

**Request For Proposal**  
**For**  
**Business Process Management Services**



**SECURITIES AND EXCHANGE  
COMMISSION OF PAKISTAN**

**Administration Department**  
**Support Services Division**  
**4th Floor, NICL Building, Islamabad**

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## 1 INTRODUCTION

### 1.1 SECP Overview

The Securities and Exchange Commission of Pakistan (SECP), setup in pursuance of the Securities and Exchange Commission of Pakistan Act, 1997 is an apex regulatory authority mandated to regulate and supervise the Pakistani securities markets, corporate sector, insurance industry and non-banking financial sector etc. The head office of the SECP is in Islamabad and branch offices are located in Islamabad, Peshawar, Lahore, Faisalabad, Multan, Sukkur, Karachi and Quetta.

### 1.2 Objective

Main objective of this RFP is to seek proposals for the implementation of IBM Business Process Manager. Implementation covers Installation, Configuration, Integration with existing systems, Migration of required data from existing relevant system, Development and Deployment of current and new business process and related services.

### 1.3 Background

The Commission is already running an automated workflow system named as eServices, since year 2008. The eServices is running 60+ business processes successfully since its launch in 2008. It's a business process management framework based on IBM technologies and provides the base to capture required information from external stakeholders, in the form of electronic forms. IBM technology stack consists of Database servers, Content Management servers, Form servers, Tivoli LDAP servers, MQ Work flow and WebSphere Application Server.

With the advent of new technologies and keeping in view the vital role of Business Process Management, it is of utmost importance to keep the existing system at par with new technologies and systems. SECP needs to upgrade required usable components of the existing system and rebuild workflow processes on IBM BPM



server to satisfy the dire needs of new processes, improvement in existing business processes and integration requirements with others system.

## 2 EXISTING SYSTEM ENVIRONMENT

### 2.1 Current eServices Application Environment

The eServices workflow system provides electronic alternative to manual filing system. It captures and store data from external stakeholders, automates business workflows and turns gathered data into useful information. It also provides record in both electronic and non-electronic form. Companies register and submit information to SECP. The submitted documents are digitally signed. The eServices use XFDL form format to entertain multiple digital signatures requirement on a single digital form. Any individual/person from anywhere in the world can now get his company registered online through this system. Registered companies can submit their annual and quarterly returns online, which directly archive the data, hence removing any chance of error. The system uses digital certificates to make sure communications between SECP and the involved organizations is confidential and makes sure that appropriate legal cover is available to support the process. All documents are digitally signed through digital certificates issued by globally acceptable certifying authority currently NIFT.

### 2.2 eServices Interfaces

eServices project of SECP consists of two main applications. The primary application includes, eServices external portal which is a web based projects developed in J2EE (servlet/JSP/JSF) technologies, it is used by the external users for submission of returns. Second application (Validation and Approval system) is based on IBM MQ workflow technology for validation and approval of information submitted by the stakeholders.

The external application has further following two interfaces for return submission:



### **2.2.1 Offline Submissions**

There is an option for external users to submit documents offline (e.g. submitting printed copies of applications in concerned Company Registration Office (CRO)) in order to initiate processes with SECP. On behalf of company, facilitation user in each CRO initiates the process, enters data with scanned copies of submitted documents in eServices, and submits for further processing.

### **2.2.2 Online Submissions**

For online Submissions, the main interface for the external users is eServices Portal (<https://eservices.secp.gov.pk/eServices>). The user accesses the portal to initiate any process and provides relevant document material to support the process.

The internal user connects with the WebSphere MQ Workflow web client, customized as per requirements, and processes the application requests from stakeholders. User-defined Program Execution Services (UPES) are used for synchronous integrations with backend legacy system and email notifications.

## **2.3 User Management Component**

There are two categories of users in the eServices application. External users and Internal users. The credentials of external users are stored in IBM Tivoli directory server, and credentials of internal users are stored in both IBM Tivoli and MQ Workflow.

### **2.3.1 eServices External Users**

These are the Companies, Brokers, Surveyors, and other persons / individuals interacting with SECP for company registration processes, filing of returns, filing of complaints, registration, licensing, etc. As mentioned above IBM Tivoli Directory Server is used to authenticate the external users.

### **2.3.2 eServices Internal Users**

These are the SECP officers / officials working on the tasks assigned by eServices system and maintained within IBM MQ Workflow.

## **2.4 Content Management Component**

The IBM DB2 Content Manager is the main repository for all documents, forms, attachments, etc. submitted by any external stakeholder to comply with the requirements of business process as well as any documents generated by SECP Officers during the validation and acceptance of the process. Most of the documents are in XFDL, PDF and MS Word. The contents of this repository can be accessed by any SECP Officer / official with access rights.

## **2.5 Business Rule Management Component**

eServices workflow requires the use of some business rules (laws, rules and regulations etc.). IBM Operation Decision Management (ODM) is being used for rule repository in eServices. Every backend legacy system integrated with eServices will use same rule for processing the same logic from rule repository. This means single source of truth for every business decision For example, assigning process activities according to user groups or company kind and sector and Information required based on the representative type. For the time being, all processes' fee calculations based on company paid up capital and company type for online/offline submissions are being calculated from IBM operational Decision Server (IBM ODM).

## **2.6 IBM Forms Component**

IBM Lotus Form Component is used to comply with Electronic Transaction Ordinance 2001. A user submits data in JSP pages and system generates statutory forms in XFDL format that are then digitally signed fulfilling the requirements of ETO 2002 (Electronic Transactions Ordinance) and stored in IBM Content Manager for further processing.

## **2.7 eServices Infrastructure**

Backend Infrastructure for e-Services is virtualized and in High Availability mode. There are 29 Microsoft Windows based Servers running on VMWare virtual environment.

## 2.8 eServices Software Products/IDE/Kits

Sr No	IBM Software Components	Current Version	Latest Version	Remarks
1	IBM WebSphere Application Server ND	8.0.0.3	8.5.5	Need to upgrade
2	IBM DB2 Server	9.7.10	10.5	Need to upgrade
3	IBM WebSphere Application Server	8.0.0.3	8.5	Need to upgrade
4	IBM Forms Designer	3.5	8.1	
5	IBM Forms Server	3.5	8.1	Need to Upgrade
6	IBM Content Manager	8.5	8.5	No need to upgrade
7	IBM WebSphere MQ Workflow	3.6	3.6.9	Need to Replace with <b>IBM BPM</b>
8	IBM WebSphere MQ Series	6.0.2.5	7.5	Need to Replace with <b>IBM BPM</b>
9	IBM Tivoli Directory Server	6	6.3	Need to upgrade
10	IBM WebSphere Decision Server	8.0.1	8.8	Need to upgrade
11	Rational Application Developer	8.0		No Comment
12	Oracle Database	11g		No Comment
13	VeriSign Trust Services Integration Kit			No Comment



### 3 BUSINESS REQUIRMENTS OVERVIEW

#### 3.1 Business Requirements

Following are the business requirements

1. Modeling the business process flow into the BPM Suite to preserve the Organizational knowledge, standardize the business operation, and facilitate the external stakeholders on our business services.
2. The business process flow in BPM should include the interaction of external stakeholders, payment options and verification, data entry operators, including scanning activities, and document validation and acceptance/ rejection of the process.
3. Collaboration between Business and IT on designing the workflow and final executable design. The business and IT interface should be well-integrated environment, allowing IT to add integration interface to the workflow designed by business users easily and business user can review the finished executable process design which is similar to the workflow model designed by business users.
4. Providing application architecture to integrate required application and human interfaces in each step of the business workflow. This provides an overall framework to tie all the Implementation Service applications and human tasks required for our business operations in the modeled workflow.
5. Providing web-based work portal for relevant SECP officers and managers to easily manage their work lists. It will allow managers to handle tasks like re-assigning work items and handling work escalations from the work portal. The BPM system will guide the SECP officers through the steps to complete their work. Once a step of a work item is completed, the assigned workers for the next step will have the work item displayed in their individual work list automatically. Also related documents/files stored in IBM DB2 Content Manager will be a part of the work item to pass along to the next steps in the workflow, thus greatly reducing/eliminating the need for passing hardcopy documents between officers.

6. Providing higher management/business analysts the capability to generate reports on status of work items in each business workflow in real time as well as reports on historical data available in multiple data sources. This provides managers the visibility on business process, such as the status of each work item, the overall statistics of time duration spent on each step of certain workflows, the overall completion rate for various work items in the BPM system, workload and performance for workers in the group; as well as business reporting required for analysis and decision making.
7. Providing business agility that depends on responsive and intelligent decision automation to manage decisions separately from business applications, with more flexibility and responsiveness to the changing needs. In addition, enable system experts to define and manage the business logic, reducing the amount of time and effort required to update that business logic in production systems, and increasing the ability of SECP to respond to changes in the business environment.
8. Using the information obtained through monitoring and reporting functions in BPM, business process owners or designated persons can identify improvement areas like redundancies and bottlenecks to improve the efficiency of the business process. After the redesign of the workflow is done, it can be redeployed into the BPM system to take effect.
9. Bringing the benefits of improved process cycle time, increased employee productivity, reducing un-worked cases due to misplaced documents in processing, legislation compliance, business agility, and business visibility. This shall complete the “Define, Validate, Deploy, Monitor, and improve” cycle of business process improvement for the SECP business processes.

### **3.2 Business Processes & Implementation (Processes Implementation Phases)**

Complete list of business processes is attached as Annexure B. The processes are categorized into two phases from the delivery perspective. The bidders are required



to clearly include the separate phase-wise **cost** and **time** for each of the two phases in their respective proposals.



**4 PROSPECTIVE BUSINESS PROCESS MANAGEMENT ENVIRONMENT**

The business improvement objective for the BPM is to document and model the business process knowledge into our system in a way that can be easily monitored, modified, improved and redeployed by the collaboration of business users and IT staff to achieve business agility, management visibility, improved efficiency and comprehensive reporting for decision making. With the proposed BPM implementation, we expect business changes (e.g. government regulation changes, changes in SECP rules and regulations, efficiency related improvements in the processes, etc.) to be integrated into existing workflows via business rule changes or modified workflows instead of modifying codes in hard-coded application codes. It should also accommodate the underlying application component changes making it easier to achieve business agility.

