Annex I: Terms of Reference (Tender:
EBA Website Services)

Annex I: Terms of Reference

Tender: EBA Website Services

The aim of this procurement procedure is to conclude a contract for the hosting, maintenance and enhancement of the EBA website and its Web Content Management System (WCMS).

1. Background Information

A. About the EBA

The European Banking Authority (EBA) is a specialised agency of the European Union set up to achieve a more integrated approach to banking supervision across the EU. Among its core tasks is the establishment of a single set of rules applicable to all banking institutions in the EU in the same manner, which is the basis for the creation of an EU single market in the banking sector.

The EBA also seeks to ensure that these common rules are all understood and applied by banking supervisors across the EU in a consistent and harmonised way. Its work aims at upgrading the quality and consistency of supervision across the EU, as well as at strengthening oversight of cross-border groups, i.e. those banking groups which operate in more than one EU Member State.

The EBA acts as the cornerstone of a consistent and transparent single market for EU banking that is beneficial to all: businesses, consumers and the broader EU economy. By providing the regulatory framework for the integrity and efficiency of banking in the EU, the EBA also contributes to financial stability across the Union.

B. Context and Objectives of the Contract

The EBA is currently relying on a service contract which has been running for the past 3.5 years and has involved a major redesign of the website. The new Contractor will be required to provide website services for the hosting, maintenance and enhancement of the EBA's main website www.eba.europa.eu and its other websites (extranet). A service-level agreement (SLA) will be part of the contract. The SLA will define the service in terms of scope, quality, and responsibilities. The contract and SLA will have an initial duration of one year. After the initial term of twelve (12) months the contract is renewed automatically up to three (3) times, each time for a period of

twelve (12) months, unless one of the parties receives formal notification to the contrary at least three (3) months before the end of the ongoing duration. The renewal is subject to budgetary availability, satisfactory performance and the continuing needs of the EBA.

The overall objectives of the contract are as follows:

- To increase the visibility of the EBA among the target audiences;

- To comply with the EU requirements in terms of transparency and security;

- To develop and maintain communication tools in line with the tasks and competences laid down in its Founding Regulation;

The Service Level Agreement sought by the EBA is expected to start 1st August 2016, when the Contractor will need to be in full capacity to start delivering the specifications in the SLA.

C. Description of the EBA Website

The website of the EBA (www.eba.europa.eu) is its main electronic information tool. It was redesigned in 2013. It runs on Liferay and has a total of 693 public pages. The average number of users per month is approximately 641,117. It is updated throughout the day and has a restricted area dedicated to members only. The current EBA website, extranet and sub-sites (www.eba.europa.eu) content is approximately 62GB (as of 20/01/2016). There are 1,610 pages in total. The current website Web Content Management System (WCMS) is Liferay 6.1.1 CE. In addition, the EBA currently owns an extranet of 917 pages and based on an on-line database handling approximately 22,700 users, which is managed through the WCMS (extranet); e-mail alerts are also regularly sent to these contacts when new content is uploaded.

Here follows a general description of the EBA website. For full detail please see Annex 1, System Architecture Documents.

Liferay implementation in EBA is based on Liferay 6.1.1 CE and PostgreSQL 9.0.12, Apache Tomcat for application server and Cisco ACE for load balancer and the system is running in high availability through failover clustering. The high-availability clusters provide continuous availability of services by eliminating single points of failure and by failing over services from one cluster node to another.

The following table outlines the related specifications: 7 Virtual servers

SERVER	CORE	RAM	Hard Disk	Comments
2 x Liferay nodes each Linux - Red Hat Server	4 x CPU	8Gb	50Gb	
2 x Solr nodes each Linux - Red Hat Server	2 x CPU	8Gb	50Gb	
2 x Postgres nodes each Linux - Red Hat Server	2 x CPU	6Gb	50Gb	The DB nodes are clustered using RHCS (Red Hat Cluster Suite) and have 2

SERVER	CORE	RAM	Hard Disk	Comments
				additional disks using 2 Global File System (GFS) to be shared on both the nodes. 50Gb disk for the DB and 100Gb for the DB binary logs.
1 x HTTP load balancing node load balancer appliance (Cisco ACE).	4 x CPU	3Gb	14Gb	The Load Balancer node also has a 100Gb second disk which hosts a number of static contents for the EBA site. That disk is exported via NFS to the two Liferay nodes.

