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**Technical Specifications (In-Cash Procurement)**

# Technical specification for CATIAV5/ENOVIAV5 Support and Administration

This technical specification document specifies scope, associated Work-Units and the related deliverables for the support and maintenance of the infrastructure of the mechanical and plant design performed thanks to the ITER CATIAV5/ENOVIAV5 platform. This platform is used by several hundred designers and engineers at IO, 7 DAs, IO-contractors and DA suppliers.

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# 1 Preamble

This Technical Specification is to be read in combination with the General Management Specification for Service and Supply (GM3S) – [Ref 1] that constitutes a full part of the technical requirements.

In case of conflict, the content of the Technical Specification supersedes the content of Ref [1].

# 2 Purpose

This technical specification document specifies scope, associated Work-Units and the related deliverables for the support and maintenance of the infrastructure of the mechanical and plant design performed thanks to the ITER CATIAV5/ENOVIAV5 platform. This platform is used by several hundred designers and engineers at IO, 7 DAs, IO-contractors and DA suppliers.

# 3 Acronyms & Definitions

## 3.1 Acronyms

Please refer to the document ITER_D_2MU6W5 - ITER Abbreviations for the list of abbreviations.

The following acronyms are the main one relevant to this document.

| Abbreviation | Description |
|---|---|
| CAD | Computer Aided Design |
| CRO | Contract Responsible Officer |
| CV5 | CATIA Version 5 |
| DA | Domestic Agency |
| E&S | Equipment & Systems |
| ENG | Engineering |
| EV5 | Enovia V5 |
| DA | Domestic Agencies |
| GM3S | General Management Specification for Service and Supply |
| ICP | ITER Collaborative Platform |
| IO | ITER Organization |
| P&O | People and Organization |
| QA | Quality Assurance |
| QC | Quality Control |
| PBS | Plant Breakdown Structure |
| PRO | Procurement Responsible Officer |
| SSD | See System Design (IGEXAO software) |
| TO | Task Order |
| TRO | Technical Responsible Officer |
| WU | Working Unit |

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## 3.2 Definitions

**Contractor:** shall mean an economic operator who have signed the Contract in which this document is referenced.

**Domestic Agencies (DA):** Stakeholders of the ITER project which includes the European Union, India, Japan, the People's Republic of China, the Republic of Korea, the Russian Federation and the United States of America.

**Design Office (DO):** A unit within the IO with the overall responsibility to manage the CAD resources, CAD Production, CAD Infrastructure and Support Contracts to enable the project to perform its Engineering and CAD activities. It also has the mission to control CAD quality and efficiency of the design activities.

**Design Office infrastructure**: All processes, procedures, hardware and software that are required to enable the Design Office to perform its duties, including CAD activities at IO, Contractor's premises and at the DA/Suppliers.

**ITER Organization (IO):** 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. The IO is also responsible for establishing appropriate CAD infrastructure platform and design collaboration schemes between the IO, the Domestic Agencies and suppliers.

**Technical Responsible Officer (TRO):** Any IO staff responsible to the technical definition and provision of input for any given Contract. He/she is responsible to technically validate the deliverable outputs provided by the Contractor under an associated Contract under his/her responsibility.

**Contract Responsible Officer (IO-CRO):** shall mean the IO staff person accountable for the full-cycle contract performance including initiating the procurement request according to the procurement plan(s), preparing the technical documentation, in collaboration with the Procurement Officer, supporting the tendering process, ensuring the overall quality of the input data prepared for the tender and for the contract, and being the IO's single point of accountability for the overall performance of the contract once placed.

**Work Unit:** It is a single repetitive and identical task that is used in order to define certain repetitive activities. The Technical Specifications can formulate several Work Unit Types and the Contractor shall assign a fixed cost to each type. The Work Units per se shall not be considered deliverables. One Work Unit or Several Work Units can be delivered as part of a Ticket or request to be completed as a task, the ticket is the formalization of the client's request.

# 4 Applicable Documents & Codes and standards

## 4.1 Applicable Documents

It is the responsibility of the Contractor to identify and request for any documents that would not have been transmitted by IO, including the below list of reference documents.

This Technical Specification takes precedence over the referenced documents. In case of conflicting information, this is the responsibility of the contractor to seek clarification from IO.

