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Technical Specifications (In-Cash Procurement)

Technical Specification for the Framework Contract for Design and Configuration Control support

This technical specification defines the scope of the framework contract for Design and Configuration Control support

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1. Purpose

The purpose of this technical specification is to define the scope of work for the Framework Contract for Design Control and Configuration Management (CM) Support to the ITER Organization Central Integration Office.

The objective of this specification is to define the required fields of expertise and needs for ensuring satisfactory support to perform activities being under the scope of Design and Configuration Control Section.

The Contractor(s) of this Framework Contract for Design Control and Configuration Management Support shall provide the services needed through for the period of 3 years 2023 - 2025.

The main services to be provided, detailed here under, are:

- Engineering and general services support to design control activities
- Engineering and general services support to configuration management activities.

2. Scope

2.1 ITER project

The ITER project aims to demonstrate the scientific and technological feasibility of fusion power for peaceful purposes and to gain the knowledge necessary for the design of the next stage device.

The ITER project is organized as an international research and development project jointly funded by its seven Members; the European Union (represented by EURATOM), Japan, the People's Republic of China, India, the Republic of Korea, the Russian Federation and the USA.

ITER is being constructed in Europe, at Cadarache in southern France, which is also the location of the headquarters of the ITER Organization (IO).

During ITER construction, most of its components are being supplied "in-kind" by the ITER Members. These in-kind contributions are being managed through a Domestic Agency (one per ITER Member) located within the Member's own territory.

More details about the Project Organization, The Domestic Agencies, the IO location and other different aspects of the Organization are available on the website: <u>www.iter.org</u>.

2.2 Scope for ITER Design control activities

Design control is the process ensuring that design data are properly developed, identified, released (or approved), distributed and stored. It consists on design planning, input & interface control, development, verification & validation and change control. More details are provided below.

The contractor shall provide engineering and generic services to IO/CIO/CMD division necessary for the Design Control activities.

2.2.1 Design planning

Design planning consists in the elaboration of the design activities and deliverables to be planned and/or documented prior to the design development, and maintained throughout the project lifecycle, in order to ensure compliance, integrity, and consistency of the design. It materializes in a design plan and document production plans for each SSC.

2.2.2 Design input control

This consists in making sure that all relevant inputs to a design are well identified, clarified, and documented, so as to make sure that the proposed SSC design is compliant with the project's needs.

2.2.3 Design development

The design development is the set of activities to be performed to transform the design input into a complete set of design output documents for a given design phase as defined in the Design Plan. It follows specific rules, in particular with regards to the expected content of some key standard deliverables (System Requirement documents, Design Description documents, diagrams, etc...).

2.2.4 Design verification and validation

This consists of the set of activities to be managed to ensure that all the design tasks for Structures, Systems, and Components (SSCs) are appropriately designed and that the requirements are adequately incorporated into the design. This verification and validation materializes, during the design, via the preparation of design compliance matrices, qualification documentation, and via the performance of design reviews.

2.3 Scope for ITER Configuration management activities

Configuration Management (CM) is the process that establishes and maintains the consistency of a product's attributes with its requirements and associated configuration documentation. It distinguishes four main processes: configuration identification, configuration control, configuration status accounting, and configuration verification, reviews & audits. More details are provided below.

The contractor shall provide engineering and generic services to IO/CIO/CMD/DCC section necessary for the Configuration management activity.

2.3.1 Configuration identification

Configuration identification is the process upon which all configuration management activities are based. Configuration identification is a decisional activity dedicated to:

- The identification of Configuration Items using a graded approach;
- Selecting technical documentation to record the functional and physical characteristics of those CIs;
- Assigning unique identifiers to the identified CIs and documentation;
- Establishing the project technical baselines and reference configurations.

For the proper configuration identification it is essential to ensure that technical baseline has a complete set of data including transverse technical data (radiation maps, loads etc.) that is properly propagated through all baseline levels.

2.3.2 Configuration control

Configuration Control is the configuration management activity that controls the evolutions of, or departures from, agreed configuration baselines. This activity includes the evaluation of the need for a change, its formulation, performing impacts analysis and justifications, implementation of the proposed changes in the associated configuration documentation and effected items and disposal of the change.

