



PART I – IDENTIFICATION SHEET

Project ref. no.	045153
Project acronym	ELLECTRA-WeB
Project full title	European Electronic Public Procurement Application Framework in the Western Balkan Region

Security (distribution level)	Public
Contractual date of delivery	13/10/2008
Actual date of delivery	30/06/2008
Deliverable number	D10.2
Deliverable name	Electronic Public Procurement Application Framework (2 nd release)
Type	<u>Prototype</u>
Status & version	version 0.5
Number of pages	21
WP contributing to the Deliverable	3
WP / Task responsible	3 / T3.3
Editor	Christos Georgousopoulos
Author(s)	Christos Georgousopoulos, Brian Elvesæter, Gøran K. Olsen
EC Project Officer	Aniyan Varghese
Keywords	Application Framework, Specifications, Software Engineering, MDE, MDD, SOA
Abstract (for dissemination)	This documentation contains the optimisations and refinements performed in the electronic Public Procurement Application Framework (ePP AF) since its 1 st release. The final (2 nd release) of the ePP AF is accompanied to this Deliverables' CD-ROM.

VERSIONING AND CONTRIBUTION HISTORY

Version	Date	Description	Contributors
0.1	30/05/08	Initial structure and content.	C. Georgousopoulos (INTRASOFT)
0.2	01/09/08	Introduction of chapter 1 and 2	C. Georgousopoulos (INTRASOFT)
0.3	25/09/08	List of resolved bugs identified by consortium partners.	M. Oreskovic (ECCF) D. Brdjanin, S. Vrhovac (EXIT-IT) M. Radomir, N. Dobrilovic, M. Stojanovic (EON) S. Shyti (C-CENTER) C. Georgousopoulos (INTRASOFT) B. Elvesæter, G. K. Olsen (SINTEF)
0.4	10/10/08	Internal peer review.	G. Davidovski (PPB)
0.5	13/10/08	Addressed feedback from internal peer review and final formatting.	C. Georgousopoulos (INTRASOFT)

TABLE OF CONTENTS

PART I – IDENTIFICATION SHEET	1
VERSIONING AND CONTRIBUTION HISTORY	2
TABLE OF CONTENTS	3
LIST OF ACRONYMS	4
LIST OF FIGURES.....	5
LIST OF TABLES	6
PART II – EXECUTIVE SUMMARY.....	7
PART III – FULL DESCRIPTION	8
1. INTRODUCTION	9
1.1 PURPOSE AND OBJECTIVES	9
1.2 TARGET AUDIENCE AND RELATIONSHIP TO OTHER DELIVERABLES.....	9
1.3 STRUCTURE OF THE REPORT	10
2. DESCRIPTION OF THE 2ND RELEASE OF THE EPP AF	11
2.1 VERSIONING HISTORY	11
2.2 MODIFICATIONS PERFORMED ON THE EPP AF SINCE ITS 1 ST RELEASE	11
2.3 BUGS RESOLVED	12
3. CONCLUSION	19
PART V – REFERENCES	20
BIBLIOGRAPHY.....	21

LIST OF ACRONYMS

Term	Description
AF	Application Framework
BPEL	Business Process Execution Language
CA	Contracting Authority
CD	Compact Disk
EC	European Commission
EO	Economic Operator
ePP	electronic Public Procurement
EU	European Union
IDABC	Interoperable Delivery of European eGovernment Services to Public Administrations, Business and Citizens
IDE	Integrated Development Environment
IT	Information Technology
JDK	Java Development Kit
MDA	Model Driven Architecture
MDD	Model-Driven Development
MDE	Model-Driven Engineering
OJEU	Official Journal of the European Union
PC	Personal Computer
PIM	Platform-Independent Model
SDK	Software Development Kit
SME	Small Medium Enterprise
SOA	Service-Oriented Architecture
SPEM	Software Process Engineering Metamodel
UML	Unified Modeling Language
URL	Unified Resource Locator
WSDL	Web Services Description Language
XML	Extensible Markup Language

LIST OF FIGURES

Figure 1: Users of the ePP AF and their roles.....	9
--	---

LIST OF TABLES

Table 1: Resolved JIRA issues.....	12
------------------------------------	----

PART II – EXECUTIVE SUMMARY

The overall aim of the ELLECTRA-WeB project is to specify, develop and test an open-source electronic Public Procurement (ePP) Application Framework and a set of Supporting Guidelines that will enable, on the one hand, Western Balkan ICT solution developers to cost-effectively develop, and, on the other hand, Western Balkan Public Organisations and Suppliers to easily deploy and use trusted, interoperable, user-friendly, secure and EC compliant electronic Public Procurement solutions.

