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# SAP ABAP Services

11-July-2013

# Abstract

This document is the Technical specification for the Call for Expertise for the SAP ABAP Services for ITER Organization (IO). It covers technical specifications and developments for evolutions and corrections mainly in the areas of Material Management and Finances.



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# **Technical specifications**

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# 1. Introduction

# 1.1. Purpose and scope

This document is the Technical specification for the Call for Expertise for the SAP ABAP Services for ITER Organization (IO).

# 1.2. Goal of the document

The ITER Organization Administration Department is in charge, for the entire ITER Organization (IO), of administration (Finances, Human Resources, Procurement and Logistics management). The ITER SAP has been implemented to support the Administration Department needs.

IO SAP system went live in September 2008 after a particularly fast development. Since then, the Application Maintenance team has been implementing additional functionalities and stabilizing the system.

The ITER Organization Project Control and Assembly Directorate is in charge, for the entire ITER Organization (IO), of assembly of the machine. A dedicated IT tool, SMART PLANT, is under implementation and has to be integrated with ITER SAP solution.

In addition to the current Application Maintenance Services contract, IO needs a new SAP ABAP contract for 6 months in order to integrate Smart Plant Material with SAP. This document is the technical specification for the SAP ABAP Services Call for Expertise.

Its goal is to provide the bidders with information concerning the IO SAP system and IO's expectations concerning the developments services.

# 2. Scope of the AMS

This chapter presents the scope of the current Application Maintenance Services, in terms of:

- organization, inside the ITER Organization (IO),
- delivery model,
- SAP and non SAP modules
- technical constraints

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# 2.1. IO Organization and SAP stakeholders

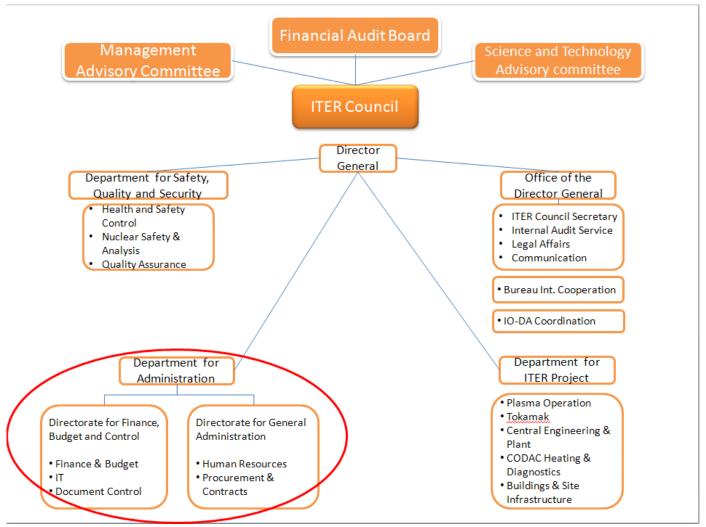


Figure 1 - ITER Organization



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IO SAP has been implemented by the Department for Administration in order to support the administration needs of IO in terms of:

- Finance & budget
- Procurement & contracts
- Human resources

# 2.2. Roles and responsibilities

The following roles and responsibilities are defined for SAP implementation. All of the descriptions below describe the current organization for the SAP team and its planned evolution. This is described for information only and may be modified at any time based on new business needs or experience.

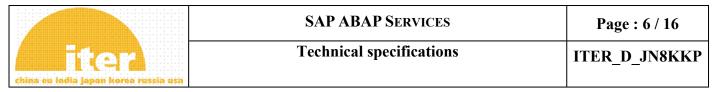
- The business needs will be defined by the administration department and possibly complemented by other key users for Project Control and Assembly Directorate.
- The IT section has the overall implementation responsibility. Consequently the IT Section Leader is the 'SAP sponsor'. He is responsible to make final decisions concerning top level implementation decisions. He is also responsible for the AMS contract.
- For the 3 main divisions of administration (HRD, PCD, and FBD) process owners continue to be defined which are responsible for the definition of business needs.
- The 'ERP Responsible Officer', (Enterprise Resources Planning) reporting to the IT Section Leader, will translate the business needs into functional and technical specifications. The ERP Responsible Officer is responsible for all day to day activities concerning SAP.
- The ERP Responsible Officer will be technically supported by an IO person able to set configurations and implement customizations hands-on. This person advises the SAP Responsible Officer concerning implementation details and technical proposal from external consultants.
- External experts shall help developing functional and technical specifications, writing documentation, perform training, coaching, configuration and customization, and IT administration tasks (set up and maintenance of servers, software installation, database configuration, network settings, backup etc.).
- The steering committee composed of the division heads of finance, procurement and HR, the DDG in administration, and the IT Section Leader are scheduled with intervals of 3 to 6 months.

