps between pre- and post-awarding e-Catalogues and confirmed the need for a more formal and in-depth gap analysis, of which the results are documented in this report.

This gap analysis is not to be considered as a detailed feasibility study for a pre-awarding e-Catalogues solution supporting all possible market procedures.

2. GAP ANALYSIS

As explained in the introduction, the features of the e-PRIOR post-awarding e-Catalogue solution are to be mapped against the business requirements for e-Catalogues in a pre-awarding context, as they have been defined in a study that was performed for DG MARKT.

2.1. DG MARKT business requirements for pre-awarding e-Catalogues

For the business requirements for pre-awarding e-Catalogues, we are referring to functional requirements as listed in the DG MARKT study, "Electronic Catalogues in Electronic Public Procurement, vol III – Functional Requirements Report – November 2007".

The report can be found on

http://ec.europa.eu/internal_market/publicprocurement/docs/eprocurement/feasibility/ecat-vol_3_en.pdf, the other volumes are available on

http://ec.europa.eu/internal_market/publicprocurement/e-procurement_en.htm.

The following table lists the functional requirements as they have been defined in the study.

DG MARKT #	Functional requirement
Functional Requirement 1	Register user
Functional Requirement 2	Support user profiling
Functional Requirement 3	Support user authentication
Functional Requirement 4	Support user authorisation
Functional Requirement 5	Create a call for tenders workspace
Functional Requirement 6	Provide standards-based tender specifications for eCatalogue prospectuses
Functional Requirement 7	Define a tender evaluation mechanism for eCatalogue prospectuses
Functional Requirement 8	Prepare official procurement notices including eCatalogue information
Functional Requirement 9	Use the Common Procurement Vocabulary (CPV) classification
Functional Requirement 10	Use the Nomenclature of Territorial Units for Statistics (NUTS) classification
Functional Requirement 11	Electronically dispatch notices to OJS - Interface with OJEU
Functional Requirement 12	Publish Contract Documents
Functional Requirement 13	Provide searching mechanisms for calls for tenders

DG MARKT #	Functional requirement
Functional Requirement 14	Provide electronic access to call for tenders specifications (Visualise/Download)
Functional Requirement 15	Make available to suppliers tools for verifying the technical format of their eCatalogue prospectuses
Functional Requirement 16	Make available to suppliers tools for assessing the quality of their eCatalogue prospectuses
Functional Requirement 17	Publish additional information/documents
Functional Requirement 18	Support automated notifications
Functional Requirement 19	Support creation of initial offers in the form of eCatalogue prospectuses
Functional Requirement 20	Allow for the interoperable and secure submission of tenders in the form of eCatalogue prospectuses
Functional Requirement 21	Support a device for the electronic receipt of tenders (including eCatalogue prospectuses)
Functional Requirement 22	Securely store tenders in the form of eCatalogues
Functional Requirement 23	Open tenders following the four-eyes principle
Functional Requirement 24	Ensure the confidentiality of tenders
Functional Requirement 25	Automate the evaluation of tenders in the form of eCatalogue prospectuses
Functional Requirement 26	Create reports
Functional Requirement 27	Invite Economic Operators to submit tenders in the form of eCatalogues
Functional Requirement 28	Verify eCatalogue prospectus format outside specific calls for competition and request refinement if needed
Functional Requirement 29	Support the refinement of eCatalogue prospectus format
Functional Requirement 30	Support creation of specific offers in the form of eCatalogue prospectus update (in view of re-opening of competition)
Functional Requirement 31	Archive submitted eCatalogue prospectuses prior to any updates
Functional Requirement 32	Support an appropriate device for the active collection of tenders ("punch-out")
Functional Requirement 33	Support creation of specific offers in the form of eCatalogue prospectus update (under re-opening of competition)
Functional Requirement 34	Automate verification of technical format and quality of eCatalogue update
Functional Requirement 35	Automate placing an order based on an eCatalogue prospectus
Functional Requirement 36	Create DPS workspace
Functional Requirement 37	Support DPS reporting
Functional	Create indicative Tenders in the form of eCatalogue prospectuses in a DPS

DG MARKT #	Functional requirement
Requirement 38	
Functional Requirement 39	Create an eAuction workspace and establish eAuction parameters
Functional Requirement 40	Rank tenderers based on the automated evaluation of bids in the form of eCatalogue prospectuses in an eAuction

2.2. Description of the e-PRIOR post-awarding e-Catalogues solution

A full analysis of the e-Catalogue system in e-PRIOR, its use cases and related features can be found in the e-Catalogue Feasibility Study and is available at <http://ec.europa.eu/idabc/servlets/Doc?id=32432>.

The e-Catalogues solution is composed out of three integrated systems

- e-PRIOR, allowing the electronic exchange of electronic catalogues and related documents between the European Commission and its contractors;
- a Central Catalogue Management System within the Commission allowing procurement officers to view and validate catalogues; and
- the Commission's back-office systems accessing the Central Catalogue Management System for the creation of (electronic) orders.

The e-PRIOR e-Catalogues system implements the following use cases:

- Request Catalogue
 - The Commission requests the contractor to send his electronic catalogue
- Submit Catalogue:
 - The supplier submits the e-Catalogue message to e-PRIOR
 - The supplier gets an “OK” acknowledgement back, meaning that the e-Catalogue message has been accepted for processing
 - e-PRIOR creates a canonical format out of the original message and stores both formats in its message repository
 - e-PRIOR creates a Catalogue object in its repository and sets the status to “RECEIVED”
 - e-PRIOR submits the message into the Central Catalogue Management System queue and launches the “Import Catalogue” use case
 - The Central Catalogue Management System sends back an application response to e-PRIOR, and the supplier can download this message.

- If the catalogue gets approved in the Central Catalogue Management System, the Catalogue object status is set to "PROCESSED"
 - If the catalogue gets rejected in the Central Catalogue Management System, the Catalogue object status is set to "REJECTED"
- Submit Catalogue Update
 - This use case is implemented in the same way as the submit catalogue use case. It is the line information that defines whether a line should be added, updated, or marked for deletion (see also import catalogue use case)

In the Central Catalogue Management System, the following use cases are implemented:

- Import Catalogue
 - After submitting the e-Catalogue message in the queue from the Central Catalogue Management System, the message import starts
 - The e-Catalogue gets versioned: if a previous version does not exist, a first version is created. Otherwise, the e-Catalogue is updated line by line. Through action codes on each e-Catalogue line, lines are added, updated, or marked for deletion
- End-User Catalogue Query Request
 - The customer sees a list of e-Catalogues he has access to in the Central Catalogue Management System and can query them
 - He can view the selected catalogue through the view catalogue use case
- View catalogue
 - After having selected a catalogue, the customer can view the catalogue in a pre-defined human-readable format in the Central Catalogue Management System
- Approve Catalogue
 - The customer sees a list of e-Catalogues that he needs to approve or reject in the Central Catalogue Management System
 - The approve catalogue use case includes the "view catalogue" use case
 - The approve catalogue use case includes a "compare catalogues" use case

In the Back-Office, the following use cases are implemented:

- Back-Office Query Catalogue:
 - Catalogue Query: The customer sees a list of e-Catalogues he has access to in the back-office system and can query them
 - Catalogue Item Query: When selecting one e-Catalogue, he can view the line items showing a limited number of item details

- Retrieve Catalogue Item: When selecting one line item, the customer can view the full details of this line item, by launching the “Catalogue Item Retrieve Request” use case
- Catalogue Item Retrieve Request
 - This use case is launched from the “Catalogue Query Request” use case and shows all the data from one specific catalogue line item

e-PRIOR includes also a number of administrative use cases, such as

- Administrate Catalogue
- Export Catalogue
- Archive Catalogue

User access is implemented as part of the generic infrastructure use cases:

- User access
 - This use case is embedded in the other use cases
 - It supports different roles (approver, viewer, ...)

The following two tables show respectively

- Which features are linked to each use-case
- A description of each feature.

Use-Case	Description	Feature
Request Catalogue	Customer requests the catalogue or the update of the catalogue to the Supplier.	FEAT 3 FEAT 4
Submit Catalogue	Supplier submits its e-Catalogue to DIGIT. This includes: <ul style="list-style-type: none"> • The sending of the business response. 	FEAT 1 FEAT 2 FEAT 25 FEAT 26 FEAT 27 FEAT 30 FEAT 34 FEAT 35 FEAT 38 FEAT 42

Use-Case	Description	Feature
Submit Catalogue Update	<p>Supplier submits electronic updates of its e-Catalogues to DIGIT. This encloses:</p> <ul style="list-style-type: none"> • Price update; • Product and/or service specification update; • Full catalogue update; • The sending of the business response. 	FEAT 2 FEAT 10 FEAT 25 FEAT 26 FEAT 27 FEAT 28 FEAT 29 FEAT 30 FEAT 34 FEAT 38 FEAT 42
Validate Catalogue	<p>Customer consults the submitted catalogue to approve it.</p> <p>This will enclose:</p> <ul style="list-style-type: none"> • Creation; • Update. 	FEAT 6 FEAT 7 FEAT 8 FEAT 9 FEAT 10 FEAT 32
View Catalogue	<p>Customer consults the catalogue.</p> <p>This will enclose:</p> <ul style="list-style-type: none"> • Consult specific version of the catalogue. 	FEAT 5 FEAT 30 FEAT 36 FEAT 39 FEAT 40 FEAT 41
Compare Catalogue versions	Customer compares two versions of the catalogue.	FEAT 32 FEAT 33
End-User Query Catalogue	Customer end-user queries the catalogue.	FEAT 37
BackOffice Query Catalogue:	Customer Back-Office queries the catalogue.	FEAT 11 FEAT 23 FEAT 24
Export Catalogue	Export of the Catalogue to a commonly used format.	FEAT 42 FEAT 44

Use-Case	Description	Feature
Import Catalogue	Import of the Catalogue from a commonly used format.	FEAT 30 FEAT 34 FEAT 38 FEAT 42 FEAT 43
Administratate Catalogue	Administration of framework contracts data, access rights, approval workflows, etc.	FEAT 45
Archive Catalogue	Archiving of the e-Catalogue.	FEAT 31

Description of each feature:

Feature ID	Description
FEAT 1.	The system must support a service which facilitates the submission of e-Catalogue by Suppliers. This interface must be available to external systems.
FEAT 2.	The system must detect any technical error and non compliance with business rules (e.g. value out of a range, etc.) which might occur during the e-Catalogue submission. Non compliance may lead to the rejection of the e-Catalogue. This information should be made available to the Supplier.
FEAT 3.	The system must facilitate the submission of e-Catalogue create requests (i.e. a request for the submission of the e-Catalogue) to the Suppliers' system. This request must include the reference to the framework contract to which the catalogue is linked to. This requesting step must not be required for all framework contracts.
FEAT 4.	The system must facilitate the submission of e-Catalogue update requests (i.e. a request for the submission of the e-Catalogue update) to the Suppliers' system. For correlation purposes, this request must include the reference to the framework contract to which the catalogue is linked to. This requesting step must not be required for all framework contracts.
FEAT 5.	The format of the e-Catalogue must be rendered into a human readable format which can facilitate its consultation by end-Users.
FEAT 6.	The system must provide a workflow service so that once received the e-Catalogue is automatically routed to a predefined approval workflow. These workflows can be fully automated (i.e. no Human intervention) or semi-automated (i.e. requiring some step(s) Human intervention).
FEAT 7.	The system must provide a multi step approval workflow which enables the approval of the catalogue by several roles of the leading organisation.
FEAT 8.	In the context of the approval workflow, the system must notify the approver that a catalogue create request or update request requires his/ her approval.
FEAT 9.	The system must facilitate the browsing of the e-Catalogue. This must be performed in a human readable format.