Identified needs for change to the established configuration baselines are managed through the

Project Change Request (PCR) procedure. The PCR is the management tool used to implement a configuration change to a CI and its associated configuration documentation that belongs to one of the project's baselines.

2.3.3 Configuration status accounting

Configuration Status Accounting (CSA) is the CM activity that provides information about the current status of approved CIs and consists in recording configuration data as output of the other three CM processes, store them and release them so that they can be used in other processes.

The CSA activity allows to:

- Record all CI, product or system configuration information with its validity status in the chosen CM tool (in ITER PLM is used for this purpose);
- Return the information in a defined format according to the needs of the users;
- Assure safekeeping of the configuration information history;
- Assure the traceability of the decisions.

2.3.4 Verification, Review and Audit related activities

Configuration Verification is the process to verify that the requirements have been achieved by the design and that the design has been accurately documented. Configuration Verifications are mainly associated with configuration reviews. Configuration Verification is an activity that is common to configuration management, design process, systems engineering, manufacturing and quality assurance. They are performed at the project gate reviews.

The Configuration Verification process also uses the configuration audit in order to compare the defined characteristics in a configuration baseline to those presented by a CI, identify highlights and gaps and obtain an approved decision record for each CI. In order to verify the above, two configuration audits are performed:

- 1. Functional Configuration Audit (FCA);
- 2. Physical Configuration Audit (PCA).

3. Definitions & Acronyms

3.1 Selected acronyms

- CCB : Configuration Control Boards
- CMCT : Configuration Management Core Team
- CI : Configuration Item
- CM: Configuration Management
- DR : Design Review (CDR, PDR, FDR, MRR)
- IDM: ITER Document Management
- IT: Information Technology
- KPI: Key Performance Indicator
- PA: Procurement Arrangement
- PBS: Plant Breakdown Structure
- PCR: Project Change Request
- PIM: Project Issue Management
- PLM: Plant Lifecycle Management System
- SSC: System, Structure, Component
- TO: Task Order
- TRO: Technical Responsible Officers

For a complete list of ITER abbreviations see: ITER Abbreviations (ITER_D_2MU6W5).

3.2 Selected Definitions

- <u>ITER Organization (IO)</u>: An international Organization and team located in Cadarache and responsible, in close partnership with the Domestic Agencies, for the construction, commissioning, operations and maintenance of the ITER facility. The IO is in particular responsible for the requirements definition, the design, the performance, the configuration management, the project schedule, the monitoring of the construction, the assembly the commissioning, and the operations of ITER.
- <u>Domestic Agencies (DA)</u>: Stakeholders of the ITER project being on one hand suppliers of in-kind contributions and project managers. ITER members are: European Union, India, Japan, the People's Republic of China, the Republic of Korea, the Russian Federation and the United States of America.

- <u>Contract Responsible Officer (CRO)</u>: IO staff responsible for management and administration of a Contract. The CRO shall ensure compliance with the terms and conditions of the Contract, as well as documenting and agreeing on any changes or amendments that may arise during its implementation or execution of the Framework Contracts and associated Task Orders. Responsible to resource and performance monitoring, budget implementation, schedule and coordination of the services. Responsible for the validation of scope before the implementation of services under these Framework Contracts as well as for the review and recommendation of the Task Orders' dedicated technical specifications.
- <u>Technical Responsible Officer (TRO)</u>: Any IO staff responsible to the technical definition and provision of input for any given Task Order. He/she is responsible to technically validate the deliverable outputs provided by the Contractor under an associated Task Order under his/her responsibility.

4. References

- [1] ITER Configuration Management Implementation Plan (CMIP) (27LHHE)
- [2] Procedure for Configuration Identification (TZV743)
- [3] Procedure for Configuration Control, Review and Audit (TZY7YV)
- [4] Project Change Procedure (22F4E5)
- [5] Procedure for Configuration Status Accounting, Verification and Audit (3L8MYN)
- [6] ITER Systems Engineering Management Plan (SEMP) (2F68EX)
- [7] Design Review Procedure (2832CF)
- [8] Design Interface Control Procedure (28VNJG)
- [9] Design Change Control Procedure (U2QPDS)
- [10] Design Verification and Validation Procedure (R3KD8C)
- [11] ITER Abbreviations (ITER_D_2MU6W5)
- [12] Order dated 7 February 2012 relating to the general technical regulations applicable to INB - EN (7M2YKF)
- [13] Provisions for Implementation of the Generic Safety Requirements by the External Actors/Interveners (SBSTBM)
- [14] ITER Procurement Quality Requirements (22MFG4)
- [15] Requirements for Producing a Quality Plan (22MFMW)

5. Estimated duration

The duration of the Framework Contracts will be three (3) years, with one (1) option to extend the Framework Contracts for up to two (2) years. The decision for Option Release / extension shall be solely taken by the IO.