**Our future environment must consider the existing eServices framework components** e.g. content management component, form management component and user management component and should be able to extract historical data from multiple data sources. We plan to simplify the Business Process environment for ease of support, reduce implementation time and maintenance. The proposed BPM infrastructure will also be running on VMWare 6.0 based virtual environment. The proposed solution must use the latest version of all required product keeping in view the compatibility requirements.

**4.1 Prospective Business Process Management Products/IDE/Kits**

Sr No	IBM Software Components	Status	Current Version	Latest Version	Remarks
1	IBM WebSphere Application Server ND	Existing	8.0.0.3	8.5.5	Need to upgrade

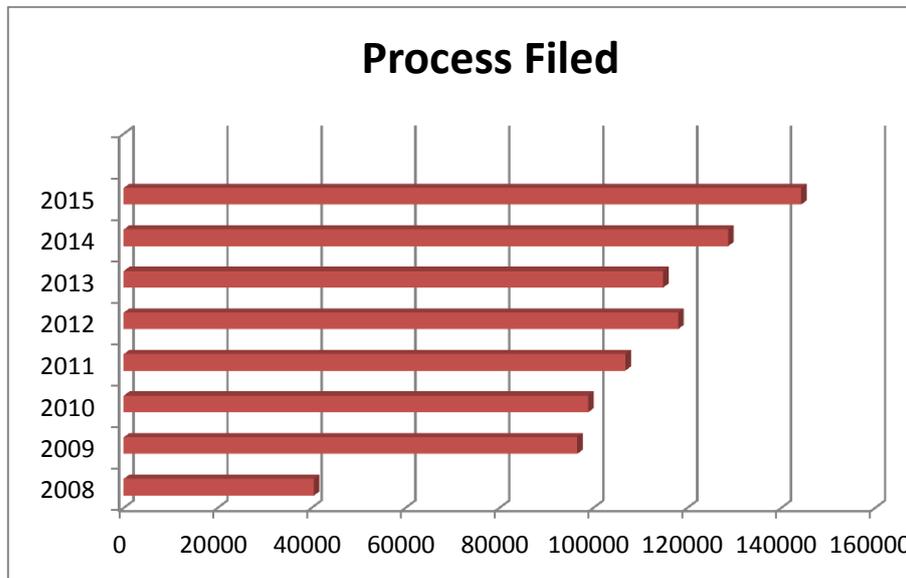
2	IBM DB2 Workgroup Server	Existin g	9.7.10	10.5	Need to upgrade
3	IBM WebSphere Application Server	Existin g	8.0.0.3	8.5	Need to upgrade
4	IBM Forms Designer	Existin g	3.5	8.1	No Comments
5	IBM Forms Server	Existin g	3.5	8.1	Need to Upgrade
6	IBM Content Manager	Existin g	8.5	8.5	No need to upgrade
7	IBM WebSphere MQ Workflow	Replac ed	3.6	3.6.9	Need to Replace with IBM BPM
8	IBM WebSphere MQ Series	Existin g	6.0.2.5	7.5	Need to replace with IBM BPM
9	IBM Tivoli Directory Server	Existin g	6	6.3	Need to upgrade
10	IBM WebSphere Decision Server	Existin g	8.0.1	8.8.0	Need to upgrade
11	IBM Business Process Manager Advanced	New	-	8.5.7	New Product
12	IBM Business Process Connector for Microsoft SharePoint	New	-	8.5.7	New Product
13	IBM Business Monitor	New	-	8.5.7	New Product
14	IBM Process Designer	New	-	8.5.7	Development Tool
15	IBM Integration Designer	New	-	8.5.7	Development Tool



16	Rational Application Developer	Existin g	8.0		Development Tool
17	Oracle Database	Existin g	11g		No Comment
18	VeriSign Trust Services Integration Kit	Existin g	-		No Comment
19	Any other Tool				No Comment

#### 4.2 **BPM Workload**

The SECP business processes are mostly document/financial data-intensive and human-centric in nature. The work involves the corporate entities' (Company, Brokers, Surveyors, Agents, etc.) Registration, Licensing and Compliance. The major applications for BPM to integrate with are our current and future oracle based applications like Corporate Registration and Compliance System (CRCS), Enterprise Resource Planning, Market Surveillance Suite (MSS), Complaint Management System, SharePoint Portal and Exchange Server. The application currently serves around 500 concurrent sessions that will increase significantly after the implementation of new processes in BPM. The application serves around six thousand various process activities per day during annual filing season. Year wise processes statistics is as under:



Year	Process Filed
2015	144259
2014	128716
2013	114847
2012	118037
2011	106781
2010	98904
2009	96577
2008	40523

A process instance may take varied time to complete depending upon the type of process and required input/information from the stakeholders of the process. Some Processes may take hours to complete while few may take years to complete. Therefore, there shall be no restriction on process lifespan.

### 4.3 Business Rule Management Component

The type of workflow in the SECP will require the use of some business rules (such as law, rules, regulations, etc.). These business/process rules have to be handled through rule repository. Some of the rules' examples are listed below:

- Assigning process activities according to user groups or company kind and sector
- Setting required number of Directors based on Company kind.
- Fee calculations based on company paid up capital and company type for online/offline submissions
- Actions that may need to be taken based on submission/non-submission of processes in BPM

**Proper Object Model** should be defined in a way that different objects can be used by multiple rules and one rule can be used by multiple systems e.g. eServices and Enterprise Resource Planning etc. In addition, rules must be available as Web Services.

#### **4.4 Business Monitoring Component**

The proposed reporting modules should have the capability to handle performance/ KPI as well as data analysis reporting requirements. Some examples of these reports are:

- Report on the status of each Process Activity
- The overall statistics of time duration spent on each step of certain workflows
- The overall completion rate for various process activities in the BPM
- Other similar reports

Reporting module must have the capability of drilling down to view the detailed information along with the graphs. Proper Monitor models should be defined for every process to capture KPIs and subsequent reporting.

#### **4.5 Business Reporting Component**

The proposed reporting modules should have the capability to extract information from multiple data sources, on all data fields and from all processes. Some examples of these reports are:

- Profile of board of directors and adverse findings against them
- List of Listed Companies with more than Rs.50,000 Paid up Capital
- Summary report for Non-banking Finance Companies Quarterly Returns
- Report on timely holding of annual general meeting
- Sector analysis

Reporting module must have the capability of drilling down to view the detailed information along with the graphs.

#### **4.6 BPM Integration Services**

The proposed solution should be an integrated BPM suite based architecture and include executing process design, workflow automation, application integration, reporting on various KPI, and process/business rule handling.



The proposed framework needs to support integration with our current and future backend applications running on Windows with SQL server and Oracle databases. These applications will either be off-the-shelf applications, like Oracle Enterprise Resource Planning or some custom designed applications like complaint management system. We will require these applications to provide business data access through web-service/SOA and Enterprise Service Bus standards for ease of integration with the BPM platform. Therefore, the BPM framework should provide complete integration platform coverage for our future IT application environments in addition to the ability to integrate with applications in our current environment.

In existing solution, the integration portion of the BPM framework with the existing legacy applications provides sufficient data to be passed to the workflow to carry out the work smoothly from step to step and to complete the work without unnecessary human tasks outside the eServices. Although, some schedulers are running external to the system for various tasks e.g. Company name expiration, generation of warnings/reminders and challan verification.

Develop a set of web services for selected processes from the point of submission of the process for validation and approval. These web services will be available to provide the information required for the start of the validation and approval of the process including any data and documents required for the process.

Once the proposed solution is in place it should also provide updated interface with the legacy applications as well as catering for integration with future applications. This integration should be based on the Enterprise Service Bus using the web service based interface. Proposed BPM solution integrations are summarized as under:

- NIFT for digital signatures
- NADRA for CNIC verification
- Courier company for creating shipments

- Integrations related to fee payments through Challan, advices, transfers (such as Branch payments, Mobile Banking Platforms, Internet Payment Gateways, Credit Cards, Debit Cards, Digital Payment System, Challan Generator etc.)
- Oracle Financials ERP for payment information posting
- IBM Content Manager for document storage
- IBM Lotus Forms for form generation
- IBM MS SharePoint integration for displaying web-worklist portal
- Integration with mail and SMS gateways for notification and alerts

#### **4.7 Business Process Designing and Simulation**

The proposed solution needs to have the ease of designing business processes using IBM Process Designer, management visibility into business processes, ease of modifying, and improving our business processes to better accommodate government regulation changes and technology changes using IBM BPM. In addition, provides business users ability to collaborate during the requirement gathering/Analysis/Design phase.

The proposed solution should use process designer with rich user interface that employs drag and drop wizards and visual design for both business and IT users' design modules (process modeler, process design snapshots and simulation, reporting modules). For technical design modules such as process designing, minimal programming is desired.

### **5 IMPLEMENTATION STRATEGY**

The proposed solution should include following stages:

#### **5.1 Stage-1 - Analysis**

This shall comprise of detailed analysis by the implementation partner of the existing eServices infrastructure and the details of the processes to be implemented. The infrastructure analysis should especially cover identification of pitfalls and upgrade requirements. The Implementation partner will come up with proposed BPM design documents essentially covering architecture, upgrades etc.



This will also include review of the draft business processes provided by the Commission. The implementation partner will provide feedback on the draft business processes to ensure that these are framed in accordance with best business practices and efficient turnover time.

The Implementation Partner will submit a detailed report in this regard to the Commission that should also include high-level infrastructure architecture and Business Process improvements. Based on the analysis the business processes will be redefined and BRD will be finalized by the Business Users in consultation with the Implementation Partner and IS&T.

## 5.2 Stage-2 - Implementation

Based on the finalized BRD and Architecture, Implementation Partner will come up with detailed design documents. They will first implement the changes, improvements and upgrades in the overall eServices Infrastructure. Subsequently they will start implementing the processes, following proper development and testing methodologies. This includes implementation of the proposed solution in the IBM BPM suite to encompass all aspects of Business Process Management Implementation including rule repository, real time business monitoring, data analysis reports, and reporting dashboards. The proposed BPM Framework should be flexible enough to implement all processes of the Commission considering the existing IBM Product stack as well as organizational limitations.