The IT section provides services such as First Line Support, administration for production systems and infrastructure.

# 2.3. IO Delivery Model presentation

The day to day responsibilities of SAP implementation and maintenance are with the ERP Responsible Officer who follows the various detailed processes.

The business needs will be submitted to a monthly project progress meeting called by the ERP Responsible Officer. If needed, a special ticket system folder can be created to track the various business requests. Participants are the SAP process owners and other experts as seemed necessary by the ERP Responsible Officer. In these monthly meetings priorities will be set to implement evolutions of the system. An informal progress report will be given by the ERP Responsible Officer on the state of the SAP system (issues, new features, planning, functional/technical specifications etc).

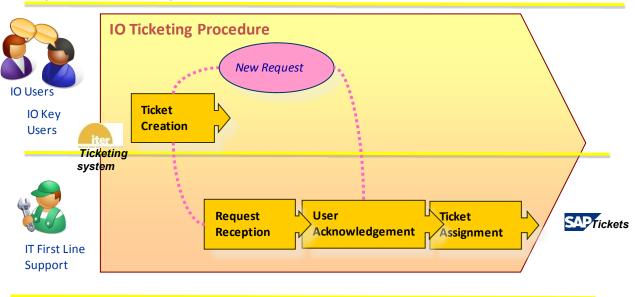


The ERP Responsible Officer will organize weekly progress meetings with the implementation and system administration team to track actions and discuss issues / ideas.

Every 3-6 month the ERP Responsible Officer will report to the steering committee about the progress made in the last 3-6 month and the plans for the next period of time.

# 2.3.1. IO Ticketing Procedure

Figure 2 - IO Ticketing procedure



IO users report any IT issue through the IO ticketing system supported by IT First Line Support.

IO SAP Key users can bypass the first line support by registering their issues directly in the SAP ticketing system.

# 2.3.2. Support procedure

A support procedure is activated when the IO user needs assistance or coaching.

IO has identified 4 teams of key users who are available for 1<sup>st</sup> level user assistance concerning:

- Finance issues
- Purchase requirement issues
- Human Resources issues
- Other issues

IO users know and directly contact the Key users when they need functional assistance. When an issue remains unanswered, they can address the AMS via IO Ticketing System.



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# 2.3.3. Issue Qualification

#### 2.3.3.1. Correction

When the system does not comply with a business rule described in the SAP documentation, a correction is needed. Corrections are defined by IO Process owners with assistance of the Functional Support, and prioritized by the ERP Responsible Officer before development. The development is done by the AMS. The transports to pre-production and for go live follow a dedicated procedure (SAP standard) with SAP Administration team.

#### 2.3.3.2. Evolution

When IO users need a functionality which is not described in the SAP Documentation, an evolution is required.

Evolutions are requested by the IO Process owners, who are responsible for the business rules definition and validation that they are correctly taken into account in the functional specification and then in the solution.

The AMS assists the IO Process owner validating the specifications, the workload and delay, and writing the tests sheets.

On request of the ERP Responsible Officer the AMS is responsible for writing the functional and technical specifications, estimating the workload and delivery date, based on developing and testing the solution.

# 2.3.4. SAP Administration

SAP Administration consists of maintaining authorizations and handling user management, maintaining transport routes and managing transports, monitor the system (updates, backup, database, batch ...) and control its performance.

SAP Administration falls under IT responsibility.

IT provides the server set up and network services.

There are (at least) four SAP environments to be maintained: test, development, pre-production and production.

