APEC PROJECT MANAGEMENT SYSTEM

Request for Proposal

Prepared by: APEC IT
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1 Organization Background

The Asia-Pacific Economic Cooperation (APEC) is a regional economic forum established in 1989. APEC's 21 members aim to create greater prosperity for the people of the region by promoting balanced, inclusive, sustainable, innovative and secure growth and by accelerating regional economic integration. The APEC Secretariat is the core supporting institution of APEC. Located in Singapore, the Secretariat provides analytical and policy support, institutional coordination in support of up to 80 APEC fora, technical and advisory support as well as financial management and communications, public information and stakeholder engagement.

APEC-funded projects are a key part of the APEC process with around 120 projects launched every year. An APEC funded project comprises a set of pre-approved activities (such as workshops or research) conceived and coordinated by project overseers outside the Secretariat with significant design and implementation oversight provided by specialised teams within the Secretariat. Each project operates from a pre-approved budget that is partly or wholly financed by the Secretariat on a reimbursable (not grant) basis. The Secretariat manages the APEC-funded project system in close partnership with a range of external parties including project overseers, APEC fora, project event participants and project contractors.

For more information on APEC, feel free to visit the link to the Website; https://www.apec.org/About-Us/About-APEC

1.1 Terminology

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>APEC</td>
<td>Asia Pacific Economic Cooperation</td>
</tr>
<tr>
<td>BMC</td>
<td>Budget and Management Committee</td>
</tr>
<tr>
<td>BR</td>
<td>Business Requirements</td>
</tr>
<tr>
<td>BRD</td>
<td>Business Requirements Document</td>
</tr>
<tr>
<td>BRD</td>
<td>Business Requirements Document</td>
</tr>
<tr>
<td>Business Actor</td>
<td>Business Users who perform business activities</td>
</tr>
<tr>
<td>CN</td>
<td>Concept Note</td>
</tr>
<tr>
<td>CPAU</td>
<td>Communications and Public Affairs Unit</td>
</tr>
<tr>
<td>CR</td>
<td>Completion Report</td>
</tr>
<tr>
<td>DRD</td>
<td>Data Reference Document</td>
</tr>
<tr>
<td>ED</td>
<td>Executive Director</td>
</tr>
<tr>
<td>EXO</td>
<td>Executive Office</td>
</tr>
<tr>
<td>EIM</td>
<td>Enterprise Information Management</td>
</tr>
<tr>
<td>FIN</td>
<td>Finance</td>
</tr>
<tr>
<td>FSD</td>
<td>Functional Specifications/Requirements Document</td>
</tr>
<tr>
<td>GFP</td>
<td>Gender Focal Point</td>
</tr>
<tr>
<td>ITU</td>
<td>APEC Secretariat’s Information Technology Unit</td>
</tr>
<tr>
<td>MR</td>
<td>Monitoring Report</td>
</tr>
<tr>
<td>PA</td>
<td>Project Assessor</td>
</tr>
<tr>
<td>PD</td>
<td>Program Director</td>
</tr>
<tr>
<td>PDB</td>
<td>Projects Database</td>
</tr>
<tr>
<td>PE</td>
<td>Program Executive</td>
</tr>
<tr>
<td>PMU</td>
<td>Project Management Unit</td>
</tr>
<tr>
<td>PO</td>
<td>Project Overseer</td>
</tr>
<tr>
<td>PP</td>
<td>Project Proposal</td>
</tr>
<tr>
<td>PRJ</td>
<td>Project</td>
</tr>
</tbody>
</table>
1.2 Current IT Systems

The following are the existing IT systems in APEC built through the years from the needs of different user groups and purposes. These systems are standalone and only if stated are connected in some form.