Fig(1) EBA current website Infrastructure overview for production environment:
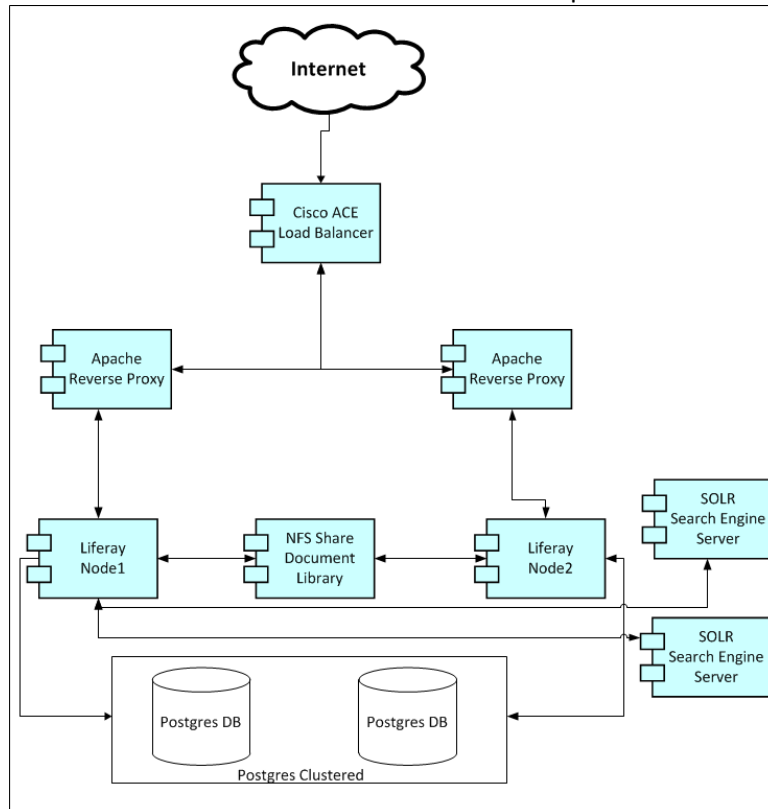
The current EBA website is deployed in four different environments:

- ▪ Production environment (PROD)

- ▪ Pre-Production environment (PREPROD)

- ▪ Test environment (TEST)

- ▪ Development environment (DEV)

All environments are hosted in the contractor's premises.

D.   Description of the Additional Features of the EBA websites

More technical specifications and details on these web features and related software requirements are available in Annexes 2 and 3.

I.   Extranet and its maintenance (User Management System, Database and Email Alerts)

Main Features: The EBA uses its database in order to send tailor-made emails to specific target groups and to allow users to be informed on news items related to their subject of interest. The Contractor must therefore ensure the continuation of the database usage to allow users to manage their own contact details and preferences (create, update, delete) through the main website. The website must continue to maintain a secure space for Extranet (BSG) and Extranet users, which is restricted from others. Users must also continue to be able to subscribe/unsubscribe to email alerts, notifications and to bookmark pages. The system must continue to allow the EBA to send tailor made e-mails to all or part of the contacts on a regular basis. The EBA must be able to sort the contacts on different criteria selected by the users when they registered. A maximum of 30 mailings are expected per month. The Contractor must be able to provide, upon request, the EBA with qualitative information on the users registered. This system, as all others on the website, must be in line with the European Commission policy on data protection (see: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52012PC0010).

Restricted Pages/User Management: WCMS will be managed by the Contractor (granting of access according to EBA requests, helping users to retrieve passwords, acting as a helpdesk for all questions regarding the user management system etc.). The EBA must continue to be able to restrict, through the WCMS, the access to some content to selected and registered users. Therefore the Contractor will maintain the user management system (specify users) and the contactor will also be responsible for both for the transfer in and the transfer out the current User Management. For security reasons, the system must require participants to change their password on a regular basis. A user must only have one username/password to access the limited content.

II.   Database and Email Alerts

The current contacts Database (currently 22,700 records) must continue to be hosted together with the website on virtual server and the contractor will be responsible for maintaining appropriate interface for mass mailing under WCMS.

The system must allow mails to be delivered quickly (less than 15 minutes after sending), and continually monitored to avoid any blockage. The system must also allow test email to be sent, if required. Users must be able to subscribe/unsubscribe and change their contacts details and preference settings from the website.