Feature ID	Description
FEAT 10.	Following the approval workflow, the system must provide a business response to every catalogue create request and update request submitted by the Supplier.
FEAT 11.	The system must facilitate the use of the e-Catalogue for the creation of requisitions.
FEAT 12.	The system should enable sorting and filtering of the Catalogue content.
FEAT 13.	The system must facilitate the use of the e-Catalogue for the creation of orders.
FEAT 14.	The system must acknowledge the receipt of the e-Catalogue once the Supplier submits it.
FEAT 15.	The system should ensure that the data is protected against unauthorized reading during the exchange of the e-Catalogue.
FEAT 16.	The system should ensure that the data exchanged with Suppliers is not changed on its way. It must be possible to detect any changes that may occur.
FEAT 17.	The system must support the update of the e-Catalogue. For correlation purposes, the e-Catalogue must support a reference to the Catalogue being updated (i.e. at least its ID).
FEAT 18.	At the moment of the update and for contractual reasons, the Catalogue must support a reference to the Contract Amendment.
FEAT 19.	<p>The system must support the versioning of the Catalogue. For this purpose, the e-Catalogue must at least include the following data:</p> <ul style="list-style-type: none"> • Catalogue ID; • Issue Date; • Catalogue Version; • Contract reference.
FEAT 20.	The system must support the archiving of each an every version of the e-Catalogue. This is especially relevant as part of the updating process.
FEAT 21.	The system must enable the automatic comparison of two versions of the same Catalogue.
FEAT 22.	The system must facilitate the use of the e-Catalogue for the creation of requisitions.
FEAT 23.	The system should enable sorting and filtering of the catalogue content.
FEAT 24.	The system must facilitate the use of the catalogue for the creation of orders.
FEAT 25.	The system must acknowledge the receipt of the catalogue once the Supplier submits it.
FEAT 26.	The system should ensure that the data is protected against unauthorized reading during the exchange of the e-Catalogue.
FEAT 27.	The system should ensure that the data exchanged with Suppliers is not changed on its way. It must be possible to detect any changes that may occur.
FEAT 28.	<p>The system must support the update of the e-Catalogue. For correlation purposes, the e-Catalogue must support a reference to the catalogue being updated (i.e. at least its ID).</p>

Feature ID	Description
FEAT 29.	At the moment of the update and for contractual reasons, the catalogue must support a reference to the Contract Amendment.
FEAT 30.	The system must support the versioning of the catalogue. For this purpose, the e-Catalogue must at least include the following data: <ul style="list-style-type: none"> • Catalogue ID; • Issue Date; • Catalogue Version; • Contract reference.
FEAT 31.	The system must support the archiving of each an every version of the e-Catalogue. This is especially relevant as part of the updating process.
FEAT 32.	The system must enable the retrieve of each version of the e-Catalogue.
FEAT 33.	The system must enable the automatic comparison of two versions of the same catalogue.
FEAT 34.	The e-Catalogue must support multiple Product Categorization (e.g. CPV, eCl@ss, etc) and Identification schemes. The standard product and service classification schemes should at least be available for at least the following three languages: English, French and German.
FEAT 35.	The system must be able to receive large e-Catalogues.
FEAT 36.	The system must allow printing the electronic catalogue.
FEAT 37.	The system must allow customers to search through the electronic catalogue. This search should allow the usage of, at least, the following parameters: <ul style="list-style-type: none"> • Latest contract amendment version; • Catalogue classification identifier; • Product or service description; • Product or service characteristics.
FEAT 38.	The e-Catalogue must support a reference of the version of the contract to which the catalogue refers to.
FEAT 39.	The system must support and allow visualizing in distinct areas products from the product reference list and products in the supply channel reference list.
FEAT 40.	The system must allow support additional services associated to the products of the catalogue. These services may be maintenance services, installation services, delivery services, etc...
FEAT 41.	The system must enable the storing and making accessible multimedia resources of products of the catalogue. This also includes external resources such as a web-link.
FEAT 42.	The e-Catalogue must enable the complete, accurate and uniform description of the offered products and/or services, prices, etc facilitating their automated processing. The data scheme enclosing these data definitions should be understandable both at the level of the logical concept and also at the level of its applicability. It should equally be based on wimble and wide-spread formats,

Feature ID	Description
	which can be accommodated through the use of e-Catalogue standards.
FEAT 43.	The system must facilitate the import of well defined catalogues in commonly used formats. In this case the approval process should consider the catalogue as approved.
FEAT 44.	The system must facilitate the export of well defined catalogues in commonly used formats.
FEAT 45.	The system should include a secured administration console to support activities such as the monitoring of the system, users administration or code tables administration.
FEAT 46.	<p>The system should control the validity of the e-Catalogue content (including the associated services). This implies that:</p> <ul style="list-style-type: none"> • The validity period is the one set in the framework contract; • When the catalogue includes associated services there are two validity periods: <ul style="list-style-type: none"> ◦ A validity period for purchasing the products of the catalogue. This is, as a rule, aligned to the validity of the framework contract; ◦ A validity period for purchasing the associated services to the products of the catalogue (e.g. maintenance services). This is usually longer than the one of the products. • Once the validity period of the product of the e-Catalogue is expired then these products should be marked as no longer valid (i.e. not available for purchasing); • Once the validity period of the associated services of the products of the e-Catalogue is expired then these associated services should be marked as no longer valid (i.e. not available for purchasing).
FEAT 47.	The system must allow visualizing the additional information linked to the products and/or services of the catalogue.

More information about the e-Catalogue solution of e-PRIOR can be found in the e-Catalogues feasibility study (<http://ec.europa.eu/idabc/servlets/Doc?id=32432>).

2.3. Mapping of e-PRIOR e-Catalogues features to the DG MARKT e-Catalogue Requirements

The following tables are the result of the actual mapping exercise. For each functional requirement in the DG MARKT study, we have described what kind of functionality e-PRIOR offers – or doesn't offer – in the context of this functional requirement.

How to read the following tables:

The fields in white are taken over from the DG MARKT Study, without assessing their correctness or validity.

The fields in grey have been added in the context of this gap analysis.

Number	Functional Requirement 1
Name	Register user
Actors	Contracting Authority (procurement officers), Economic Operators
Status	Optional
Description	<p>This functional requirement allows new procurement officers and tenderers/economic operators to register and create a profile in the eProcurement system. The registration process must ensure the confidential transfer and secure storage of all personal information of users. Furthermore, mechanisms may be put in place for the validation of the information provided by new users of the system. Hence, the registration process may be performed in two phases. One phase to allow new users to apply for registration to the system, and another phase to allow authorised personnel to validate the submitted information and approve or reject a registration application. Alternatively, electronic signatures/digital certificates may be used for ensuring the authenticity of the person attempting to register.</p> <p>Under the EU Directives, there are no particular provisions related to user registration in eProcurement systems. The primary reason for an eProcurement system to feature a user registration process for suppliers should only be for providing a good service to suppliers, through automated notifications or personalised searches to calls for tenders. The registration process for suppliers should be simple and straight-forward, so as to avoid excluding any supplier from taking part in a competition due to complexity of user registration. If validation checks are necessary before a new user account becomes active, these checks should be performed in a way that they do not restrict a supplier's participation in calls for tenders.</p>
e-PRIOR features	<p>e-PRIOR does not provide in a self-registration process for users. Suppliers and their service providers are created in e-PRIOR, allowing them to connect to a number of specific web services, for a system-to-system upload of XML catalogues or download of application responses; this user creation process is handled internally, by the e-PRIOR support team.</p> <p>The Central Catalogue Management system is only open to European Commission procurement officers or technical Framework Managers; this user management process is handled by a user access console.</p>
GAP	Partially covered. A self-registration portal would need to be developed in the context of a larger pre-awarding e-Procurement system.

Number	Functional Requirement 2
Name	Support user profiling
Actors	eProcurement system (eCatalogue stock management system)
Status	Optional
Description	<p>This functional requirement relates to the capacity of an eProcurement system to store personal information of registered users. Users may be able to update their personal information if required. This personal information may be used for several functionalities of the system, including reporting, automated notifications, etc. In addition, each user can be associated to a unique identifier, which can be used by the audit trailing facility of the system, in order to record all user activities, and to identify the initiator/actor of each activity. Moreover, user profiling can allow users to set up their preferences when using the system, in terms of how data is searched, displayed, their preferred language, etc. allowing for advanced system customisation/ personalisation settings.</p>
e-PRIOR features	e-PRIOR does not support this.
GAP	Not covered. This would be a feature of the self-registration section of the pre-awarding e-Procurement system.

Number	Functional Requirement 3
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Name	Support user authentication
Actors	eProcurement system (eCatalogue stock management system)
Status	Optional
Description	This functional requirement relates to the mechanisms used by the eProcurement system for identifying users. This is necessary for an eProcurement system to display the appropriate data to users, as well as, to allow users to perform appropriate activities according to their acquired role. User authentication may be performed based on different levels of security. Advanced security implementations may make necessary the use of digital certificates (not mandated by the EU Directives however). If digital certificates are used, they must respect the requirements of EU Directive 1999/93/EC on “e-signatures”.
e-PRIOR features	Suppliers and service providers are authenticated to the e-PRIOR web services by means of basic http authentication, with username and password. For EC procurement officers or technical framework managers, e-PRIOR foresees basic user authentication in the Central Catalogue Management System, using the ECAS system.
GAP	Partly covered. This would be a feature of the pre-awarding e-Procurement system.

Number	Functional Requirement 4
Name	Support user authorisation
Actors	eProcurement system (eCatalogue stock management system)
Status	Optional
Description	Each user in an eProcurement system is commonly associated with a certain role, permitting the system to be aware of what data the user may access and what activities the user may perform within its context. User authorisation can be performed only after a user is authenticated by the system, i.e. the system is aware who the user is.
e-PRIOR features	The e-PRIOR Central Catalogue Management System (for EC procurement officers or technical framework managers), supports a number of roles (e.g. reader, approver ...), to which certain privileges are linked (view catalogue, approve catalogue ...).
GAP	Covered.