Upon notification of any revision of the applicable document transmitted officially to the Contractor, the Contractor shall advise within 4 weeks of any impact on the execution of the contract. Without any response after this period, no impact will be considered.

| Ref | Title | IDM Doc ID | Version |
|---|---|---|---|
| 1 | General Management Specification for Service and Supply (GM3S) | 82MXQK | 0.0 |
| 2 | ITER_D_X3QQXG - ITER Software Toolmap | X3QQXG | 2.0 |
| 3 | ITER_D_2F6FTX - Procedure for the Usage of the ITER CAD Manual | 2F6FTX | 1.1 |
| 4 | Test_reports | N3S657 | |
| 5 | ITER_D_32NNXA-ENOVIA_CATIA_Training_Concept_DESA_EnS_PBS A | 32NNXA | 3.6 |
| 6 | ITER_D_UYRHSG - How to create a JIRA CAD Ticket - for administration | UYRHSG | 2.0 |

If a new version of the documents listed above is issued before T0. In such case, the TRO will share the latest approved version with the contractor.

## 4.2 Applicable Codes and Standards

It is the responsibility of the Contractor to procure the relevant Codes and Standards applicable to that scope of work.

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# 5 Scope of Work

This section defines the specific scope of work for the service, in addition to the contract execution requirement as defined in Ref [1].

This specification covers all activities related to the CATIA/ENOVIA CAD support and infrastructure activities. It includes the following tasks:

- CAD and Engineering User support (Mechanical and Plant)
- CATIA Administration / Development / Maintenance
- Training Certification and P&O
- CAD and ENG Methodology, Quality Assurance and Quality Documentation

The scope is mainly limited to tasks in relation with CATIA/ENOVIA platform and auxiliary software:

- CATIA V5 (Mechanical and “Equipment and Systemes” design)
- Enovia V5
- Q-Checker
- Q-PLM
- LCA classic
- Cadenas
- ISOGEN

All support activities will be performed in accordance with the methodology defined in the ITER CAD Manual [REF3]:

The Contractor shall also consider the specificities of data coming from others CAD software and integrated into Enovia V5 database.

Please refer to the document below for more information on the Engineering tool map [REF4]:

However, due to the interconnected ITER tool landscape, the Contractor will have to contribute to tasks directly or indirectly related to others software such as ICP, SmartPlant, AVEVA, SSD… In such case, both ITER TRO and Contractor shall formally agree on the volume and type of tasks, as described in the following chapters. These potential activities will be managed under the same conditions (Working Unit, inputs, deliverables…) than the tasks related to CATIA/ENOVIA platform.

All activities to be performed are divided into Work Units described in the following chapter.

## 5.1 CAD and engineering user support

### *5.1.1 Description*

This scope of work covers all tasks related to the support of all end-users of the CATIA/ENOVIA platform.

To address this task efficiently, the Contractor shall demonstrate a high experience on CAD/PLM support activities on an international project, where the support is not only provided locally, but in a world-wide context.

The support can be split into several support levels.

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#### *5.1.1.1 1st level support*

Direct support to IO and IO contractors designers / engineers on basic issues and questions not requiring investigations. Most of the time, for such kind of simple tasks, end-users will not open an IOCAD. They will contact the CAD support team directly on ITER premises or by phone/Teams.

**WU -T4:** Therefore, this proximity support will be recorded in a report collecting such kind of coaching per month. However, this 1st level support shall not represent more than 25% of the total support activity prior TRO formal acceptance.

#### *5.1.1.2 2nd level support:*

Support for IO and IO Contractor users of CAD platform whatever their location, collaboration scheme and connection mode (CADWorkstation / RDS, Firewall / VPN, …).

This activity will be supported by dedicated JIRA tickets system, focusing on answering to user request related to:

- Malfunction of the software
- Lack of knowledge about the usage
- Consultation on the rules, methodologies to be applied on ITER project.
- Request for improvements.