<table>
<thead>
<tr>
<th>System Name</th>
<th>Operating System / Hosting</th>
<th>Applications</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Database (PDB)</td>
<td>Windows 2008 R2 / APEC Private Cloud</td>
<td>SQL Server 2008 R2 / Microsoft Office SharePoint Server (MOSS) 2007</td>
<td>The PDB is a repository of Project related information such as Project Proposals. Project information is only updated up to the point of approval.</td>
</tr>
<tr>
<td></td>
<td>Hyper-V 2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hyper-V 2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APEC Collaboration System (ACS)</td>
<td>Office 365</td>
<td>SharePoint Online</td>
<td>This is an extranet available to registered users from the member economies of APEC.</td>
</tr>
<tr>
<td>Online Meeting System (OMS)</td>
<td>Office 365</td>
<td>SharePoint Online</td>
<td>This is an extension of the ACS as an avenue to share pre-meeting documents to no registered members.</td>
</tr>
<tr>
<td>APEC Public Website (<a href="http://www.apec.org">www.apec.org</a>)</td>
<td>Amazon Web Services</td>
<td>Sitecore</td>
<td>The APEC web site is not connected to any other listed Systems but it does have embedded systems such as the Publication DB.</td>
</tr>
<tr>
<td>Travel Disbursement tool</td>
<td>Windows</td>
<td>Office 2016 Excel Macro</td>
<td>This is a customized Excel File that runs macro to facilitate processing of Travel Disbursement for Program Executives.</td>
</tr>
<tr>
<td>APEC ACCPAC</td>
<td>Windows Server/ APEC Private Cloud Hyper-V 2016</td>
<td>SAGE Financial Accounting System</td>
<td>This is a customized module tailored to handle accounting for APEC Projects and Special Fund sources</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>APEC Private Cloud</td>
<td>Windows Server 2016 hosted on redundant servers</td>
<td>Hyper-V 2016</td>
<td>This has replaced most of the APEC Secretariat’s Physical Servers and is hosted on premise. It follows Microsoft Private Cloud standards and is connected to Azure Services for Disaster Recovery.</td>
</tr>
<tr>
<td>APEC M Drive</td>
<td>Windows Server 2016/ APEC Private Cloud</td>
<td>Windows File Sharing</td>
<td>This is a local shared Network drive where most of APEC Digital information is stored. It is a file share that not only contain MS Office Documents but other formats such as .msg messages and other files.</td>
</tr>
</tbody>
</table>
2 Project

2.1 Introduction:

In the many years providing the services stated, APEC Secretariat has produced and continue to store huge number of documents in network drives and Microsoft SharePoint. At any point of time there are up to 200 projects running concurrently, at different points in their lifecycle, supporting a broad cross-section of APEC fora.

2.2 Project Overview

APEC plans to implement a solution that will support the APEC Project Management Process. A high-level diagram provided below shows the Project management processes that shall be included in the system for this module. The solution should enable APEC to build an efficient and agile Data Management operation with capabilities for information creation, capture, distribution and consumption. The key goal is to preserve and provide information as a business asset that remains secure, easily accessible, meaningful, accurate and timely. In principle, data, which is created or collected once and used many times, is the key basis of the project. All data which can be transformed to information are in a repository. This should facilitate integration or connectivity capabilities for future projects that might need any data on this repository.

**High-Level Diagram of the Proposed System**

[Diagram showing project repository, analytics & reporting]
This paper will focus on the Project Management System, which is the first in a series of efforts from the Secretariat to modernize several APEC processes. In consideration of the entire spectrum of Secretariat’s business functions, the process modernization plan aims to develop/implement, a Centralized System of Business Services and Data Management which can comprehensively digitize and scale all its activities, end-to-end. This will ensure that all automated functions are able to speak to each other since the data will be held by a central unit. The Secretariat acknowledges that this modular approach may not enable full integration. However, it is important to consider the ability connect or share the information with other platforms.

2.3 Project Areas

2.3.1 Project Administration Activities

The project related administrative functionality of APEC Secretariat is broadly divided into two distinct, yet interconnected, critical processes:

- **Projects Lifecycle Management** comprising of Concept Note and Proposal development; Projects Implementation, Monitoring and Completion; and Projects Change Management
- **Project Disbursements** comprising of Contracts disbursement, and Travel disbursement.

As these processes constitute the overall implementation of projects, there are a series of activities, sometimes simultaneous, in each process that complete and represent the fulfilment of that process. These are coordinated by 21 Program Directors, 9 Program Executives and a 4 member Project Management Unit, as well as the Secretariat Finance and Communications teams. A majority of these activities are manual in nature, following internal operational protocols and the overarching policy framework laid out in the Guidebook on APEC Projects available on the APEC website, [https://www.apec.org/Projects/Forms-and-Resources](https://www.apec.org/Projects/Forms-and-Resources).
2.4 Project Goal

Digital Transformation, to transform Data to Information with Insights to make APEC Secretariat provide an effective and efficient service to its stakeholders.