Number	Functional Requirement 5
Name	Create a call for tenders workspace
Actors	Contracting Authority (procurement officers)
Status	Optional
Description	When creating a call for tenders, the eProcurement system can make available to procurement officers a virtual workspace for storing all call-related information. This virtual workspace allows the authorised procurement officers to provide core information about the call, such as its title, description, estimated value, etc., and allows storing buyer documents, such as notices, contract documents, additional documents, etc. Moreover, the tender workspace can be used as the area for storing submitted tenders, and all other data related to the call. In order for information stored in a Tender workspace to be accessed and/or modified by authorised users only, the use of a user authorisation module (Functional Requirement 4: “Support user authorisation”) is essential. Some activities in the tender workspace should be possible only when certain other events (both activity-related and time-related) have been completed. For instance, suppliers should be able to access the contract documents stored in a Tender workspace only after the relevant Contract Notice has been published (i.e. activity-related). Procurement officers should be able to apply the “four-eyes principle” for unlocking the received tenders only after the designated tender opening period has been reached (i.e. time-related).

e-PRIOR features	Not supported by e-PRIOR
GAP	Not covered by e-PRIOR. This should be included as a feature of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 6
Name	Provide standards-based tender specifications for eCatalogue prospectuses
Actors	Contracting Authority (procurement officers)
Status	Optional but recommended
Description	<p>The contract documents of a call for tenders must clearly describe the subject of the contract and the exact requirements for participating in the competition. In addition they describe the expected content and format of tenders to be received, as well as, processes that suppliers must follow in order to participate in the competition.</p> <p>The preparation of contract documents involves an “approval” lifecycle for documents, comprising their creation, validation, approval and publication. The “approval” lifecycle depends on the internal procedures of the contracting authority, and may be supported by an eProcurement system. Under current practice, contract documents of call for tenders which authorise the use of eCatalogues commonly describe:</p> <ul style="list-style-type: none"> - The required eCatalogue format - The expected content of eCatalogues - The product classification and description scheme to be used (if any) - The exact processes to be followed and electronic means of communication to be used for tender submission <p>The current use of eCatalogues presents several limitations, and should be improved. The specifications included in contract documents for the use of eCatalogues in public procurement should only describe the submission techniques for eCatalogues, as well as, the minimum information that should be included in tenders.</p> <p>The specifications included in contract documents can be even more succinct. Contracting authorities may only define the minimum information that should be included in tenders, as well as, the industry-wide standards that suppliers should abide to in order to submit their eCatalogues (e.g. UBL and eCl@ss).</p> <p>Regardless the exact use of eCatalogue contracting authorities are recommended to refrain from defining the exact eCatalogue specifications that suppliers must abide to in order to describe offered products/services (e.g. attributes and potential values).</p> <p>Contract documents for calls which authorise the use of eCatalogues should abide to Legal Requirement 3: <i>“Provide non-discriminatory specifications for creating tenders in the form of eCatalogue prospectuses”</i>.</p>
e-PRIOR features	The ICD (Interface Control Document) of e-PRIOR will provide the technical specifications on how the supplier must send their electronic catalogues. This document provides details on the format (UBL), content (through guidelines), product classification (CPV) and description scheme (eCl@ss). It also describes how a supplier or his service provider can connect to the web services of e-PRIOR.
GAP	Partly Covered. The current e-PRIOR ICD could be re-used as an example on how the pre-awarding contract documents should provide the technical requirements.

Number	Functional Requirement 7
Name	Define a tender evaluation mechanism for eCatalogue prospectuses
Actors	Contracting Authority (procurement officers)
Status	Mandatory

Description	<p>Contracting authorities should perform the full evaluation of tenders based on either the lowest price or the Most Economically Advantageous Tender (MEAT). In both cases, the evaluation model to be used must be pre-stated in the contract notice or the contract documents at the beginning of a public procurement competition. In the latter case, the contract notice must at least state which of the two evaluation mechanisms will be used.</p> <p>If the evaluation is based on MEAT, contracting authorities should define the exact evaluation criteria to be used, as well as indicate their weightings either within the contract notice or contract documents. In duly justified cases, where the weighting of evaluation criteria cannot be established, contracting authorities should give reasons, and indicate the descending order of importance of all criteria.</p> <p>When the evaluation parameters of a call based on MEAT can be established with precision, a contracting authority may decide that the award of the contract shall be preceded by an electronic auction. The intention of using an electronic auction as part of the awarding procedure must be mentioned in the contract notice of the call.</p> <p>To accommodate the above, an eProcurement system can prompt procurement officers to define the evaluation mechanism to be used, as well as automatically include the details of the evaluation mechanism in the contract notice and/or contract documents.</p> <p>Where tenders take the form of eCatalogue prospectuses, the tender evaluation mechanism may include specific provisions enabling the automated evaluation of eCatalogues. As discussed in Legal Requirement 3: "<i>Provide non-discriminatory specifications for creating tenders in the form of eCatalogue prospectuses</i>", the specifications for forming eCatalogues can either be fully defined by the contracting authority, or in accordance with an eCatalogue standard. In both cases, the contracting authority may define particular quantitative attributes of the expected eCatalogues to be taken into account for automated evaluation. Weights and evaluation formulas can be defined for eCatalogue attributes or groups of them.</p>
e-PRIOR features	e-PRIOR provides in an "approve catalogue" use case, but this validates only that the catalogue is according to what has been agreed in the awarded contract. e-PRIOR does not validate the e-Catalogue against awarding criteria, as the contract has already been awarded.
GAP	Not covered. This should be included as a feature of a broader pre-awarding e-Procurement system

Number	Functional Requirement 8
Name	Prepare official procurement notices including eCatalogue information
Actors	Contracting Authority (procurement officers)
Status	Mandatory if eCatalogues are authorised
Description	<p>Procurement officers may be assisted to prepare notices by using specialised ICT applications/tools. Such applications/tools, commonly known as "Form Filling Tools", can be a part of an eProcurement system itself, or an external application/tool integrated into the eProcurement system.</p> <p>At present, the OJEU system of the EU Publications Office offers a number of mechanisms by which notices can be filled and transmitted electronically. Depending on the exact mechanism used by a specific eProcurement system, a different type of "Form Filling Tool" maybe used for the preparation of such notices. Notices can be created using:</p> <ul style="list-style-type: none"> - the SIMAP Forms application of the EU Publications Office; - specialised OJS e-Sender applications or - tailor-made applications, provided that they can export notices in the appropriate format mandated by the Directives and the EU Publications Office. <p>Procurement officers can be further assisted in preparing notices by automatically utilising information already provided to the eProcurement system within the Tender workspace.</p> <p>The creation of the contract notice takes place at the same time as the preparation of the contract documents. Such documents, described in Functional Requirement 6: "<i>Provide standards-based tender specifications for eCatalogue prospectuses</i>" and Functional Requirement 12: "<i>Publish Contract Documents</i>" provide detailed information and technical</p>

	specifications regarding the subject of the contract, as well as, the conditions and rules for preparing tenders, including reference to any standards to be used.
e-PRIOR features	e-PRIOR does not provide in these kind tools.
GAP	Not covered by e-PRIOR. This should be included as a feature of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 9
Name	Use the Common Procurement Vocabulary (CPV) classification
Actors	Contracting Authority (procurement officers)
Status	Mandatory
Description	<p>Under the EU Directives, contracting authorities shall describe the object of the contract in procurement notices by reference to the CPV nomenclature. The CPV scheme is a multilingual European classification standard, which is specifically tailored to describe goods, services or works purchased by public authorities using numerical codes. Its use is mandatory, in order to render a transparent and efficient public procurement environment.</p> <p>The CPV exists in the 22 official languages of the EU. Using this classification scheme, economic operators can easily identify the subject of a contract, regardless of the language. An eProcurement system should prompt procurement officers to make use of the CPV classification standard when creating procurement notices.</p> <p>As the use of CPV is not mandatory for eCatalogue prospectuses, contracting authorities may use an alternative classification and/or description scheme for tenders taking the form of eCatalogues. This in fact may be suitable for both contracting authorities and suppliers, as the CPV does not yet support many attributes for products, while other schemes have advanced features for this. A framework regulating the co-existence of the CPV with other classification schemes could facilitate the automated mapping of contracting authorities needs (expressed in CPV codes) to received eCatalogue offers (potentially expressed using other schemes).</p>
e-PRIOR features	CPV and eCl@ss (or other classification and description schemes) are supported by e-PRIOR and the applied standards (CEN/BII profiles with syntax binding to UBL 2.0)
GAP	Covered

Number	Functional Requirement 10
Name	Use the Nomenclature of Territorial Units for Statistics (NUTS) classification
Actors	Contracting Authority (procurement officers)
Status	Optional
Description	<p>In the contract notice, a contracting authority may specify the NUTS codes for the delivery or execution of the contract to be procured. The NUTS constitutes a classification nomenclature for geographic regions, which uses numerical codes to define locations in Europe. Similarly to the CPV, the inclusion of NUTS codes in notices allows economic operators to easily identify the locations in which they will be required to deliver the goods, services, or works of public contracts, regardless of the language used in the procurement notice.</p> <p>An eProcurement system can prompt procurement officers to make use of the NUTS classification scheme when creating notices. This functional requirement is not mandated by the EU public procurement Directives, nevertheless can significantly increase the interoperability and usability of notices created by an eProcurement system (e.g. support for searching, reporting, system integration, etc.).</p>
e-PRIOR features	The NUTS classification is supported by UBL, the standard which is currently supported by e-PRIOR. However, NUTS is not used in the context of the e-PRIOR project.
GAP	Covered