During the transition from eServices Framework to BPM based framework, there will be a stage where some business processes will be available in current eServices framework and new processes will be available in the proposed BPM framework. To facilitate end users during this transition a “Facade” layer will need to be developed as a single point of entry whereby the end users will be directed to the appropriate framework based on the business process selected. In parallel with the implementation phase, training sessions will be arranged for business users and IS&T by the Implementation Partner for best practices and

knowledge transfer. This should allow SECP resources to understand the system, its use and Business Process refinement work to be conducted in future.

### 5.3 **Stage-3 – Acceptance & Deployment**

This will include the User Acceptance and Deployment Phases. Based on the overall strategy these phases may also overlap with the implementation phase. Pre-deployment of each Process, Implementation Partner need to get the Process accepted by the Commission through proper UAT. Deployment should follow proper Deployment and Release Management Strategy and Methodology.

Implementation Partner need to ensure post deployment monitoring and support.

## 6 **BOUNDARIES AND CONSTRAINTS**

Following are the boundaries identified considering all phases of the upgrade:

### 6.1 **Technical Constraints:**

1. **Usage of Digital Certificates:** The use of digital certificates for signing all documents submitted through the proposed BPM solution to ensure integrity, confidentiality, authentication, and non-repudiation of all documents submitted any party. eServices already covers this aspect by allowing stakeholders to digitally sign all documents, submitted to SECP in the form of XFDL format (IBM Forms) or PDF format for attachments.
2. **Content Management System:** eServices is using IBM DB2 Content Manager for content storage. Approximately 1.8TB Terabytes of data has been stored in Content Manager to date. For any migration strategy to be executed folder structure and Meta data of content management solution should remain intact or be clarified beforehand.
3. **Business Rules Repository (ILOG):** Existing business rules absorbed in ILOG should remain integral with any upgrade or migration strategy and should remain separate and independent from process design and development.



4. **User Authentication (External):** For more than 200,000 existing company users, Tivoli LDAP Server should remain intact for user authentication.
5. **Backend Database for existing “External eServices” Data:** We need DB2 as applications database till the time complete data migration will successfully be rolled out.
6. **Networked Deployment Clusters WebSphere Application Server Network Deployment:** This is required to manage the eServices external application cluster and IBM Forms Cluster.
7. **Digital Certificates Integrity** the proposed solution should ensure the integrity of the data already stored the IBM DB2 Content Manager including the digital certificates of the signed documents.
8. **Messaging between Internal/External eServices Applications:** IBM MQ series maybe used for flow of XML messages between Internal/External eServices Application (If applicable).

## 6.2 General Constraints

1. Ensuring business continuity during upgrade, transition and implementation of the proposed BPM solution.
2. Enablement of SECP teams for taking handover for future process implementation and maintenance activities.



## 7 TECHNICAL SPECIFICATION GUIDELINES

**Response Codes:** Place the appropriate Code in the “Availability” column according to the following description. For each requirement or function identified in Technical Requirements, vendor must indicate how the capability is provided in the proposed solution using IBM BPM.

<b>Code</b>	<b>Description</b>
<b>Not Available</b>	“Not Available” Feature or capability, cannot be provided with the base system as proposed.
<b>Available (including any required customization)</b>	“Available” Feature or capability may or may not be part of the base system out of the box but will be made available including any required customization based on functional/ technical requirements.

## 8 BUSINESS PROCESS MANAGEMENT FUNCTIONALITY REQUIREMENTS

### 8.1 Process Design

#### 8.1.1 Mandatory Requirements

SN	Requirement Description	Availability	Comments
1.	Describe how usability features in process modeler, such as the 'drag and drop' feature, facilitates the designing of the business process workflow.		
2.	Describe how process modeler supports parallel (branching), conditional and loop process patterns in workflow.		
3.	Describe ability to identify and report infinite loops and redundant steps in workflow.		
4.	Describe ability to initiate sub process or some external process and resumes again.		
5.	Describe ability to allow the authorized business users and the business analysts to monitor the workflows during simulation and production.		
6.	Ability to perform human task assignment to <ul style="list-style-type: none"> <li>• Roles and groups managed in the Active Directory</li> <li>• Dynamically based on properties of the instance and properties of the individual task performers.</li> </ul>		
7.	Describe ability to attach comments to a step in a workflow and the attached comments are visible to the remaining steps in the workflow depending upon		



	the users roles		
8.	Describe ability to get advice from any internal business user, make all discussion part of the process and visible to remaining steps in process flow depending upon the user roles.		
9.	Describe ability to provide instructions to business users in the completion of complicated work steps. For example, checklists for work that needs to be completed for these steps.		
10.	Provide details how solution identify bottlenecks that may occur in simulation as well as the production workflows. Explain fully how these bottlenecks are reported.		
11.	Provide details how solution identify bottlenecks that may occur in simulation as well as the production workflows. Explain fully how these bottlenecks are reported.		
12.	Ability to support human and system based events. Describe type of events supported and how this can be used in workflow.		
13.	Explain fully the types of documentation/annotation your solution allows process modelers to document the modeled process workflow during the workflow design.		
14.	Describe how process designs can export to Word document if possible for final go ahead and sign off from business users.		
15.	Fully explain how BPM solution can identify and		



	suggest improvement on modeled workflows.		
16.	Describe in detail and by example how sub-processes are created, archived and how they could be re-used.		
17.	Explain fully how archived sub- processes may be called for use by a main process and how the sub-process may be updated.		
18.	Explain fully how the completion of a work step could initiate another workflow.		
19.	Describe in detail how BPM Solution allows the business user to stop a workflow for a set time (i.e. suspend the workflow) and how the workflow may be resumed after additional information is received.		
20.	When the workflow suspension described in item above is activated, describe how the supervisor/manager is notified and what effects this suspension has on other steps of the workflow (e.g. parallel steps, subsequent steps). How is the suspended workflow displayed in the dealing officer's work list? Is it displayed in a separate suspended work list? Please describe.		
21.	Explain fully how BPM Solution connects to outside SECP Stakeholders (Companies, Brokers, and Surveyors etc.) to participate in the workflow.		
22.	Describe how already stored external users in IBM Tivoli LDAP initiates the process based on their company type and kind.		
23.	Ability to incorporate task triggers to execute some tasks (like sending email, start a process, etc.) in		



	production workflows. Please describe.		
<b>24.</b>	<p>Task -user interface includes:</p> <ul style="list-style-type: none"> <li>• Task instructions, including checklists of sub tasks</li> <li>• Dealing Officer’s comments on the task</li> <li>• User defined forms and screen flows</li> <li>• Document image view and annotations, including IBM Form viewers to display XFDL Forms</li> <li>• Related Data from multiple sources including IBM DB2 CM, Oracle, DB2, SQL Server, MS Excel etc.</li> <li>• Related data from multiple systems including Service Desk, CRCS, MSS etc.</li> <li>• Launch local web based back end Applications on detailing Officer’s interface such as CRCS, intra portal etc.</li> <li>• Provide the user help for all action/ data items/ input fields, etc. in the form of tooltips/ help/ video guides etc.</li> <li>• Provide the user the ability to provide feedback on user experience for process improvement and to conduct surveys</li> </ul>		
<b>25.</b>	Ability to fully test and debug design from the development environment (i.e. without deployment).		
<b>26.</b>	Describe how the façade layer to act as single point of access for business processes for new and old BPM solutions.		

SNo	Requirement Description	Availability	Comments
27.	Provide a screen shot of process modeler including all palettes associated with the modeler. Please explain how the business analyst would best utilize the modeler and its palettes/panes.		
28.	Fully explain how Software Engineers and Business Analysts would interface with process modeler. Is it an easy hand-off between business analysts and Software Engineers when collaborating on designing the workflow? Does it provide a way to attach documents or comments with the workflow to pass the necessary information of the workflow to another group of process designers?		
29.	Describe programming skills needed for the visual process design, if any. Describe design functions where Java, or similar codes are required. Describe design functions where JavaScript, JSP/JSF or similar scripting is required.		

## 8.2 Process Modeling/Simulation

### 8.2.1 Mandatory Requirements

SNo	Requirement Description	Availability	Comments
30.	Describe how modeling tool provides simulation analysis. Describe what simulation parameters can be set and what simulation reports are provided.		
31.	Describe in detail how modeling tool allows knowledgeable business analysts to design the business workflow without having any knowledge about		

	implementation (application integration interface) details.		
32.	Describe how Business users can use the modeling tool for form design.		
33.	Describe how modeling generates artifacts for the executable design. Which ones?		
34.	Describe how BPM solution provides easy identification of officers/resource group in workflow design in process modeler such as swim lane in BPMN.		
35.	Does BPM solution support authoring and delivering templates? Describe how they are created, managed and used		
<b>SNo</b>	<b>Requirement Description</b>	<b>Availability</b>	<b>Comments</b>
36.	Describe how workflow model repository supports version control, access control, and browser based access to models.		

### 8.3 Printing/Reporting/Monitoring/Auditing

#### 8.3.1 Mandatory Requirements

SNo	Requirement Description	Availability	Comments
37.	Ability to provide archival and search capabilities for work items that have been completed. Can archived work items be kept in a searchable database separate from the production database? How can this be configured to indicate completed work items older than a certain time period to be archived? Please explain.		
38.	Ability to define Key Performance Indicators (KPI's) and user defined KPI's to generate reports and trigger alerts. Please describe skill sets required by		



	authorized business user to do this and what type of parameters can be used to define the KPI.		
39.	Ability to generate reports by various user levels, such as Business Users, IT developers, BPM administrators, managers and end users. Describe the different reporting levels available and if they are dependent on the user profile.		
40.	Ability for business user to build a custom report and chart using the captured process data, without writing code. Explain the required steps.		
41.	Ability to archive historic process execution data, separate from production data. Please describe how report generation can be done for current production and historic data.		
42.	Describe how SECP users can be able to track and summarize task duration, and perform trend analysis over time.		
43.	Ability to store workflow events such as: start, end, suspension, restart, stop, abort, transfer (reassign), error, and abort along with the associated timestamp for each event in logging file.		
44.	Ability to report on the volume of work and the performance of users. Describe the types of data that can be reported and if these are summary or detail data reports.		
45.	Ability to generate custom report definition without programming.		
46.	Ability to generate reports from content manager based on Items types meta data. Describe in details.		