2.4.1 Key Business Objectives

- Improve the service response time to the APEC business users – external and internal
- Improve the quality of service to APEC activities stakeholders
- Strengthen the capacity of APEC Secretariat

2.4.2 Technical Objectives

- Provide data capture using e-forms and single portal view.
- A streamlined environment to support the editing and review of key project administration documents, such as Project Proposals
- Ensure it is a workflow driven reporting, review and approvals with automated work-flow referrals to external users, managed by internal administrators or super-users.
- Provide automated notifications on timelines, submissions and processing.
- Ensure consistency and adherence to the standards-based management of tasks (communications, templates, processes).
- Document naming, versioning and referencing to project are automated
- Document generation, sharing and availability are generated by system
- Reduce routine email-based business communications and transaction of business information and these are automated by the system
- Provide a Single portal view for self-service by external users (POs, Event Attendees, Fora members, etc.)
- Ensure a Single point of access to all the project related information – documents, communications, data.
- Enable view of project implementation status in real time.
- System create a complete Data reusability across all activities and functions.
- Create an Integrated data reporting/data interrogation functionality for internal users with complete management reporting and data analytics.
- Ensure complete elimination of calculations errors
- Asses the payment data integration with Finance accounting system to the proposed system.

2.4.3 Expected Benefits

- Improved efficiency, productivity and flexibility
• Minimize data double-handling and ‘reinventing the wheel’
• Information and powerful analytics available to support decision making
• Collaboration made easier within internal and external stakeholder groups
• Improving information flow with APEC fora
• Process streamlining with work-flow and controls in place
• Processes are online and real time
• Facilitates continuous improvements and innovation in providing services to stakeholders
• Facilitates controls where necessary

2.5 Scope of Work

2.5.1 Deliverables

• Project Life Cycle Management, streamline processes and workflow with full visibility of status progress and financial tracking. Easy and customisable workflow to assist processes in fora management.
  Process Workflow
  Process routing
  Activity tracking and monitoring – include cost, schedule, scope, quality and actions.

• Document Management, better collaboration, flexibility and supports towards being agile.
  Simultaneous editing coordination
  Security and access control
  Search and retrieval
  Version control
  Indexing and classification
  Audit trails

• Migration of existing Data and Systems, it may be necessary to migrate from existing systems to the proposed solution. Data migration from existing repository should be included depending on the existing systems environment.
  Single/Central Repository
  Single Portal for all above Processes.

• Analytics and Reporting, the proposed solution should provide on screen analytics and be able to provide defined reports. These functionalities should be customizable.
  Customizable Reports
  On Screen Analytics
2.6 Success Criteria

- All Project Forms are online, data is captured only once and stored centrally for multiple use in the various stage of the process as well as reference required from different department.
- References to Project and other documentation are centrally accessed with access to current and prior versions at any point of time.
- Searching for information is easy with the necessary access permissions. At a glance, able to see where and what are the stages of each Project in the Life cycle.
- Once defined, key statistics and reports are easily and readily available when necessary.

2.7 Project Timeline

In submitting the Proposal in section 3.2 of this document, kindly indicate the response based on the timeline in phases specified below.

1. Study and design the necessary repository and workflow requirements. Catalog and enable easy search and access to existing digital asset.

2. Project Life Management Phase 1
   a. Concept Notes, implementation based on current defined process.
   b. Project Proposal process, collaboration and process workflow

3. Project Life Management Phase 2
   a. Project Implementation flow
   b. Project Monitoring / tracking
   c. Project Completion

4. Project Life Management Phase 3
   a. Contract Management with information captured once and a contractor database established
   b. Event Management integration with the Central system
3 RFP Responses

3.1 Instructions

- The Tenderer shall read through all the components of the RFP Document in preparing its response.
- It is the responsibility of the Solution provider / System Integrator to ensure that the Tender Response is delivered on time.
- Please note that extensions will not be granted unless instructed by the APEC Secretariat.
- Any enquiries concerning this document and the attached requirements document should be routed via the APEC Secretariat or Project consultant appointed by the Secretariat.
- Any proposals for changes to this document must be made in writing to the APEC Secretariat. In the event of an agreed change, other potential Solution provider / System Integrator will be notified without identifying the original source. Should a request for a change be rejected the originator shall be informed within one working day.
- Solution provider / System Integrator response shall remain valid for a period of no less than 60 days from the return date and if successful, will be attached to the Terms and Conditions of contract.