The work scope will be ordered through individual Task Orders which will define specific durations for each task ordered within the Framework Contract.

Task Orders shall be communicated to the Contractor and formalized at Task Order Level. No Task Order shall have a duration beyond the end date of the Framework Contracts. The starting date of the services shall be after the signature of the Contract, the related task order and the Kick-Off Meeting.

6. Location of the services

The services may be rendered in three foreseen location, which will be defined at IO's discretion for each Task Order.

- L1: At the ITER Organization's Site; The Contractor may decide about some remote work arrangements in case of unexpected constraints (COVID 19 pandemic, etc...).

- L2: At the contractor's premises, where the offices are at distance no longer than 1,500 Km from the IO Site; and/or

- L3: At the contractor's premises, where the offices are at distance is greater than 1,500 Km from the IO Site.

7. Contractor's Team organization

The Contractor shall be organized in order to comply with requirements as presented in this specification.

Typically:

- The Contractor shall nominate Service Team with the qualifications guaranteeing a successful execution of tasks as prescribed by this technical specification and relevant Task Orders.
- The Contractor shall nominate a single point of contact to the IO Contract Responsible Officer (CRO) and PCD for all commercial and contract management issues dealing with, but not limited to:
 - Management of the contract (solving of organizational issues, proposals aiming at improving efficiency, quality & cost-containment).
 - Management of the Task Orders (supervision of the expected deliveries in due time, resource flexibility & skill sharing; multi-tasking; training & coaching; collaboration ...).
 - Ensuring that the IO requirements for quality & performance efficiency will be met.
 - Regular information including monthly reporting on the Performance of each Task Order to determine the status of the activities and mitigate implementation, delay or over-cost issues; and when applicable in relation to the CIO Work Plan performance.
 - Participation to the regular committees and meetings related to Contract and Task Orders Management.
 - Management of the follow-up meeting.

The Contractor shall demonstrate that its organization takes into account the following:

- The Contractor shall clearly demonstrate that continuity is maintained through appropriate training and efficient handover during staff movements / replacements. For each Task Order, the Contractor shall provide a clear organization able to maintain the long term knowledge of component / topic and the continuity of the service. The Contractor shall guarantee that in case of resource replacement a hand over and overlap of at least 2 weeks is put in place (At the Contractor's cost).
- The Contractor shall implement the best industrial engineering practices in: configuration management, project administration, document and data control, research of multi-discipline solutions & their corresponding evaluation, specifications, technical documentation, code and standards, feasibility assessment, etc.
- The Contractor shall demonstrate that its Service Team is familiar and able to use complex systems for engineering data management like Project Lifecycle Management (PLM), in compliance with the IO manuals and work instructions.
- The Contractor shall demonstrate the implementation of ITER Organization safety and quality assurance/control requirements (as further detailed in this technical specification in Sections (16 & 17).
- Instructions for the execution of the contract shall be given by the IO's TRO only to the Contractor's Coordinator(s).
- The Contractor shall support and coordinate activities at both the IO site and Contractor's site.

8. Framework contract Work Description

The scope of this contract is divided into **5** main Work Packages. The Contractor shall provide the deliverables described for each Work Package when specified in the relevant task order that will be launched once the Contract is signed.

The coordination of all task orders on IO side shall be responsibility of the ITER project team. The detailed work estimate scope for the work packages and typical task orders is detailed below.

Any deviation of the service work shall be specified and formalized in consultation with the Contractor. An updated deliverable schedule and dates shall be then agreed.

All data shall be stored in a common exchange area and shall be used on regular basis. The detail of the tools and best practice to be followed to ensure a smooth group work and traceability will be defined and agreed at the start of the implementation.