47.	Describe to generate comparison reports from multiple data sources, e.g. from content manager data and oracle database.		
48.	Ability to generate custom reports on non BPM databases.		
49.	Ability to generate report on archived process data		
50.	All reports should be exportable to word, excel and PDF		
51.	Ability to send sms/email alerts with an interface for enabling/disabling it		
52.	For year to year trend comparison report, if the previous year work item data is archived in separate archive, can the comparison data be displayed in one single report? Please describe.		
53.	Describe the ability to configure different logging levels for each workflow. Explain configuration steps needed.		
54.	Describe the logging file and logging level set up for various BPM modules. Does each module have its own logging file? How can the log file be configured to conserve disk space usage?		
55.	Describe the ability to view and query various logging files including audit log using BPM tool and generate readable reports for any decision.		
56.	Describe the interface for running, administering and using the monitoring and reporting module. Describe built-in reporting and monitoring function in IBM Business Monitor. Describe the additional functions provided and the integration level with IBM BPM.		
57.	Report module interface shall be customizable. Specify the possible levels or types of customization of report module.		



58.	Describe the ability to use the standard reporting tool such as Crystal reports to report on the process execution data and other related data that the BPM reporting module uses.		
59.	Describe drilldown capabilities in charts and reports to uncover root causes.		
60.	Describe the kind of Out-of-the-Box charts and reports provided by BPM Solution. For the higher management, the reports for management visibility may include but not be limited to employee performance statistical reports and charts, workflow completion percentages, work item status, time taken for completing each work step in a workflow, etc.		
61.	Describe how system tracks user defined KPIs in real time reports, charts and alerts.		
62.	Ability to restrict printing of reports/documents/forms to authorized users		
63.	Ability to add information on the reports/documents/forms such as a watermark, code, barcode, etc. to identify the source from where the document was printed including the user name, process, print date, etc.		
<b>SNo</b>	<b>Requirement Description</b>	<b>Availability</b>	<b>Comments</b>
64.	Describe how attachments in the workflow included in the work item is archived? If the attachment is from SECP existing content management repository, whether the archive only contains URL/pointer to the attachment.		
65.	Describe the ability to predefine milestones in a process that can be used to determine percentage complete for a work item. For example: in a three step workflow, finishing step 1		

	means work is 10% complete, finishing step 2 means work is 80% complete, etc. Describe ability to use these milestones to escalate the work item and trigger alerts if it exceeds a certain threshold.		
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#### 8.4 Process Work list and Work Management Interface

##### 8.4.1 Mandatory Requirements

SNo	Requirement Description	Availability	Comments
66.	Shall provide out of the box web-based portal environment for end users, business users, analysts, managers, and administrators along with different user interfaces for their work, as well as different levels of authorization for different user profiles.		
67.	Describe how IBM SharePoint Connector shall be used to integrate web-based IBM BPM portal with MS SharePoint Portal.		
68.	A group work list shall be available to a group of users that have the same profile.		
69.	Ability to provide "alerts" to both end user's and manager's work portals when a work item has been escalated, flagged as high priority or as special category of processes. Describe all the methods of notification available for such events.		
70.	Describe ability to search for work items on other officers' lists by authorized users and users of the same group.		
71.	Describe the ability of assigning tasks to users, according to user profile and rules applied to the business data in the work item, e.g. Automatic assignment of tasks based on		



	company type or alphabetical order of company name.		
72.	Describe the ability to cancel and add work items from work queue as needed by authorized users.		
73.	Describe the ability to allow managers to manually assign work items to individual users.		
74.	Describe the ability to track and reassign items from user's work queue by authorized users.		
75.	Describe the ability to track and notify the user that an item was cancelled or removed from their work queue by an authorized user.		
76.	Describe ability to use filters and queries to assist supervisors and users when viewing work list data.		
77.	Describe the ability for users to filter and sort the work list based on priority or deadline date - for the user's own work items.		
78.	Shall provide user management module to easily configure user groups, roles, and authorizations.		
79.	Describe the ability to allow the authorized users to assign different priorities and deadlines to the work items.		
80.	Describe how tasks shall be automatically (or manually) delegated to other users, based on absence rules or workload thresholds.		
81.	Describe the ability for users to customize the view of work list. For example, to hide some columns, and to sort work items by process type.		
82.	Describe the ability to use existing Microsoft Active Directory Service (ADS) for user management.		
83.	The admin/super user may have the right to bypass a		

	certain internal officer or step in the predefined steps for a particular process/item.		
<b>84.</b>	Ability to generate auto email to concern officer with general summary of case. How BPM solution allow for real-time collaboration by integrating with or supporting presence awareness, instant messaging, chat. How can the contents be routed through email and Web? Describe the process and exactly what is routed for example, files, indexes, links and URLs.		
<b>85.</b>	Describe your solution's capability to synchronize content across multiple devices (mobile devices such as smartphones and tablets).		
<b>SNo</b>	<b>Requirement Description</b>	<b>Availability</b>	<b>Comments</b>
<b>86.</b>	Describe the ability to recognize the existence of a duplicate work item for a newly created work item - especially for manually created work items.		
<b>87.</b>	Describe ability to manipulate Process Instance: stop, abort, suspend, restart, etc. - by system administrator and authorized user.		

## 8.5 Rule Management

### 8.5.1 Mandatory Requirements

<b>SNo</b>	<b>Requirement Description</b>	<b>Availability</b>	<b>Comments</b>
<b>88.</b>	Shall provide a user interface for creating business rules in IBM Operational Decision Management. Describe how the created rules can be linked to business work flows.		



89.	Ability to test the business rules to ensure that they are error free and do not contain any ambiguities before deployment. Please explain.		
90.	Describe the ability to use existing Microsoft Active Directory Service (ADS) for user management in IBM ODM.		
91.	Ability to provide a rule management module to create, archive, update, and reuse rules in business process. Please describe IBM ODM business rule functions in these areas.		
92.	Explain what steps are performed to create a rule in the business process workflows.		
93.	Describe how work items can be prioritized by specific process rules, business data and conditions?		
94.	Ability to dynamically affect in flight instances of affected processes when business rules are modified and loaded at run time.		
95.	Describe how existing business rules absorbed in ILOG should remain integral with any upgrade or migration strategy and should remain separate and independent from process design and development.		
<b>SNo</b>	<b>Requirement Description</b>	<b>Availability</b>	<b>Comments</b>
96.	Ability to separate the decision making rules from the business process workflow specification and application logic to allow dynamic rule update.		
97.	Describe how IBM ODM supports dynamic process rules. Explain the kind of rules that have dynamic definitions, how those rules are defined and managed, and the		

	steps required to make dynamic changes.		
98.	Describe the communication/information exchange between the IBM ODM (rules engine) and the IBM BPM (process engine) in design time and run time.		
99.	Ability to design complete object hierarchy to develop every business rule and their accessibility to multiple resources (re-usability).		

## 8.6 Form Designer and User Interaction in workflow

### 8.6.1 Mandatory Requirements

SNo	Requirement Description	Availability	Comments
100.	Shall provide a form designer web-module for business users with drag and drop features of form objects such as edit boxes, check boxes, radio buttons to speed up the creation of forms for human interaction steps in the work flow.		
101.	Describe ability to allow business users to design a form layout for use in workflow.		
102.	Describe ability to merge business data into IBM Forms, or MS word letters and print them.		
103.	Describe abilities to validate field types in forms to reduce incorrect data entry and what types of checking/validation are provided.		
104.	Ability to review submitted Forms by end users.		
105.	Ability to provide inter-field relationship checking capability in form designer. Relationship such as when data is entered in one field, data in another related field should also be entered and should not be left blank.		



<b>106.</b>	Ability to populate the fields in the forms with data retrieved from databases.		
<b>107.</b>	Ability to update the databases using data entered in the fields of the form by the user.		
<b>108.</b>	Describe the ability for forms to support dynamic generation of the different fields contained on the form. For example, depending on the user selection of some buttons on the form, different fields will be displayed.		
<b>109.</b>	Describe the ability for forms to do database and content management updates and queries. Form can be used to bring up another form as in a screen flow fashion. Please describe function provided.		
<b>110.</b>	Ability to create, archive, modify, and reuse forms.		
<b>111.</b>	Ability to import existing form templates (such as IBM Forms /XFDL, PDF and Word format) into form designer. Please specify supported import formats.		
<b>112.</b>	Ability to embed formulas/rules into data entry fields to make calculations. Explain how they may be set up.		
<b>113.</b>	Explain how forms can be changed without affecting in-flight items.		
<b>114.</b>	Describe how end users may collaborate with each other on a work item? For example, a new employee needing help from a more experienced worker. Explain who retains ownership of the work item, is this configurable? In addition, how this advice can be part of the process and can view later.		
<b>115.</b>	Describe how BPM solution provides an online room for project teams to discuss and resolve work/task problems		

	together.		
116.	Describe how to schedule hearings, calendaring, discussion groups etc. that may be needed to match the needs of project participants and milestones.		
117.	Describe how documents such as Word and Excel can be shared and modified by all participants of a work group.		
118.	Describe how the external user use digital certificates for signing all documents and XFDL submitted to ensure integrity, confidentiality, authentication, and non-repudiation of all documents		

## 8.7 Content Management

### 8.7.1 Mandatory Requirements

SNo	Requirement Description	Availability	Comments
119.	Ability to attach/view documents to a work item and be visible to all the workers working on the work steps in the same workflow instance. For example, a worker created a company folder attaching multiple documents/comments for a work item, the documents/comments in this company folder will be visible to the manager approving the work in the next step of the same workflow instance. Attached documents could be in a variety of file types including but not limited to XFDL, Word, Excel, jpeg, tiff, PDF format.		
120.	Describe ability to include web links (URL) in a form or checklist attached to work items. When clicking on such web link (URL), it shall bring up a browser linking to the URL address..		