…

Below the types of ticket categories to be addressed:

1. **WU C1 XS** defines an issue or a question which is recurring from time to time and the solution is known or the solution can be found without intensive investigation or test. The communication with the submitter and the documentation of the resolution can be done quickly.
2. **WU C1 S** defines an issue or a question, which was not raised previously, and/or the investigation or test requires some time because large amount of data is involved, remote connection is required or several possible solutions have to be tested. A lot of communication with the submitter is required and the documentation of the resolution might lead to a dedicated document.
3. **WU C1 M** defines an issue, which was not raised previously, and the investigation or test may require long time because large amount of data is involved, remote connection or several possible solutions have to be tested because of the complexity. A lot of communication with the submitter is required and the documentation of the resolution leads to a dedicated document.
4. **WU C1 L** defines an issue, which was not raised previously, and the investigation or test may require long time because large amount of data is involved, remote connection or several possible solutions have to be tested because of the complexity. A lot of communication with the submitter is required and the documentation of the resolution leads to a dedicated document. Involvement of IO-IT or others end-users/ CAD support members is required to identify the root cause and to find a solution.
5. **WU C1 XL** defines an issue which was not raised previously, and the investigation or test require long time because a large amount of data is involved, remote connection or several possible solutions have to be tested because of the complexity. A lot of communication with the submitter is required and the documentation of the resolution leads to a dedicated document and a service request with the software editor or a specific development.

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Concerning the 2nd level support, the contractor shall ensure an "on call duty" at least during ITER IO working hours, meaning currently from 8am to 6pm, (France time zone) during IO working days. The period of working hours could be adjusted according to project needs.

As a result of a task, a how to, specification for customization or a service request (in the editor support tool) to the software editor might be required depending on the category.

Below a document describing how the IOCAD ticket shall be managed by CAD support team [REF6]

#### *5.1.1.3 3rd level support*

For complex problem, if a DA local support did not find a solution, the DA local support can escalade the incident to IO CAD support. This activity will be monitored and tracked by an IOCAD tickets, opened by a DA member with the same category than 2nd level support.

### *5.1.2 Service Duration*

The estimated start date of the services shall be after Contract signature by both Parties. Implementation of the activities shall only start after the Kick off Meeting (T0). The expected duration of tasks is T0 + 36 months.

T0 shall be within 4 weeks from the entry into force of the Contract.

## 5.2CATIA Administration / Development / Maintenance

### *5.2.1 Description*

This scope of work gathers the following tasks:

- Administration, configuration of the CATIA / ENOVIA platform, following incident or enhancement requests.
- Maintenance of the CATIA/ENOVIA platform
- CATIA/ENOVIA platform development performed by IO/DO, IT or a third party

All the tasks described in this chapter will be triggered and followed-up by an IOCAD ticket.

WU6 will cover all administration and maintenance tasks with the same principle than C1.
Specific WUs dedicated to development are described on the following chapters (C5 & D4).

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However, these activities can lead to the creation of several types of deliverables, such as:

- Functional specifications
- Training materials
- HowTo
- Acceptance test reports
- Macros
- …

All related deliverable types will be listed on the dedicated chapter.

**Note: As a reminder, on top of the classic Mechanical CATIA workbenches, contractors shall cover "Equipment and Systems" (CATIA workbenches dedicated to Plant Design), ISOGEN and QPLM / QChecker administration.**

#### *5.2.1.1 CATIAV5 /ENOVIA V5 administration*

Contractors shall propose CATIA V5 / ENOVIA V5 administrator(s) with high technical knowledge. As part of the administration, the contractors will have to perform the following tasks (not exhaustive list):

- Management of user and project CATSettings with CATIA admin role
- Management of the specific Equipment and Systems setup (e.g. CATFct, CATNls, standard, design rules…)
- Management of the software accessibility and configuration, jointly with IT focal point
- Management of Enovia V5 masks, properties, data visibility/accessibility
- Support CAD production by performing actions with Administrator privileges such as demote, force promote…
- Maintenance of an up-to-date supplier package in order to propagate ITER environment to all file-based ITER project contributors.
- Enrol and maintain ITER and ITER supplier CATIA/ENOVIA licenses inside IO and DA DSLS
- Administration of the ITER launcher (managing the access to CAD tools, licensing, environment…)
- …

The contractors shall record all modifications of any configuration files inside GIT software for a complete traceability. Knowledge of GIT tool will be advantageous.

#### *5.2.1.2 Platform maintenance*

The objective is to maintain a high level of service of the platform by ensuring its robustness, availability, and high performance. This is applicable for all IO, DA and suppliers' users.

Under the coordination of the TRO, the contractor will have to collaborate with the editor, ITER IT, the DAs and potentially others IO departments.