The ITER Organization may request Contractor's staff to travel and work at Domestic Agencies (DAs) or locations other than the ITER site. In these instances there will be a provisional amount allocated in the respective Task order to cover the anticipated travel and all claims shall be made in accordance with the IO Mission Travel rules (available on request).

The scope of the 5 Work Packages is as follow:

- 1) Design Control process administration
- 2) Design Control technical coordination and support
- 3) Configuration Management process administration
- 4) Configuration Management technical coordination and support
- 5) WP5 Engineering review, verification and audits, and transversal issue resolution coordination

Each activity can be launched separately and independently using separate task orders.

8.1 WP1 Design Control process administration

Typical tasks and deliverables in the scope of the design control process administration area include, but is not limited to, the production of the following:

- 1. Data gathering: support in design reviews preparation by gathering mandatory documents and data according to the check lists;
- 2. Meeting administration: provide support in design review organization (list of participants, invitations, agenda, minutes drafting, review and approvals of documents etc.);
- 3. Trainings: support for the organization in provision and execution of guidance, working instructions and trainings on the tools and procedures for design control
- 4. Reporting: provide statistical and KPI reports for the design control, prepare analysis of the procedure steps implementation and propose possible improvements;
- 5. Communication: Update as per need the webpages describing the Design Control processes.

8.2 WP2 Design Control technical coordination and support

Typical tasks and deliverables in the scope of the design control technical coordination and support area include, but is not limited to, the production of the following:

- 1. According to the design review importance classification (final design review with specific monitoring), organization of framing / scoping meetings with the Design Developers;
- 2. Review and refinement with the Design Developers of the planned input document package for the design reviews;
- 3. Case by case assessment and participation to design control related documents such as design plans;
- 4. Support in the preparation of "Technical Document Family Cards", which are synthetic cards indicating the key content and rules for generating various types of technical documents;
- 5. Support in the preparation updates of IO's procedures for the design control function (for example design review procedure, design verification and validation procedure);
- 6. Support in the preparation of checklists;
- 7. Support in preparation of tools, specification of IT tools to support the Design Control function.

8.3 WP3 Configuration Management process administration

Typical tasks and deliverables in the scope of the configuration management process administration and support area include, but is not limited to, the production of the following:

- 1. Secretariat of configuration management related meetings: ensure the organization, planning, administrative support and follow up of meetings (agenda, minutes, actions, Record of Decisions);
- 2. Maintenance and administration of the CM (PCRs, PIMs) databases: manage data in Matrix/JIRA/Confluence and other IT tools;
- 3. Guidance to Technical Responsible Officers (TROs) and other users: provide support and guidance to Responsible Officers for the execution of the Project Change procedures;
- 4. Interactions with ITER Organization Directorates, Offices, Domestic Agencies and external collaborators involved: liaise with the stakeholders of the configuration management processes ensuring proper understanding of the roles, actions, tasks, activities;
- 5. Trainings: support for the organization in provision and execution of guidance, working instructions and trainings on the tools and procedures for configuration management, change control in particular;
- 6. Reporting: provide statistical and KPI reports for the configuration management, prepare analysis of the procedure steps implementation and propose possible improvements.

8.4 WP4 Configuration Management technical coordination and support

Typical tasks and deliverables in the scope of the configuration management technical coordination and support area include, but is not limited to, the production of the following:

1. **<u>CM identification</u>**:

- Identification of a complete set of information on CIs requirements, functional and physical characteristics;
- Quality check and coordination of baselining Configuration Items and relevant data in PLM;
- Setting reference configuration of the CI, related documentation and data in PLM;
- Coordination of the propagation of plant level transverse technical data (radiation maps, FRS etc.) to system level (PBSs) and support in the baselining effort led by IO;
- Coordination of PA related baselining activities.