<b>121.</b>	Describe ability to view a document with all digital signature details and their validity.		
<b>122.</b>	If attachments such as MS Word letters are opened within the work portal, they shall be able to open in native application viewer (in a separate window) for that file type to retain original application functions. For example, Word document will be opened in MS Word application to allow for view and update in the Word application then re-attach to the workflow as the newer version.		
<b>123.</b>	Describe how already saved XFDL forms(IBM Forms) can be viewed within end user work portal and viewed XFDL form shall retain the same functionality as IBM Form viewer. If XFDL Forms cannot be viewed within work portal, solution shall display the form in a separate window?		
<b>124.</b>	Ability to perform audit trails for documents pertaining to version changes. If so, what audit information is provided in the audit trail?		
<b>125.</b>	Ability to view the digital signatures with document for each version.		
<b>126.</b>	Ability to support check-in and check-out for version control for attached document.		
<b>127.</b>	Should have ability to store all types of documents and XFDL forms with digital signatures in IBM content Manager		
<b>128.</b>	Should have ability to retrieve all versions of documents and XFDL forms with digital signatures from IBM content Manager		
<b>129.</b>	Describe how to ensure the integrity of the data already stored the IBM DB2 Content Manager including the digital		



certificates of the signed documents		
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SNo	Requirement Description	Availability	Comments
130.	Describe ability for versioning to be kept for all attachments.		

## 8.8 Release Management

### 8.8.1 Mandatory Requirements

SNo	Requirement Description	Availability	Comments
131.	Describe ability to maintain and deploy various versions of process workflows (executable process design) from the repository. (multiple versions of same process)		
132.	Describe ability to maintain and deploy various versions of business rules (Executable rule design) from the rule repository. (Multiple versions of same rule)		
133.	Describe ability to maintain and deploy various versions of the applications.		
134.	Ability to update and redeploy a process model without adverse impact on its ongoing instances. Allow coexistence of multiple versions of a same process (two different releases). Please explain if this is a configurable item to set user preference or whether the in-flight processes will use the originally deployed process model and the new instance will use the new version of the process model. Describe how BPM solution migrate in-flight processes to new version of deployed workflow. (We have some long-running workflows spanning years in duration).		
135.	Describe version control mechanism for forms, sub-		

	processes, rules, task-attached documents if such version control mechanism exists.		
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## 8.9 Documentation and training

### 8.9.1 Mandatory Requirements

SNo	Requirement Description	Availability	Comments
136.	Provide separate Documentation for various user roles (e.g. Business Users, System Developers, System Administrator, super users and end users).		
137.	Provide complete listing and description of all error messages for all BPM modules including cause and problem resolution instructions.		
138.	Provide training program for your BPM Solution. It should cover the Business Users, Developers, Administrators (BPM, ODM and Business Monitoring, WebSphere), end user, and super user training for BPM solution.		
139.	Provide Performance Monitoring guides/scripts to improve all BPM components performance with schedule.		
140.	Describe proposed training plan to provide effective training for IS&TD personnel to Create New Process, Modify existing, use, operate, and administer the proposed solution. The proposed training plan should include models and duration based on defined user groups and qualifications of the trainers.		
141.	The selected vendor shall be responsible for conducting training upon approval/deployment of the Processes. These		



	training sessions will be conducted at training sites designated by the Commission. Most often, the training site is within the SECP Head Office; however, other locations may be requested.		
142.	The selected vendor shall provide current and up-to-date training materials. The user training manual will document the key functions and procedures of the solution. The user manual should include, but not limited to, procedures for form completion, explanations of report uses, and purposes and procedures for reconciliation and error correction etc.		
143.	Provide online help information/Training videos for all modules. Ability to provide subject search and context-sensitive help for the online help information.		
144.	Provide best practices/guidelines in process modeling, process execution, reporting, auditing, and process improvement areas. For example, the impact of the data size of the BPM process execution database vs. the performance of process execution and report generation.		
<b>SNo</b>	<b>Requirement Description</b>	<b>Availability</b>	<b>Comments</b>
145.	In using the modeled workflow in IBM BPM as a tool to do employee training to show the overall workflow process, Describe IBM BPM 's ability in providing overall workflow diagram (on screen and printout) and related documentation and annotation explaining the workflow steps (on screen and printout). Such a training module shall be part of your BPM design.		

## 9 BUSINESS PROCESS MANAGEMENT TECHNICAL REQUIREMENTS

### 9.1 Architecture

#### 9.1.1 Mandatory Requirements

SNo	Requirement Description	Availability	Comments
1.	<p>Ability to run on Microsoft Windows Server 2008 R2 Datacenter edition R2 -64 bits or later in a VMware based virtual environment and shall base on existing/new eServices Product Stack as under: the selected bidder must need to upgrade the existing components to the required compatibility level of the IBM BPM.</p> <p>IBM WebSphere Application Server ND</p> <p>IBM DB2 Workgroup Server</p> <p>IBM WebSphere Application Server</p> <p>IBM Forms Designer</p> <p>IBM Forms Server</p> <p>IBM Content Manager</p> <p>IBM Tivoli Directory Server</p> <p>IBM Websphere Operational Decision Server</p> <p>IBM Business Process Manager Advanced</p> <p>IBM Business Process Connector for Microsoft SharePoint</p> <p>IBM Business Monitor and development tools</p> <p>IBM Process Designer</p> <p>Rational Application Developer (RAD)</p> <p>IBM Integration Designer</p>		



2.	Ability to provide load balancing and fault tolerant capability in the BPM product. List modules (for example, BPM process Engine, Rule engine etc.) that have these capabilities. Describe how these capabilities are provided. SECP BPM Solution uptime requirement is 99% with recommended set up. Describe recommended set up.		
3.	Ability to run in VMWare 6.0 environment with Microsoft Windows 2008 Server operating system. Describe whether fault tolerant and load balance capabilities can be achieved through this set up and how this can be achieved.		
4.	Indicate whether the capability of new business requirements is provided by the available technologies/products/Hardware/Storage or if there is a need for any additional tool/product to integrate with the IBM's BPM Suite.		
<b>SNo</b>	<b>Requirement Description</b>	<b>Availability</b>	<b>Comments</b>
5.	Ability to support J2EE in MS Windows environment.		
6.	Describe solution architecture. Use diagrams to show IBM BPM components and underlying infrastructure to better illustrate the relationships. Explain how this architecture supports the BPM solution performance and scalability. Overall, Explain how this architecture is better for BPM Solution.		
7.	List the operating systems, databases, application servers, their versions and inter compatibility used by BPM Solution. All BPM components shall be on latest		

	versions and if any existing components are not compatible or older versions, list all upgrade/migration paths to the latest versions.		
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## 9.2 Standards and Technology

### 9.2.1 Mandatory Requirements

SNo	Requirement Description	Availability	Comments
8.	Application architecture must be based on international standard/design pattern. Describe in detail.		
9.	Load balancing and fault tolerant capabilities must be based on IBM guidelines. Describe in detail.		
SNo	Requirement Description	Availability	Comments
10.	Describe how BPMN standard is supported in modeling and design tools (if different), including intermediate events, message flows, compensation, etc. Please describe the advantage of supporting the BPMN standard.		
11.	Describe other industry standards IBM BPM supports such as JCA, LDAP, JMS, SOAP (1.1 or 1.2) and WS-Addressing and WS-Security and the advantages/usage of supporting these standards in BPM solution.		

## 9.3 Application Integration

### 9.3.1 Mandatory Requirements

SNo	Requirement Description	Availability	Comments
12.	Ability to retrieve, view, and attach the XFDL Forms from IBM Content Management Solution in BPM workflow. It is required to retrieve XFDL Forms/Attachments from IBM CM be displayed in IBM Forms viewer to allow end users to view		



	and print.		
13.	Ability to provide data integration framework to do data retrievals and data updates. Indicate whether this interface designed with stored procedures. Describe integration middleware or architecture for relational database application integration.		
14.	IBM built-in Integration Bus shall be used for all integration requirements e.g. with backend legacy applications or connection for data sources reporting purposes.		
15.	Describe ability to integrate with MS SharePoint Portal though IBM BPM Connector for SharePoint.		
16.	Ability to retrieve and display data from multiple resources e.g. fetching complaints data from Complaint management System , Company profile information from either CRCS or any other rational database (Oracle) on any work item in process workflow.		
17.	Ability to integrate with mobile payments (OMNI , Easypaisa etc) for fee payments to SECP. Describe in details how this integration will be done and cost involved.		
18.	Ability to integrate with Credit/Debit cards payment for fee payments to SECP. Describe in details how this integration will be done and cost involved.		
19.	Ability to integrate Banks Online Transfer payments for fee payments to SECP. Describe in details how this integration will be done and cost involved.		
20.	Ability to fetch business logic from rule engine, usage of single defined business rule at multiple places in application, Define the mechanism, how this will be done.		



21.	Ability to verify CNIC from NADARA or fetch required fields data from NADRA, translate the data in English if required. Describe in detail, how this will be done.		
22.	Integration with SMS gateway		
23.	Integration with UBL/MCB bank for challan/payment processing		
24.	Ability to provide integration with portals products (API, Web services or custom code). List which portals your product currently integrates		
<b>SNo</b>	<b>Requirement Description</b>	<b>Availability</b>	<b>Comments</b>
25.	Ability to provide data integration adapter or IBM built-in Integration Bus to interoperate with BPM solution for data retrieval and data update to Oracle ERP and database on Oracle Real Application Cluster.		
26.	Give details for BPM Solution's Application Integration framework. Like SOA (web services), point to point adapters or other integration middleware or architecture for application integration.		

