Technical Specifications (In-Cash Procurement)

TECS_2022-09_CFT_Catia-Enovia_Systems_High_Level_Customized_Services

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1 Purpose

ITER Organization (IO) is using CATIA/ENOVIA V5 from Dassault Systems in order to support design & engineering activities. In order to have it integrated, those systems must be adapted based on the needs and requirements from Design Office and IT.

2 Scope

The IO IT section is looking for consultant(s) to provide solutions of well-defined task orders that will address complex enhancements, bug fixing development of top level architectures of solutions, administration and support for the existing CATIA/ENOVIA V5.

The objective of this call for tender is:

- To select a provider recognized for its expertise in CATIA / ENOVIA V5 customization, enhancement, administration and support;
- To conclude a framework contract that will supply services in CATIA / ENOVIA V5advanced customization and platform support.

3 Definitions

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

4 References

Not applicable.

5 Estimated Duration

The duration of the framework contract shall be of 5 years including 4 options of 1 year. The IO may exercise the option to extend these services for 4 times 1 year. Such option shall be exercised by written notice to the contractor no later than 30 days before the expiration of the initial term of the contract or of the additional period.

6 Work Description

The scope of work will be divided in 3 main areas of support:
- Implementation of CATIA/ENOVIA V5 customizations based on functional and technical specifications submitted by IO, testing, and deployment of the tools. This also includes fixing of the reported bugs and enhancement of ITER specific custom features based on defined needs.

- Customization / configuration needed for integration with other design office tools including DELMIA, 3Dlive, 3DVia composer, drawing title block generation tool, Q-checker, CADENAS, etc.

- Customization / configuration needed to support the custom made ENOVIA V5 ITER replication tool which was built on top of the Dassault Systemes provided toolkit.

- Administration & support of the various components of the CATIA/ENOVIA V5 platform including but not limited to availability, performance, capacity, configuration management, customization, hotfix management

- Customization needed for integration with other enterprise tools deployed by ITER. This includes but is not limited to PLM Matrix (based on 3DExperience platform), ICP (ITER Collaborative Platform), data warehouse and business intelligent tools, AVEVA design suite, SmartPlant solutions, etc. This also includes the maintenance of integration tools already implemented and to be implemented.

This also includes the processes integration, testing and bug hunting, technical documentation, data management, data analysis and data migration/correction by scripts.

This Framework Contract will be implemented by means of "Task Orders" (TO), signed by the Contractor and the IO. The TOs will be organized in work packages (WP) reflecting the ITER needs.

We have defined for this framework contract the following types of work-packages:
- New features implementation.
- Bug fixing or enhancement of already implemented featuresTop level architecture design, data migration and correction script
- Mentoring and coordination of team members (coaching and training**)**

Infrastructure correction or evolutionThe typical estimated duration for a work-package is **3 days**.

The primary focus of this contract will be regarding CATIA/ENOVIA V5 related tasks.

7 Estimated volume of activity

Based on previous year and future needs, the currently estimated volume of activity for year 1 would be of **35 work packages**.

8 Responsibilities

ITER:

IO will make available necessary access to the system in accordance with IO security policy.

IO will on-board properly contractor resources to give them the specific ITER project knowledge. In case of contractor resource shift this tasks will be contractor responsibility.

The Contractor:

The contractor shall be responsible for the organization of the work and production of all the deliverables described in section 8 below.

9   List of deliverables

As previously described in section 6, the work will be divided in work-packages. In order to validate the completion of a given WP, the following deliverables will need to be submitted and validated by IO.

The applicable deliverables for software development, configuration management or scripting related tasks:

- Customization documentation (design specification, interfaces design, installation & end user manual, etc.)
- Source code and other configuration items identified

The applicable deliverables for bug fixing and configuration tasks would be references to closed tickets and any other document produced to support those tasks.

For the tasks concerning top level architecture, data migration and correction scripts, the contractor should deliver the detailed design documentation including but not limited to data migration requirements documents and high level design document.

The applicable deliverables for mentoring and coordination tasks would be a combination of training and coaching reports and of the material produced to support the work.

Additional periodic entries in the in-house developed activity tools are expected from the contractor's team in order to facilitate the follow up of the work performed such as:

- Periodic time and activity logging: Ctime (In-house developed)
- Project management: Cpm (In-house developed)
- Ticketing follow-up: Jira.
- Packages consumption details.

10 Acceptance Criteria

Each item of work to be completed according to agreed deliverables shall be reviewed and accepted by the IO Contract Responsible Officer or a nominated representative.

11 Specific requirements and conditions

The contractor shall have demonstrated capabilities in CATIA / ENOVIA V5, for large and complex organizations, preferably in an international environment and in a complex contractual and organization setup (comparable to the ITER project).

IOs cost containment objectives also favour companies with a proven track record of delivering projects on time and within budget.

The specific qualification and experience sought by IO includes but is not limited to :

- Higher diploma or certificates in Engineering, Computer Science or equivalent for the resources being proposed by the company;

- At least 10 years' experience and outstanding skills in CATIA/ENOVIA implementation and customization;
- Data Model customization
- Software Development in C++ and other language
- Software development with CAA
- Windows Server environment
- Life-cycle management
- Development of processes, methodologies…
- ENOVIA LCA Viewer
- 3D.map, file-introspection system
- ENOVIA LCA Replication module (up to 8 concurrent sites)
- Mechanical and Equipment & Systems Catalogues
- Interfaces with other external software (DELMIA, analysis…)
- Interfaces with external DB
- Contribution to the interfaces with the IT office and software Editors
- Interfaces with Windows Server
- Software customization support consulting for other ITER-like complex systems Collaborative design with remote design Partners
- Testing new software, software modules & functionalities
- IT configuration management tools (Ansible or similar)
- Complying with Quality Assurance standards
- Demonstrated ability to produce high quality consultancy results
- Flexibility and adaptability to new requirements and work methodologies
- A high level of autonomy
- Capability to efficiently work within a team
- Very good knowledge of written and spoken English

12 Work Monitoring / Meeting Schedule

Regular progress meeting are expected (typical bi-weekly) and should monitor activity done versus the scheduling, with open action items, issues and action to complete and resolve.

Outcome of this meeting should be a formal weekly progress report including decision and action decided during the meeting

13 Quality Assurance (QA) requirements

The organisation 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 (ITER_D_22MFG4).

Prior to commencement of the task, a Quality Plan must be submitted for IO approval giving evidence of the above and describing the organisation for this task; the skill of workers involved in the study; 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 (ITER_D_22MFMW)).

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. The use of computer software to perform a safety basis task activity such as analysis and/or modelling, etc. shall be reviewed and approved by the IO prior to its use, in accordance with Quality Assurance for ITER Safety Codes (ITER_D_258LKL).

14 CAD Design Requirements (if applicable)

Not applicable

15 Safety requirements

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

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 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 [20].