2. <u>CM control:</u>

- Technical Coordination of change proposals preparation and impact assessment;
- Technical Support to PCR RO (PCR Responsible Officer) to prepare a Draft PCR with good quality prior to Configuration Management Core Team review (CMCT);
- Technical coordination with PCR RO and TRO to complete Impact assessment and define a PCR Implementation Plan (IP);
- Technical Support to PCR RO and TRO to complete Impact assessments and Implementation Plan in PLM in due time;

- Quality check of PCR status and TRO Impact assessments prior to Configuration Control Boards (CCB);
- Follow-up and monitoring of the implementation of the Change Actions according the forecasted due dates;
- Technical Support to PCR RO and TRO to complete Change Actions and related tasks (link to output documents, Applicability of Outputs documents, ...) in PLM;
- Quality check of PCR status and TRO Implementation tasks prior to Configuration Control Boards (CCB);
- Support to formulation of functional specifications for the PLM tool and processes improvements: draft functional specifications for PLM or other IT tools upgrades needed;
- Perform final user acceptance tests.

3. <u>CM status accounting:</u>

• Support to the issuance of CI Status Accounting Report.

8.5 WP5 Engineering review, verification and audits, and transversal issue resolution coordination

Typical tasks and deliverables in the scope of the engineering review, verification and audits area include, but is not limited to, the production of the following:

- 1. Perform quality review of the content of Configuration Items (CI) in PLM in support to Configuration Management Engineer and TROs;
- 2. Support design and configuration management audits preparation;
- 3. Coordinates the resolution of transversal engineering issues.

8.6 General tasks for all activities

The Contractor will be required to carry out a number of general tasks. These include but are not limited to:

- Review of the task's input content and, if needed, clarification with the TRO and other IO relevant Members (technical input, requirements definition and propagation, interfaces, codes & standards, deliverables, schedule, resources...);
- Development of the detailed work implementation plan including schedule & deliverables.
- Reporting the relevant activities in the Work Plan;
- Progress monitoring and associated documentation: reporting to the Contractor's management team, including regular meetings;
- Creation of monthly service status per Task Order, which include the Key Performance Indicators linked to the delivery and invoicing of the activities;
- Highlighting of errors or areas of possible improvements, and suggestion of corrective actions (solutions, organization...);
- Preparation of the Contractor's staff regarding IT tools used at ITER (PLM Matrix, JIRA, Confluence, IDM etc.);
- Advising CIO staff and ROs about methodological tools and requirements that have to be put in place as part of the services being rendered;

- Checking that the ITER QA system is respected by their Staff;Compliance with all relevant IO procedures.

9. Responsibilities and Resources Profiles

9.1 IO Responsibilities

The IO shall assign one IO representative, to work as sole Contractor interface for the coordination of the full Framework Contract.

The IO shall assign one IO representative, to work as sole Contractor interface for the supervision of each specific Task Order.

The IO representative(s) will assess the performance and quality of the work.

The IO representative shall be responsible for checking the deliverables against requirements, schedule and processes.

The IO shall make available to the Contractor all technical data and documents which the Contractor requires to carry out its obligations pursuant to this specification in a timely manner. For delays of more than two weeks in making them available, the Contractor shall advise the IO representative of the potential impact on the delivery of the task deliverables, to agree and define all the correction actions to be taken in place.

9.2 Contractor's responsibilities

The Contractor shall ensure that he complies with the provisions of the Contract in particular with the following:

- the Contractor shall guaranty that all input information provided to perform the services remain property of IO and shall not be used for any other Work Package than the one specified in this specification;
- the Contractor shall be in charge of the training & coaching of all its resources;
- the Contractor shall provide an organization suitable to perform the work as described in this specification;
- the Contractor shall work in accordance with the QA plan approved by IO;
- the Contractor shall perform the tasks accordingly to this specification taking into account all relevant additional documents and IO processes (hand books, export control, intellectual properties, etc.).

Prior to the start of work on each task, the Contractor shall review the input technical information provided to it by IO for completeness and consistency, and shall advise the IO representative of any deficiencies it may find. The Contractor shall not be responsible for errors in the input technical information which could not be reasonably detected during such review; duration of this review will be agreed between Contractor and the IO representative and will have no impact on the delivery schedule.

9.3 Resource Profile

All Task Orders under this Framework Contract are under a deliverable-based scheme.

Neither time and material work, nor time based services are allowed as part of the IO's internal policies.

