

外部委託業者の募集

References: IO/25/OT/10030526/KRH

"CAD Data Quality and Engineering Content Quality Services "

(CAD データとエンジニアリングコンテンツの品質管理サービス)

IO 締め切り 2025 年 2 月 2 日(日)

〇はじめに

本事前情報通知 (PIN) は、作業契約の入札授与および実行につながる公開入札調達プロセスの最初のステップです。

本文書の目的は作業範囲と入札プロセスに関する技術的な内容の基本的な要約を提供することです。

〇背景

ITER は平和利用の核融合発電の科学的小および技術的な実現可能性の実証を目的とした、国際共同研究開発プロジェクトです。ITER 機構の 7 つのメンバーは、;欧州連合 (EURATOM が代表)、日本、中華人民共和国、インド、大韓民国、ロシア連邦、および米国です。

ITER の敷地はフランス南東部のブーシュデュローヌ地区にあり、ITER 本社 (HQ) もあるフランス CEA サン・ポール・レ・デュランス に近いところに位置しています。詳細については、ITER のウェブサイト <http://www.iter.org> を参照して下さい。

〇作業範囲

IO は、以下の作業範囲において ESD/デザインオフィスの支援を調達することを目的としています：

- ・ CAD 品質保証および品質管理業務 (主に CATIA/ENOVIA、SSD、AVEVA E3D および図面)、
 - ・ エンジニアリングワークパッケージ (EWP) およびターンオーバーパッケージ (TOP) ドシエの CAD 内容のレビューおよび管理、
 - ・ As-Design から As-Built の成熟度への CAD ドキュメントの更新
- 詳細は別添 II (技術仕様書) に記載されています。

重要：第 9 条の利益相反条項にご留意ください！

〇調達プロセスと目的

目的は、競争入札プロセスを通じて供給契約を落札することです。

この入札のために選択された調達手続きは 公開入札 手続きと呼ばれます。

オープン入札手順は、次の 4 つの主要なステップで構成されています。

➤ ステップ 1-事前情報通知 (PIN)

事前通知 (Prior Indicative Notice) ** は、公開入札プロセスの最初の段階です。IO (国際機関) は、国内機関に対して、今後の入札に関する情報を公開するよう正式に依頼します。この事前通知により、企業、機関、またはその他の団体に対して、入札機会を事前に知らせることを目的としています。入札に興味のある企業は、調達スケジュールに記載された期限

までに、関心表明書（付属書 I）を電子メールで返送してください。

➤ ステップ 2-入札への招待

事前通知（PIN）の公表から 14 日以内に、入札招請状（ITT）が公示されます。この段階では、事前通知（PIN）を確認した関心のある入札者が入札書類を取得し、入札指示に従って提案書を準備し、提出することができます。

➤ ステップ 3-入札評価プロセス

入札者の提案は、ITER 機構の公正かつ専門的に有能な技術評価委員会によって評価されます。入札者は、技術範囲に沿って作業を実施できる技術的適合性を示す詳細を提供し、入札招請状（ITT）に記載された特定の評価基準に従って提案する必要があります。

➤ ステップ 4-落札

サービス契約は、入札招請状（ITT）に記載された評価基準および方法論に基づき、最良のコストパフォーマンスに基づいて授与されます。

○概略日程

概略日程は以下の通りです：

マイルストーン	暫定日程
事前指示書（PIN）の発行	2025 年 1 月 20 日
関心表明フォームの提出	2025 年 2 月 2 日
iPROC での入札への招待（ITT）の発行	2025 年 2 月 5 日
明確化のための質問（もしあれば）と回答締め切り	2025 年 3 月 19 日
入札提出	2025 年 3 月 30 日
入札評価と契約授与	2025 年 4 月 18 日
契約調印	2025 年 5 月 2 日
契約開始	2025 年 6 月 1 日

○契約期間と実行

ITER機構は2025年の4月ごろ供給契約を授与する予定です。予想される契約期間はオプションの36か月を伴って36か月の予定です。

○経験

契約者は、添付の技術仕様に詳細に記述された必要な経験を持っているスタッフメンバーからなるチームを形成する必要があります。

○候補

参加は、個人またはグループ/コンソーシアムに参加するすべての法人に開放されます。法人とは、法

的権利及び義務を有し、ITER 加盟国内に設立された個人、企業又は機構をいいます。ITER 加盟国は欧州連合(EURATOM メンバー)、日本、中華人民共和国、インド共和国、大韓民国、ロシア連邦、アメリカ合衆国です。