III.   Meeting registration tool

The EBA organises around 300 meetings/events every year and needs to maintain the related web feature to manage the registration process and provide the participants with information and

documents related to the meeting. Most of the meetings are by invitation only and so this information is, therefore, not to be made available to everyone but should be limited to invited individuals. The feature must support the event organisation process as in the current EBA website.

In particular, the web page(s) must continue to include:

- Registration forms - divided into the following section: 1) I would like to participate 2) I cannot participate 3) I want to cancel my participation.

- If the meeting is composed of different sessions or includes a social event, the EBA staff must be able to easily tailor the form, adding or removing parts of it. The Contractor needs to ensure that all special characters (such as ü, Õ or é) are valid.

- Documents to be attached (meeting agenda or any other documents for downloading)

- Contact (Contact information in case of problems or questions)

- Social event (this feature is necessary if a social event is planned. It could include details of the restaurant and directions on how to get there etc.)

- EBA Visitors Handbook

IV. Public Consultations Tools

The EBA organises open consultations on its policy proposals (guidelines, technical standards, etc.). In order to make the process more efficient and easy to manage, the EBA would like to continue the form that allows participants to tick boxes, select items in a rolling menu, etc. The form must continue to be easy to adapt (number of questions, nature of the questions, etc.) to each consultation and to any new developmental features that may be required in the future. The Contractor must continue to provide the current functionalities of implementation for web tool consultations.

V. Regulatory Activities Tools

The EBA currently produces an interactive table that allows visitors to see all its regulatory deliverables sorted by a set of criteria. This table is referred to as "Interactive Single Rulebook" on the EBA website and needs regular updates in order to reflect the latest regulatory deliverables, as well as changes in EU legislation. Updates may be needed both in terms of content and structure. All these pages contain an important amount of text (especially the compliance table). Therefore, the Contractor must provide technical solutions to allow part of the content to be hidden/expanded when needed. The Contractor must continue to provide the current functionalities of implementation for tools for regulatory activities.

VI. Document Register Tools

The Contractor will continue to support the Document Register through which the EBA website complies with Decision EBA DC 036 of the Management Board on Access to documents, especially

Article 7. https://www.eba.europa.eu/documents/10180/16082/EBA-DC-036-Decision-on-Access-to-Documents-FINAL_1.pdf/c7c7ff83-14b5-4a97-a6e8-c63aafe9027e

2.   Scope of Contract: Website Maintenance, Hosting and Enhancement

The European Banking Authority intends to conclude a framework contract for its website services. The contractor will be required to provide hosting, maintenance and professional services, including enhancements services, for the EBA website and its Web Content Management System (WCMS).

The Contractor will ensure the maintenance and hosting of the EBA websites, continuing to include all the features and technical facilities already implemented, or any of their upgraded versions that may become necessary.

In order to ensure this, the Contractor will provide hosting, management, operation and design services, and transition, as defined in the ITIL documentation (https://www.axelos.com/best-practice-solutions/itil/what-is-itil) for the EBA's websites and databases, as well as for its Web Content Management System (WCMS).

3. Description of the Services

The services to be provided are detailed in the following sections and are based on present and past activities conducted on the EBA website.

The EBA will require the Contractor to ensure the regular maintenance and hosting of its current website. The Contractor will be required to provide and maintain a secure hosting service and a WCMS at the level of the current Liferay 6.1.1 CE utilised by the EBA or analogues. During implementation of the contract the Contractor may be required to enhance the website. Enhancements could include work to improve navigation and information research. The Contractor will be required to ensure the smooth transition of the services and hosting of the entire EBA WCMS platform environment from the current Contactor to the new hosting environment.

The Contractor will appoint a Service Manager, who will act as the single point of contact within the team tasked with the implementation of the services, and a back-up for the Service Manager.

A. Website Transfer from Present/to Future Contractor

Upon signature of this contract, a full handover from the present to the future contractor will be implemented in order to guarantee smooth transition of the services and ensure uninterrupted service. The same activities shall be also organised at the end of the this contract.

The present contractor's responsibilities will be:

1. To execute the following activities:

    a. Prepare and fully organise the transfer activities based on the existing website infrastructure (planning, activities coordination); this should cover full knowledge transfer. The planning needs to be confirmed and aligned with the Future Contractor.