The technical services to be supplied by the Contractor will generally require personnel with generalist experience capable of adapting quickly to the ITER-specific processes and practices. This can be achieved by adequate suitable training provided by the Contractor and

successful industrial experience covering as much as possible, several multi-discipline project phases (design, construction, installation etc.) and areas (system engineering, document control, planning etc.).

Each resource shall be associated with a reference *technical profile* (P1 to P5) as detailed in the next subsections.

The Contractor shall quote maximum rates for each type of these profiles. These rates will be used for the **verification of the quotes of the deliverables fixed prices** in each dedicated Task Order technical specification.

All rates shall be fully inclusive of all direct and indirect means for the execution of the services dependent on the Location specified. The IO shall not be charged for any additional fees supplementary to the rates such as management cost, allowances and/or licenses and equipment cost.

9.4 P1: Typical profile of a team member to perform tasks under WP 1 Design Control process administration

- At least 2 years' experience in coordinating the activities in complex international projects
- Basic knowledge of the systems engineering / design control processes ;
- Ability to work effectively in a multi-cultural environment;
- Ability to prepare concise and clear report in English;
- Proficiency in office software suite for the efficient and effective communication, study & analysis, report generation, presentation;
- Advanced knowledge of other IT tools used at ITER is an advantage.

9.5 P2: Typical profile of a team member to perform tasks under WP 2 Design Control technical coordination and support

- Engineering degree or higher technical education level
- At least 5 years' experience in coordinating the activities in complex international projects
- Advanced knowledge of systems engineering and design control methods;
- Advanced knowledge of the ITER architecture / main systems (or main systems of a nuclear-type facility);
- Ability to work effectively in a multi-cultural environment;
- Ability to prepare concise and clear report in English;
- Proficiency in office software suite for the efficient and effective communication, study & analysis, report generation, presentation;
- Advanced knowledge of other IT tools used at ITER is an advantage.

9.6 P3: Typical profile of a team member to perform tasks under WP 3 Configuration Management process administration

- At least 2 years' experience in coordinating the activities in complex international projects
- Basic knowledge of the configuration management processes ;
- Ability to work effectively in a multi-cultural environment;
- Ability to prepare concise and clear report in English;
- Proficiency in office software suite for the efficient and effective communication, study & analysis, report generation, presentation;
- Advanced knowledge of other IT tools used at ITER is an advantage.

9.7 P4: Typical profile of a team member to perform tasks under WP 4 Configuration Management technical coordination and support

- Engineering degree or higher technical education level
- At least 5 years' experience in coordinating the activities in complex international projects
- Basic knowledge of Project Change Management and Configuration Management;
- Advanced knowledge of the ITER architecture / main systems (or main systems of a nuclear-type facility);
- Ability to work effectively in a multi-cultural environment;
- Ability to prepare concise and clear report in English;
- Proficiency in office software suite for the efficient and effective communication, study & analysis, report generation, presentation;
- Advanced knowledge of other IT tools used at ITER is an advantage.

9.8 P5: Typical profile of a team member to perform tasks under WP 5 Engineering review, verification and audits and transversal issues resolution coordination

- Engineering degree or higher technical education level
- At least 5 years' experience in coordinating the activities in complex international projects
- Basic knowledge of Project Change Management and Configuration Management;
- Advanced knowledge of the ITER architecture / main systems (or main systems of a nuclear-type facility);
- Ability to work effectively in a multi-cultural environment;
- Ability to prepare concise and clear report in English;
- Proficiency in office software suite for the efficient and effective communication, study & analysis, report generation, presentation;
- Advanced knowledge of other IT tools used at ITER is an advantage.

10. Typical deliverables and due dates

The deliverables will be defined in each specific task order.

All formal deliverables shall be stored in the exchange area of the Framework and follow the workflow agreed in at the Kick of Meeting.