法人は、単独で、またはコンソーシアムパートナーとして、同じ契約の複数の申請または入札に参加することはできません。共同事業体は、恒久的な、法的に確立されたグループ又は特定の入札手続のために非公式に構成されたグループとすることができます。

コンソーシアムのすべての構成員(すなわち、リーダーと他のすべてのメンバー)は、ITER 機構に対して連帯して責任を負います。

コンソーシアムとして許可されるために、その点で含まれる法人はコンソーシアムの各メンバーをまとめる権限をもつリーダーをもたなければなりません。このリーダーはコンソーシアムの各目メンバーのために責任を負わなければなりません。

指名されたコンソーシアムのリーダーは、入札段階で、コンソーシアムのメンバーの構成を説明する予定です。その後、候補者の構成は、いかなる変更も ITER 機構に通知することなく変更してはなりません。かかる認可の証拠は、すべてのコンソーシアムメンバーの法的に授権された署名者が署名した委任状の形式で、しかるべき時期に IO に提出しなければなりません。

【※ 詳しくは添付の英語版技術仕様書「**CAD Data Quality and Engineering Content Quality Services**」をご参照ください。】

ITER 公式ウェブ <http://www.iter.org/org/team/adm/proc/overview> からアクセスが可能です。

「核融合エネルギー研究開発部門」の HP : <http://www.fusion.qst.go.jp/ITER/index.html>
では ITER 機構からの各募集 (IO 職員募集、IO 外部委託、IO エキスパート募集) を逐次更新しています。ぜひご確認ください。

イーター国際核融合エネルギー機構からの外部委託 に関心ある企業及び研究機関の募集について

＜ITER 機構から参加極へのレター＞

以下に、外部委託の概要と要求事項が示されています。参加極には、提案された業務に要求される能力を有し、入札すべきと考える企業及び研究機関の連絡先の情報を ITER 機構へ伝えることが求められています。このため、本研究・業務に関心を持たれる企業及び研究機関におかれましては、応募書類の提出要領にしたがって連絡先情報をご提出下さい。



china eu india japan korea russia usa

Route de Vinon-sur-Verdon - CS 90 046 - 13067 St Paul Lez Durance Cedex - France

PRIOR INDICATIVE NOTICE (PIN)

OPEN TENDER SUMMARY

for

IO.25.OT.10030526.KRH

“CAD Data Quality and Engineering Content Quality Services”

Abstract

The purpose of this summary is to provide prior notification of the IOs intention to launch a competitive Open Tender process in the coming weeks. This summary provides some basic information about the ITER Organisation, the technical scope for this tender, and details of the tender process for the provision of Technical Support Services for Equipment Qualification to the ITER Organization.

1 Introduction

This Prior Indicative Notice (PIN) is the first step of an Open Tender Procurement Process leading to the award and execution of a Service Contract.

The purpose of this document is to provide a basic summary of the technical content in terms of the scope of work and the tendering process.

The Domestic Agencies are invited to publish this information in advance of the forthcoming tender giving companies, institutions or other entities that are capable of providing these services prior notice of the tender details.

2 Background

The ITER project is an international research and development project jointly funded by its seven Members being 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 St. Paul–Lez-Durance in southern France, which is also the location of the headquarters (HQ) of the ITER Organization (IO).

For a complete description of the ITER Project, covering both organizational and technical aspects of the Project, visit www.iter.org.

3 Scope of Work

IO aims to procure support for ESD/Design Office in various scopes of work:

- CAD Quality Assurance and Quality Control tasks (mainly CATIA/ENOVIA, SSD, AVEVA E3D and Diagram),
- Reviewing and controlling the CAD content of Engineering Work Packages (EWP) and Turn Over Packages (TOP) dossiers and
- Updating the CAD document from As-Design to As-Built maturity as further described in Annex II (Technical Specification).

Important: Please note the Conflict of Interest clause in Art. 9!

4 Procurement Process & Objective

The objective is to award a Service Contract through a competitive bidding process.

The Procurement Procedure selected for this tender is called the Open Tender procedure.