The contractor's responsibilities will be:

2. To execute the following activities:

    a. Prepare and fully organise the transfer activities based on the existing website infrastructure (planning, activities coordination, knowledge transfer)

    b. Package all software components related to the EBA website and make sure it is transferrable to the future Contractor via a hard support (DVD, external HDD) or remotely via a secured ftp connection.

    c. Create a clear and complete EBA website installation manual that will allow the future Contractor to install, setup and configure properly on the production environment.

    d. Package all EBA website supporting documents including all analysis material, design material, development material, testing material, migration material, hosting material and training material. As a minimum required set of documents, the following shall be produced and delivered:

        i. Analysis material: Requirements Analysis, Non Functional Requirements, Database Model, System Architecture Document, Site Map

        ii. Design material: Images & Illustrations, Screen Designs, Style Guide

        iii. Development material: Detailed Installation Manuals, Source Code, System Operation Manual, User Manual, Release Notes

        iv. Testing material: Test Strategy, Test Plan, Test Cases, Factory Acceptance Report

    e. Provide support to the future contractor until all website services are up and running. Ideally organise and provide full knowledge transfer to the future contractor in form of a training session.

    f. Regarding the domain: transfer of domain names etc. from present contractor at entry into force of contract, thus avoiding any down-time at the end of this contract's term and during the transfer to another contractor.

    g. Close the transfer activities by signing off "Services Transfer Acceptance".

    h. At completion of contract term—after successful transfer of content to future contractor — deletion of all the EBA website-related content from present contractor's servers;

3. To produce and hand over the following deliverables:

    a. Handover Plan

    b. Handover Material (as described above)

    c. Fully transferred software assets

    d. Fully transferred content of the repositories used during the contract

    e. Training Material

The future contractor's responsibilities are:

1. To create the new infrastructure, environments, servers in line with the current architecture.

2. To install and setup fully the EBA website on Production and make sure it is fully operational.

3. To gain full knowledge of the EBA website and set up a full team to operate it.

4. To retain the current websites domains names that are held by the EBA and provision of regulatory domain name.

5. To close the transfer activities by signing off "Services Transfer Acceptance".

The deadlines of the main milestones are as follows (T0 being the date of Handover initiation). Based on the current timeline, the Handover invitation will start when the new contract comes into force (which the EBA expects to happen by mid-June 2016). All transition activities will have to be finalised by the end of the current contract deadline (2/8/2016 + 2W).

1. T0 + 1 week: Hand Over Plan produced and agreed

2. T0 + 2 weeks:

    a. Handover material (incl. Training material) produced and delivered

    b. Software assets and content of the repositories fully transferred.

3. T0 + 3 weeks:

    a. Knowledge transfer organised.

    b. All new infrastructure prepared and ready to start installing and setting up the EBA Website

4. T0 + 7 weeks:

    a. EBA website fully installed and configured

    b. New contractor fully in charge of the EBA website

    c. "Services Transfer Acceptance" signed off by EBA, present contractor and future contractor.

Important remarks: The downtime for implementation has to be less than 1h and carried out during the weekend.

B. Technical Maintenance Services

For the duration of the contract, the Contractor shall be responsible for the following technical areas:

- **Web hosting Back-up and Security:** The Contractor must follow the European Commission's policy on Security of Information Systems and also the Computer Emergency Response Team (CERT) requirements in term of security (see for info https://cert.europa.eu/cert/plainedition/en/cert_about.html). In particular, the Contractor must comply with the following standards:

    o Standard on Controls against Malicious Code (Annex 4)

    o Standard on Logging and Monitoring (Annex 5)

    o Standard on Back-ups (Annex 6)

    o Standard on Access Control and Authentication (Annex 7)

    o Standard on Mobile Code (Annex 8)

- **Server:**

    o Based on the current architecture, the contractor must accommodate the EBA website (http://www.eba.europa.eu), which must have an adequate bandwidth to handle the average visits with a load time of no more than 5 seconds per page. The hosting server must be firewalled and antivirus protected and independent form the EBA network.

    o The Contractor must maintain the solutions to ensure the website is able to cope with specific peaks of up to ten times the average visits at any moment. The Contractor must also ensure continuous verification of accessibility to the website, as well as come up with timely solutions for any technical or domain incidents or malfunctioning. The Contractor must allow the EBA to access the log files and must ensure that these log files are retained for at least 3 years.

- **Content Management System:** The Contractor will be responsible for maintaining and updating the current EBA WCMS, including the plug-ins/extensions and any other web application used or that can be needed in the framework of the contract. Based on the current WCMS functionalities, namely Liferay 6.1.1 CE, the WCMS must remain user-friendly and easy to understand for people with no web management background.