The typical deliverables for relevant WP are given below:

Task Description: Design control technical coordination and support			
WU	WU Title	Format	
ID			
Estimated performance of task			
	Specific monitoring for final design reviews: Preparation meeting	.doc	
D1	minutes		
	Specific monitoring for final design reviews: Review of input data	.doc	
D2	package list		
D3	Review of a particular design control related document (e.g design plan)	.doc	
D4	Procedure update proposal	.doc	
D5	Technical document family card update proposal	.doc	

Task Description: Design control Process administration			
WU	WU Title	Format	
ID			
Estimated performance of task			
D1	Training content preparation and execution	.ppt	
	Template proposal	.xls or	
D2		.doc	
D3	Reporting KPI set generation for a given period	.ppt	
D4	Design control webpage update	webpage	

Task Description: Configuration Management process administration			
WU	WU Title / deliverable	Format	
ID			
Estimated performance of task			
	New Project Change Request (PCR) load and processing in PLM	.doc	
	(Content check and review of initial proposals of draft changes, Follow	PLM	
	up and support to domain TROs on impact analysis of PCRs, Monitoring	Object	
D1	of PCRs implementation progress)		
	Technical meetings preparation and follow up (agenda drafting, minutes	.doc	
D2	taking, follow up of actions)		
	Individual support to TROs on change management	oral	
		report;	
D3		.msg	
D4	Periodic reports on PCR statistics, on Change Control process KPIs	.xls	

Task Description: Configuration Management technical coordination and support			
WU	WU Title	Format	
ID			
Estima	ted performance of task		
	Quality review of new Project Change Request (PCR)		
	(Check of the form of the PCR, check of the exhaustiveness of impacted		
	domains, check of the clarity of the PCR, Check of the scope of the		
D1	PCR)		
	Technical coordination in support to PCR RO and TROs for complex	.msg	
	PCR		
D2	(specific meeting coordination /organisation)		
	Technical Support to PCR RO and TRO to complete Impact assessments	Oral	
	and Implementation Plan prior to CCB	report;	
	(Quality check of PCR status and TRO Impact assessments prior to	.msg	
D3	CCB, Support to TRO to complete PLM tasks)		
	Follow-up and monitoring of the implementation of the PCR Change	Oral	
	Actions according the forecasted due dates;	report;	
D4		.msg; .xls	
D5	Functional specification for PLM tool improvements	.doc	
	PLM/ configuration management processes training content preparation	.ppt	
D6	and execution		
D7	PLM Final user acceptance test	.doc	

Task Description: Engineering review, verification and audits, and transversal i			
resolution			
WU	WU Title	Format	
ID			
Estimated performance of task			
D1	Configuration audit report	.doc	
	Verification of configuration data used in engineering processes	.doc, oral	
		report,	
		tickets	
D2		list	
D3	Transverse technical issue resolution/coordination report	.doc	

11. Acceptance Criteria

11.1 All deliverables to be "materialized" by a report in IDM

Even if deliverables are not per se documents (running platform, trainings, demonstrators, etc.), every main deliverables shall be "materialized" by a report in IDM.

Depending on the type of deliverables, it can be a "working instruction", a "minutes of meeting"), etc.

Type of report and content shall be agreed between IO and the Contractor at the start of the Work Package.

11.2 All deliverables document to be stored in IDM

All the deliverables produced in the scope of this services shall be stored in IDM <u>in a</u> <u>dedicated folder</u> (folder will be communicated at the start of the Work Package), based on the following mandatory work-flows (depending on templates).

11.2.1 Workflow for document following IO's template

For document using an IO form or an IO template (i.e. a document created in the IO document management system and showing the IO logo and details): the document should be stored in IDM (native format) implementing the following work-flow:

- Author: Contractor. By signing in IDM, as author, the Contractor certify that he has properly implemented its own QA process and that the document is ready to be delivered to IO
- Reviewer: According to the corresponding IO work-flow and procedures
- Approver: According to the corresponding IO work-flow and procedures

11.2.2 Workflow for document following Contractor's template

For document using a Contractor template / form (i.e. a document created in the Contractor document management system and showing the Contractor logo and details): the document should be stored in IDM as follows:

- The document should be stored in IDM with the following method:
 - in PDF format
 - with a clear demonstration of the Contractor's internal review process
 - attaching in the metadata of the document the native version (word, excel, ...)
 - using signatory instead of author
 - using an automatically generated IO cover-sheet
 - filling in the abstract with the following: "Document submitted for IO Acceptance"
- Signatory: Contractor representative
- Reviewer: According to documents contents and in particular impacted unit in interface
- Approver: Task Order Responsible Officer (Approval stands for an acceptance)

11.3 Review time

The maximum time for IO acceptance or comments in IDM is 10 working days after the storage (+IDM email) of the deliverables in IDM.