The platform maintenance includes:

- Upgrade of the platform due to software / hardware obsolescence or due to IT security requirements. For instance, the contractors will have to contribute to the migration to another CATIA release by carrying out non-regression tests and report potential incidents. For information, the next CATIA/ENOVIA release migration is planned for Q1 2025 and may lead to regressions to be fixed with IO IT and/or publisher. As example, contractor can find examples of test reports performed during previous Customization package delivery [REF4]
- Resolution of incidents detected by end-users or CAD support team in PROD environment, whatever they are related to the IO customization or related to "of the self tools". It includes the reproduction of the issue, reporting to the relevant stakeholders, follow up of the resolution progress, testing, deployment of the fix.
- Enhancement requests to support the CAD productivity, tools integration or the CAD platform level of service.

In addition, for the incident to be fixed by the publisher, the contractor shall open a "Service Request" to be handled in the dedicated web tool. Specific work unit includes detailed scenario description of the issue (video, presentation, screenshot…), data samples preparation, config files, communication with the editor support…

TRO will provide the required privileges on the publisher web page.

#### *5.2.1.3 Platform development*

To increase the efficiency of the CAD activities and to support the Engineering Work Package production, it is required to create/improve ITER specific developments.

In this context, ITER Design office is responsible for the specification, testing and end-users support of developments related to CAD activities. In some cases, ITER Design office is also responsible for the macro programming itself.

In the frame of this technical specification, the contractors will have to cover the following activities:

- Macro programming in relation with CAD design activity
- Technical specification for new/enhanced functionalities, to be developed by IO IT or a any third party.

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The macros can address user needs on the following tools:

- Mainly CATIA V5, covering all workbenches (including Mechanical, E&S, Drafting, Space analysis…)
- Enovia V5
- MS Office suite (Excel, Word, PowerPoint)
- Acrobat Reader
- Potentially, others software connected to Catia/Enovia

Any specification/development shall be carried out in accordance with the ITER environment specificities (e.g. CATIA level, MS office, Operating system, Remote connection…)

**Work unit D4: Development specifications**

This work units address the activities of identification and validation of requirements from requestors (e.g. PBS's) and documentation of functional or technical specification to be used as input for development. A specification shall describe the new software functionality or set of functionalities and the associated user scenarios. It shall include user needs, description of the behaviour of the wanted functionalities in all the possible cases of applications.

This working unit can be carried out:

- Whatever it is for new macro creation or for existing macro enhancement
- Whatever the development is performed by DO or by IT.

This task is divided into several categories depending on their complexity:

D4-XS: Very simple specification:

Minor modifications of an existing specification

D4-S: Simple specification:

Specification documents describing functional need for simple enhancement or adaptation of the existing CAD platform to new user requirements. The specification leads normally to IT task managed with JIRA system or IOCAD ticket (or sub-tasks) to DO developers.

D4-M: Medium specification:

Specification documents describing functional need for enhancement of the existing CAD platform or creation of a new functionality with medium complexity. The specification leads normally to IT task managed with JIRA system.

D4-L: Large specification:

Specification documents describing functional need for advanced upgrade of existing CAD platform or creation of a new complex functionality involving several tools. The specification leads normally to IT task managed with JIRA system (mainly ITSD).

D4-XL: Very large specification:

Specification documents describing functional need for advanced upgrade of existing CAD platform or creation of a new complex functionality involving several tools and requiring a significant effort of gathering of business requirements . The specification leads normally to IT task managed with JIRA system (mainly ITSD).

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**Work Unit C5: Development performed by the DO contractor:**

Before starting the programming task, the contractor shall confirm that he has all inputs to perform the task. Most of the development are performed in CATVBA. In contrary case, the contractor has to submit the language code proposal to IO for validation.

The programming task is divided into several categories depending on their complexity:

C5-XS: Maintenance/Support of existing macros

This typically addresses minor adjustments of existing macros or bug fixing requiring a very low level of effort. It can also cover user support on macro usage with screen sharing session.

C5-S: Simple macro

This typically addresses simple CATIA macros, which can be implemented quickly. It is usually a small improvement of an existing macro or the creation of a new report.

C5-M: Medium macro

This typically addresses CATIA macros, which are of medium complexity.