3.2 Proposal

RFP Proposal format
There are two parts of the RFP to complete, Book A (Compliance), to address meeting the Business and Technical Objective include Functionality, and Book B (Project & Costing), to provide all the necessary information in these areas Project/Company/Cost as mentioned in the respective sections.

3.2.1 Book A Compliance
The Solution provider / System Integrator will submit, in the format shown below against each of the sections and sub-sections of all components of the RFP Document.

- Company Profile.
- Compliance Statements.
  - 2.4.2 Technical Objective
  - 2.5.1 Scope of Work – Deliverables
  - Appendix 1 (Functional Requirement)

<table>
<thead>
<tr>
<th>Section</th>
<th>Sub-Section</th>
<th>Compliance</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2.1.1 The Solution provider / System Integrator shall state and must state based on the following:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully Compliant</td>
<td>Meets each and every requirement stated</td>
</tr>
<tr>
<td>Partially Compliant</td>
<td>Meets some elements of the stated requirement, but not all</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>Non-Compliant</td>
<td>Does not meet any of the stated requirements</td>
</tr>
</tbody>
</table>

3.2.1.2 For each and every reply defined above the Solution provider / System Integrator shall provide a full description for areas where non-compliance exists and of how compliance will be achieved or how it affects the requirement.

3.2.1.3 Any question left unanswered or deviates from the categories mentioned in 3.2.1.1 shall be deemed to be “Non-Compliant”.

3.2.1.4 Solution provider / System Integrator must clearly identify any instance where a specified requirement cannot be met.

3.2.1.5 Solution provider / System Integrator must include full product description and technical literature for the system offered as part of the tender.

3.2.2 Book B (Project & Costing)
Solution provider / System Integrators for this section of the RFP Proposal format must include the following as detailed below:

- Introductory letter including ‘Total Project Cost’ and any proposed staged payments
- Solution provider / System Integrator Summary.
- Schedule of Rates “SOR” (PDF and Excel Versions)
- Complete Project Team org-chart and details
- Customer / Project Reference

Please provide full detail breakdown of cost for software license (one time or annual), implementation (full breakdown of labour-hours) as well as the support and maintenance notwithstanding any related cost that APEC may incur with the existing environment.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Number</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Software Licence&lt;br&gt;Please specify complete breakdown, include available options (if any). One Time Perpetual or Subscription based license</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Professional Services (Man Days)&lt;br&gt;If there are different levels breakdown each consultant type,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Support &amp; Maintenance&lt;br&gt;Please highlight if there is support and license maintenance are separate.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Hardware (if any)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2.2.1 Solution provider / System Integrator shall state whether it is currently or has done business with the APEC Secretariat in the past. If so, provide the nature of that relationship with the APEC Secretariat business contact and any other relevant information.

3.2.2.2 Solution provider / System Integrator shall warrant and represent to the APEC Secretariat and will certify upon request that,
Solution provider / System Integrator is duly organized and existing in good standing under the laws of the state/country of organization and no proceedings for the liquidation or dissolution of Solution provider / System Integrator are pending or contemplated and

Solution provider / System Integrator shall provide and perform all services in compliance with all applicable laws and regulations. Solution provider / System Integrator shall keep confidential all information concerning APEC business activities to which the Solution provider / System Integrator’s employees or its agents may acquire access and all information and material developed by the Solution provider / System Integrator under the agreement with APEC. The confidentiality restrictions contained in this section shall survive the termination of this RFP for a period of five (5) years.

3.2.2.3 Solution provider / System Integrator shall not use the name or marks refer to or identify “APEC” in advertising or publicity releases, promotional or marketing materials, announcements, customer listings, testimonials or advertising.

3.3 APEC

3.3.1 APEC, point of contact
Please send the proposal via email to the attention of the Procurement Officer, APEC Secretariat, at: procurement@apec.org no later than 5:00pm Singapore time (SGT), 20th July 2020.
Please contact Mr. Jose Tan Castro Barron at jtb@apec.org, if you need further information.

3.3.2 APEC actions
3.3.2.1 All information received by the APEC Secretariat shall be treated in the strictest confidentiality.

3.3.2.2 Solution provider / System Integrator shall note that a response to this RFP does not commit the APEC Secretariat to any course of action resulting from its receipt. The Secretariat is not bound to accept the lowest price and may at its discretion:
- Reject any response.
- Reject any response that does not conform to instructions and specifications that are contained herein.
- Select a Solution provider / System Integrator based on its own unique set of criteria.
- Accept a response after the final return date.