The Open Tender procedure is comprised of the following four main steps:

- **Step 1- Prior Indicative Notice (PIN):**
The Prior Indicative Notice is the first stage of the Open Tender process. The IO formally invites the Domestic Agencies to publish information about the forthcoming tender in order to alert companies, institutions or other entities about the tender opportunity in advance. **Interested tenderers are kindly requested to return the expression of interest form (Annex I) by e-mail by the date indicated in the procurement timetable below.**
- **Step 2 - Invitation to Tender (ITT):**
Within 14 days of the publication of the Prior Indicative Notice (PIN), the Invitation to Tender (ITT) will be advertised. This stage allows interested bidders, who have seen the PIN, to obtain the tender documents and to prepare and submit their proposals in accordance with the tender instructions.
- **Step 3 – Tender Evaluation Process:**
Tenderers' proposals will be evaluated by an impartial, professionally competent technical evaluation committee of the ITER Organization. Tenderers must provide details demonstrating their technical compliance to perform the work in line with the technical scope and in accordance with the particular criteria listed in the invitation to tender (ITT).
- **Step 4 – Contract award:**
A service contract will be awarded on the basis of best value for money according to the evaluation criteria and methodology described in the Invitation to tender (ITT).

Procurement (tentative) Timetable

Milestone	Date
Publication of the Prior Indicative Notice (PIN)	20 January 2025
Deadline Submission of expression of interest form	2 February 2025
Invitation to Tender (ITT) advertisement	5 February 2025
Clarification Questions (if any) and Answers deadline	19 March 2025
Deadline Tender Submission	30 March 2025
Tender Evaluation & Contract Award	18 April 2025
Contract Signature	2 May 2025
Contract Commencement	1 June 2025

5 Quality Assurance Requirements

Prior to commencement of any work under this Contract, a “Quality Plan” shall be produced by the selected Contractor and submitted to the IO for approval, describing how they will implement the ITER Procurement Quality Requirements.

6 Contract Duration and Execution

The ITER Organization shall award a Service Contract end of April 2025. The resulting Contract will be for a period of 36 months including the two foreseen options.

The working language of ITER is English, and a fluent professional level is required (spoken and written).

7 Experience

The tenderer shall form a team of the dedicated staff who shall have the required experience as detailed in the attached technical specifications in order to provide the required support service.

8 Candidature

Participation is open to all legal entities participating either individually or in a grouping / consortium. A legal entity is an individual, company, or organization that has legal rights and obligations and is established within an ITER Member State.

Legal entities cannot participate individually or as a consortium partner in more than one application or tender of the same contract. A consortium may be a permanent, legally established grouping, or a grouping which has been constituted informally for a specific tender procedure. All members of a consortium (i.e. the leader and all other members) are jointly and severally liable to the ITER Organization.

In order for a consortium to be acceptable, the individual legal entities included therein shall have nominated a leader with authority to bind each member of the consortium, and this leader shall be authorized to incur liabilities and receive instructions for and on behalf of each member of the consortium.

It is expected that the designated consortium lead will explain the composition of the consortium members in a covering letter at the tendering stage. Following this, the Candidate’s composition must not be modified without notifying the ITER Organization of any changes. Evidence of any such authorization shall be submitted to the IO in due course in the form of a power of attorney signed by legally authorized signatories of all the consortium members.

9 Eligibility

Only tenderers from the ITER Member states are eligible for tendering:

- European Union (EURATOM Members),
- Republic of India,
- Japan,
- People’s Republic of China,
- Republic of Korea,
- Russian Federation,
- United States of America.

The ITER Organization may decide to broaden the eligibility to other countries as deemed appropriate.

Conflict of Interest:

The bidders shall not be part of the current CAD and ENG Framework Contracts.

The bidder awarded will be excluded from the Engineering Services Department upcoming contracts.

10 Sub-Contracting Rules

Sub-contracting is allowed under this Contract. The maximum percentage of sub-contracting is limited to **30%** of the total contract value.

All sub-contractors who will be taken on by the Contractor shall be declared with the tender submission in iPROC. Each sub-contractor will be required to complete and sign forms including technical and administrative information which shall be submitted to the IO by the tenderer as part of its tender.

The IO reserves the right to approve (or disapprove) any sub-contractor which was not notified in the tender and request a copy of the sub-contracting agreement between the tenderer and its subcontractor(s). Rules on sub-contracting are indicated in the RFP itself.