C5-L: Complex macro

This typically addresses CATIA macros which are of high complexity. Most of the time, they are related to 3D data, BOM generation and/or drawing modification.

C5-XL: Very complex macro

Dedicated to very complex macro requesting an exploration or pilot phase, several iterations are requested before delivering the development to the contractor.

The code has to be commented in English.

In addition, the contractor shall:

- Provide an user documentation (HowTo document)
- Attach the new/updated macro to the IO macro catalogue
- Perform unitary tests to demonstrate that basic tests have been performed by the developer before delivering the macro to IO (for M or L macro)
- Record the code modification/creation on the IT code management software (currently GIT)

### *5.2.2 Service Duration*

The estimated start date of the services shall be after Contract signature by both Parties. Implementation of the activities shall only start after the Kick off Meeting (T0). The expected duration of tasks is T0 + 36 months.

T0 shall be within 4 weeks from the entry into force of the Contract.

## 5.3 Training Certification and P&O

This scope of work covers:

- Training and certification of trainees
- Update and new training material/exercises (for IO & 7 DA/Suppliers)
- Granting and removing user access right to CAD software, licenses, and required environments.

As the training and certification are moving progressively to SAP SuccessFactors, the process may evolve in a close future. TRO and the Contractor shall assess the situation and potential consequences during the kick of meeting.

Size of the Work Unit described below will depends on the trainings and type of modifications to be performed by the contractor.

### *5.3.1 Training and certification of trainees*

**WorkUnit T1:** Training of trainees

The task is to run e-learning based CATIA/ENOVIA or CATIAE&S training, run the recapitulation exercise and the trainee within about 3 hours, After the training, the Contractor shall clean the exercises and data created during the training.

The Contractor will find the current contents of the 3 main trainings on [REF5].

Example of CATIA training (DESIGNER A)

- 1 days of remote presentation: introduction + recap. exercises)
- 4 days (partial time) of eLearning, including daily trainer's follow-up, with Questions/Answers sessions and exercises follow-up.

As the trainings are mainly e-learning based, others tasks will be be assigned to the contractor in parallel to the training.

On top of the official Design Office training and following request by the TRO, the contractor shall organize awareness sessions on specific advanced topic on ITER best practices and rules. The objective is to ensure that CAD users have sufficient knowledge to produce CAD data in accordance with the QA.

On some specific cases, trainings on site may be required. In such cases, the TRO can ask the Contractor to perform the training/ awareness on IO premises (limited to 6 times a year).

**Work Unit T2:** Certification of trainees

The task is to schedule the certification, manage the certification, correct it, save the result in Success Factor and IDM restricted area, send the certificates to the trainee by e-mail, fill the certification tracking table and inform the IO TRO to approve the record. After the certification, the contractor shall clean the certification data.

As example, certification session for a DES A required 0.5day of effort, including the session, correction and recording.

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On top of the certification of IO / IO supplier trainees: This task includes the correction of certifications performed by the 7 DA-DOs.

- Contractor shall record a zip file containing the correction of the certification, scan of the theoretical exam and documentation of the practical exam.
- Check whether this record is complete and with a random check whether the certification result is correct
- Send the certificates to the trainer by mail
- Fill the training and certification tracking table in SharePoint and inform the ITER TRO to approve the record.

The tracking and certification table and the certification template have restricted access to ITER TRO and the contractor's staff performing the work unit.

The zip file shall be stored in the IDM folder dedicated to "Training Administration", inside local trainer in the DA (restricted access)

### *5.3.2 Update and new Training material*

**Working Unit D1:** The task is to develop new or update existing training materials such as:

- Lessons
- How to
- Videos
- Exercises
- Training data set

All training materials shall be created/ updated according to the latest ITER dedicated training Templates.

### *5.3.3 Service Duration*

The estimated start date of the services shall be after Contract signature by both Parties. Implementation of the activities shall only start after the Kick off Meeting (T0). The expected duration of tasks is T0 + 36 months.

T0 shall be within 4 weeks from the entry into force of the Contract.

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## 5.4CAD and ENG Methodology, Quality Assurance and Quality Documentation

### *5.4.1 Description*

The ITER Design Office is responsible to assure and control the quality of all CAD data produced by ITER or received from design partners. The Design Office is also responsible to manage and distribute the CAD data sets, which are used by all design partners as a common reference environment.