The ePP Application Framework (AF) supports the latest evolutionary approach of Software Engineering, called Model-Driven Engineering (MDE). In contrast with traditional Software Engineering approaches, MDE shifts the focus of software development from writing code to modelling. An ePP solution produced via the utilisation of the ePP AF comes in the form of a Web-based application that adheres to Service-Oriented Architecture (SOA).

The 1st version of the ePP Application Framework was documented in Deliverable D10.1. The deliverable contained the specifications of the ePP AF and supporting installation guidelines – an accompanied CD-ROM disk included all the necessary files, components and plug-ins required for the proper installation of the framework.

The 2nd version of the ePP Application Framework is described within this documentation i.e. D10.2. The Deliverable captures the optimisations, refinements and bug-fixing performed on the ePP AF since its first release (M17). The files constituting the final version of the ePP AF are supplied on the CD-ROM disk accompanied to this Deliverable. The same installation process described in D10.1 with the files accompanied by this deliverable may be followed for the setup of the framework.

PART III – FULL DESCRIPTION

This part includes Chapters 1 - 3.

- Chapter 1. Introduction
- Chapter 2. Description of the 2nd release of the ePP AF
- Chapter 3. Conclusion

1. INTRODUCTION

1.1 Purpose and objectives

The overall aim of the ELLECTRA-WeB project is to specify, develop and test an open-source electronic Public Procurement (ePP) Application Framework and a set of Supporting Guidelines that will enable, on the one hand, Western Balkan ICT solution developers to cost-effectively develop, and, on the other hand, Western Balkan Public Organisations and Suppliers to easily deploy and use trusted, interoperable, user-friendly, secure and EC compliant electronic Public Procurement solutions.

The work that is presented within this deliverable is part of the “Development of the ePP Application Framework” work package 3 (WP3) and covers the following task:

- Task T3.3: Development of the electronic Public Procurement Generation Engine.

The task T3.3 has been split for practical purposes into two subtasks (but not formally): (i) development, modifications and extension to the open-source MOFScript generation engine chosen for the ePP AF, and (ii) the realisation of the ePP AF.

This deliverable focuses on the optimisations, refinements and bug-fixing performed on the ePP AF since its first release (M17). Actually, D10.2 stands as a versioning history to the work performed on the ePP AF since D10.1. The process of installing the latest version of the framework (accompanied in a CD-ROM disk along with this documentation) is the same as the first release, and is well described in D10.1.