11 Annexes

Annex I – Template Expression of Interest

Annex II – Technical Specifications ITER_D_9DTH76 v2.4 dated 21 November 2024

EXPRESSION OF INTEREST & PIN ACKNOWLEDGEMENT

To be returned by e-mail to: Kathleen.Reich@iter.org copy Vishal.Dubey@iter.org

ITER Organization / ITER Headquarters
Procurement Division, Building 81/143
Route de Vinon-sur-Verdon
CS 90 046
13067 St. Paul Lez Durance Cedex
France

TENDER No. **IO.25.OT.10030526.KRH**

DESIGNATION of SERVICES: **CAD Data Quality and Engineering Content Quality Services**

Officer in charge: **Kathleen Reich & Vishal Dubey
– Procurement Division, ITER Organization**

- ☐ WE ACKNOWLEDGE HAVING READ THE PIN NOTICE **FOR** THE ABOVE-MENTIONED TENDER
- ☐ WE INTEND TO SUBMIT A TENDER
- ☐ WE WILL NOT TENDER FOR THE FOLLOWING REASONS:

.....

COMPANY STAMP

Signature:

Name:

Position:

Tel:

E-mail.....

Date:

Technical Specifications (In-Cash Procurement)

Technical specification - CAD Convergence Contract 2025

This document defines the needs of ESD/DO in CAD (mainly CATIA/ENOVIA, SSD, AVEVA E3D and Diagram) for QA and QC tasks, in particular in the context of reviewing and controlling the CAD content of EWP and TOP dossiers, as well as an involvement in the task for updating the CAD document from As-Design to As-Built maturity.

It includes also a limited involvement in the implementation of DO processes such as CAD collaboration and storage in SMDD.

SERVICE

Table of Contents

1	PREAMBLE.....	2
2	PURPOSE.....	2
3	ACRONYMS.....	2
4	APPLICABLE DOCUMENTS & CODES AND STANDARDS.....	3
5	SCOPE OF WORK.....	4
5.1	Context.....	5
5.1.1	CAD Context	5
5.1.2	EWP & TOP Preparation Support	5
5.2	Tasks description	7
5.2.1	CAD Related Tasks.....	7
5.2.2	Site Related Activities.....	9
5.2.3	CAD and Engineering data Review	9
5.2.4	Other DO Process Support.....	10
5.3	Task Management.....	11
5.4	Maximum time to deliver.....	11
5.5	Service Duration	11
6	LOCATION FOR SCOPE OF WORK EXECUTION	11
7	IO DOCUMENTS.....	12
8	LIST OF DELIVERABLES AND DUE DATES	13
9	QUALITY ASSURANCE REQUIREMENTS.....	25
10	SAFETY REQUIREMENTS	25
11	SPECIAL MANAGEMENT REQUIREMENTS	25
11.1	Contract Gates.....	25
11.2	Work Monitoring	25
11.3	Meeting Schedule.....	26
11.4	CAD design requirements.....	26
11.5	Resources availability	26
11.6	Conflict of interest	27

SERVICE

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 defines the needs of ESD/DO in CAD (mainly CATIA/ENOVIA, SSD, AVEVA E3D and Diagram) for QA and QC tasks, in particular in the context of reviewing and controlling the CAD content of EWP and TOP dossiers, as well as an involvement in the task for updating the CAD document from As-Design to As-Built maturity. It includes also a limited involvement in the implementation of DO processes such as CAD collaboration and storage in SMDD.

The scope will be formalized using a Service Contract. The implementation of the tasks to be executed will be done using “Work – Units” (WUs) which will be explained in detail in the section 5 of this document.

3 Acronyms

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

Abbreviation	Description
CCT	CAD Core Team
CEQAC	Catia-Enovia QA QC
CMM	Configuration Management Model
CRO	Contract Responsible Officer
DO	Design Office
DA	Domestic Agency
DCIF	Design Collaboration Implementation Form
DECO	Design Coordinator
DET	Data Exchange Task
DER	Data Exchange Request
ESD	Engineering Service Department
EWP	Engineering Work Package
FR	Functional Reference
GM3S	General Management Specification for Service and Supply
HIT	Holistic Integration Team
IDL	Integrated Data Loading
IO	ITER Organization
IRP	Instance Root Path
PLM	Product Lifecycle Management
PNI	Part Number of ITER
PRO	Procurement Responsible Officer
RO	Responsible Officer

SERVICE

SMDD	System for the Management of Drawings and Diagrams
TOP	Turn Over Package
TRO	Technical Responsible Officer
WP	Work Package
WU	Work-Unit

For a complete list of ITER abbreviations see: [ITER Abbreviations \(ITER_D_2MU6W5\)](#).

Furthermore the following definitions apply the management of this contract:

- 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.
- Technical Responsible Officer (IO-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.