3.3.2.3 Solution provider / System Integrator will be assessed on:
- Company profile.
- Compliance with the instructions of this document.
- Quality and details of the tender response.
- Project management, Delivery and installation ability.
- Reference sites and supplier relationship.
- Overall price.
- Warranty & accreditation, Service and support.
### 3.3.2.4 Schedule

<table>
<thead>
<tr>
<th>Event</th>
<th>Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal Submission</td>
<td>20&lt;sup&gt;th&lt;/sup&gt; July 2020 5:00 PM SGT</td>
</tr>
<tr>
<td>Presentation by chosen Tenderer</td>
<td>18&lt;sup&gt;th&lt;/sup&gt; September 2020</td>
</tr>
<tr>
<td>Demo / Pilot by shortlisted Tenderer</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Week of October 2020</td>
</tr>
<tr>
<td>Kick-off project</td>
<td>November 2020</td>
</tr>
</tbody>
</table>
APPENDIX 1 (Functional Requirement)

1  Functional Capability Model

2  Core Components

2.1  Customizable User Data Input Forms

- The system shall provide User Data Input Forms that can be customized, i.e., a system administrator can:
  - Customize the fields - Add, Delete, Modify
  - Define the data source for drop-down lists, look-ups and tooltips
  - Manage (edit, add, delete) the drop-down lists, look-ups and tooltips data sources
  - Specify conditional population of drop-down list, text fields and formulas
  - Assign specific field properties such as maximum word count on text fields; or minimum and maximum values on numeric fields such as cost or duration
  - Assign of regional fields such as dates
  - Define the flow of events between
  - Define workflow and data flow between the fields within a form and to/from other forms

- The system shall provide autofill services by referencing previous forms or already stored data and information.

- The system shall contain proofing tools such as Spell Checks, etc.

- The system shall provide basic indicators for a set list of words that should be noted by the author.

- These forms shall be modular in nature, i.e., one or more form can be called within another form.
2.2 Customizable Checklists

- The system shall have checklists generated from the workflow checkpoints and tollgates. These Checklists shall be configurable, i.e., a system administrator can customize (add, delete, modify) which workflow checkpoints should appear in a list and define the manual checkpoints.

- The system shall automatically populate the activity status in the checklists.

2.2.1 Workflow Checkpoints and Tollgates

- The system shall have functionality to define the checkpoints and tollgates against certain activities in the entire workflow.

- The system shall capture the activity statuses automatically.

2.3 Inline Content Editor for Authoring

- The System shall have an Inline Content Editor for WYSIWYG (What You See Is What You Get) authoring and editing of topics. It will appear for all use cases requiring development of multi-line text including construction of tables, insertion of images, styling the headings and text.

- Tables constructed within the content will transform into data lists.

- The Inline Content Editor shall have basic formatting features such as pre-configured styles for headings, paragraphs, lists, etc.
The Inline Content Editor will facilitate collaborative editing, change tracking, etc.

2.4 Content Publisher

- System shall generate an HTML output from the user data and publish it as a web document (web page). For example, in a list of project proposals, a user can select to view it as a complete web page.
- System shall provide HTML templates for publishing different types of web documents for online viewing. For example, to publish a concept note or a project proposal, one type of HTML template shall be used and another type for publishing reports.
- System should allow sys admin to customize the HTML templates.
- System should be able to output the final HTML file into generally accepted file types such as PDF and Word Documents.

2.5 Collaboration Tool for Published Contents Review
The collaboration tool will help the reviewers to perform the following actions on the published (HTML) contents:

- Highlight text and insert comments against it
- Insert comments without any text selection
- Respond to comments
- Strike through text to mark a deletion
- Insert text
– All the comments will carry the date and time stamp besides the user’s short name.
– System shall allow the users to respond to any comment, i.e., comment on a comment.
– The active users’ (currently online) short names will be displayed in the collaboration window.
– **Collaboration by Email:** Review feedback submitted through emails by the external users should appear against the corresponding published content so that the comments can be viewed by the other authorized reviewers.
– External users have the facility of downloading the published contents in the form of a PDF or Word document to review offline. The comments inserted in the PDF files should be brought into the system.
– Users will be able to view any two versions of documents/contents side by side. System shall highlight the differences in the two versions.