1.2 Target audience and relationship to other deliverables

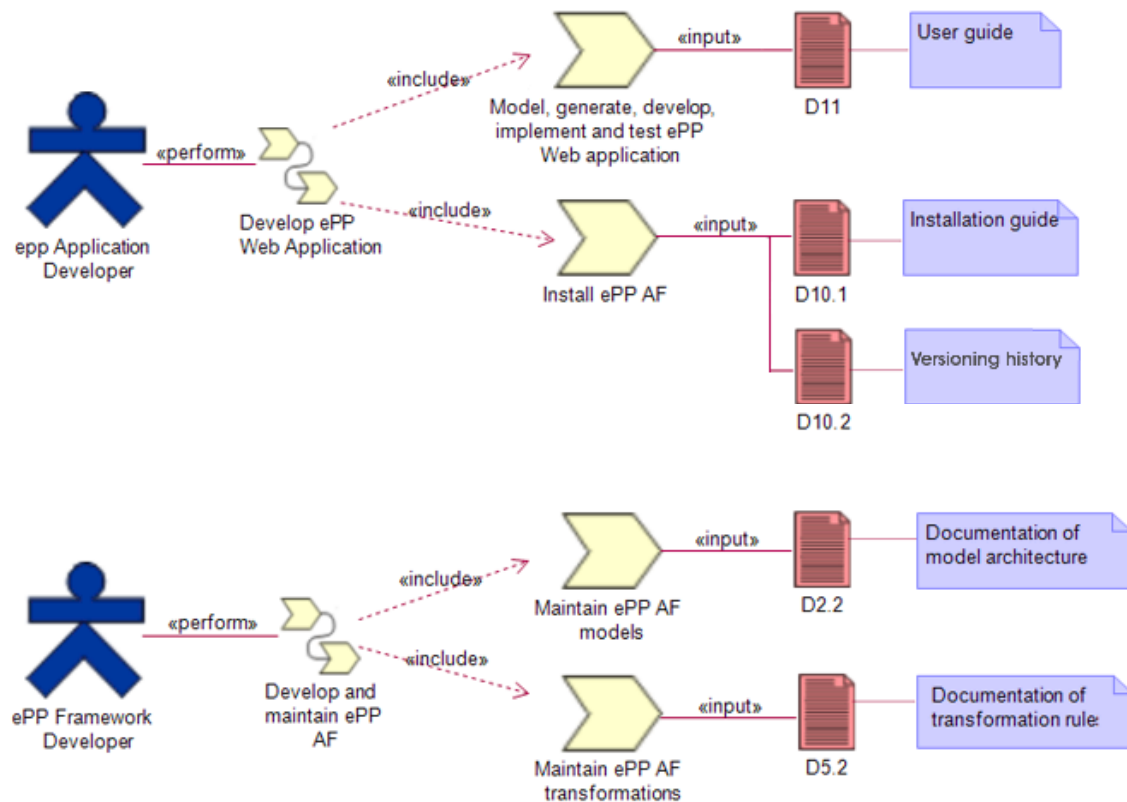


Figure 1: Users of the ePP AF and their roles

The users of the ePP Application Framework may be distinguished into two different types according to their roles as shown in Figure 1.

- The **ePP Framework Developer** is responsible for the development and maintenance of the ePP AF, which includes activities such as maintenance of models and transformation rules.
- The **ePP Application Developer** is the end-user of the ePP AF that utilises the framework to develop an ePP solution as a Web-based application. This work includes activities such as installing the ePP AF and modelling, generating, implementing and testing ePP Web applications.

The deliverables D2.2, D5.2, D10.1, D10.2 and D11 are related and complements each other to form a complete documentation of all aspects of the ePP AF. In order to achieve a consistent and good documentation we have tried to minimize the overlap and focus on descriptions suited for the two different user roles of the ePP AF. This has resulted in the following:

- Deliverables D2.2 and D5.2 document the model architecture and the transformation rules, and are targeted at the ePP Framework Developer who is responsible for the information about the architecture of the framework and how to maintain and further develop it.
- Deliverables D10.1, D10.2 and D11 document the installation and usage of the ePP AF and are targeted at the ePP Application Developer which does not necessarily need to understand the internal details of the ePP AF but only how to install and use it.

D10.1 documents the specifications and installation guide of the ePP AF. D10.2 corresponds to the final version (2nd release) of the ePP AF and documents the modifications made since its 1st release i.e. D10.1. D11 corresponds to the user manual.

This deliverable focuses on the modifications performed to the ePP Application Framework since its 1st release (M17).

1.3 Structure of the report

The report follows with Chapter 2 that documents the amendments, refinements and optimisations performed on the ePP Application Framework, as well a list of bugs resolved since its 1st release. Chapter 3 concludes the deliverable.

2. DESCRIPTION OF THE 2ND RELEASE OF THE EPP AF

The development of the ePP Application Framework followed an iterative and incremental approach. A lot of challenges have been met during the realisation of the framework mostly involved due to the innovative approach utilised on combining SOA with MDD, the latest technologies applied and the open-source nature of the project which restricted the integration of available components/plugin-ins required for the production of the framework.

2.1 Versioning history

Despite the difficulties encountered, a prototype version of the ePP Application Framework was initially released in M6 along with Deliverable D3. Eight month later the 1st official version was released in M17 along with Deliverable D10.1. From M17 up until M22 the ePP Application Framework has been under scope of testing and optimisation. The output of the developers' requirements utilising the framework and users' requirements experimenting on the ePP Solutions generated via the former, the suggestions and proposals for optimisation, along with a number of bugs identified was the release of the 2nd version of the ePP AF in M22.

2.2 Modifications performed on the ePP AF since its 1st release

During the development of the 2nd release of the ePP Application Framework the JIRA[1] issue tracking tool has been utilised by the consortium members for recording bugs and requests for optimisation with respect not only to the functionality of the actual framework but also to the quality of its output i.e. the ePP Solutions generated via the framework.