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# 2.4. Functional scope

SAP is part of the Dynamic ITER Administration Management System (DIAMS). DIAMS is the global information system for Project Office and Administration Department.

# IO's ERP Systems architecture - Overview

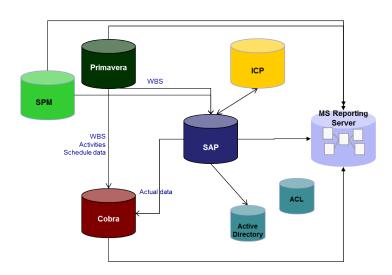


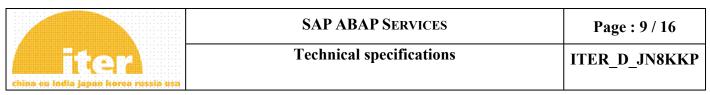
Figure 3 - DIAMS - Global information system for Administration Department and Project Control and Assembly Directorate (PCA)

# Administration Department PCA Primavera WBS Schedule data Actual data Actual

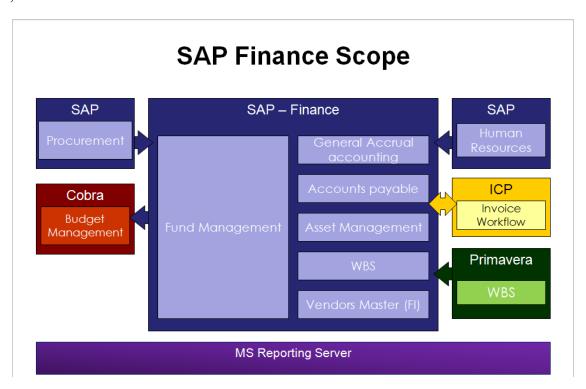
# IO's ERP Systems Maintenance Responsibilities

The main goal of this contract is to develop interfaces between Smart Plant Material (SMP) and SAP.

#### 2.4.1. SAP domains and modules



ITER Organization has implemented 3 SAP domains for the Admin Divisions: Finance and Budget, Human Resources, Procurement and Contracts.



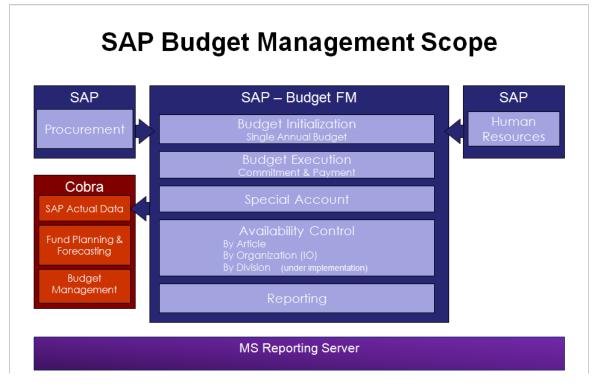


Figure 4 - SAP Functional scopes

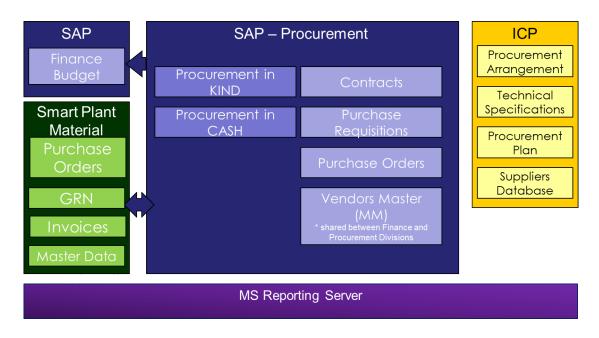


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# **SAP HR Scope**

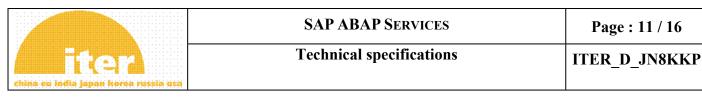


# **SAP Procurement Scope**



SAP is usable to a large amount of IO users through Procurement, Finance and Human Resources portals for specific activities such as:

- Purchase requisition
- Accounts receivable and invoicing
- Absence, travels and activity reporting



• Time Sheet booking

SAP modules FI, CO, PS, MM, AA, HR, and FM are implemented.