### 2.6 Document Management

#### 2.6.1 Document Processors
– System shall have a functionality to convert User Forms into MS-Word documents and Excel spreadsheet (wherever applicable) that can be downloaded for offline editing and data entry.
– The Word document and Excel spreadsheet should be completely locked except the editable field where the user can fill the contents. Wherever applicable, the dropdown lists should be pre-populated.
– Upon upload of Word and Excel files, system shall capture the contents from the document fields and populate the respective sections of the User Data Input Forms.
– System shall generate all standard letters in MS-Word file format that can be edited offline using the standard document templates.
– System shall allow downloading the published contents, such as RFP, as a PDF file.

#### 2.6.2 Document numbering & naming
– System shall automatically assign a Unique Document Number to the documents created on the system. Project Code shall be the baseline for generation of this unique document number.
– Depending up on the type of document and the process it belongs to, a document naming and numbering convention will be defined as business rules by the sys admin (numbering convention to be decided during the technical design phase).
– Documents, such as contractor invoices, air travel proof, etc. that are submitted by the external users will also be assigned a unique identification number and will be automatically linked to the project code they belong to.

#### 2.6.3 Document Versioning
– Each time a document and published content undergoes a change; the System shall automatically increment its version. This applies to all the documents produced by the system.
– Versioning is not applicable to documents submissions by external users.
2.6.4 Auto-Save

- System shall periodically save the contents automatically.
- Besides auto-save functionality, System shall also provision a manual save option.

2.6.5 Document Templates

- System shall have functionality to upload MS-Word Document and MS-Excel templates for creation of standard letters, etc.
- System administrator should be able to link the required templates to the user forms, i.e., within a user form, a user will be able to select a desired template to generate a document.

2.6.6 Document Uploader

- Wherever a user is required to upload the documents (PDF, Word, Excel and Image files), the System shall have a Drag and Drop functionality besides the usual Browse and Upload functionality.

2.7 Reports Designer
- System shall have pre-configured operational and management reports (details to be decided during technical design phase).
- System shall have user configurable report building functionality wherein the users can select the desired fields to design the report.
- System administrator can edit existing reports or create new ones by grouping and filtering the data elements.
- Options to use Data Grid for a simple preview of data or build a customized data view or build pivot grids.
- Reporting tool shall have multiple chart options, including pie and donut charts, bar charts, etc. to help with data visualization.
- The report data shall be organized through multiple data sources or data field viewer and data tags viewer.
- The report building functionality shall be intuitive, not requiring any technical or querying skills.

2.8 Real-Time Status Tracker

- The following project activities calendars are required:
• Major Events, such as SOM1, SOM2, etc.
• Concept Notes Lifecycle Timelines
• Project Proposals Lifecycle Timelines
• Project Work Plans
• Contracts Disbursement Lifecycle
• RFP Services Timelines
• Project Events schedules
• Project Event Timelines
• Project Implementation Milestones
• Reports (MR, CR) Timelines
• Publications schedules

– Activities scheduling will be available to the internal users and PO.
– PDs and PMU shall have control over who can view which timelines. That is, they should be able to define the access rights to different sections of calendar items.
– The calendar shall have functionality to setup auto-reminders periods and frequency.
– The personal and working group calendars should sync with Personal MS outlook calendar and vice-versa.
– Whenever a new event is added to the MS Outlook calendar, this event will automatically show up in the system calendar and vice-versa.

2.9 Tasks & Workflow Management

– Tasks management functionality shall include automatic generation of workflow-based tasks and manual creation of general tasks.

For example, in a workflow-based task, when a user publishes a concept note or a project proposal for review, the task to review automatically appears under the New Tasks section in the dashboard of assigned reviewers. Simultaneously, the same task appears under the In-Progress Tasks section of the user who published the item for review. Upon completion of review by an assigned reviewer, the task moves into the Finished Tasks section in the reviewer’s dashboard and appears under the New Tasks section of the task initiator.

In a general task, a user creates a To-Do type of activities lists and assigns completion dates.

– The tasks are broadly categorized as:
  • On-going
• Set by me
• Supervising
• Following
• Favorites

All these tasks categories shall have the following task status sections:
• New
• In-Progress
• Require moderation
• Finished

- Tasks bucketing: The System shall provide a complete view of all categories of tasks against a project, forum, user, event, etc.