The improvements performed on the 2nd release of the ePP AF, since its 1st release, may be summarised to the following ones:

- A number of bugs have been identified by the consortium partners and have been addressed by the ePP Framework developers - those are documented in detail in section 2.3.
- The MOFScript transformation rules have been optimised to address certain aspects with regard to the needs of ePP domain. New well-defined patterns have been captured by the model-to-text transformation rules and the generated code is now commented.
- The framework is inline with the latest MOFScript model transformation rules, the UML/BPEL models i.e. the output of Deliverables D5.2 and D2.2 respectively, and the UML profile pertinent to ePP domain.
- The usability of the framework has been enhanced:
 - The generation and deployment steps of ePP solutions have been simplified after the optimisation of the scripts responsible for the execution of the corresponding operations.
 - A new ECLIPSE plug-in has been developed for the BPEL editor in order to assist the modelling of ePP processes. In specific, the new introduced plug-in facilitates the introduction of foreign Web-services (partner links) in the editor's workspace.
- Help functionality has been introduced. The user manual (output of Deliverable D11) has been integrated within the framework to support framework usage. A tutorial on the methodology adopted by the framework on generating ePP Solutions as well as examples of utilisation is provided in the form of an audio-visual means. A number of videos demonstrating different customisation aspects of ePP Solutions are also included. All these have been outputted in the form of an ECLIPSE plug-in.
- The interface of the framework has been slightly revamped (tweaked) in order to have a flavour of our project look and feel style i.e. ELLECTRA-WeB logo and colours.
- The hierarchical directory structure has been amended:
 - A new directory named 'eu.ellectraweb.solution.webapplication' has been introduced to better structure the output code of the generated ePP Solutions. The 'eu.ellectraweb.solution.application' now maintains the server-side code i.e. entities, web-

services, BPELs where the 'eu.ellecraweb.solution.webapplication' maintains the client-side code i.e. web-pages and managed Java-beans.

- The 'eu.ellecraweb.framework.documentation' directory has been removed since the help functionality is provided from the framework's main menu-bar.

The limitations of the current ePP AF lie in the fact that although the current transformation rules do not support auditing functionality, available constructal modelling artefacts and specific stereotypes and tagged-values have been defined for this operation. In addition to this, the functionality for supporting the communication between an ePP Solution and the OJEU has been developed but not tested due to time restrictions applied based on synchronisation between OJS eSender scheduling and ELLECTRA-WeB time-plan.

2.3 Bugs resolved

The table below contains a list of the resolved bugs identified by the developers using the framework and recommendation for refinement posted by the users exploiting the ePP Solutions generated by the framework. The information of Table 1 is acquired from JIRA issue tracking tool but has been formatted to match the layout of this deliverable.

Table 1: Resolved JIRA issues

ID	Description
ISTELWEB-1	The GUI allow us to add assigned PO's in a Call For Tenders workspace, also allow us to view and edit but the 'edit' functionality creates undesirable results.
ISTELWEB-2	It would be nice to add functionality for editing the evaluation criteria of a Call For Tender, BPELs are supported but this is not reflected in the GUI.
ISTELWEB-5	Once all the necessary PO's associated with a specific Call For Tenders have confirmed the unlock of tender(s) the message depicted on screen identifying the tender(s) status doesn't change.
ISTELWEB-6	The assigned PO's are saved correctly into the DB but they are not visualised properly on the tab named 'Assigned People'.
ISTELWEB-7	The PO Admin that creates a Call For Tenders Workspace is not visualised on the list of associative Procurement Officers.
ISTELWEB-8	During the registration process, the organisation details are not updated properly. It works fine only the first time. Necessary code must be added to refresh all the fields once a new organisation is selected from the drop-down menu.
ISTELWEB-9	Add functionality for visualising user account details in the administrative console.
ISTELWEB-10	In the user profile web-page add an extra button for saving the user's information after they have been modified.
ISTELWEB-11	Two extra fields need to be added on GUI to support proper visualisation of data with regard to the winner, and winner justification for tender evaluation.
ISTELWEB-12	The 'contract' link in the top-right corner of the main web-page is not required.
ISTELWEB-15	On a Call For Tenders information, the tab that provided support for additional document needs further testing.
ISTELWEB-16	For any document that may be downloaded, provide a download button, to support such functionality.
ISTELWEB-17	The interface to OJEU needs to be tested with a valid eSender account.
ISTELWEB-18	e-mail notification must be supported by the system to support notification of events (both in BPEL/GUI).
ISTELWEB-19	Validate all text on the GUI and overall Look and Feel
ISTELWEB-20	In the GUI, all 'evaluate' link should be rename to 'view'/'evaluate' depending of available action for each phase.