Their data are dumped in MS Reporting server for reports use.

# 2.4.1. Specific developments

The following specific developments have been identified for the integration between SAP and Smart Plant Material: (list is not exhaustive and may be amended according to ITER business requirements)

### 2.4.1.1. Procurement

- Master Data
- Purchase Orders creation
- Blanket Orders (PO) creation
- Goods Receipt
- Logistics Invoices

# 2.4.2. Non SAP Modules

#### 2.4.2.1. COBRA

IO has implemented COBRA, and some reports are generated from COBRA data.

# 2.4.2.2. MS Reporting server

A solution for reporting with SQL reports developed with the .Net framework is implemented.

# 2.5. Technical scope

#### 2.5.1. Available environments

|                                       | Dev   | Test  | PreProd                    | Prod                   |
|---------------------------------------|---|---|----------------------------|------------------------|
| <b>SSM</b><br>SAP Solution<br>Manager | -100 Main Client  |   |                            | -100 Main Client       |
| SAP<br>Enterprise Core<br>Component   | -100 Customizing setting<br>-110 Unit Testing<br>-199 Sandbox | -200 Customizing reference<br>-210 QualityTesting<br>-299 Sandbox | -500 Customizing reference | -600 Productive Client |
| Portal<br>Enterprise Portal           | -Unique Client  | -Unique Client  | -Unique Client             | -Unique Client         |

SAP is present on different environments: development - test - pre-production - production. For these environments, the different installed SAP parts are:

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- SAP ECC 6 with Microsoft SQL server for the database
- SAP Portal EP 7
- SAP SSM 4
- SAPGui 7.1 with Microsoft terminal server (TS)

SAP users connect with the link TS – SAP Portal – SAP ECC. SAP interactive forms are also used in these environments.

# 2.5.2. Security conventions

Some security conventions are already in place, such as:

- External contractors have read only access to the Production System (exception: IT system administration)
- Before each user creation, a requested profiles form is required and validated by the manager of the user and the process owner of the concerned domain.

A security audit is currently carried out and recommendations will be made.

#### 3. Estimated Duration

This contract shall be for a one year duration and will have 185 working days. Another optional year is possible with approximately 100 days.

# 4. Required ABAP Services

# 4.1. Service catalogue

Each service is explained in detail thereafter; services related to "Management of services" are explained in the dedicated chapter 3.4. Service management & reporting

The levels of expectations and performance measuring are outlines in a dedicated chapter and need to be validated.

# **4.1.1.** Application Maintenance – Evolutions

An evolution is requested when IO needs a functionality which is not described in the SAP Documentation. The business requirements are described by IO Process owners.

# 4.1.1.1. Qualification of evolutions

The AMS is expected to provide impact analysis, estimation of workload and timeline.

Evolutions estimated workload and timelines are then accepted by the ERP Responsible Officer.

#### 4.1.1.2. Documentation

Documentation is requested with any development of evolution. It must contain at least:

• The functional specification

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- The technical specification
- The unit and integration test sheets with test results
- A "how to" documentation for user manual's update
- The code of the evolution, if applicable

Documentation is to be delivered together with the transport to Preproduction request.

It is stored in IO's Documentation Management tool.

The code is to be stored in IO's Code repository.

# 4.1.1.3. Closing of evolution requests

Evolutions are delivered to the IO Process owner on the Preproduction environment for testing and validation. Transport to production is requested after validation of the responsible Process owner and approval from the ERP Responsible Officer.

Evolutions are closed by the AMS after transport to production. If the user does not agree with this closure, he will be able to reopen it.

Transports to production should have no collateral impacts on the system. The AMS team has the responsibility to analyze impact, develop, test and give IO teams all necessary information in order to avoid any incident on the production environment due to a go live.

#### 4.1.2. Ad-hoc support interactions

Ad-hoc support interactions will be performed on demand.

# 4.1.2.1. Training of IT First Line Support

The IT First Line Support expects to be regularly updated by the AMS team concerning SAP evolutions and frequent users questions.