Number	Functional Requirement 11
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Name	Electronically dispatch notices to OJS – Interface with OJEU
Actors	eProcurement system (eCatalogue stock management system)
Status	Optional, although highly recommended for all eProcurement systems
Description	<p>Once the contract notice of a call for tenders is completed, it is made publicly available. For contracts above the EU thresholds, as defined in the EU public procurement Directives, the contract notice needs to be published in the S-Series of the Official Journal of the European Union (OJEU).</p> <p>The EU Publications Office is responsible for the daily publication of the Official Journal. It offers several methods by which a notice can be published in the OJEU. An eProcurement system can support the automated or semi-automated dispatching of notices to the OJEU, through the “SIMAP Forms application”. This application constitutes a web-based system of the EU Publications Office, based on which authorised procurement officers and systems can prepare official EU procurement forms and publish them to the OJEU, either through its eForms (for users), or a specialised web interface (for systems). Another alternative relates to the use of OJS eSenders, which form specialised applications, certified by the EU Publications Office for forming and publishing official EU procurement notices to OJEU.</p> <p>In addition to the use of electronic means for the transmission of notices, the EU Publications Office still supports the transmission of notices using non-electronic means (e.g. non-structured forms submitted via email, fax or post). This approach is not recommended, as the use of electronic means can save costs and shorten the time-limits of the competition.</p>
e-PRIOR features	e-PRIOR does not provide in a tool to electronically dispatch notices to OJS, as this requirement is not relevant anymore in a post-awarding context.
GAP	Not covered by e-PRIOR. This should be included as a feature of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 12
Name	Publish Contract Documents
Actors	Contracting Authority (procurement officers)
Status	Mandatory
Description	<p>The contract documents, approved by the contracting authority, shall not be made publicly available until the contract notice of the call for tenders is dispatched to the OJEU for publication. Once the contract notice is published in the OJEU, it may also be published in other publication boards. All interested parties should be given full and unrestricted access to the respective contract documents.</p> <p>Once a set of contract documents is made publicly available, it should not be possible for anyone to remove and/or modify any of the documents of the set. Nevertheless, contracting authorities reserve the right to publish new contract documents, if this is deemed necessary in order to clarify specific points or present new information. The publication of new contract documents must be performed in accordance with the general principles of equal treatment, non-discrimination and transparency, e.g. by extending deadlines for the submission of offers if necessary. If the modification of the contract documents is substantial, re-publication of the notice must be envisaged.</p> <p>Information relative to the submission of tenders by means of an eCatalogue prospectus and/or their subsequent use should be given in detail in the contract documents. In particular, when new information is provided to economic operators regarding specifications for tenders in the form of eCatalogues, the publication of the new contract documents should respect Legal Requirement 4: <i>“Provide additional information after publication in a non-discriminatory way”</i>.</p>
e-PRIOR features	In e-PRIOR and the post-awarding e-Catalogue context, information relative to the submission of the e-Catalogues is only provided to the parties that intend to send catalogues electronically, and the contract that stipulates the way of working (the Interchange Agreement) is not disclosed to other parties.
GAP	Not covered by e-PRIOR. This should be included as a feature of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 13
Name	Provide searching mechanisms for calls for tenders
Actors	eProcurement system (eCatalogue stock management system)
Status	Optional
Description	<p>At this step, a call for tender is considered “open”, as it is publicly available. An eProcurement system may provide a searching mechanism for calls, so that interesting “open” calls are easily located by suppliers. A search mechanism can be based on details contained in the contract notice, for instance the call title, the CPV or NUTS codes, or the date of publication.</p>
e-PRIOR features	e-PRIOR does not provide in a tool to list open calls.
GAP	Not covered by e-PRIOR. This should be included as a feature of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 14
Name	Provide electronic access to call for tenders specifications (Visualise/Download)
Actors	eProcurement system (eCatalogue stock management system)
Status	Mandatory
Description	<p>Any interested party should be provided with the functionality to access all publicly available information of a call, comprising the contract notice, contract documents, additional documents, etc. An eProcurement system may require interested parties to provide some personal information, in order to be notified if and when new information about the call is published (e.g. new additional or contract documents)</p> <p>The eProcurement system should ensure that full and unrestricted access to all publicly available information is provided equally to all interested parties, meeting the requirement for equal treatment, non-discrimination and transparency.</p>
e-PRIOR features	In e-PRIOR and the post-awarding e-Catalogue context, information relative to the submission of the e-Catalogues is only provided to the parties that intend to send catalogues electronically.
GAP	Not covered by e-PRIOR. This should be included as a feature of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 15
Name	Make available to suppliers tools for verifying the technical format of their eCatalogue prospectuses
Actors	Contracting Authority (procurement officers)
Status	Optional
Description	<p>Contracting authorities may provide to suppliers tools for easily verifying the correct formatting of their eCatalogues. Formatting verification can cover several technical checks, for instance:</p> <ul style="list-style-type: none"> - Correct technical format - Correct data in specific fields of an eCatalogue (based on data types) - Correct value within the bounds of predefined numerical ranges (e.g. value 1 to 10) - Valid product classification codes <p>If such verification tools are hosted by the contracting authority, any verification must be entirely automatic with no access to, nor any intervention on, the eCatalogues by the contracting authority. The use of these tools, apart from assisting suppliers in verifying the</p>

	technical compliance of their eCatalogues, can also fully automate the verification process of an eProcurement system when receiving tenders in the form of eCatalogues (see Legal Requirement 6: “ <i>If used, fully automate eCatalogue prospectus verification</i> ” and Functional Requirement 25: “ <i>Automate the evaluation of tenders in the form of eCatalogue prospectuses</i> ”).
e-PRIOR features	<p>e-PRIOR provides in a number of validation tools related to the XML e-Catalogue format:</p> <ul style="list-style-type: none"> - XSD schema, for validating the XML syntax - Schematron for checking a number pre-defined business rules <p>Via the e-PRIOR “ICD Validation Tool”, the XSD and Schematron validation can be applied to e-Catalogue, by the supplier.</p> <p>When submitting the XML e-Catalogue to e-PRIOR, the XSD and the Schematron validation are automatically run. When the validation fails, an application response is sent back to the supplier.</p> <p>Another tool, the PEPPOL e-Catalogue tool, provides in a front-end application where the XSD validation is automatically applied when viewing a catalogue.</p>
GAP	Covered.

Number	Functional Requirement 16
Name	Make available to suppliers tools for assessing the quality of their eCatalogue prospectuses
Actors	Contracting Authority (procurement officers)
Status	Optional
Description	<p>The contracting authority may provide to suppliers tools for establishing eCatalogue prospectuses of high quality. Only high-quality eCatalogues allow taking full advantage of the envisaged benefits by making use of electronic means, e.g. enabling buyers to efficiently browse, locate and evaluate products in a non-discriminatory and effective manner.</p> <p>Such tools can include mathematical routines, based on indicators, that highlight to suppliers which fields/products in their eCatalogues are not well described, also estimating the searchability, usability and relevance of eCatalogues in comparison to the specifications of a call for tenders.</p> <p>Similarly to Functional Requirement 15: “<i>Make available to suppliers tools for verifying the technical format of their eCatalogue prospectuses</i>”, if such verification tools are hosted by the contracting authority, any verification must be entirely automatic with no access to, nor any intervention on, the eCatalogues by the contracting authority. The use of these tools, apart from assisting suppliers in verifying the quality of their eCatalogues, can also fully automate the verification process of an eProcurement system when receiving tenders in the form of eCatalogues (see Legal Requirement 6: “<i>If used, fully automate eCatalogue prospectus verification</i>” and Functional Requirement 25: “<i>Automate the evaluation of tenders in the form of eCatalogue prospectuses</i>”).</p>
e-PRIOR features	e-PRIOR does not provide in tools to assess and enhance the quality of the content of e-Catalogues (although the Schematron validation as described above in principle could do some content validation)
GAP	Not covered. This should be included as a feature of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 17
Name	Publish additional information/documents
Actors	Contracting Authority (procurement officers)
Status	Mandatory
Description	During the eTendering phase, economic operators may request clarifications from the contracting authority regarding the specifications/subject of the call. The request for clarifications is referred to as request for “additional documents”, that any interested party may

	ask for, without any prerequisites (e.g. registration or official expression of interest to the call), or any future obligations (e.g. obligation to submit a tender).
	Requests for additional documents may be submitted only within a predefined period of time (i.e. the contracting authority may set a deadline for accepting questions). All requests for additional documents and the additional documents themselves need to be made publicly available to all interested parties, and in due time before the end of the time-limit for submission of tenders to ensure non-discrimination and equal treatment of economic operators. The identities of economic operators posting requests for additional documents should not be disclosed.
e-PRIOR features	Additional information about the post-awarding e-Catalogue process can be requested from the e-PRIOR support team, and if relevant, additional FAQs or guidance will be made available to the suppliers / service providers interested in or connected to e-PRIOR.
GAP	Not covered. This should be included as a feature of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 18
Name	Support automated notifications
Actors	eProcurement system (eCatalogue stock management system)
Status	Optional
Description	An eProcurement system may support an automated notification mechanism, which automatically notifies its users of interesting events. For instance, users may be automatically notified when new information is made available in a CfT workspace. The EU Directives do not directly foresee for such mechanism. Nevertheless, this can constitute a value-added service for an eProcurement system. Contracting authorities should not fully rely on such notification techniques, as the technologies involved may not guarantee the authenticity of notification recipients, proof of delivery and adequate security. For instance, the use of email notifications (e.g. SMTP) cannot guarantee for any of the above and should not be the only means of notification.
e-PRIOR features	e-PRIOR provides notification services via email, in case of certain events, e.g. a new document is waiting for download by the supplier from his inbox
GAP	Covered

Number	Functional Requirement 19
Name	Support creation of initial offers in the form of eCatalogue prospectuses
Actors	Economic Operators
Status	Mandatory if eCatalogues are authorised by the call for tenders
Description	This functional requirement relates to the creation of initial tenders in the form of eCatalogue prospectuses. This functionality may be supported either internally by an eProcurement system or by external ICT services. In the former case, the eProcurement system may allow suppliers that do not have the necessary ICT capacity, to create eCatalogue prospectuses directly in the system. In such cases, it is recommended that prospectuses abide to industry-wide standards, in order for suppliers to be in position to extract their eCatalogue prospectuses for re-utilising them in other systems (e.g. an eProcurement system of another contracting authority). This can be achieved either through appropriate web forms, or external tools that the contracting authority may provide to suppliers in order to simplify the eCatalogue creation process. In the latter case, when external ICT services are used to create eCatalogues for public procurement, for instance an ICT application of a supplier, this functional requirement should be viewed as a process that suppliers must follow in order to create their tenders in the form of eCatalogues. Use of eCatalogues as well as the process followed towards their adoption must satisfy the principles of equal treatment and non-discrimination. Under no circumstances contracting authorities may view, edit and/or improve eCatalogue prospectuses which form official offers; the confidentiality of tenders must be fully respected.
e-PRIOR	The PEPPOL e-Catalogue tool supports the creation of the e-Catalogue in a front-end

features	application and the submitting to the contracting authority via the PEPPOL network. The same tool also provides in an excel template, where the e-Catalogue can be created, saved as an UBL XML message and uploaded to the contracting authority.
GAP	Covered

Number	Functional Requirement 20
Name	Allow for the interoperable and secure submission of tenders in the form of eCatalogue prospectuses
Actors	eProcurement system (eCatalogue stock management system)
Status	Mandatory
Description	<p>Economic operators should have the possibility to electronically submit their tenders in the form of eCatalogue to the eProcurement system of the contracting authority. As discussed in Legal Requirement 2: "<i>Use interoperable electronic means and tools for communication</i>", any tools used for tender submission must be generally available, non-discriminatory, and interoperable.</p> <p>Economic operators that have submitted a tender should be provided with the possibility to update their tender until the designated tender submission deadline.</p> <p>An official time-stamping facility must ensure the exact submission date and time of a tender. Security arrangements for all data transmitted to/from the eProcurement system should ensure the integrity of tenders, as well as, the authenticity of the economic operators that have submitted them, always in line with Legal Requirement 5: "<i>Apply rules for the device for the electronic receipt of tenders/eCatalogues</i>" and Functional Requirement 21: "<i>Support a device for the electronic receipt of tenders (including eCatalogue prospectuses)</i>".</p>
e-PRIOR features	<p>e-PRIOR provides in web services that can be called to upload UBL e-Catalogue messages. Economic operators will also be able to use the PEPPOL e-Catalogue tool to upload their e-Catalogues to e-PRIOR via the PEPPOL Network.</p> <p>By supporting commonly recognised standards, e-PRIOR provides in interoperable means and tools for communication.</p> <p>Official time-stamping (based on PKI and external time-stamping provider) is not supported by e-PRIOR. However, the date and time of receiving e-Catalogues is logged.</p> <p>The security of the submission is guaranteed by an EDI concept, where a number of procedures and measure guarantee the authenticity and integrity of the message.</p>
GAP	Covered. Official time-stamping of the e-Catalogue is currently not supported, but nothing would prevent the economic operator from time-stamping his e-Catalogue before uploading it to e-PRIOR.