CAD Quality is ensured by the definition of appropriate processes and standards, such as the CAD manual and processes for checking, promotion and exchange of design data. CAD quality is controlled by checking and reporting for compliance with those processes.

Quality of the design, in terms of compliance with the engineering and other technical requirements, is outside the scope of CAD Quality QA/QC.

The scope of work is to:

- Maintain and enhance all the enablers contributing to CAD quality control, whatever they are methods, tools, processes, and this in a consistency manner with the Quality Assurance. It includes for example: reports, checklists, development of macros, Q-Checker profile, HowTo, awareness, training materials…).
- Promote the CAD Quality Assurance to CAD users to secure a sufficient level of quality of CAD data.
- Contribute to the QA enhancement thanks to a strong knowledge of ITER methodologies
- If required, contribute to Quality Control and even CAD data clean-up

All related deliverable types will be listed on the dedicated chapters.

#### *5.4.1.1 Maintenance and enhancement of CAD platform quality check tools:*

This WP covers the tasks described below:

- Maintain and administrate QChecker and QPLM (with IO/IT support)
- Promote the QA/QC best practices to DAs and partners and finish the deployment QPLM on DAs (jointly with IT)
- Contribute to the migration of the CATIA/ENOVIAV5 release2024 platform by performing all necessary actions ensuring that QC enablers will be compatible and fully operational with the new release, in accordance with the migration project plan
- Fix Q-PLM, Q-Checker issues if any, with the support of IT as soon as it is requested.

#### *5.4.1.2 CAD and ENG Methodology, QA and Quality Documentation*

Thanks to a high level of knowledge of ITER CAD methodologies but also experience on CAD production, the contractor will have to:

- To contribute to the consolidation and improvement of CAD QA by updating various CAD documents such as CAD manual, how to and methodology guides
- Support the CAD production by developing new methodologies and enhance existing ones aiming at improving the overall productivity and quality of CAD data.

#### *5.4.1.3 CAD quality control and data clean-up*

In the frame of urgent tasks, or for large data cleaning campaigns, the contractor will contribute to the identification and even correction of CAD quality issues:

- Support the QC team by checking CAD Data against the requirements defined in the CAD Manual and others defined processes and standards.
- To report discrepancies and to assist DECOs and data owners in the update and correction of the data.
- To assist in modification/restructuring of the CAD data, to correct discrepancies or following changes of the quality requirements.

### *5.4.2 Service Duration*

The estimated start date of the services shall be after Contract signature by both Parties. Implementation of the activities shall only start after the Kick off Meeting (T0). The expected duration of tasks is T0 + 36 months.

T0 shall be within 4 weeks from the entry into force of the Contract.

# 6 Location for Scope of Work Execution

Contractor can perform the work at its own location. However, for efficiency of the proximity support and for 'in person" training, a regular presence on site, close to the end-users, is required.

**The contractor shall have at least one person on site during ITER working hours.**

In addition, work at the ITER site may be required on occasions, such as coordination meetings, workshops, etc… and shall be organised accordingly as and when required either by the TRO or the Contractor.

# 7 IO Documents

Under this scope of work, IO will deliver the following documents by the started date:

| Ref | Title | Doc ID | Expected date |
|---|---|---|---|
| 1 | ITER_D_UYRHSG - How to create a JIRA CAD Ticket - for administration | UYRHSG | T0 |
| | ITER_D_2X3ZNC - DO Training Document Template Exercise and how to | 2X3ZNC | T0 |

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# 8 List of deliverables and due dates

The Supplier shall provide IO with the documents and data required in the application of this technical specification, the GM3S Ref [1] and any other requirement derived from the application of the contract.

For all activities triggered and monitored by an IOCAD ticket, Contractor will have to manage 2 differentiate cases:

- The IOCAD is the main deliverable. (e.g. user support). It shall be accompanied by a report listing the ticket processed on a monthly basis and type and size
  To be noted that all information and data generated included in the ticket processing (as specified in the scope of work) are also considered part of the deliverable.
- The IOCAD is not the main deliverable (e.g. Training, HowTo…). On a general matter, the deliverables shall be self-standing documents corresponding to the outputs defined and agreed at the start of the task (Test reports, functional specifications, etc…) and according to the template provided by the IO when applicable. Deliverables will be invoiced as defined in the table below. If an IOCAD has be created to trigger and follow the task, the IOCAD will not be invoiced.
  In case of intermediate deliveries, it shall be clearly stated that the revision is not the final delivery with details on what is and is not covered (e.g. percentage of completion of FR). The deliverable shall keep its initial reference, and any additional delivery shall be a new version of it up to the final delivery.