**9.4 Process Performance, Scalability, Hardware sizing**

**9.4.1 Mandatory Requirements**

SNo	Requirement Description	Availability	Comments
27.	Provide hardware sizing requirements including the hardware (CPU, memory, disk space), operating system, database information and associated BPM usage data (concurrent users, number of deployed processes, type and complexity of deployed processes). Provide similar sizing information for load balance and fault tolerant setup using		

	<p>the following assumption:</p> <p>A total of 70 modeled processes deployed (most processes with human interaction, content storage, payment activities and backend integration in workflow steps), with an annual count of two million process instances, several thousands of concurrent work items in the BPM system per day on average with different process cycle time. The number of steps in a workflow varies for different type of process. If sizing requires the number of steps per process information, use the estimated 20 steps per workflow as an average number), 500 concurrent users, using a Windows 2008 server enterprise server edition, IBM Forms, Content manager and DB2 database.</p>		
SNo	Requirement Description	Availability	Comments
28.	Ability to execute concurrently all BPM modules such as reporting, process monitoring, Content retrieval, process XFDL forms, user management module, process modeling module and process execution module – while maintaining adequate performance of the BPM solution. Provide benchmark testing data and related test results.		
29.	Ability to perform concurrent maintenance (like user profile update or deploying newer process) on product without disrupting user using product modules not affected by the maintenance operation. Describe BPM solution design to achieve this.		
30.	Provide monitoring tool for monitoring the health and status of the process execution engine and other modules. Any alert or notice that can be sent to the system		

<p>administrator when there are errors or possible problems with the process execution engine or other modules. Provide API, or database schema/portal for accessing such information.</p>		
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## 9.5 Event Management and Exception Management

### 9.5.1 Mandatory Requirements

SNo	Requirement Description	Availability	Comments
31.	Ability to utilize external and internal event (calendar timer, message, rule, etc.) to initiate/trigger a process instance. For example, we want to initiate a deployed workflow A on July 1 of every year. Describe in detail what types of events can trigger/initiate a process instance and how it works.		
32.	Ability to execute actions (such as sending an email to designated users/groups, start a process, resume a suspended work instance when timer expires), integration with backend legacy systems. When event occurs; the event should also trigger an alert to be displayed on work portal in addition to email notification. Describe what types of actions and event can be used and configured for this purpose.		
33.	Describe how meaningful reports can be generated to take preemptive actions on events.		
34.	Interface for managing external users, their roles and authorizations,		
SNo	Requirement Description	Availability	Comments
35.	Describe exception handling implementation in various modules: e.g. process modeler, process execution module.		
36.	Describe how exception management works with your		

	<p>event management module in handling exceptions. For example, exception condition can trigger some events/alerts sent to designated users/system administrators.</p>		
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## 9.6 Security and User Access Control

### 9.6.1 Mandatory Requirements

SNo	Requirement Description	Availability	Comments
37.	<p>Ability to assign different access rights to various modules/ processes/ data fields/ forms according to different groups or roles including external users (company users) and internal users (SECP users).</p>		
38.	<p>Describe how BPM solution works with Microsoft Active Directory Service, to be used for internal users (SECP users)</p>		
39.	<p>Describe how BPM works with LDAP for assigning different rights to external users (Company users)</p>		
40.	<p>Describe how content security is implemented. Explain how security rights are assigned and modified.</p>		
41.	<p>Describe how the solution shall provide content check-in/check-out capabilities and content-level security.</p>		
42.	<p>How the security controls in place to protect sensitive data and/or confidential information, and also security practices regarding secure application development. Describe authentication requirements if Federated Identity is needed. What resources and steps required for the State to install and/or configure your solution's overall system as described by the technical architecture. Ability to Assign user security</p>		



	settings, permissions, etc		
43.	SECP password policy should be implemented. All user level and system level passwords should adhere to the policy		
<b>SNo</b>	<b>Requirement Description</b>	<b>Availability</b>	<b>Comments</b>
44.	Ability of internal users to work from remote location		

**9.7 Product Roadmap and Product Support**

**9.7.1 Mandatory Requirements**

SNo	Requirement Description	Availability	Comments
45.	List major functions/enhancements to be added in the coming releases of IBM BPM, list the scheduled release versions and dates. Describe the functions in detail.		
46.	Describe in detail IBM BPM support program including different levels of support, SLA for each level, and problem reporting procedures.		
47.	List IBM BPM product release history for the past two to three years including major functionalities being added for each release.		
48.	Provide number of professional staff working on IBM BPM products. Classify it into R&D, implementation, QA, support, training, and professional service areas for each IBM BPM product.		
49.	Provide the number of certified IBM BPM product professionals. Classify it into certified developer, administrator, trainer, and other applicable categories.		
50.	How many IBM BPM deployment projects completed over the last three years? How long is the average professional service project?		





## 10 PROPOSAL CONTENT

Proposers must present and complete all of the items stated in this section. Adherence to these rules will help ensure a fair and objective analysis of all proposals. Answers to questions in this section shall be completed in sequential order and the answers for each section should be clearly demarcated from the preceding and following sections. It is required that the question number be referenced in providing answers. The proposal shall include the following at a minimum:

### 10.1 Executive Summary/ Scope of Services

Provide a summary of the highlights of your proposal, its overall benefits to SECP and proposer's qualification and experience, including a description of the capabilities of the proposer that pertain to this RFP.

This section should provide information on the bidder's understanding of the "overall" project and a summary of the system being proposed. This description should not exceed three pages and should not contain any information about costs.

**Complete list of business processes along with is attached as Annexure B.**

### 10.2 Bidder Information

#### 10.2.1 Introduction and general information about the bidder

Including the following information:

- Name
- Address
- Number of years established in Pakistan
- Total number of employees in Pakistan
- Number of years established globally
- Total number of employees globally
- NTN number

- GST number
- Company Registration number

### **10.2.2 List company's financials**

Provide last three years financial statements.

### **10.2.3 Relevant Bidder Experience**

Staffing : Number of employees who have worked on the implementation of the IBM BPM

Please, provide a list of all employees who have worked on IBM BPM implementation. In addition, please, provide resumes of employees of your company who will form the implementation team for the project at SECP (in case of successful bid). Highlight the projects in which the employee worked on the IBM BPM, IBM ODM and IBM BAM etc. Also, specify whether experience on implementation of specified technologies was obtained with the bidding company or a different company (in case of different company, specify different company).

In case any member of the implementation team specified in the proposal is not a part of the team at the actual time of implementation, the Commission may consider cancelling the contract. Further if required, the vendor would provide a written guarantee that the absence of the specific resource would not affect the project in any way.

### **IBM Gold, Silver, Platinum, Tier 1 Level Partner Certificate**

Please provide the certificate details.

### **Qualification and relevant experience of the bidder**

- Total number of implementations of IBM BPM in Pakistan
- Total number of implementations of IBM BPM internationally
- Total number of implementations of IBM BPM in the public sector in Pakistan

### **References for the latest IBM BPM implemented by the bidder**

- Name of Client
- Industry/ Sector of client

- Location of client (City, Country)
- Address of client
- Name and Contact Number of client representative
- Duration of the project, including start and end dates
- Scope of the project
- Value of project in Pakistan Rupees
- Number of client end users

References for the IBM BPM implemented by the bidder. (In addition to the certificates/references provided by the bidders, marks will be allotted only after references' cross verification)

### **10.3 Proposed Business Process Management System**

#### **10.3.1 Bidder's ability to satisfy the Project Scope**

Clearly define how bidder is capable of satisfying the project scope.

#### **10.3.2 Business Process Management Requirements**

**Section 8** , "BUSINESS PROCESS MANAGEMENT FUNCTIONALITY REQUIRMENTS " and **Section 9** "BUSINESS PROCESS MANAGEMENT TECHNICAL REQUIRMENTS " identified Mandatory requirements.

For each requirement or function identified in functional/Technical Requirements, vendor must indicate how the capability is provided in the proposed solution using IBM BPM.

<b>Code</b>	<b>Description</b>
<b>Not Available</b>	"Not Available" Feature or capability, cannot be provided with the base system as proposed.
<b>Available (including any required)</b>	"Available" Feature or capability may or may not be part of the base system out of the box but will be made available

<b>customization)</b>	including any required customization based on functional/technical requirements.
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**10.4 Additional Products/Tools/Hardware/Storage**

For every vendor response of **Section 8 “Business Process Management Functional Requirements”** and **Section 9 “Business Process Management Technical Requirements”**, vendor shall provide the proposed solution based on existing BPM components that clearly described in **Section 2 “eServices Software Products/IDE/Kits”** and system constraints in **Section 6 “BOUNDARIES AND CONSTRAINTS”**. Based on new business requirements defined in **section 3 “BUSINESS REQUIRMENTS OVERVIEW”** and newly available technologies defined in **Section 4.1 “Prospective Business Process Management products/IDE/Kits”** , vendor shall indicate whether the capability of new business requirements is provided by the available technologies/products/Hardware/Storage or if there is a need for any additional tool/product to integrate with the IBM’s BPM Suite and associated any other hardware and storage requirements . Please specify the additional tool/product/Hardware/Storage information and its cost in Financial Proposal.

**10.5 Project Implementation Plan**

This project plan should include three parts: **The first** is to cover the IBM BPM Upgrades/installations/Configuration/Set up services, which includes on-site inspection of the existing infrastructure and eServices(existing BPM) set up at the SECP before configuration/set up of the BPM software. The installation and configuration/set up of the IBM BPM software will include the software installation/set up, considering existing Content Management, Forms management, external Users management, Rule Management components and internal user access/management module configuration using Microsoft Active Directory Service and integration with Share Point Portal in the SECP. This does not include the workflow/process modeling part of the implementation.



**The second part** is to cover the possible utilization of vendor’s professional staff to help implement integration services with various current and future applications already outlined in “**4.5 BPM Integration Services**”.

**The third part** is to cover the phase wise implementation and deployment of business processes as referred above in section 3.2

Project Implementation plan should include the following details:

#### **10.5.1 Project Roles and responsibilities**

Project role for the Proposer and the SECP, including skills provided and required.

#### **10.5.2 Project Phases**

Project phases and tasks to be performed by the Proposer and by the SECP; No task should exceed more than eighty hours in the project plan.

Project timeline and phases, include tasks and deliverables and Proposer's capacity to implement the project. The plan must include appropriate progress/Gantt charts that reflect the proposed schedule and all major milestones.

Complete list of business processes is attached as Annexure B. The processes are categorized into two phases from the delivery perspective. The bidders are required to clearly include the separate phase-wise **cost** and **time** for each of the two phases in their respective proposals

#### **10.5.3 Implementation Methodology and Approach**

Describe methodologies used to carry project from requirements through finished deliverables, including project management, checkpoints, and periodic status reporting to SECP BPM Project Management Team. Describe policies and procedures employed to ensure the timely completion of tasks in a quality fashion.