Number	Functional Requirement 21
Name	Support a device for the electronic receipt of tenders (including eCatalogue prospectuses)
Actors	eProcurement system (eCatalogue stock management system)
Status	Mandatory
Description	<p>The two most relevant standards for the exchange of eCatalogues, UBL and c-Catalogue, define specifications on how eCatalogues should be transmitted between parties, through standardised processes and messages, as well as, how transactions can be completed based on already exchanged eCatalogues. At present, common practice in eProcurement systems in Europe is to provide suppliers with contracting authorities' tailor-made specifications for forming and submitting eCatalogues.</p> <p>In order to implement an ICT eProcurement system which can receive eCatalogues either based on industry-wide standards or tailor-made specifications, the eProcurement system should feature a suitable communication channel for external ICT systems to be able to communicate with it. That communication channel must, amongst others, be able to accept new/updated eCatalogues. In this respect, the device for the electronic receipt of tenders can</p>

	<p>support the receipt of both eCatalogues and non-eCatalogue based tenders, as the same communication channel is used for both. Thus, the device for the electronic receipt of eCatalogues must not be considered as a supplementary mechanism to the general device for the electronic receipt of tenders.</p> <p>This communication channel should accept the new/updated eCatalogues and immediately transmit them to the device for the electronic receipt of tenders, so that they are securely stored in accordance with Legal Requirement 5: <i>“Apply rules for the device for the electronic receipt of tenders/eCatalogues”</i>. In addition, the communication channel (and all other related software modules) should ensure the confidentiality of data, so that the information included in eCatalogues is made available only to the electronic device for the electronic receipt of tenders and no other unauthorised party, including software components and/or human entities. The device for the electronic receipt of tenders should then be in full control to respect all other rules detailed under Legal Requirement 5: <i>“Apply rules for the device for the electronic receipt of tenders/eCatalogues”</i>. eCatalogues should be securely stored and be inaccessible to all users until their opening under the “four-eyes principle”, as detailed in Functional Requirement 23: <i>“Open tenders following the four-eyes principle”</i>.</p> <p>The device for the electronic receipt of tenders should ensure that tenders in the form of eCatalogues are accepted until the tender submission deadline. Suppliers should be allowed to re-submit an eCatalogue, providing that the re-submission is performed before the tender submission deadline.</p> <p>When updating eCatalogues in the context of Framework Agreements or DPS, the device for the electronic receipt of tenders must also ensure that updates are only accepted during the designated eCatalogue update periods (if applicable). The device for the electronic receipt of tenders may be interconnected with official time-stamping systems so that official time-stamps of the exact submission date and time of a tender are recorded. In addition, the device for the electronic receipt of tenders should feature appropriate security arrangements, ensuring the integrity of tenders, including advanced security techniques for data encryption, document signing, and user authentication. To this end, the device for the electronic receipt of tenders may be interconnected with specialised systems of certification authorities if electronic certificates are used. Use of electronic certificates must comply with the provisions of Directive 1999/93/EC.</p>
e-PRIOR features	<p>e-PRIOR currently supports the CEN/BII profiles for the e-Catalogue processes and the UBL format standard for the e-Catalogues.</p> <p>Economic operators can submit catalogues by calling the web services available in e-PRIOR. Updates are managed by an action code on item line level (add, update, delete). Update receipt, the e-Catalogue message is immediately stored securely.</p> <p>The economic operator gets an ACK from e-PRIOR when a file has been uploaded successfully. After the validation of XSD and Schematron business rules, an application response is sent to the supplier. Once the catalogue has been approved in the Central Catalogue Management System, a final application response is sent back.</p> <p>Designated e-Catalogue update periods are not taken into accounts. Formal deadlines for the submission are not supported.</p> <p>The communication channel is using SOAP / Web Services and is encrypted using https to ensure confidentiality.</p> <p>Advanced Electronic Signatures and time stamping are currently not supported by e-PRIOR. “Opening of tenders” and the four-eyes principle are not supported.</p>
GAP	Partly covered. The support of advanced electronic signatures by e-PRIOR will be studied in 2010. Other features should be included as a feature of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 22
Name	Securely store tenders in the form of eCatalogues
Actors	eProcurement system (eCatalogue stock management system)
Status	Mandatory
Description	The device for the electronic receipt of tenders/eCatalogues must ensure that all tenders are stored in a secure environment and cannot be accessed until authorised procurement officers

	proceed to open them, following the “four-eyes principle”. This in turn can be performed only after the designated tender opening time has been reached. If the access prohibition is infringed, it should be reasonably ensured that the infringement is clearly detectable.
e-PRIOR features	e-PRIOR stores e-Catalogues securely in the e-PRIOR message database as well as in the Central Catalogue Management System, but doesn't support the opening procedure or four-eyes principle.
GAP	Not covered. This should be included as a feature of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 23
Name	Open tenders following the four-eyes principle
Actors	Contracting Authority (procurement officers)
Status	Mandatory
Description	<p>As discussed in Functional Requirement 22: “<i>Securely store tenders in the form of eCatalogues</i>”, the device for the electronic receipt of tenders should ensure that access to tenders cannot be obtained by anyone, until authorised procurement officers proceed to the opening of tenders following the “four-eyes principle”. To “open” or “unlock” tenders, two or more authorised procurement officers need to perform simultaneous actions.</p> <p>The opening of tenders shall only be performed after the tender submission deadline, and once the designated tender opening time has been reached.</p> <p>Once tenders are opened they can be stored in other specialised modules of an eProcurement system, and be removed from the eProcurement device for the electronic receipt of tenders/eCatalogues. Such specialised modules should ensure the confidentiality rules for received tenders, as discussed in Functional Requirement 24: “<i>Ensure the confidentiality of tenders</i>”.</p>
e-PRIOR features	e-PRIOR and the Central Catalogue Management System do not support the four-eyes principle.
GAP	Not covered. This should be included as a feature of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 24
Name	Ensure the confidentiality of tenders
Actors	eProcurement system (eCatalogue stock management system)
Status	Mandatory
Description	<p>The information contained in tenders received within the context of a public procurement competition must remain confidential even after tenders are opened/ unlocked following the “four-eyes principle”.</p> <p>As described in Functional Requirement 23: “<i>Open tenders following the four-eyes principle</i>”, once tenders are unlocked, they can be stored in specialised modules of an eProcurement system and be removed from the eProcurement device for the electronic receipt of tenders/eCatalogues. Such modules should ensure that only authorised users may obtain access to unlocked tenders. In addition, these modules should permit authorised procurement officers to grant access privileges to unlocked tenders to other procurement officer users.</p> <p>As for every other action taken within the context of an eProcurement system, the actions taken by users for accessing received tenders should be traced and logged by the audit-trailing facility of the system.</p>
e-PRIOR features	Once the e-Catalogue is stored in the Central Catalogue Management System, only authorised users can access it.
GAP	Covered

Number	Functional Requirement 25
Name	Automate the evaluation of tenders in the form of eCatalogue prospectuses
Actors	eProcurement system / Contracting Authority (procurement officers)
Status	Optional
Description	<p>An eProcurement system may assist procurement officers in performing the evaluation of tenders, either in an automated or semi-automated manner. The evaluation of tenders must be performed according to the pre-defined evaluation criteria and formulas, as stated in the contract notice and/or contract documents of the Call.</p> <p>To enable contracting authorities to evaluate tenders in the form of eCatalogues, support for browsing and searching eCatalogues must be provided. Evaluating procurement officers should be able to view all contents of an eCatalogue prospectus; nevertheless restrictions may apply in case of phased-opening (i.e. first open technical offers and then financial offers). In addition, advanced search functionalities for locating particular product lines in an eCatalogue may be supported.</p> <p>To make the evaluation more efficient, the automated comparison of eCatalogues may be supported. This would enable contracting authorities to select particular products included in eCatalogue prospectuses of different suppliers and compare the values in the different eCatalogue attributes. This however may be only performed if eCatalogues from different suppliers follow the same (or similar) structure, based on the same set of attributes and the same set of possible values (or at least the same format) in each attribute.</p> <p>For contracting authorities that follow a two-phased evaluation of tenders (i.e. technical evaluation followed by financial evaluation), the fields that contain financial information should be inaccessible during the technical evaluation. This could be achieved by encrypting financial information until a specific condition is met (e.g. the technical evaluation is completed).</p>
e-PRIOR features	<p>The Central Catalogue Management System provides in an “approve use-case”, where the approving procurement officer can view the catalogue data and check whether the e-Catalogue is according to what has been agreed in the framework contract, or e.g. if pricing information has been updated properly. This approval mechanism is manual. Through the “view use-case” the user can browse through the e-Catalogue lines by selecting the appropriate product classification code. Advanced search functionalities are not supported currently; you cannot search on a free text field.</p> <p>Through the “compare use-case”, a procurement officer can visually compare two e-Catalogues.</p> <p>Phased-opening is not supported.</p> <p>e-PRIOR automatically validates a number of basic business rules by running Schematron scripts, before uploading the e-Catalogue to the Central Catalogue Management System.</p>
GAP	Partly covered. Some e-PRIOR features could be re-used, but should be further analysed in the context of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 26
Name	Create reports
Actors	Contracting Authority (procurement officers)
Status	Mandatory
Description	<p>A requirement of the EU Directives relates to the capability of the contracting authority to prepare regulatory reports, which provide information on all aspects of a given competition. As per Article 43 of 2004/18/EC, such reports include information about:</p> <ul style="list-style-type: none"> - the name and address of the contracting authority, the subject-matter and value of the contract, Framework Agreement, or Dynamic Purchasing System - the names of the successful candidates or tenderers and the reasons for their selection - the names of the candidates or tenderers rejected and the reasons for their rejection - the reasons for the rejection of tenders found to be abnormally low