C. Business Maintenance Services

The Contractor must provide support to the EBA Communication team in maintaining the EBA websites. It will do so through its helpdesk service, supporting the EBA staff in resolving all issues related to the management of all EBA websites and web tools described below.

The following list is the minimum set of standard helpdesk business services:

- General maintenance of the Extranet and related groups

- Updating Authorisation officers and their rights and roles

- Creating secure folders within the extranet groups (accessibility to selected members)

- Creation of groups + include initial members when first created

- Managing accessibility of new and existing users to new or existing groups)

- Creating meetings for Extranet groups

- Re-setting of passwords

On top of the standard helpdesk business services, the following tasks are expected to take on average 25 hours/month of maintenance work. This is an indicative and non-exhaustive list of the services on the existing functionalities and tools which are most frequently requested by the EBA to its current contractor:

Website maintenance:

- Updating the website with new/updated links or content on request of the EBA staff

- Execute basic activities such as publications of PDFs, HTML texts, photos, videos or other files, ordinary updates

- Managing and changing templates

- Maintaining specific features, forms, templates (e.g. the Questions and Answers tool, the EU wide stress test pages and their interactive tables and infographics, templates for vacancy notices, the extranet etc.)

- Support on maintaining regular activities/features (hidden/unpublished pages, public consultations, forms, submissions of papers from web users during public consultations, etc.)

- Cooperating and coordinating with other EBA Contractors that provide related services, if necessary (uploading infographics, big files, new icons/Logos, interactive tools)

- Support in reorganising parts of the website (to different locations)

Interactive Single Rulebook (SRB) tool and Q&As tool:

- Overall maintenance of the interactive Single Rulebook tool (i.e. adding sections)

- Q&A tool upgrades and updates (adding links)

- Support on meeting pages which have registration facilities

- Linking questions in the Q&A tool with relevant articles in the interactive Single RuleBook

- Technical problems with submissions

- Advise on creating extra functions to convey additional information (ad-hoc)

- Creation of new directives

Contacts Database and Email Alerts:

- Registering public users / extranet users

Meeting registration tool:

- Creating and managing forms for attending public hearing or Extranet meetings

Public Consultations tool:

- Creating and managing forms for sending of comments (including creating the forms and downloads/publication)

Calendar tool:

- Creating and managing forms

D. Other Requirements

- **Training EBA staff:** In order to ensure that the EBA staff are familiar with the website and the WCMS used, the Contractor may be asked to provide training (on-site and/or on-line) to the EBA staff, if on-site, the Contractor will be responsible for his/her own travel expenses. Training sessions are expected to take place on average once every quarter, or whenever a new or existing member of the EBA communications team requires so (4 members in the team at present). Training should cover how to use all functions, can be provided via webcast or in person, as decided by the EBA, and should cover everything that the staff member/s need to know. The Contractor may also be asked to update the existing manual, or if deemed necessary by the EBA, to deliver a comprehensive new manual on how to use the system, detailing step by step how to use the WCMS. The manual and the training should be simple and easy enough to be followed even by those without a web background.

- **Extranet training:** banking authorities at Member State level rely on the EBA extranet for their work. Instructions on how to use the extranet should also be provided to these national authorities (in English language only).

- **Provision of Statistics:** The Contractor must provide on a monthly basis (as well as cumulative year-to-date), and also upon request for specific topics, detailed website usage statistics configured so as to provide the EBA with a realistic and concrete indication of specifically who is using the website, how frequently, and for how long. The Contractor must provide, upon request, any statistics on specific pages of the website.

E. Enhancements

For the duration of the contract, the Contractor shall be responsible for implementing enhancements based on specific requests by the EBA or following the Contractor's own advice. Enhancements will be carried out through individual specific contracts or specific purchase orders.

As an example, the Contractor may be asked to provide enhancement services in the following areas:

- Designing and implementing new templates for the website and related documents (covering all necessary file types).

- Enhancing the current EBA contacts database and mass mailing system

- Creating, designing and developing new website/sub-site that may be needed

- Designing and producing new features, new functionalities and new web tools, as needed.

To implement website enhancements, the Contractor shall have a **team** which shall include at least the following:

- An IT Project Manager with at least 7 years of experience in IT which must include at least 5 years as a Project Manager and at least 3 years in web implementation projects.

- A functional analyst / web designer with at least 7 years of experience in business analysis, design and configuration of web/IT systems which must include at least 3 years as a Liferay functional analyst / web designer.