Any non-compliance will cause a rejection of the global deliverable, and the rework shall be performed at the charge of the contractor.

The table below lists the deliverables per type of WU:

| Work Unit category | Deliverable Description | Format |
|---|---|---|
| C1-User support | JIRA ticket closure | JIRA ticket |
| C2-Consulting, Engineering Expertise | JIRA ticket closure | JIRA ticket |
| C3-User access rights | * P&O modification<br>* JIRA ticket closure | JIRA ticket |
| C4-Editor service request | * Service request on Dassault Systemes website<br>* MS Office document<br>* Video | Service request with all documents describing the incident |
| C5-Development | * Code<br>* JIRA ticket | * VBA, CATScript, CAA<br>* JIRA ticket |
| C6 Administration | JIRA ticket closure<br>Administration files up to date in GIT | JIRA ticket<br>Administration files |
| D1-CAD user documentation | * MS Office document stored in IDM | MS Office (pptx, dox, xlsx…) |
| D4-Specification | * MS Office document stored in IDM | MS Office (pptx, dox, xlsx…) |
| D5-Test report | * MS Office document stored in IDM | MS Office (pptx, dox, xlsx…) |
| T1-Training | * Tracking table up to date<br>* Session record with list of attendees<br>* Record of trainees CAD certified data | * MS Office (pptx, dox, xlsx…)<br>* CAD data |
| T2-Certification | * Certification record<br>* Certificate<br>* Tracking table update | * MS Office (PowerPoint, Word, Excel…)<br>* PDF |
| T4-Proximity support | Report summarizing the coaching, proximity support activities performed during the given period | MS Office (PowerPoint, Word, Excel…) |
| Q1-CAD Data QC | Ticket comment, how to document, Report, Presentation, Configuration files, QChecker profile | Ticket system, MS Office document, Txt file, Xml file, qcprofile |

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All WU listed above can be delivered in all scopes of work described in the chapter 5.

For information, the estimated distribution of WU per activity is as follows:

- CAD and Engineering User support: 30%
- CATIA Administration / Development / Maintenance: 30%
- Training Certification and P&O: 15%
- CAD and ENG Methodology, Quality Assurance and Quality Documentation: 25%

The Estimated effort for completion of the tickets or work units is encoded as following:

| Size | Estimated effort (`hour) |
|---|---|
| XS | 1 |
| S | 4 |
| M | 8 |
| L | 16 |
| XL | 40 |

The table below gives the number of WU per year and for the full contract.

| Work Unit title | Working Unit | Estimated effort (h) | Quantity per year | Total quantity (36months) |
|---|---|---|---|---|
| **User support** | **C1-XS** | **1** | **600** | **1800** |
| **User support** | **C1-S** | **4** | **150** | **450** |
| **User support** | **C1-M** | **8** | **100** | **300** |
| **User support** | **C1-L** | **16** | **30** | **90** |
| **User support** | **C1-XL** | **40** | **10** | **30** |
| **Consulting, Engineering Expertise** | **C2-M** | **8** | **80** | **240** |
| **Consulting, Engineering Expertise** | **C2-L** | **16** | **20** | **60** |
| **Consulting, Engineering Expertise** | **C2-XL** | **40** | **4** | **12** |
| **User access rights** | **C3-XS** | **1** | **800** | **2400** |
| **User access rights** | **C3-S** | **4** | **20** | **60** |
| **Editor service request** | **C4-M** | **8** | **5** | **15** |
| **Editor service request** | **C4-L** | **16** | **5** | **15** |
| **Editor service request** | **C4-XL** | **40** | **5** | **15** |
| **Development** | **C5-XS** | **1** | **160** | **480** |
| **Development** | **C5-S** | **4** | **40** | **120** |
| **Development** | **C5-M** | **8** | **40** | **120** |
| **Development** | **C5-L** | **16** | **20** | **60** |
| **Development** | **C5-XL** | **40** | **20** | **60** |
| **Admin** | **C6-XS** | **1** | **200** | **600** |
| **Admin** | **C6-S** | **4** | **50** | **150** |
| **Admin** | **C6-M** | **8** | **90** | **270** |
| **Admin** | **C6-L** | **16** | **10** | **30** |
| **Admin** | **C6-XL** | **40** | **4** | **12** |
| **CAD user documentation** | **D1-XS** | **1** | **80** | **240** |
| **CAD user documentation** | **D1-S** | **4** | **40** | **120** |
| **CAD user documentation** | **D1-M** | **8** | **20** | **60** |
| **CAD user documentation** | **D1-L** | **16** | **10** | **30** |
| **CAD user documentation** | **D1-XL** | **40** | **5** | **15** |
| **Specification** | **D4-S** | **4** | **20** | **60** |
| **Specification** | **D4-M** | **8** | **10** | **30** |
| **Specification** | **D4-L** | **16** | **10** | **30** |
| **Specification** | **D4-XL** | **40** | **8** | **24** |