	<ul style="list-style-type: none"> - the name of the successful tenderer and the reasons why his tender was selected and, if known, the share of the contract or Framework Agreement which the successful tenderer intends to subcontract to third parties - if necessary, the reasons why the contracting authority has decided not to award a contract or Framework Agreement or to establish a Dynamic Purchasing System - any other important or mandatory information <p>The contracting authority may be assisted in this process by an eProcurement system which, utilising all information created/stored during the competition, can automatically or semi-automatically produce such reports.</p> <p>The reporting services of an eProcurement system should provide functionality for generating reports on specific eCatalogue operations. For instance these may relate to the updating of eCatalogues, the ordering of products/services based on eCatalogues, the extraction of specific eCatalogue data for being included in reports, etc.</p>
e-PRIOR features	e-PRIOR does not provide in reporting services currently.
GAP	Not covered. This should be a feature of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 27
Name	Invite Economic Operators to submit tenders in the form of eCatalogues
Actors	Contracting Authority (procurement officers)
Status	Mandatory
Description	<p>Once all requests to participate (including the provided proof documents) have been examined and, where applicable, candidates have been short-listed, based on objective selection criteria, pre-stated in the contract notice, the contracting authority invites all or some economic operators to submit their tenders until a pre-defined tender submission deadline. From this point onwards, all call related information (comprising contract documents, and additional documents) should be disclosed only to the economic operators selected to submit a tender. Rejected economic operators should be notified that they will not be invited to submit tenders.</p> <p>This process can be simplified for contracting authorities by an eProcurement system, which automatically or semi-automatically calculates the deadline for submitting tenders, as well as, prepares appropriate notification messages for all involved economic operators (Functional Requirement 18: "<i>Support automated notifications</i>"). The identity of all economic operators should however remain confidential (Functional Requirement 24: "<i>Ensure the confidentiality of tenders</i>").</p>
e-PRIOR features	Not supported by e-PRIOR.
GAP	Not covered. This should be a feature of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 28
Name	Verify eCatalogue prospectus format outside specific calls for competition and request refinement if needed
Actors	Contracting Authority (procurement officers)
Status	Optional
Description	<p>Once the Framework Agreement is established, the contracting authority may verify the format and technical quality of the eCatalogue. This can be performed using automated tools or through manual procedures. In both cases the integrity and confidentiality of data must be preserved at all times, while these verification checks must relate to the presentation/format of eCatalogues.</p> <p>In case needs arise, contracting authority may request a supplier to refine/improve his/her eCatalogue prospectus in a particular way. This request should be made after the establishment of the Framework Agreement, and always outside the context of a competition for a specific contract. Contracting authorities should not perform any changes to received eCatalogues,</p>

	<p>which form the initial offers of suppliers in the context of Framework Agreements, and are binding. Instead, contracting authorities could provide guidance to suppliers on how their eCatalogues may be improved. eCatalogue updates should relate only to their presentation/format for better usability, and not alter the subject and content of the eCatalogue (which forms an initial tender and is binding to the supplier).</p> <p>This requirement can be implemented by the message “Request catalogue”, supported by both UBL and c-Catalogue standards (see also Annex III of [SIR]).</p>
e-PRIOR features	<p>The verification of the format and technical quality of the e-Catalogue are done by</p> <ul style="list-style-type: none"> - applying XSD and Schematron (business rules) validation in e-PRIOR, and if the validation fails, the economic operator gets back an application response notifying him of the failure and requesting him to send a corrected e-Catalogue - a validation by the procurement officer in the Central Catalogue Management System, by the "approve use-case" and "compare use-case". In case of non-approval, the economic operator is again requested to send a corrected e-Catalogue
GAP	Covered

Number	Functional Requirement 29
Name	Support the refinement of eCatalogue prospectus format
Actors	Economic Operators
Status	Optional
Description	<p>Contracting authorities may request suppliers to improve their eCatalogues in relation to their presentation/format, which must always be outside the context of a competition for a specific contract. The sole purpose for such updates should be to improve the presentation/format of eCatalogues for their better usability.</p> <p>The “<i>Verify eCatalogue prospectus format outside specific calls for competition and request refinement if needed</i>” and the current functional requirement may be repeated as many times as required, until the format/presentation of an eCatalogue reaches the desired quality level, provided this does not violate the terms of the Framework Agreement.</p> <p>In order to update the technical presentation of their tenders, suppliers may submit a new full eCatalogue or only update part of their initial eCatalogue. This depends on the exact terms of the Framework Agreement and the technical readiness of a supplier and the contracting authority. In both cases, a new version of the supplier eCatalogue prospectus should be created in the eProcurement system. The refinement should only relate to the presentation and readability of an eCatalogue prospectus, and there should no be substantial changes to the contents of the offer.</p>
e-PRIOR features	The presentation of the e-Catalogue is managed by the Central Catalogue Management System, by applying the "view catalogue use-case". Any improvement to the presentation/format is in control of the contracting authority, unless the content of the e-Catalogue needs to be changed by the economic operator. In that case, the "approve catalogue use-case" can be applied.
GAP	Covered

Number	Functional Requirement 30
Name	Support creation of specific offers in the form of eCatalogue prospectus update (in view of re-opening of competition)
Actors	Economic Operators
Status	Mandatory if eCatalogues are authorised
Description	<p>A supplier may, at its own initiative, update his/her eCatalogue with updated information within a Framework Agreement or a DPS.</p> <p>Such updating may only be performed to the extent that eCatalogue updates have been authorised by the contracting authority prior to the establishment of the Framework agreement or DPS, and within the specific rules and limits defined by it, in respect of the terms of the Agreement or DPS. Such rules may regulate the exact fields to be changed in eCatalogues, the</p>

	<p>time-periods for such updates and any necessary specific conditions.</p> <p>From a technical point of view, economic operators may either create a new catalogue or they may perform such updates based on their existing eCatalogue.</p> <p>When receiving such eCatalogue updates contracting authorities may utilise automated tools to verify that updated eCatalogues respect the terms of the Framework Agreement.</p>
e-PRIOR features	<p>e-PRIOR supports catalogue updates which are managed by an action code on item line level (add, update, delete).</p> <p>Via the "compare catalogues use-case", an updated version of a catalogue can be compared with the original version, and can be approved through the "approve catalogue use-case".</p>
GAP	Covered

Number	Functional Requirement 31
Name	Archive submitted eCatalogue prospectuses prior to any updates
Actors	eProcurement system
Status	Mandatory
Description	When updating an eCatalogue, suppliers may either submit a new full eCatalogue, or only an updated part of the initial eCatalogue. In both cases it is strongly recommended that the previous version of the eCatalogue be archived for audit trailing and traceability purposes, particularly when transactions (e.g. such as purchase orders) have been completed based on the previous version.
e-PRIOR features	e-PRIOR supports versioning of e-Catalogues and stores each version in the Central Catalogue Management System.
GAP	Covered

Number	Functional Requirement 32
Name	Support an appropriate device for the active collection of tenders (“punch-out”)
Actors	eProcurement system (eCatalogue stock management system)
Status	Optional
Description	<p>The EU Directives authorise the “active collection of tenders” as a new technique for the submission of tenders. According to this technique, also referred to as “punch-out”, the eProcurement system of a contracting authority may collect eCatalogue tenders directly from supplier systems. Under this provision, an eProcurement system of a contracting authority may feature a specialised device which can access designated interfaces of supplier ICT systems in order to retrieve and process eCatalogue information.</p> <p>The device for the active collection of tenders and all related operations should be in line with the provisions of the EU Directives, as described in Legal Requirement 8: <i>“Provide rules and guidelines for the active collection of tenders in the form of updated eCatalogues (punch-out)”</i>. The use of “punch-out” appears to be suitable only for established Framework Agreements and DPS.</p> <p>The active collection of tenders should respect the following general guidelines:</p> <ul style="list-style-type: none"> - the “punch-out” device must be open to all supplier systems. In this respect, contracting authorities and eProcurement system implementers should assume suitable technical architectures, in order to guarantee openness and accessibility of the device, in line with open / industry-wide standards. - any costs for the necessary system-to-system communication in order to accommodate this submission technique should be reasonable and the same for all suppliers. In addition, any costs incurred by suppliers should be justifiable considering the total estimated value of the Framework Agreement or DPS. Any technical solutions that suppliers must implement for using this submission technique should not bind suppliers to specific products, platforms,

	<p>operating systems, hardware, etc, unless these are provided at no (or reasonable) cost by the contracting authority. The provisions of Legal Requirement 2: “<i>Use interoperable electronic means and tools for communication</i>” and the non-functional requirements for tools and means should be respected.</p> <p>- this tender submission technique should not be used on an ad-hoc basis, as the active collection of tenders is allowed only within the context of a competition. Contracting authorities should ensure that this device is not viewed as a direct link to obtain real-time prices from supplier systems, as punch-out constitutes an innovative and alternative submission technique, which nevertheless must abide to the rules for the submission of tenders received without the use of punch-out (i.e. tenders submitted following a specific notice and before a specific tender submission deadline). As a consequence, a “punch-out” device should ensure that collection of tenders is performed only when foreseen under the rules of an FA or DPS, and collect eCatalogue prospectuses that are in a “frozen” or “snapshot” state (i.e. the eCatalogue should not contain any dynamic links to external files or internet locations).</p> <p>- suppliers should be given notice to prepare their eCatalogue prospectuses for a specific competition, before a “punch-out” is used, in line with Legal Requirement 7: “<i>Provide rules and guidelines for performing eCatalogue updates</i>”. The notice should define the exact date and time the “punch-out” will be performed. This should be considered by suppliers as the absolute deadline for preparing and storing their “frozen” eCatalogues in their systems, before the “punch-out” device commences the process for collecting tenders. All suppliers should of course have the same deadline.</p>
e-PRIOR features	e-PRIOR does not support the punch-out mechanism
GAP	Not covered. This should be a feature of a broader pre-awarding e-Procurement system.