ISTELWEB-21	Appropriate business-logic transformation rules must be written to support the generation of a complete phase of ePP.
ISTELWEB-22	Appropriate transformation client-side must be written to support the generation of a complete phase of ePP.
ISTELWEB-23	In the Call For Tenders information Tab, the duration of the contract doesn't appear properly.
ISTELWEB-25	The main menu on the left hand-side should also contain the "Information Links" menu item and functionality for performing a search for calls.
ISTELWEB-26	The "Information link" menu item needs a space to differentiate it from the previous menu item.
ISTELWEB-27	The main content of the pages needs refinement, e.g. small fonts, bolded titles & the two hyper-links do not work properly.
ISTELWEB-28	A navigational menu should be positioned on top of the main content for each web-page.
ISTELWEB-29	Between the top menu items (e.g. Home, My profile, My calls) add a space so as the menu items to be separated.
ISTELWEB-30	The 'My Call' link of the top-menu is not functional e.g. it does not visualize the Calls that a specific PO has created.
ISTELWEB-31	The links of 'Contracts' menu item does not function properly.
ISTELWEB-32	The content of the main page should change e.g. an EO cannot create a Call For Tenders.
ISTELWEB-33	The content of the main web-page should change e.g. an PO with opening role cannot create a Call For Tenders.
ISTELWEB-34	If the 'unlock' menu-item is pressed then only the Calls associated to the specific PO that require unlocking (have not been unlocked) should be visualized - not the whole list.
ISTELWEB-35	In the user registrations tabs the ":" symbol should appear after each label e.g. "Title:".
ISTELWEB-36	In the associated web-page of Call searching, the 'Select CPV code' should go closer to the associated text-field (similarly to NUTS button).
ISTELWEB-37	None of the search criteria should be in bold e.g. 'CPV code', ' Keyword ...' etc.
ISTELWEB-38	In the associated web-page of Call searching, the calendar component/combo should be placed next by the appropriate date-fields
ISTELWEB-39	In the tab of a Call for Tenders Workspace information tab, the labels on the left-side of the Call information should be placed in a single line e.g. 'short description' should not reserve 2 lines
ISTELWEB-40	The 'Conditions for participation, and 'awarding criteria' as well as their status should not be in bold, so as to differ from the titles of the table above.
ISTELWEB-41	In the Call for Tenders associated information, the 'additional documents' tab has a typo.
ISTELWEB-42	In the 'additional documents' tab, the page that appears after I click on a specific question needs: <ul style="list-style-type: none"> a. to share the same look & feel with the rest of the application. b. a 'back' and a 'reply' button should be inserted. c. any files that may be attached to an answer are not accessible (downloadable) - only the title of the file is visualized.
ISTELWEB-43	In the 'additional documents' tab, for the web-page responsible utilized for posting an answer:

	<p>a. the components need rearranging. b. The 'answer' text-field should be converted to a text-area. c. a submit button is missing d. the language drop-down menu does not include all available languages</p>
ISTELWEB-44	In the 'Criteria' tab. In the list of criterions, the last column that contains a check-box that should be minimized in terms of length.
ISTELWEB-45	The content of the main page (after log-in) is improper e.g. the admin of a system should not be able to create a Call.
ISTELWEB-46	In the tab of the Call for Tenders, under the associated Procurement Officers tab, change the 'name' label to 'Full name'.
ISTELWEB-47	In the 'unlock Tender' page (a) add a row to insert labels for the table columns i.e. Opening staff full name, status, (b) change the status label from 'ok' to 'unlock'.
ISTELWEB-48	A discretionary text is required in each web page e.g. title/brief description.
ISTELWEB-49	The "Important legal notice" link on the top-right corner of the web-page does not function properly
ISTELWEB-50	The "ELLECTRA-WeB" link on the top-left corner of the web-page under the logo does not function properly
ISTELWEB-51	After a Call For Tenders workspace has been created the next-page that should appear is the Call details of the specific call, so as the user to be able and continue in filling of information with regard to the evaluation mechanism
ISTELWEB-52	The menu-item of the top menu 'My Calls' should be changed to 'My Tenders' or else is there a difference between this link and the 'MyTenders' link of the left-menu ?
ISTELWEB-53	Forms should provide: (a) document management facilities e.g. store, edit (prior data), delete, & visualize data (over the form, as a pdf/html). (b) population of form based on data retrieved from the Call For Tenders workspace.
ISTELWEB-55	A user may be register with the following roles: (a) Economic Operator, or (b) a combination of POs roles e.g. Administrative & Evaluating. The 'ePP Admin' role should be removed.
ISTELWEB-56	The application form of user account registration does not support any constraints e.g. mandatory fields are not considered, a registration may be completed without a name
ISTELWEB-57	If a user has already been registered (but not accepted by the administrator yet) during his logging attempt appropriate messaging should appear instead of 'Your Username or Password is Invalid'
ISTELWEB-58	In the user-account registration tabs, the languages drop-down menu is empty.
ISTELWEB-59	Searching is not functioning properly. It should take under consideration all of the possible combinations of searching criteria.
ISTELWEB-60	On the list of Call For Tenders retrieved after performing a search, If I click on a Call that has been closed no information are visualized (when logged as Economic Operator).
ISTELWEB-61	In the 1 st tab of the Call For Tenders workspace web-page, if no information is filled and I click on the 'code selector' button then I get a number of errors.
ISTELWEB-62	In the Call For Tenders workspace, the errors (displayed in red) below the tabs do not clear when I switch to a different tab.
ISTELWEB-63	In the Call For Tenders workspace, all of the constraints do not function properly e.g. (a) mandatory fields are not taken under consideration e.g. I can create a space without specifying a CPV code, (b) logical errors: in the 'quantity & duration' tab I can set (and be accepted) that the starting date is in a month within 2008 and the ending date is in a date of 2007 !

ISTELWEB-64	There is no edit functionality for the Call For Tenders workspace data.
ISTELWEB-65	There is no edit functionality for the evaluation forms.
ISTELWEB-66	If the 'conditions for participation' are complete and I click on them, then the 'back' button in the window on where the cfp are visualized is not functional.
ISTELWEB-67	In the Condition for Participation of a Call for Tenders, constraints are not supported e.g. I can add a string as the values of a criterion weight.
ISTELWEB-68	The administrator of the specific Call is not visualized in the list of Procurement Officers associated to a specific Call.
ISTELWEB-69	Although the Procurement Officers that I choose are listed in the tables (of associated PPOs), the data are not stored.
ISTELWEB-70	In the web-page of a Call for Tenders workspace for associating Procurement Officers with a Call, if the 'Type' is set to 'select staff role' then the: (a) 'procurement officer's name' drop-down menu and (b) the 'add to list' button should be disabled.
ISTELWEB-71	In the web-page of a Call for Tenders workspace for associating Procurement Officers with a Call, the default value of 'minimum POs ...' is currently set to 'null' this should be either left blank or set to 2 (four-eye principle).
ISTELWEB-72	It should not be possible to add the same Procurement Officers more than once in the list of associated POs of a specific Call For Tenders.
ISTELWEB-74	In the web-page of a Call for Tenders workspace, the language drop-down menu does not include all available languages.
ISTELWEB-75	In the web-page of a Call for Tenders workspace, the 'submit' button should be active only if: (a) the time for submitting tenders is not over, (b) both of technical and financial documentations are uploaded.
ISTELWEB-76	If a tender has been submitted the associative Economic Operator cannot see his/her files - alternatively s/he has the option of uploading a different proposal – this is wrong!
ISTELWEB-77	According to the system, an Economic Operator is possible to submit more than 2 tenders for the same Call. This is impossible and should not happen.
ISTELWEB-78	It would be good that the code selectors are visualized in a separate window (pop-up)
ISTELWEB-79	The window of the code selectors must share the same look&feel as with the rest of the application e.g. colours, font style etc.
ISTELWEB-80	In all forms, the 'Clear all fields' button does not function (e.g. see registration).
ISTELWEB-81	SSL protocol should be enabled.
ISTELWEB-82	A Procurement Officer which is not associated with a specific Call For Tenders can indeed perform changes to the Call's information - this should not be possible by unauthorized personnel.
ISTELWEB-83	The names of the users posting/answering questions/answers should be visualized on appropriate place within the web-pages.
ISTELWEB-84	Appropriate discretionary text should be placed in each web-page.
ISTELWEB-85	There is no messaging functionality supported by the system. If there is please specify where.
ISTELWEB-87	I was able to create a Call, unlock tenders (without tenders uploaded), submit tenders, proceed directly to evaluation !
ISTELWEB-88	I couldn't proceed to the awarding procedure.
ISTELWEB-89	When a Call For Tenders has ended, all the associated Economic Operators along with their rankings & the Awarding Economic Operator should be displayed