| SERVICE | | | | |
|---|---|---|---|---|
| **Test report** | **D5-S** | **4** | **20** | **60** |
| **Test report** | **D5-M** | **8** | **20** | **60** |
| **Test report** | **D5-L** | **16** | **20** | **60** |
| **Test report** | **D5-XL** | **40** | **16** | **48** |
| **Training** | **T1-XS** | **1** | **40** | **120** |
| **Training** | **T1-S** | **4** | **8** | **24** |
| **Training** | **T1-M** | **8** | **10** | **30** |
| **Training** | **T1-L** | **16** | **30** | **90** |
| **Training** | **T1-XL** | **40** | **15** | **45** |
| **Certification** | **T2-XS** | **1** | **8** | **24** |
| **Certification** | **T2-S** | **4** | **40** | **120** |
| **Proximity support** | **T4-XL** | **40** | **20** | **60** |
| **CAD Data QC** | **Q1-XS** | **1** | **80** | **240** |
| **CAD Data QC** | **Q1-S** | **4** | **80** | **240** |
| **CAD Data QC** | **Q1-M** | **8** | **30** | **90** |
| **CAD Data QC** | **Q1-L** | **16** | **20** | **60** |
| **CAD Data QC** | **Q1-XL** | **40** | **20** | **60** |

To adapt the CAD support to production activities, TRO and contractor can adjust the number of WU during the work monitoring meeting, as soon as it stays in the frame of Contract's total commitment / duration conditions.

Tickets come in 5 Priority levels and the associated delay of resolution shall be fulfilled once it is assigned to contractor and as soon as all required inputs are given by ticket requester:

| Ticket Priority | Max. Delay in Days |
|---|---|
| Blocker | 0.25 |
| Critical | 0.5 |
| High | 3 |
| Medium | 10 |
| Low | 20 |

The delays above are given in working days, they could be revised for exceptional reasons (very large requests put as critical, resources planning) after validation and planning review with the IO representative. Delay does not include time needed by requester to validate ticket closure following resolution provided. In addition, resolution time does not include the time awaiting for a third party answer/action (e.g. resolution of an IT issue)

These due dates can be adjusted once a year.

During the monthly review, if the due date is overpassed without an acceptable rationale, TRO can refuse the invoice of the related WU.

# 9 Quality Assurance requirements

The Quality class under this contract is Design control – Class 2 and [Ref 1] GM3S section 8 applies in line with the defined Quality Class.

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 ITER_D_258LKL - Working Instruction for the Qualification of ITER safety codes)"

# 10 Safety requirements

N/A

## 10.1 Nuclear class Safety

N/A

## 10.2 Seismic class

N/A

# 11 Specific General Management requirements

"Requirement for [Ref 1] GM3S section 6 applies completed/amended with the below specific requirements:"

## 11.1 Work Monitoring

Monitoring of ticket resolution is done via ticket system during a weekly meeting with the Contractor.

For critical and blocker ticket, contractor shall inform the TRO of the resolution progress daily.

## 11.2 Meeting Schedule

The TRO will create a weekly meeting to review all on-going activities. During this meeting, the Contractor shall share a dashboard highlighting the performance of the CAD support, the progress on the other tasks and share the blocking points.

## 11.3 CAD design requirements

This contract requires for CAD activities, [Ref 1] GM3S section 6.2.2.2 applies".

# 12 Appendices