- A software engineer / test engineer with at least 5 years of experience in software testing which must include at least 3 years in testing web applications.

- A software engineer / web developer with at least 7 years of experience in web development which must include at least 3 years in programming language specific to Liferay and proven experience in the customisation and management of development tools related to the implementation and operating of Liferay.

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4. Service Level Agreement and Performance of the Services

A. Back-up and Security/Data Protection Requirements

The Contractor must ensure EU data protection rules are applied. The Contractor must follow the European Commission's policy on Security of Information Systems and also the Computer Emergency Response Team (CERT) requirements in term of security. In particular, the Contractor must especially comply with the following standards:

- Standard on Controls against Malicious Code (Annex 4)

- Standard on Logging and Monitoring (Annex 5)

- Standard on Back-ups (Annex 6)

- Standard on Access Control and Authentication (Annex 7)

- Standard on Mobile Code (Annex 8)

The Contractor must also ensure the EBA has access to the log files and must ensure that these log files are retained for at least 3 years.

B. Quality of Service/Key Performance Indicators (KPIs)

In order to show they can ensure the quality of service throughout the duration of the contract, the tenderers shall provide a Service Level Agreement document, in which it must commit to the following minimum requirements. These requirements shall also function as KPIs for measuring the quality of the service provided by the Contractor throughout the whole duration of the framework contract.

1. Website/Service Availability:

    a) The service must be available 24/7 all year round and with a weekly planned maintenance window of 30 minutes at the weekend.

    b) Excluding planned maintenance window, the service must be available at an average rate of 99.8%.

    c) The service credit payable will be applied on a monthly basis and is 5% of the total monthly hosting and maintenance service fee for each percentage point below the target availability mentioned above. This service credit payable will be applied on the following month.

2. Capacity/performance:

The website shall be hosted on a dedicated server, which must have an adequate bandwidth to handle the average visits to the EBA website and with a load time of no more than 5 seconds per page.

3. Incident handling:
   a) Failure condition:

   - More than 1 major failure per month (major to be defined in the SLA)

   - More than 5 minor failures per month (minor to be defined in the SLA)

   b) The service credit payable will be applied on a monthly basis and is 5% of the total monthly hosting and maintenance service fee, which will be applied on the following month.

   c) Incidents' resolution /response time: critical incident shall be acknowledged within 1 hour.

4. Defect rates of enhancements and new releases:
   a) 99.8% in major deliverables/releases should be bug free.

   b) 1 major and 5 minor production failures per month.

5. Time-to-implement:
   - A request must be implemented during 24 hours plus the time which is needed for the resolution of a fix or development of an enhancement.

6. Time-to-acknowledgement:
   a) Critical incidents must be acknowledged by the provider in less than 1 hour.

   b) The response time to a production problem of a programmer must be less than 1 hour during business hours.

7. Backlog size:
   a) The backlog must be less than 6 production failures.

   b) A proposal to implement any enhancement activity should be submitted within 2 weeks from when the EBA initially requests the enhancement.

8. Technical and Business support helpdesk response time:

   a) The Contractor must be able to respond to the EBA staff during the business hours of the EBA offices in London, UK (8am until 6pm - UK time) over the phone or by email.

C. Performance and Quality of Service assessment

The contractor must provide monthly reports related to the services provided where all KPIs above are measured and detailed.

D. Further Important Information

The websites, database and all related documents will remain the property of the EBA at all times and none of the information contained in the database can be shared, sold, or disclosed to third parties.

5. List of Annexes

Annex 1 System Architecture Document
Annex 2 Further Specifications - Additional Features
Annex 3 Further Specifications - Software Requirements
Annex 4 Standard on Controls Against Malicious Code
Annex 5 Standard on Logging and Monitoring
Annex 6 Standard on Back-ups
Annex 7 Standard on Access Control and Authentication
Annex 8 Standard on Mobile Code

6. List of Acronyms

Bank Stakeholders Group (BSG)
Computer Emergency Response Team (CERT)
Development environment (DEV)
Global File System (GFS)
(Interactive) Single RuleBook (SRB)
Information Technology Infrastructure Library (ITIL)
Key Performance Indicators (KPIs)
Network File System (NFS)
Pre-Production environment (PREPROD)
Production environment (PROD)
Red Hat Cluster Suite (RHCS)
Service-level agreement (SLA)
Test environment (TEST)
Web Content Management System (WCMS)