However, for documents longer than 20 pages, IO must be given sufficient notice and time to properly review the document through a pre-review.

A pre-review (using groupware tools put in place in the team) shall be used to submit any long document in advance.

11.4 Changes

In case of non-compliance/non-conformity of a deliverable or a set of deliverables, the Contractor shall correct them and re-submit them for review and acceptance; resubmission shall be at Contractor's cost.

11.5 Contractor compliance with the scope

In the event of the Contractor not complying with the scope and/or with the work and/or with the definition of the typical Required Profile as they are described for each Work Package in sub-sections of the section 8 of the present document and for the dedicated Task Orders, the ITER Organization reserves the right to inform the Contractor of such erroneous or incorrect actions in writing. In such instances, ITER Organization reserves the right to instruct the Contractor to re-perform any work necessary to make good any erroneous work or services of his own volition, and at the contractor's own cost. Such re-work will not be reimbursable and will be executed in a manner so as not to affect adversely on the progress of other parallel contract scope activity by the contractor.

12. Specific requirements and conditions

12.1 Working language

The working language of the ITER Project is English. Meetings shall be conducted in English. Software human interfaces, comments in code, emails, etc. shall be written in English. <u>All documents shall be written in English</u>. All personnel in direct interaction with ITER staff shall be fluent in English (written and spoken).

13. Work Monitoring / Meeting Schedule

13.1 Work monitoring

In some cases the Contractor may be required to undertake several tasks simultaneously and re-priorities services.

Regular progress meetings shall be conducted between the Contractor and the IO RO, if needed other meeting may be needed after mutual agreement. The format and frequency of the Contractor's progress report and the format shall be agreed between IO and the contractors and may vary depending on task urgency and criticality, needs of follow-up, etc.

13.2 Changes

The list of deliverables can be changed only by amendment to the Task Order.

Should the deliverables content and priority be adjusted, ITER and the Contractor shall arbitrate together in order to reach appropriate measures. The changes and decisions shall be recorded and formalized (e.g. using minutes of meetings).

14. Delivery time breakdown

The delivery of deliverables will be established on a monthly basis, as the deliverables track a continuous activity made of numerous various topics.

15. Quality Assurance (QA) requirement

The organization conducting these activities should have an ITER approved QA Program or an ISO 9001 accredited quality system.

The general requirements are detailed in ITER Procurement Quality Requirements [14].

Prior to commencement of the task, a Quality Plan must be submitted for IO approval giving evidence of the above and describing the organization for this task; the skill of workers; any anticipated sub-contractors; and giving details of who will be the independent checker of the activities (see Procurement Requirements for Producing a Quality Plan [15]).

Documentation developed as the result of this task shall be retained by the performer of the task or the DA organization for a minimum of 5 years and then may be discarded at the direction of the IO

16. Safety requirements

ITER is a Nuclear Facility identified in France by the number-INB-174 ("Installation Nucléaire de Base").

The supplier must comply with the all requirements expressed in "Provisions for implementation of the generic safety requirements by the external actors/interveners" [13].

For Protection Important Components and in particular Safety Important Class components (SIC), the French Nuclear Regulation must be observed, in application of the Article 14 of the ITER Agreement.

In such case the Suppliers and Subcontractors must be informed that:

- The Order 7th February 2012 [12] applies to all the components important for the protection (PIC) and the activities important for the protection (PIA).

- The compliance with the INB-order must be demonstrated in the chain of external contractors.

- In application of article II.2.5.4 of the Order 7th February 2012, contracted activities for supervision purposes are also subject to a supervision done by the Nuclear Operator.

For the Protection Important Components, structures and systems of the nuclear facility, and Protection Important Activities the contractor shall ensure that a specific management system is implemented for his own activities and for the activities done by any Supplier and Subcontractor following the requirements of the Order 7th February 2012 [12].

17. Handover

At the end of the contract, a specific service could be asked to the contractor to ensure the Handover of the activities to IO or IO contractors. This activity consists in the support and in the coaching during 3 weeks of a defined group of persons to be able to ensure the continuity

of the activities identified in the 6 work packages of the contract. A last report of this activities shall be produced supporting the handover.