Number	Functional Requirement 33
Name	Support creation of specific offers in the form of eCatalogue prospectus update (under re-opening of competition)
Actors	Economic Operators
Status	Mandatory if eCatalogues are authorised
Description	<p>Under a re-opening of competition, a contracting authority requests suppliers to submit an offer for a specific contract under a Framework agreement or a DPS. The specific offer should respect the initial offer (in a Framework agreement) or indicative offer (in a DPS).</p> <p>The economic operator can either use his/her initial offer or indicative offer to participate in the competition for the specific contract or he/she may update his/her eCatalogue submitted as initial offer or as indicative offer (in a DPS).</p> <p>From a technical point of view, for this the economic operator may create a new eCatalogue, which is largely based (through cross-references) on his/her initial (or indicative) offer. The initial/indicative tender forms a “master copy” of the eCatalogue, which then is updated to generate a “specific copy” to be used for the specific contract. This specific copy does not replace the initial/indicative offer, but only serves for the submission of the eCatalogue for the specific contract.</p> <p>When receiving such eCatalogue updates contracting authorities may utilise automated tools to verify that updated eCatalogues respect the terms of the Framework Agreement or DPS.</p>
e-PRIOR features	In e-PRIOR this is managed via the e-Ordering process, not via e-Catalogues.
GAP	Covered (through e-Ordering)

Number	Functional Requirement 34
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Name	Automate verification of technical format and quality of eCatalogue update
Actors	Contracting Authority (procurement officers)
Status	Optional
Description	<p>Once a supplier submits an eCatalogue to an eProcurement system as tender for a specific contract (within an FA or DPS), the received eCatalogue may be automatically checked for its compliance against the terms of the Framework Agreement or DPS. These terms may relate to eCatalogue format and specific rules for permissible values to specific fields in an eCatalogue. Contracting authorities should implement their systems in a way that if tenders in the form of eCatalogues are scanned for verifying their compliance against the specifications prior to their locking (as soon as they are submitted by suppliers), the scans must be fully automated and not disclose any of the content of the tenders. eCatalogues that do not meet the technical specifications should not be deleted from the system, but instead be stored in a specialised and secure area for traceability purposes. In addition, a notification procedure may be initiated in order to inform the concerned supplier. The notification may be supported by Functional Requirement 18: "<i>Support automated notifications</i>".</p> <p>Tools for such verification must comply with Legal Requirement 6: "<i>If used, fully automate eCatalogue prospectus verification</i>". Through such tools, technical checks to be performed are similar to the ones enlisted in Functional Requirement 15: "<i>Make available to suppliers tools for verifying the technical format of their eCatalogue prospectuses</i>". The integrity and confidentiality of data must be preserved under all circumstances (Functional Requirement 24: "<i>Ensure the confidentiality of tenders</i>").</p>
e-PRIOR features	<p>The e-Catalogue updates go through the same verification mechanisms as described in functional requirement, as updates are part of the "submit catalogue use-case", where at line-level is defined it concerns an add, update or delete action.</p> <p>Delete actions do not result in real deletions, but rather in making unavailable to the end-user.</p>
GAP	Covered.

Number	Functional Requirement 35
Name	Automate placing an order based on an eCatalogue prospectus
Actors	Contracting Authority (procurement officers)
Status	Optional
Description	<p>When a Framework Agreement is concluded with a single operator, the contracting authority may conclude a specific contract by directly placing an order with that supplier. Similarly, when multiple operators participate in a Framework Agreement, and the conclusion of a specific contract does not require the re-opening of competition, the contracting authority can again directly place an order. Such an order is placed to the best placed operator, as ranked during the establishment of the Framework Agreement. If the best placed operator cannot fulfil the order (i.e. rejects the order), the contracting authority proceeds by placing the order to the second best operator (and so forth). The competition is re-opened, when it is necessary more precisely formulated terms, and, where appropriate, other terms referred to in the specifications of the framework agreement to be established.</p> <p>When industry-wide standards are used, tools for this requirement can be based on specialised processes included in those standards. Both UBL and c-Catalogue feature a wide range of messages for placing orders, and respective responses.</p> <p>In any case the exact terms of the Framework Agreement between the contracting authority and the participating suppliers must be respected by any supporting systems/tools.</p>
e-PRIOR features	In e-PRIOR this is managed via the e-Ordering process, not via e-Catalogues.
GAP	Covered (through e-Ordering)

Number	Functional Requirement 36
Name	Create DPS workspace
Actor	Contracting Authority (procurement officers)
Status	Mandatory
Description	<p>The contracting authority is responsible for creating an electronic virtual space for managing all related data and information for a DPS. The workspace should be accessible by authorised users, while DPS specific parameters should be established and fixed within it.</p> <p>The DPS effectively constitutes an “umbrella” for the procurement of specific contracts within it. In general, it presents many similarities to Framework Agreements, however with some distinct features, such as:</p> <ul style="list-style-type: none"> - a DPS constitutes a completely electronic process - a DPS forms an “open market” that all suppliers are permitted to join, provided that their indicative offers satisfy its terms; this contrasts with Framework Agreements in which only participants admitted at the time of establishment can compete for specific contracts within it <p>The use of a DPS workspace facilitates procurement officers to manage specific contracts within it as well as to store notices, contract documents, additional information, etc. In addition, the DPS workspace can also serve for storing all submitted indicative tenders as well as tenders for specific contracts concluded within it.</p> <p>The indicative tenders should be possible to be updated at any time, while tenders for specific contracts could be based on indicative tenders.</p>
e-PRIOR features	DPS is not supported by e-PRIOR.
GAP	Not covered. This should be seen in a broader analysis of implementing DPS at the European Commission.

Number	Functional Requirement 37
Name	Support DPS reporting
Actor	Contracting Authority (procurement officers)
Status	Mandatory
Description	<p>An eProcurement system can provide the functionality for generating automated reports, based on all information collected during the lifecycle of the DPS and the DPS workspace, for instance user accesses, participants, estimated value, etc. This requirement may be implemented based on Functional Requirements 26: “<i>Create reports</i>”. However, the reporting on the DPS should not only cover information about its establishment, but also about specific contracts concluded within it. These reports cover the suppliers admitted in the DPS, the number and value of specific contracts procured within it, etc.</p> <p>This functional requirement is not strictly applicable for the current step (i.e. Step 06: “<i>Establish DPS workspace</i>”), nevertheless is included in this step, as DPS reporting facilities should be capable to generate report for the whole DPS workspace or specific contracts within it.</p>
e-PRIOR features	DPS is not supported by e-PRIOR.
GAP	Not covered. This should be seen in a broader analysis of implementing DPS at the European Commission.

Number	Functional Requirement 38
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Name	Create indicative Tenders in the form of eCatalogue prospectuses in a DPS
Actors	Economic Operators
Status	Mandatory if eCatalogues are authorised
Description	<p>Economic operators, in order to submit their indicative tenders in the form of eCatalogues for admission to a DPS, have to follow a similar tender submission process to Functional Requirement 20: “Allow for the interoperable and secure submission of tenders in the form of eCatalogue prospectuses”.</p> <p>Indicative tenders constitute “full” tenders, with the only difference being that they are not binding. The support an eProcurement system may provide for creating/submitting tenders is also relevant to the creation/submission of indicative tenders. The information included in indicative tenders should remain confidential, as described in Functional Requirement 24: “Ensure the confidentiality of tenders”. As for tenders in one-off procedures, and initial offers for Framework Agreements, indicative offers submitted in form of eCatalogues for admission to a DPS should be received by a device for the electronic receipt of tenders. This device must ensure that indicative tenders remain inaccessible until their evaluation.</p> <p>The evaluation of indicative tenders should be performed within a maximum of 15 days after the submission date; a period which may be extended provided that no invitation to tender is issued in the meantime. Furthermore, the EU Directives require that after the publication of a simplified contract notice for the procurement of a specific contract, contracting authorities should allow at least 15 days notice before issuing the invitation to tender. This provides a reasonable time period for new suppliers to create indicative tenders and be admitted in the DPS, in order to participate in the competition for the specific contract. It may be assumed that contracting authorities perform the evaluation of indicative offers just before issuing invitations to tender in specific contracts.</p> <p>It is envisaged that indicative tenders, both from suppliers that are admitted in the DPS and from those that are not admitted, may be updated. The conditions and rules on how the update process is performed are not regulated by the EU Directives. In particular, there are no technical specifications. Suppliers may submit full indicative tenders in the form of eCatalogues, or only updated parts of eCatalogues. The exact requirements for updates should be specified at national level and/or by specific rules of the contracting authority. The update of indicative tenders is related to Legal Requirement 7: “Provide rules and guidelines for performing eCatalogue updates”.</p>
e-PRIOR features	DPS is not supported by e-PRIOR.
GAP	Not covered. This should be seen in a broader analysis of implementing DPS at the European Commission.

Number	Functional Requirement 39
Name	Create an eAuction workspace and establish eAuction parameters
Actors	Contracting Authority (procurement officers)
Status	Mandatory, if eAuction event is foreseen in the Contract Notice, the terms of FA or terms of DPS
Description	<p>This functional requirement covers the creation of a virtual workspace, used for storing all eAuction related information. This virtual workspace should only be accessible to authorised users; eAuction parameters should be established and fixed within it. The eAuction workspace can benefit from Functional Requirement 5: “Create a call for tenders workspace”</p> <p>eAuction parameters comprise the bidding fields, the closing conditions, the type of the eAuction, etc. The parameters for the full initial evaluation, the features for auction and the associated evaluation mechanism should be defined prior to launching the procedure and be published in the eAuction specifications along with the contract notice.</p>
e-PRIOR features	e-PRIOR does not support e-Auctioning.
GAP	Not covered. This should be seen in a broader analysis of implementing e-Auctioning at the European Commission.

Number	Functional Requirement 40
Name	Rank tenderers based on the automated evaluation of bids in the form of eCatalogue prospectuses in an eAuction
Actors	eProcurement system (eCatalogue stock management system)
Status	Mandatory in case an eAuction event takes place
Description	<p>An eAuction device should be in position to evaluate received bids and automatically rank the respective tenderers according to the evaluation criteria defined during the establishment of the eAuction workspace. The parameters for bid evaluation should be based on quantifiable criteria and their precise weighting to enable the fully automated evaluation of bids.</p> <p>It is estimated that the use of eCatalogues as tenders can facilitate the running of eAuctions. Before running an eAuction, the contracting authority should specify the product attributes that would be used in order to evaluate the received bids and acceptable value ranges (e.g. product quantity can be between 10 to 20 units). In parallel, it should specify the precise weighting of the various evaluation criteria. The bid evaluation mechanism would automatically read the received eCatalogues and use the pre-defined evaluation formula to perform the evaluation of bids.</p> <p>Considering the technical implementation, this process presents a high level of similarity to the update of eCatalogues as described within Framework Agreements or DPS systems.</p>
e-PRIOR features	e-PRIOR does not support e-Auctioning.
GAP	Not covered. This should be seen in a broader analysis of implementing e-Auctioning at the European Commission.

2.4. Summary of the gaps

The following table summarizes the gaps between the DG MARKT business requirements for pre-awarding e-Catalogues and the functionality of the e-Catalogues solution of e-PRIOR, operating in a post-awarding context.

This table reveals significant gaps but also matches between pre- and post-awarding.

- The most significant gaps are related with everything that has to do with the core e-Tendering process, such as the evaluation mechanism of tenders
- The most significant matches are related to the existence of a (standard) catalogue message, tools for verification and the use of classification schemes.