	in the Call's details. Functionality for the Contract Award Notice form should also be provided.
ISTELWEB-90	Audit functionality is not supported.
ISTELWEB-91	A 'home' menu link should be placed in the left main menu.
ISTELWEB-92	Appropriate messaging should appear when clicking on a specific Call for unlocking it: (a) if there are no submitted tenders, (b) if the Call has already been unlocked - visualization of POs that have unlocked it, (c) if the date for unlocking has been passed
ISTELWEB-93	An unlock should be performed only by authorized personnel associated to a specific Call and only after the Call closing date - not before. Also, a Procurement Officer when s/he clicks on 'Call unlocking', s/he should be able to visualise only the Calls that are associated with him/her.
ISTELWEB-94	In the administrative console, in the list of users their role should be depicted.
ISTELWEB-95	In the administrative console, under the user management: (a) no 'view'/edit functionality is provided, (b) in the table the Organisation id should be changed to the organization name
ISTELWEB-96	Only authorized Procurement Officers of an associative call should evaluate tenders.
ISTELWEB-97	The procedure should respect the phases. I was able to evaluate the financial documents before the proof docs. Then, when I tried to evaluate the proof docs the 'close evaluation' button was enabled - without performing the actual evaluation.
ISTELWEB-98	Appropriate messaging should appear when clicking on a specific Call for evaluating it: (a) if there are no submitted tenders, (b) if the tenders of Call have already been evaluated - visualization of POs that have evaluated them
ISTELWEB-99	Evaluation of Tenders should be performed only by authorized personnel associated to the specific Call and only after the unlocking has been performed (by appropriate Procurement Officers with unlocking role) - not before.
ISTELWEB-100	Evaluation needs further testing e.g I evaluated the proof docs of a tender and then I selected the 'close evaluation' button. After I have logged-out and logged in again the evaluation was not closed.
ISTELWEB-101	When an evaluation phase is completed the status of the corresponding table that shows the status of evaluation (proof, technical, financial) is not updated appropriately.
ISTELWEB-102	When assigning Procurement Officers to a Call for Tenders, the minimum number of opening staff must be validated.
ISTELWEB-103	The authentication functionality should be extended so as to cover User Certificates as well. This might also require the design of a new BPEL model & appropriate transformation rules (new GUI pages).
ISTELWEB-104	Every language drop-down menu should be populated with the languages described in the user/reference UML models. The transformation rules should make sure of it.
ISTELWEB-105	Each BPEL should be validated towards the EU legislative framework by some means. The script or transformation rule that will validate the BPELs can be based on the information of: "Functional Requirements for conducting electronic public procurement under the EU framework, Vol.1". Specifically page 51 includes a table of FR dependencies.
ISTELWEB-106	Create a default content for the main welcome-page of the ePP Solution. The content should be pertinent to the user's logged-in role.
ISTELWEB-107	Notification support must be provided by the ePP Solution. For instance, when a tender is submitted an email or message (with the ePP