# 4.1.2.2. Users' training

IO could request punctual users' training session concerning one or several functionalities.

# 4.1.2.3. Other services

For bigger projects, the AMS team could be requested to handle project management.



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# 4.2. Expected profile

The ABAP services Team must be made up with at least:

• ABAP skills Minimum experience: 3 years

SAP Certified competencies will be favored.

Expected profiles should have experience in international projects.

# 4.3. Qualifications

• Relevant university degree or equivalent.

# 4.4. Service availability

The ABAP Team is to be available during ITER working days, for 8 hours per day plus 1 hour lunch break between 8 AM to 5 PM local time.

Although the majority of the services can be carried out off site (remotely), on-site services must be delivered, on average, 1 day a week. Depending on needs, on site presence can increase during a limited period, to be agreed by both parties. The expectation is for a total of 185 working days per person for the first year

In case of a critical problem to be fixed urgently. if at that moment technical consultant is working remotely, he will have to be able to be on site within 2 hours.

#### 4.5. Service management & reporting

#### 4.5.1. Reporting

Monthly reports are expected from the ABAP Service provider, concerning its activity. The payment will be based on these monthly reports.

# 4.5.2. Risk anticipation and mitigation

When any risk is anticipated on the SAP System, the ABAP Service provider is encouraged to propose action plans.

# 4.6. Changes/extension to the scope or to services

Changes could be made to services as long as both parties (IO and ABAP Service contractor) agree to these changes and the overall cost is not affected. The SAP sponsor must validate each of such a change/extension.



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#### 4.7. Tools

# 4.7.1. Access to IO system

Laptops with LAN access will be provided.

# 4.7.2. Tickets follow up and documentation management

IO has a set of tools for:

- Web based ticket follow up (Ticketing system)
- Documentation management
- Code repository.

The AMS has to use these tools.

# 4.8. Technical requirements

All developments must observe IT rules and policies.

Developments must observe naming conventions, coding comments rules and modifications follow up which will be defined together with the ABAP Service contractor at the beginning of the contract.

For easier maintenance, SAP standards must be promoted by the ABAP Service provider before any development.

#### 4.9. ITER Deliverables & contribution.

# 4.9.1. IT teams and systems availability

A SLA has been defined between IO Administration and IO IT teams, the attributes are on the production environment:

- Open days are 5 days a week (Monday to Friday)
- Open hours are 8:00 AM to 6:00 PM.
- The system will be available outside of those slots without support or commitment from IT team.
- System availability = 98%

# 4.9.2. Software maintenance contracts

# 4.9.2.1. SAP Maintenance

A contract has been signed between IO-IT and SAP for the software maintenance. This contract covers the annual maintenance on the IO SAP licenses together with the option: SAP premium support.

This contract contains:

- The basic contract will provide releases and new versions
- Each SAP code delivery has to be installed (IT) and tested (Admin) by IO
- The option covers the SAP standard software anomalies (bugs) with a SLA
  - The SLA is 7d/24h for high severities (1 and 2)
  - o For severity 1 = 1h for SAP action time − 4h for SAP corrective action (on site intervention can be decided by SAP)
  - $\circ$  For severity 2 = 4h for SAP action time no SLA for SAP corrective action
- The option provides a unique SAP support advisor is named for IO
  - o The SAP advisor manages the relation between IO and SAP support
  - o The SAP advisor provides a regular quality check on IO environment

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#### 5. Selection Criteria

- 1. Experience and qualifications
- 2. Price (daily rate),
- 3. Proposed time schedule and availability,

Ratio: 60% technical 40% financial

The selection will be based on the CV(s) of the proposed person(s) delivering this service.

Before the final decision is made the pre-selected candidates may be ask to present a presentation.

# 6. Payment schedule / Cost and delivery time breakdown

The payment shall be granted on a monthly basis following invoicing for agreed daily rate and actual work performed. No payment shall be made before the report corresponding to the invoiced work is delivered to IO. In case of IO authorized travel, the IO shall reimburse all travel costs including transportation, accommodation, and meals within the IO guidelines that apply for travel missions.

#### 7. Transition

The bidder shall also propose a transition plan in case of termination of this contract.