DG MARKT #	Functional requirement	Covered in e-PRIOR?
Functional Requirement 1	Register user	Partly covered
Functional Requirement 2	Support user profiling	Not covered
Functional Requirement 3	Support user authentication	Partly covered
Functional Requirement 4	Support user authorisation	Covered
Functional Requirement 5	Create a call for tenders workspace	Not covered
Functional Requirement 6	Provide standards-based tender specifications for eCatalogue prospectuses	Partly covered
Functional Requirement 7	Define a tender evaluation mechanism for eCatalogue prospectuses	Not covered
Functional Requirement 8	Prepare official procurement notices including eCatalogue information	Not covered
Functional Requirement 9	Use the Common Procurement Vocabulary (CPV) classification	Covered
Functional Requirement 10	Use the Nomenclature of Territorial Units for Statistics (NUTS) classification	Covered
Functional Requirement 11	Electronically dispatch notices to OJS - Interface with OJEU	Not covered
Functional Requirement 12	Publish Contract Documents	Not covered
Functional Requirement 13	Provide searching mechanisms for calls for tenders	Not covered
Functional Requirement 14	Provide electronic access to call for tenders specifications (Visualise/Download)	Not covered
Functional Requirement 15	Make available to suppliers tools for verifying the technical format of their eCatalogue prospectuses	Covered
Functional Requirement 16	Make available to suppliers tools for assessing the quality of their eCatalogue prospectuses	Not covered
Functional Requirement 17	Publish additional information/documents	Not covered

DG MARKT #	Functional requirement	Covered in e-PRIOR?
Functional Requirement 18	Support automated notifications	Covered
Functional Requirement 19	Support creation of initial offers in the form of eCatalogue prospectuses	Covered
Functional Requirement 20	Allow for the interoperable and secure submission of tenders in the form of eCatalogue prospectuses	Covered
Functional Requirement 21	Support a device for the electronic receipt of tenders (including eCatalogue prospectuses)	Partly covered
Functional Requirement 22	Securely store tenders in the form of eCatalogues	Not covered
Functional Requirement 23	Open tenders following the four-eyes principle	Not covered
Functional Requirement 24	Ensure the confidentiality of tenders	Covered
Functional Requirement 25	Automate the evaluation of tenders in the form of eCatalogue prospectuses	Partly covered
Functional Requirement 26	Create reports	Not covered
Functional Requirement 27	Invite Economic Operators to submit tenders in the form of eCatalogues	Not covered
Functional Requirement 28	Verify eCatalogue prospectus format outside specific calls for competition and request refinement if needed	Covered
Functional Requirement 29	Support the refinement of eCatalogue prospectus format	Covered
Functional Requirement 30	Support creation of specific offers in the form of eCatalogue prospectus update (in view of re-opening of competition)	Covered
Functional Requirement 31	Archive submitted eCatalogue prospectuses prior to any updates	Covered
Functional Requirement 32	Support an appropriate device for the active collection of tenders ("punch-out")	Not covered
Functional Requirement 33	Support creation of specific offers in the form of eCatalogue prospectus update (under re-opening of competition)	Covered
Functional Requirement 34	Automate verification of technical format and quality of eCatalogue update	Covered
Functional Requirement 35	Automate placing an order based on an eCatalogue prospectus	Covered
Functional Requirement 36	Create DPS workspace	Not covered
Functional Requirement 37	Support DPS reporting	Not covered
Functional Requirement 38	Create indicative Tenders in the form of eCatalogue prospectuses in a DPS	Not covered
Functional Requirement 39	Create an eAuction workspace and establish eAuction parameters	Not covered
Functional Requirement 40	Rank tenderers based on the automated evaluation of bids in the form of eCatalogue prospectuses in an eAuction	Not covered

3. CONCLUSION

The conclusion of this gap analysis is that there are significant gaps between the usage of e-Catalogues in a pre- and post-awarding context. The main reason for that is that the e-Catalogue in both contexts serves different purposes and has to comply with different requirements:

- pre-awarding: the e-Catalogue fits in an e-Tendering process, where in principle any economic operator is allowed to participate and where principles such as equal treatment, non-discrimination and transparency should be guaranteed. Public procurement procedures and principles have to be respected, such as opening of tenders under the four-eyes principle or the publication of contracts.

- post-awarding: the e-Catalogue is the basis for the e-Ordering process, where the relationship with the economic operator has been formalised by an awarded contract.

The area where the gap seems the closest is the e-Catalogue message and its technical validation and the use of classification and description schemes, such as CPV and eCl@ss.

e-PRIOR today facilitates the exchange of e-Catalogues between the back-office systems of the economic operator and the back-office of the contracting authorities.

In the context of pre-awarding, an e-Tendering platform would need to be designed and built, where any economic operator would be able to register and upload e-Catalogues as electronic tender. e-PRIOR could then again facilitate the exchange of e-Catalogues between this e-Tendering platform, and the e-Procurement system of the contracting authorities, where the awarding process is executed and e-Catalogues are formally evaluated.

Where to go from here

Based on the outcome of this gap-analysis, the following proposed actions are worthwhile to be considered:

- A similar exercise might be performed between the pre-awarding requirements for e-Catalogues and with what PEPPOL has implemented in the context of post-awarding e-Catalogues
- The feasibility of implementing a pre-awarding e-Procurement solution in general and an e-Catalogues solution in particular might be further studied by the e-PRIOR team
- This gap analysis might be complemented by a similar gap analysis in the context of framework contracts with re-opening of competition
- It might be interesting to further look into the detailed gap analysis between the pre- and post-awarding catalogue data models in UBL which may be performed by the CEN/ISSS WS/BII 2 workshop.

4. ABBREVIATIONS AND TERMS

The table below provides the reader with an overview of the abbreviations used relevant to the project.

Abbreviation	Description
ACK	Acknowledgement – confirmation of receipt in this context
CEN/ISSS	The European Committee for Standardisation http://www.cen.eu/cenorm/businessdomains/businessdomains/issss/index.asp
CEN/ISSS WS/BII or CEN/BII	Workshop on ‘Business Interoperability Interfaces on public procurement in Europe’ http://www.cen.eu/cenorm/sectors/sectors/issss/activity/ws_bii.asp
CfT	Call for Tenders
CPV	Common Procurement Vocabulary http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:074:0001:0375:EN:PDF
DG MARKT	Internal Market and Services DG http://ec.europa.eu/dgs/internal_market/index_en.htm
DIGIT	Informatics DG http://ec.europa.eu/dgs/informatics/index_en.htm
DPS	Dynamic Purchasing System
EC	European Commission http://ec.europa.eu/index_en.htm
ECAS	European Commission’s Authentication Service
eCl@ss	eCl@ss is a hierarchical system for grouping materials, products and services according to a logical structure with a level detail that corresponds to the product-specific properties that can be described using norm-conforming properties. http://www.eclass-serviceportal.com
e-PRIOR	electronic PRocurement, Invoicing and Ordering http://www.epractice.eu/cases/ePRIOR
EU	European Union http://europa.eu/
EDI	Electronic Data Interchange (Recommendation 94/820/EC)
FA	Framework Agreement
FC	Framework Contract
ICT	Information and Communication Technology
HTTP	Hyper Text Transfer Protocol. TCP-based application-layer protocol used for communication between Web servers and Web clients
IDABC	Interoperable Delivery of European eGovernment Services to public Administrations, Businesses and Citizens http://ec.europa.eu/idabc/

Abbreviation	Description
PEPPOL	Pan-European Public eProcurement On-Line http://www.peppol.eu/About PEPPOL
PKI	Public Key Infrastructure - Framework for creating a secure method for exchanging information based on public key cryptography. The foundation of a PKI is the certificate authority (CA), which issues digital certificates that authenticate the identity of organizations and individuals over a public system such as the Internet. The certificates are also used to sign messages in order to ensure that messages have not been tampered with
Schematron	Schematron is a rule-based validation language for making assertions about the presence or absence of patterns in XML trees.
SOAP	Simple Object Access Protocol: Lightweight XML-based messaging protocol used to encode the information in Web service request and response messages before sending them over a network
UBL	Universal Business Language. UBL is a library of standard electronic XML business documents. http://www.oasis-open.org/committees/ubl/
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business http://www.unece.org/cefact/
XML	Extensible Markup Language. XML is a standard messaging format for business communication, allowing companies to connect their business systems with those of customers and partners using the existing Internet infrastructure. XML uses tags (words bracketed by '<' and '>') and attributes (of the form name="value") to help place structured data into text files.
XSD	XML Schema Definition. XML-based language used to describe and control the structure, content and semantics of XML documents.

The glossary below provides the reader with an overview of the terms used relevant to the project.

Term	Description
e-Tendering	In this gap analysis, the term e-Tendering comprises the digitalised public procurement phases occurring from the notification of call for tenders to the award of the contract, thus it covers the phases of submission, opening, and evaluation of tenders.
Electronic Catalogue or e-Catalogue	Electronic catalogues constitute electronic documents that describe offered products/services and prices
e-Catalogue message	Electronic structured document, containing the electronic catalogue information
Public Procurement	'Public procurement' means the purchasing of works, supplies and services by public bodies at either national or Community level.
Pre-awarding	The process of notification of call for tenders, the submission of tenders, their evaluation and awarding. In the context of e-Catalogues: <ul style="list-style-type: none"> ○ Defining e-Catalogue templates ○ Creation of e-Catalogues

Term	Description
	<ul style="list-style-type: none"> ○ Submitting e-Catalogues ○ Uploading of e-Catalogues in the buyer's systems ○ Evaluation of the e-Catalogues
Post-awarding:	<p>The processing of executing awarded framework contracts by means of requests, orders and invoices. In the context of e-Catalogues:</p> <ul style="list-style-type: none"> ○ Maintaining e-Catalogues ○ Ordering through e-Catalogues ○ Invoices referring to order lines and e-Catalogue items
Interoperability	<p>According to IDABC, interoperability means the ability of information and communication technology (ICT) systems, as well as, of the business processes they support in order to exchange data and enable the sharing of information and knowledge.</p> <p>http://ec.europa.eu/idabc/en/chapter/5883</p>
Contract	<ul style="list-style-type: none"> - Framework contract: contract establishing only the general outline of the services or goods to be delivered and requiring an additional step to make the actual purchase. - Specific contract or order form: contract specifying details of a particular task based on the previously signed framework contract.
Framework Contract	<p>In contrast to direct contracts, framework contracts merely set out a performance framework (in general, the characteristics and price of the goods or services that the contractor is prepared to provide). The other basic elements of the contractual relationship are defined at a later stage in a specific contract, which is often an 'order form' indicating the quantities and date of performance.</p>
Specific Contract or Order Form	<p>Contracts specifying the details of a particular task based on a previously signed framework contract.</p>
Feature	<p>A capability or characteristic of a system that directly fulfils a Stakeholder Need. Often thought of as the 'advertised benefits' of the system.</p>
Direct Contract	<p>In direct contracts the subject, remuneration and length of implementation of the contract are defined at the outset. As such, they are definitive and self-sufficient in that the contract can be implemented without further formalities.</p>
Dynamic Purchasing System	<p>The dynamic purchasing system is a completely electronic process for commonly used purchases, which is open throughout its duration to any economic operator who satisfies the selection criteria and has submitted an indicative tender that complies with the specification and any additional documents. The indicative tenders may be improved at any time provided that they continue to comply with the specification.</p>
Web Service	<p>Software system designed to support interoperable Machine to Machine interactions over a network. It is frequently just Web APIs that can be accessed over a network, such as the Internet, and executed on a remote system hosting the requested services.</p>
Time-stamping	<p>(Trusted) timestamping is the process of securely keeping track of the creation and modification time of a document. Security here means that no one — not</p>

Term	Description
	even the owner of the document — should be able to change it once it has been recorded provided that the timestamp's integrity is never compromised.