- Workload View: System shall provide a complete view of the PEs workloads to the PE team leader and reporting PD. The parameters required in one or more views shall be decided during the technical design phase.

- Tasks workload view can be drilled down to finer levels wherein the PE team lead can view the tasks distribution – Responsible, Assisting, Following, etc. and view each of these tasks.

- Task Delegation: The system shall allow the PE team lead to redistribute the work load from one PE to another. The system will automatically notify the impacted users.

- Users will be able to filter the tasks by several parameters such as activity status, activity stage, due date, etc.

- System shall allow the super-users to configure or customize the workflow. The functionality need not necessarily be a visual process editor.
2.10 Alerts and Notifications

- System shall have functionality to define and modify the notifications, alerts and triggers for any activity in the entire workflow.
- Sending and receiving task notifications shall be automatic. These notifications shall be triggered through set of automation rules.
- The triggers shall be activated when
  - there is a change in task stage & status,
  - a deadline is approaching, and
  - a deadline has crossed
- Super user and system administrator should be able to define the recipients of notifications and alerts for each applicable activity in the workflow.
- System shall notify the external users through emails as well.
- Super user should be able to customize the contents of Email notifications.

2.11 360-degree Project View

- System shall provide a complete 360-degree view of all the components related to or associated with a Project in a manner that any related component can be accessed from another related component. That is, every component will act as a pivot to other related components thus leading the user to the required information quickly.

  For example, when a project implementation status is being viewed, a user should be able to view the milestones, work plan, expenses, and every other entity that relates to the project.
Each node in the view shall lead to sub-nodes in a parent-child fashion and vice-versa.

2.12 Project Guidelines Reference

- System shall host all the Guidebooks online in the following forms:
  - Online HTML Help in a structure similar to or better than the sample shown above.
  - Single PDF file that can be downloaded for each type of guidebook
- Users should be able to perform search in the entire guidebook or specific sections.
- Contextualized Help: All topics shall be in authored as Topic Objects so that they can act as Single Content Source to feed into the on-page and in-line help as per the context.

  For example, when a PO is developing a concept note, a click at on-page or in-line help should display only the contextualized guidelines relevant to the concept note development action points. See the sample below.
- In-Field Compliance Prompts: System shall have In-Field compliance prompts for select user input fields (to be decided during the technical design phase) wherein the system automatically provides a list of the key requirements and processes besides providing a list relevant tasks to be fulfilled.

- The contents of these prompts shall be editable by super user.
2.13 Survey Builder

- System shall have an internal or integrated survey building tool.
2.14 Lists Data Manager

- This tool shall be simple to use, something similar to Office365 Forms or Google Forms.

- The system shall automatically build lists from the user data of certain fields (to be decided during technical design).

- System shall allow the sys admin to construct new data lists for any type of object, including files.

- Sys admin should be able to construct the lists by importing the data from Excel workbook.

- System should optionally have workflow enabling functionality to automate the execution of various actions with List elements.

2.15 User Identity and Access Management

- UIAM shall be derived from the standard specifications employed by the APEC Secretariat for its current IT systems. It will follow the roles, responsibilities, relations and conditions defined by the APEC IT unit.

- UIAM comprises of the following components:
  - **Internal contacts** – These refer to the APEC secretariat internal staff and are available in the Secretariat’s Active Directory.
  - **External contacts** – These refer to the working groups and Fora members, currently maintained in another Active Directory

- **Contact Lists Access**: System shall provision for sys admin to manage access permissions of different sections of Lists and their elements. Access control shall be configured by enabling/disabling the users, user groups or departments.

2.15.1 Organization Map

- System shall have the functionality to define the organization structures which can be used for automating the workflows. These org maps will be interrelated as APEC comprises of forums, working committees, secretariat staff, cross-fora activities, etc.

- The org maps will derive internal users’ data from Active Directory.

2.15.2 External User on/off-boarding

- Event attendees will be automatically on-boarded by using their Email ID as a Primary User ID. System shall generated a Unique User Number, for example, ExUsr001.TR which will act as a Secondary User ID.

- Upon event closure and accounts settlement, PE will flag the attendees for off-boarding.

- System Administrator should be able to easily configure the roles and access rights of the users.

- System shall have functionality to detect and prevent duplicate user on-boarding.

- PE should be able to identify the payment defaulters and mark them into blacklist.