	platform) should be send to the Economic Operator submitting the proposal notifying him/her that the proposal has been received and accepted by the server. Another example is when a Call closes, all Economic Operators should be informed that the particular Call on where they have submitted proposals has now closed, and the Procurement Officer with opening role should be informed that they should open the tenders etc.
ISTELWEB-111	The transformation rules need to be updated to support he latest changes on the layout of the pages and on the css.
ISTELWEB-112	The transformation rule that generate the web.xml needs to be update to support session time out, servlet mapping and filter.
ISTELWEB-113	In the creation of a Call For Tenders' mandatory fields are not validated. e.g. I can create a Call without specifying a CPV code.
ISTELWEB-114	After creating a new Call the publication date is set at 2010. As a result an Economic Operator cannot access a Call in order to submit a proposal !
ISTELWEB-116	The 'home' link should be placed on the left menu as in the current place (top-menu) it is not accessible by all pages.
ISTELWEB-117	For the BPEL editor an extra plug-in needs to be defined for introducing a new partner link using the web service wrapper.
ISTELWEB-119	On the generated (web-page) header the 'legal notice' is still shown
ISTELWEB-121	There is no page or functionality available for downloading the technical and financial offers of a tender.
ISTELWEB-122	In the Call For Tenders workspace (awarding criterion) I enter a criterion and a value but when I press the 'add to list' the criterion is not added !
ISTELWEB-123	After I have evaluated all documents (as Procurement Officer with evaluating role) the page with the winner appeared, but his/her score was 0.0. After I have re-visited the specific Call to see who was the winner the score was ok !
ISTELWEB-124	The Procurement Officer with administrative role of a specific Call should be able to delete a Call before the submission phase starts.
ISTELWEB-125	When compiling code there is an error in the "CallForTendersManagementService" Class in a method named "queryCallForTendersFindByCallForTenders".
ISTELWEB-126	When there is a web-service error, the web-page visualises a simple message such as : "web-service error". It would be very useful if you could please go though all the web-services/BPELs and amend the code so as to display the source web-service/BPEL that causes the error e.g. "Web-service X: error Y" so as to enable the developer to trace the source of failure.
ISTELWEB-127	When a Procurement Officer tries to open Tender details, the following error is generated: HTTP status 404: The requested resource () is not available.
ISTELWEB-128	When a Procurement Officer tries to unlock Tender, the following error is generated: <pre>org.apache.jasper.JasperException: PWC6033: Unable to compile class for JSP PWC6197: An error occurred at line: 84 in the jsp file: /unlocktender.jsp PWC6199: Generated servlet error: string:///unlocktender_jsp.java:586: cannot find symbol symbol : class Date</pre>
ISTELWEB-129	The registration form should not enable a user to be register both as Economic Operator and Procurement Officer
ISTELWEB-130	When the administrator of a Call tries to view details of questions posted by

	<p>Economic Operators, the following error appears: HTTP status 404: The requested resource () is not available</p>
ISTELWEB-131	<p>When the administrator of a Call tries to reply to a question posted by an Economic Operator on a specific Call, the following error appears: HTTP status 404: The requested resource () is not available</p>
ISTELWEB-132	<p>When viewing my profile the following error appears: My profile – not working (http Status 500)</p>
ISTELWEB-133	<p>Logged in as Economic operator, I cannot see my uploaded Tenders, although Tenders exist.</p>
ISTELWEB-134	<p>When an Economic Operator tries to see the additional documents of a Call the following error appears: HTTP status 404: The requested resource () is not available.</p>
ISTELWEB-135	<p>When Procurement Officer tries to open Tender details, the following error appears: HTTP status 404: The requested resource () is not available.</p>
ISTELWEB-136	<p>When Procurement Officer tries to unlock a Tender, the following error appears: org.apache.jasper.JasperException: PWC6033: Unable to compile class for JSP PWC6197: An error occurred at line: 84 in the jsp file: /unlocktender.jsp PWC6199: Generated servlet error: string:///unlocktender_jsp.java:586: cannot find symbol symbol : class Date</p>
ISTELWEB-137	<p>When a Procurement Officer tries to evaluate a Tender, the following error appears: HTTP status 404: The requested resource () is not available.</p>
ISTELWEB-138	<p>When a Procurement Officer tries to reply to an Economic Operator's request, the following error appears: HTTP status 404: The requested resource () is not available.</p>

3. CONCLUSION

The 1st official version of the ePP AF has been released in M17 and documented in Deliverable D10.1. Since then, based on the user experience and feedback received, improvements and bug-fixes have been performed and addressed not only the usability aspect of the framework but the quality of its output as well i.e. the ePP Solutions generated by the framework. D10.1 also provided the specifications and installation guidelines of the ePP Application Framework.

D10.2 documented the modifications performed in the ePP AF since its 1st release i.e. submission of D10.1. The accompanied CD-ROM disk to this Deliverable maintains the latest files that constitute the ePP Application Framework, and the same installation guidelines documented in D10.1 may be followed for its proper setup.

PART V – REFERENCES

This part provides references for the report. It contains a bibliography.

BIBLIOGRAPHY

[1] JIRA issue tracking tool, <http://www.jira.com> (*last visited 2008*)