- A narrative statement that sets out the methodology proposer intends to employ and that illustrates how this methodology will serve to perform the described services. In particular, describe how requirements are mapped to application configuration, how customizations are performed and how customizations are retained/ maintained after a patch or upgrade.
- A description of the management plan proposer intends to employ for the project and an explanation of how it will support the project requirements and logically lead to the required deliverables. The description must include the organization of the project team, including accountability and lines of authority.
- How is the initial overall relationship between the SECP and the proposer managed from an account and a technical support perspective?
- Describe what is required of the SECP to ensure a successful implementation of the system. Provide any requirements for SECP time and resources that will be needed to support the project effort. Be clear about the skill sets and types of interaction required from SECP.

#### 10.5.4 Project Deliverables

Deliverables from the project and who is responsible for the deliverable;

At a minimum, the following deliverables will be required as a part of the ensuing contract.

SNO	Category	Deliverable
1.	<b>Scope of the Work</b>	<ul style="list-style-type: none"> <li>• Business Requirement Documents</li> <li>• Report Specifications Documents</li> </ul> for each Implementation of Business Processes
2.	<b>Business Process End-to-End implementation Life Cycle (PDLC)</b>	PDLC and deliverables templates

3.	<b>Source Code</b>	<ul style="list-style-type: none"> <li>• BPM Framework and Framework design documentation</li> <li>• Code Review Checklists for every component mentioned below</li> <li>• (End-to-End implementation using above mentioned technologies considering SECP/ETO2002/Products limitations e.g distributed transactions)</li> <li>• Development Guides (for setting up the environment)</li> </ul>
4.	Source Code - Toolkits Development & Implementations Guides	<ul style="list-style-type: none"> <li>• UI (based on process designer)</li> <li>• Content Management (based on CMIS standard)</li> <li>• Data Access (DB2 , Oracle , ERPetc)</li> <li>• Business Rules</li> <li>• Business Monitoring</li> <li>• Reporting</li> <li>• Any other</li> </ul>
	Source Code - Integrations Development & Implementations Guides (Must be based Integration Bus)	<ul style="list-style-type: none"> <li>• Back office Integration</li> <li>• Front Office Integration</li> <li>• Business Monitor Integration</li> <li>• Operational Decision Manager Integration</li> <li>• Payment Integration</li> <li>• Reporting tool integration</li> <li>• NIFT for digital signatures</li> <li>• NADRA for CNIC verification</li> <li>• IBM Lotus Forms for form generation</li> <li>• IBM MS SharePoint integration for displaying web-worklist portal</li> <li>• Integration with mail and SMS gateways for notification and alerts</li> <li>• Any other</li> </ul>



	<p>Source Code - Business Rules Development &amp; Implementations Guides</p>	<ul style="list-style-type: none"> <li>• ILOG Object Model</li> <li>• Guidelines and Procedures (How to build business Object Model and rules?)</li> <li>• Object Model and Business Rule Review checklist</li> </ul>
	<p>Source Code - Business Monitoring Development &amp; Implementations Guides</p>	<ul style="list-style-type: none"> <li>• Monitor Model</li> <li>• Guidelines for enabling monitoring for BPM processes</li> <li>• Guidelines for How to do the monitoring, anything External to BPM to cover the whole process model.</li> <li>• Monitor Model review checklist</li> </ul>
	<p>Source Code - Reporting Tool Development &amp; Implementations Guides</p>	<ul style="list-style-type: none"> <li>• Guidelines for enabling reporting for BPM processes</li> <li>• Guidelines-How to do the reporting, anything External to BPM to cover the whole process model.</li> <li>• Reporting Model Review Checklist-from requirements gathering to live reporting in Share Point Portal</li> </ul>
	<p>Source Code- Façade Layer Development &amp; Implementations Guides</p>	<ul style="list-style-type: none"> <li>• Design and development of the Merging layer for single point of user interaction for new/old BPM solution.</li> <li>• Guidelines for the Production Environment Architecture managing new and old BPM solution considering the system load in peak timings.</li> </ul>
	<p><b>Architectural/Infrastructure/Design Documents</b></p>	<ul style="list-style-type: none"> <li>• Detailed Architecture Documents</li> <li>• User Guides for business users</li> <li>• Developers Guides for Development team</li> <li>• Code Review Checklist</li> <li>• Coding Guidelines for each component/integration</li> <li>• Deployment Guides</li> </ul>

		<ul style="list-style-type: none"> <li>• Performance Tuning Guides for each Component</li> <li>• Systems Logs/Data cleanup guides</li> </ul>
	<b>Training</b>	<ul style="list-style-type: none"> <li>• Training plans</li> <li>• Training material (Documents/ Audio/Video /CBT)</li> <li>• Training Status Reports</li> </ul>
	<b>User Acceptance</b>	<ul style="list-style-type: none"> <li>• Users Test Plan Documents</li> <li>• Test strategy (Load, Stress, Functional, Integration, etc)</li> <li>• Functional Test Plan</li> <li>• Unit Test Plan</li> <li>• UAT Test Plan</li> <li>• Test Reports</li> <li>• Metrics Indicators/Reports showing the improvements in business processes</li> </ul>
	<b>Project Management</b>	<ul style="list-style-type: none"> <li>• Project Plan with milestones</li> <li>• Project Governance Plan</li> <li>• Project Risks and Mitigations Plan</li> <li>• Change Management Plan</li> <li>• Quality Assurance Plan</li> <li>• Project Status Reporting Plan</li> <li>• Any other</li> </ul>

**Project Resources**

Identify All Resources, the plan must clearly identify all offeror and SECP resources required to successfully complete the project. The offeror must provide job descriptions and the number of personnel to be assigned to the equipment installation, testing, and implementation of the project. Resumes of Proposer's project team must be included with the proposal.

### **10.5.5 Project Change/Bug/Problem Management**

Describe the process for problem management including: problem logging, problem resolution, tracking of unresolved problems, problem escalation procedures, and problem closeout and reporting practices.

Change Requests will be considered for any change in BRDs after UAT signed off. Please include Chargeable Change Request cost per Man Day in PKR in financial proposal.

### **10.5.6 Project Handover Plan**

Describe the handover plan after the successful user acceptance in details and enablement of SECP teams for taking handover for future process implementation and maintenance activities.

### **10.5.7 Ability to Handle the Work**

Vendor's ability to handle the work based on the following factors:

- Ability and approach to limit project risks and efficiently, smoothly develop and deploy BPM modules without disruption to SECP business in the required timeframe.
- The Vendor's demonstrated track record in similar partnering relationships, including references from the vendor's current customers with similar business needs and requirements.
- Match between the vendor's capabilities and the SECP's business requirements.
- Vendor's proven capabilities in delivering projects on time and on budget.
- Vendor's demonstrated track record in overall client satisfaction.
- Vendor's financial qualifications
- Assurance that there will be no conflict of interest resulting from industries or clients previously or currently served by the Vendor
- The Provider's technical qualifications and reputation
- The Provider's presentation and documentation.
- Content and Quality of the Vendor's Proposal.

- Responsiveness to the business requirements and philosophy of this RFP, including the degree to which the proposal completely provides the requested information in the specified format.

### 10.5.8 Training Plan

Based on the Section 8 “Business Process Management Functional Requirements” SECP requires training of following user groups:

S. No	User Groups
1.	External Users (Companies/Brokers/ Surveyors etc.)
2.	Business Users (Concerned department users)
3.	Technical Administrators/Support
4.	Business Support/Helpdesk Users
5.	Developers
6.	Testers
7.	Trainer (to train external users and Business users) training
8.	Training of new employees
9.	Computer Based Training (CBT) or Audio/Video Conferencing training modules

In addition to providing a cost based on the SECP’s needs, proposers are encouraged to provide any new ideas on how training can be best presented. However, this must address all the requirements set by the SECP.

Training walkthroughs to users mentioned above shall be provided during the first year. On-going training for new/existing employees will be provided during succeeding years, as required, especially when new versions/updates are released.

SECP will utilize train the trainer concept in this project to do some subsequent external users and business user training.

We require the following information (and associated costs) in your proposal:

- The type, number, duration and cost of each training module that needs to be provided for all technical and Business Users. The trainees, at a minimum, include the following:

SNo	User Group	Training needs
1.	External Users (Companies, brokers etc. )	Business processes, process checklists, payment methods, digital signatures and flows for external users) can be Process Built-in help.
2.	Business Users	General work list tasks and operations, process modeling, reporting, form design and user management module etc.
3.	Technical support and administrator	Technical maintenance, systems support, other product administrator tasks like database set up, performance tuning , release deployment etc
4.	Trainer	To do External user/Business user training
5.	Developers	Development setups, API guides, design guidelines integration with other components , ODM, SOA integration, etc
6.	Computer Based Training/Video Conferencing and/or tutorial CDs (optional).	
7.	List any other customer specific (tailored to our operating set up) training options	

SECP's training room may be utilized. If proposers intend to use the SECP's training room, please indicate in the proposal.



If there are other training topics, not covered in this section but required under your training plan, please include description and pricing in your proposal.

Based on the requirements as stated above and proposer’s knowledge of IBM BPM and experience with other organizations, provide a training plan and cost.

Training plan should include the plan and method on how the vendor will perform the knowledge and skill transfer for the professional service work they implemented to SECP IT staff.

**10.5.9 Other Value Added Services**

Proposers are encouraged to describe thoroughly any other consulting or value-added services they feel may contribute to the success of the project. The response to this specification may include optional computer programs or other capabilities not included elsewhere in the proposer’s proposal.

Vendors are encouraged to add/ list their additional BPM functionalities and capabilities that provide a competitive advantage.

<b>SNO</b>	<b>General Category (e.g. Process modeling, form design, etc)</b>	<b>Functionality description</b>

Vendors are encouraged to add its additional BPM product architectural or technical design that provides a competitive advantage.

SNO	General Category (e.g. architecture, standard conformance, integration, etc.)	Functionality description

### 10.5.10 Maintenance Services & Support

Describe the requirements, alternatives and recommended approach for operating and maintaining the software after acceptance. It should include, but not be limited to:

- SECP responsibilities and estimated skills and level of effort required for each responsibility
- Proposer responsibilities, estimated level of effort and response time
- Proposer responsibility for software errors after system acceptance

The SECP wishes to acquire a system that will meet the needs of the SECP for at least 5 years after final acceptance. After the successful acceptance, vendor will provide post-implementation systems operation support on-site for one year after final system phase-wise cutover. Please add on site one-year support cost in financial proposal for each phase.