4 Applicable Documents & Codes and standards

This 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	1.4
2	Procedure for Management and Coordination of Contracted CAD Design & CAD related services	U6ZB29	1.0
3	Procedure for CAD Work Planning, Specification and Control	U34884	1.4
4	ITER CAD Quick Reference Guide – CV5 EV5	282BVV	3.0
5	CAD Data Promotion Checklist	2FBLRJ	4.1
6	Procedure for the CAD management plan	2DWU2M	2.2
7	How to use Mass Promotion tool with xls input	AC4CZT	1.0
8	How to Use the CONTEXT Branch Log E-Ticket	EFHRTC	1.2
9	Conversion Team-How-To	X97EWC	2.3
10	EWP Anticipation Support Presentation	3GYK8G	1.1

SERVICE

11	WI for Commissioning Certificate Readiness (CCR)	X8LS3F	4.0
12	CAD Manual 07 - CAD Fact Sheet	249WUL	7.0

In addition, for information, all the methodologies and How Tos to be used after contract award can be found in the following IDM folders:

Title	IDM Folder ID
AVEVA How Tos IDM Folder	S99FA7
CATIA / ENOVIA How Tos IDM Folder	7GETUJ
SXP How Tos IDM Folder	9MUTYC
SSD How Tos IDM Folder	2EDQYH
SMDD How Tos IDM Folder	GJ4EG5
Manual of CAD	2FQDLM

And a complete toolbox is available on the internal DO SharePoint site: [Systems Engineering Website Home](#)

And specifically for the tasks related to CAD Collaboration support, corresponding to the WU G1 and G2 as described in the section 5.2.4, the related procedure is: : [Procedure for the design office activities related to CAD Data Exchange Task \(2NCULZ\)](#)

The templates to be used:

DET template forms are available per organization:

Data Exchange Task (DET) Template for CNDA (QCJJC3)
Data Exchange Task (DET) Template for EUDA (QEYFY)
Data Exchange Task (DET) Template for INDA (QB542S)
Data Exchange Task (DET) Template for IO (QPY8YS)
Data Exchange Task (DET) Template for JADA (QCLB83)
Data Exchange Task (DET) Template for KODA (QD3URB)
Data Exchange Task (DET) Template for RFDA (QE6CMP)
Data Exchange Task (DET) Template for USDA (QEFEUP)

A how-to describes how to fill the form: [How to fill a DER – plus the DET process \(25MAL5\)](#)

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].

Each task performed on contract shall be triggered and monitored through a dedicated CEQAC jira tickets ([Catia-Enovia QA QC](#)) where all technical inputs, discussions and outputs shall be logged. The estimated cost in terms of Work Unit (as defined in this contract) shall be provided by the contractor at the beginning of the task. If the cost needs to be adjusted during the execution of the task, this should be first discussed and agreed with the task requester and the IO-TRO. If adjusted, the final cost of the task should be logged as a final comment of the jira ticket at the closure of the task.

SERVICE

5.1 Context

5.1.1 CAD Context

The scope of the Contract is to provide contribution to the management of the IO CAD data, in particular with regards to the quality of the CAD data and their proper management in the respective databases. The task will be mostly triggered by DECO in the purpose of supporting them in their mission of insuring the quality of CAD data production for the ITER project.

The CAD infrastructure to support is mainly composed of:

- CATIA / ENOVIA
- AVEVA E3D / Diagrams / Engineering
- SSD

Some tasks may also involve SXP and Navisworks.

The main CAD document types are:

- 3D Detail Models (DM) and Configuration Management Models (CMM)
- 2D Drawings of various types (Assembly, General Arrangement, Isometrics...)
- 2D Diagrams (PnIDs, Single Line, Cubicles, ...)
- BOM, Equipment Lists, Cable Lists, ...

The contract includes the following CAD task types:

- Quality Check / Control
- Quality corrections
- Consistency Checks (2D vs. 3D, list vs. representations...)
- Check & Promotion
- Product tree management (branch creation, synchronization and update)
- CAD Context Checking and Update
- CAD format conversion (STEP, 3DXML, ...)
- CAD data modification for implementing red-marking or other clearly specified updates for the purpose of QA corrections or maturity evolution, typically from As-Design to As-Built maturity
- CAD and associated Engineering Data Review related to their applicability and completeness for supporting specific gates of the project: Manufacturing, Assembly, Installation, Commissioning, Operation and Maintenance
- Various reporting tasks focused on CAD data, possibly using macros: preparation of models for annalists (Components in defined Areas, collection of attributes from 3D, etc...)
- Implementation of the CAD Exchange DO processes

5.1.2 EWP & TOP Preparation Support

For the support to the EWP and TOP preparation activities, the review tasks are requested and driven by the DECOs in charge of the impacted PBSs.