Support will include upgrades of software components used in this solution until the final system cutover. Also, include bug fixing for components of the software, integration, and business processes implemented and in production until final system cutover.

**Change Requests will be considered for any change in BRDs after UAT signed off.** Please include Chargeable Change Request cost per Man Day in PKR in financial proposal.

Supporting technical and user documentation, source code, help files, data files, libraries, software customizations and modifications will be provided to the SECP by the vendor at no additional cost.

**10.5.11 Cost**

All Bids received shall be opened and evaluated in the manner prescribed in the Bidding document. In the Financial Proposal, please provide a cost, which includes the total cost to be charged as well as the cost broken out by the following categories:

S. NO.	Description	Option 1		Option 2	
		Without Integration Bus and Cognos		With Integration Bus and Cognos	
		Phase -1	Phase-2	Phase -1	Phase-2
		Amount (Rs.)	Amount (Rs.)	Amount (Rs.)	Amount (Rs.)
<b>1</b>	Software Up-gradation Cost (with breakup)				
<b>a</b>	IBM Tivoli Directory Server		Not Applicable (NA)		NA
<b>b</b>	IBM DB2 Server		NA		NA
<b>c</b>	IBM Form Server		NA		NA
<b>d</b>	IBM Websphere Application Server		NA		NA
<b>e</b>	IBM Websphere Network Deployment		NA		NA
<b>f</b>	IBM Websphere Decision Server		NA		NA
<b>4</b>	Implementation Cost (including migration, integration, etc.)				
<b>6</b>	Training Cost				
<b>7</b>	Support and Maintenance Cost for 01 year				

8	Technical and User Support Material (Documentation ,Videos and Audios)				
9	Cost of Integration Bus (Licenses cost)	NA	NA		NA
10	Cost of IBM Cognos (Licenses cost)	NA	NA		NA
12	<b>Total Cost of each Phase inclusive of all applicable taxes</b>				

**Note: Bidders are required to quote for both of the Options in prescribed format. Change Requests will be considered for any change in BRDs after UAT sign off. The Commission reserves the right to grant approval of either Phase 1 or both phases (Phase 1 and Phase 2) of either option at its discretion.**

For information and will have no impact on financial Evaluation:

SNO	Description
1	Cost on a/c of Chargeable Change Request per Man Day in PKR
2	Renewal Cost of IBM Integration Bus and IBM Cognos for next 05 years (with breakup)

#### 10.5.12 Project Duration

Based on above-mentioned SECP requirements, limitation, constraints for Business Process Management implementation services, please provide the end –to end project time line considering all project phases, until the final user acceptance sign off. Please also include duration for each of the two Processes Implementation Phases as referred in section 3.2 above.

### **10.5.13 Proposal Assumptions**

List any assumptions you have made either regarding how you will execute the project, or regarding the activities of SECP in executing this project, or any other assumptions you may have made.

### **10.5.14 Proposal Risks & Mitigations**

List any risks that you have identified associated with this project. Indicate your best assessment of the likelihood and impact (High, Medium, Low). Identify the proposed response to those risks:

- Accept the risk
- Mitigate the risk with appropriate mitigation details

### **10.5.15 Proposal Format**

- Authorized Signed and stamped hard copy on A4 white paper double sided.
- Fold outs containing charts, spreadsheets and oversize exhibits are permissible specially for project plans.
- The pages should be placed in a binder with tabs separating the sections of the proposal.
- An electronic copy shall also be provided in Microsoft Word. This copy may be provided in a CDROM attached with the proposal.
- Attachments and supplements may be provided in alternate formats such as Microsoft Excel, Microsoft PowerPoint, Microsoft project and Adobe Acrobat (.pdf).
- All responses, as well as any reference materials, should be written in English.
- If the proposal is not submitted in the required format, it may not be considered for evaluation.
- Proposals shall respond to the RFP requirements by restating the number and text of the requirement in sequence and writing the response immediately after the requirement statement.



- Figures and tables shall be numbered and referenced in the text by that number. They shall be placed as close as possible to the referencing text.
- Pages must be numbered consecutively throughout the entire proposal. Page numbers shall be displayed on every page in a consistent location.
- Proposals shall be based only on the materials contained in this RFP. The RFP includes official responses to properly submitted questions during the response period as well as any other materials distributed during the RFP process clearly marked as elements of the RFP.
- Proposals should be to the point. Excessive length is strongly discouraged. Supplemental materials may be provided in attached appendices.

**11 Evaluation Criteria**

**11.1 Evaluation Point Summary**

Technical Evaluation	40%
Financial Evaluation	60%
Total	100%

Technical evaluation will be carried out on the basis of below mentioned criteria:

S No	Factor	Max Points
1.	Relevant Experience of the Bidder	20
2.	Project Team	20
3.	Implementation Plan & Time	40
4.	Training Plan	10
5.	Other Value Added Services	10
<b>Total Points</b>		<b>100</b>

Bidders will need to meet all the criteria marked as **Mandatory** to qualify.

**Evaluation Factors**

A maximum of 100 points may be awarded based upon the quality and thoroughness of the bidder's response to each evaluation factor as follows.

**11.1.1 Relevant Experience of the Bidder**

Up to 20 points may be awarded for relevant experience of the bidder based upon the documented work experience on similar systems will be evaluated more favorably than experience with non-related systems. IBM Gold, Silver, Platinum, Tier 1 Level Partner Certificate will be given added advantage. Point’s distribution is as per under sub sections:

- **IBM Authorized Partner (Mandatory)**
- **Qualification and relevant experience of the bidder**
  - Relevant Business experience of latest IBM BPM for at least 3 years- 15
  - Relevant Business experience of latest IBM BPM for at least 2 years-10
  - Relevant Business experience of latest IBM BPM for at least 1 years -5
  - Less than 1 year -0
- **References for the IBM BPM implemented by the bidder. (In addition to the certificates/references provided by the bidders, marks will be allotted only after references' cross verification)**
  - Satisfactory IBM BPM services certificate/reference by three clients: 5
  - Satisfactory IBM BPM services certificate/reference by two clients: 4
  - Satisfactory IBM BPM services certificate/reference by one clients: 3
  - No client :0

### **11.1.2 Project Team**

Up to 20 points may be awarded for relevant experience of project team based upon the resumes and experience narratives submitted. The engaged professional service senior technical developer staff for the implementation and consultation phase should possess current BPM Product development certification (Available through IBM BPM certification program) and be proficient in integration with other products like IBM Content manager , IBM Tivoli LDAP server, IBM Forms , BPM integration with MS SharePoint Portal Server, IBM ILOG or Operational Decision Management , IBM Business Monitor, MS office applications and other technologies that are part of proposed solution .

The engaged technical staff will require proficient skills in the areas of integrating with such relational database either through industry standard data provider interface or other web service, SOA interface based on Enterprise Integration Bus.

Point's distribution is as per under sub sections:

- Staffing : Number of employees who have worked on the implementation of the latest IBM BPM
  - More than 30 employees on IBM BPM =5
  - Between 15- 30 employees on IBM BPM =4
  - Between 10- 14 employees on IBM BPM =3
  - Less than 10 employees on IBM BPM =0
  
- Staffing : Number of employees assigned to the project who have worked on the implementation of the latest IBM BPM, with at least 1 year experience
  - More than 10 employees = 15
  - Between 5-10 employees = 10
  - Less than 5 employees = 0

### **11.1.3 Implementation Plan & Time**

Up to 40 points may be awarded based on the quality of bidder's project Implementation plan, how well organized and detailed the plans are, how they address contingencies, the degree of the bidder's staff support, and the efficiency of the plan, deliverables and quality control. Point's distribution is as per under sub sections:

- Upgrade Plan (please provide separately from project plan): 5, must cover all the components need to be upgraded.
- Roles and responsibilities: 5
- Project Methodology and Approach :5
- Deliverables and templates: 5
- Project Duration: 20

Up to 20 points will be awarded based upon time duration of Project completion;  
Maximum points will be given for minimum project duration rest on pro-rata basis.



#### **11.1.4 Training Plan**

Up to 10 points will be awarded based upon an evaluation of the thoroughness and applicability of the response to the specifications as mentioned in **Section 10.5.8 “Training Plan”**, including the thoroughness of the plans and the quality of the proposed materials and examples. Point’s distribution is qualitative in nature.

#### **11.1.5 Other Value Added Services**

Up to 10 points will be awarded based upon an evaluation of the applicability and merit of the response to the specification. Point’s distribution is qualitative in nature.

## 11.2 Evaluation Process

The evaluation process is as under:

SNO	Evaluation Step	Description
1.	<b>Compliance with mandatory requirements</b>	The mandatory requirements are required to be complied. In case of non-compliance the bidder would not be eligible for bidding.
2.	<b>Scoring of Proposals</b>	Responsive proposals will be evaluated on the factors in <b>Section 10</b> that have been assigned a point value. The responsible bidders with the highest scores will be selected as finalist bidder based upon the proposals submitted.
3.	<b>Determining a short-list</b>	SECP may eliminate from further consideration any proposal scoring less than <b>70% of Technical Evaluation</b> of the available points for evaluation criterion or any proposal which it considers deficient and, therefore, non-responsive.
4.	<b>Presentations</b>	SECP may invite short-listed vendors to <ul style="list-style-type: none"> <li>• Present their proposals to the SECP Purchase Committee and the SECP Technical Teams.</li> <li>• Demonstrate the use of their solution by presenting with a representative scenario, workflow and sample data. Using this, Vendors will show us how business requirements will be handled by proposed solution.</li> </ul>
5.	<b>Cost</b>	SECP will establish the total cost of project <b>with one-year support for each phase</b> . Cost will include



		<p>additional modules that may be acquired during the course of implementation. Provide an explanation of cost structure and an explanation of each element in the Section “ <b>10.5.11 Cost</b>”.</p> <p>Provide sufficient information that can determine the total cost of project based on different implementation, training and expansion scenarios.</p>
6.	<b>Selection of finalist</b>	<p>The bidder obtaining highest marks after consolidation of Technical and Financial evaluation marks shall be considered as the best evaluated bidder.</p> <p><b>The Commission reserves the right to grant approval of either Phase 1 or both phases (Phase 1 and Phase 2) of either option at its discretion.</b></p>