Specifically for the EWP, those reviews are usually articulated around 3 milestones as per the graph below:

SERVICE



Figure 1: EWP preliminary and final reviews workflow

For the specific TOP preparation activities, the reviews are integrated into the formal Operation CAD Production Process as follow:

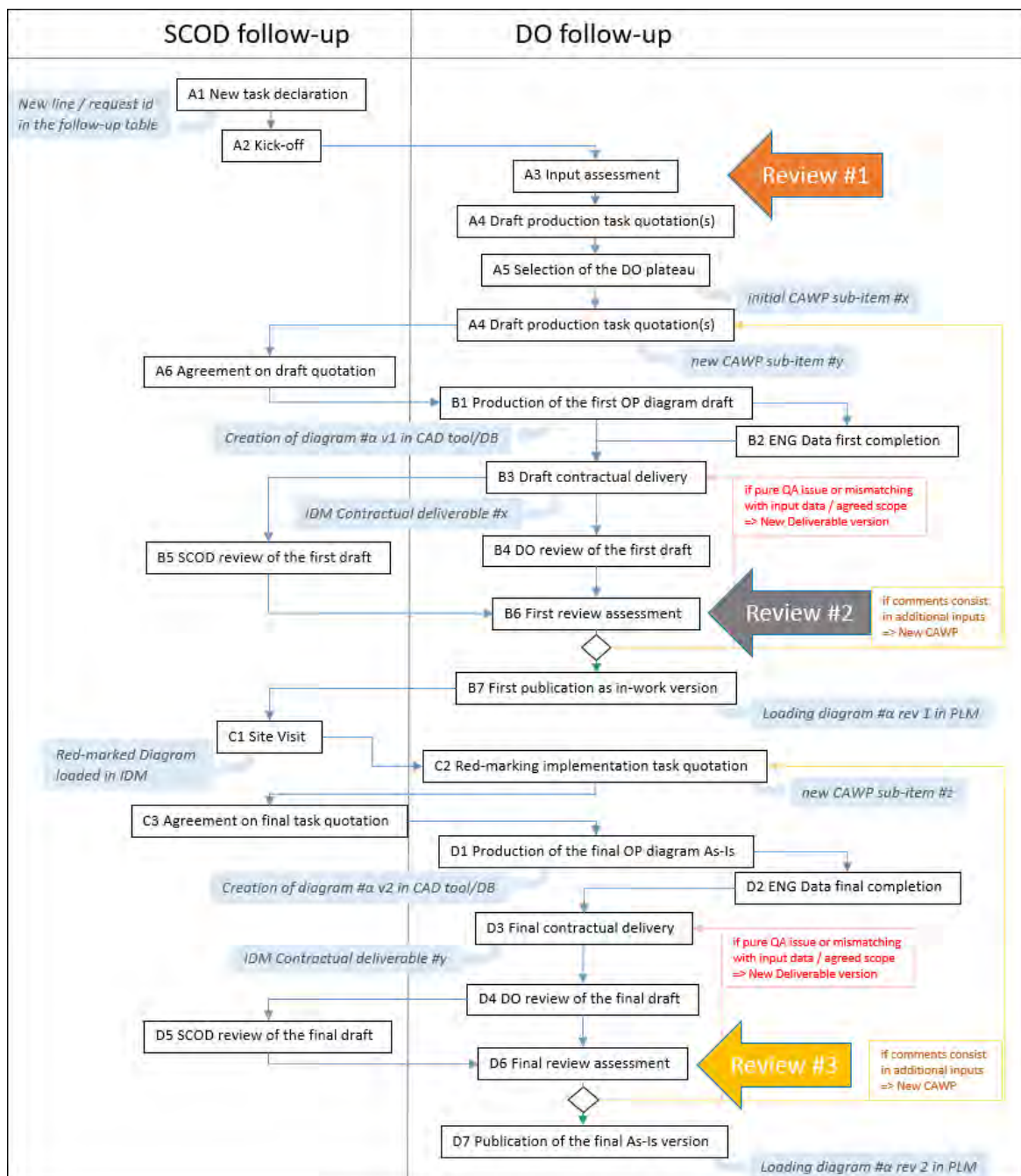


Figure 2: CAD production workflow for TOP preparation

SERVICE

The HOP planning and CAD documents content analyze and follow-up for a designated PBS/scope shall be triggered and followed-up by DECO using specific WU as shown below:

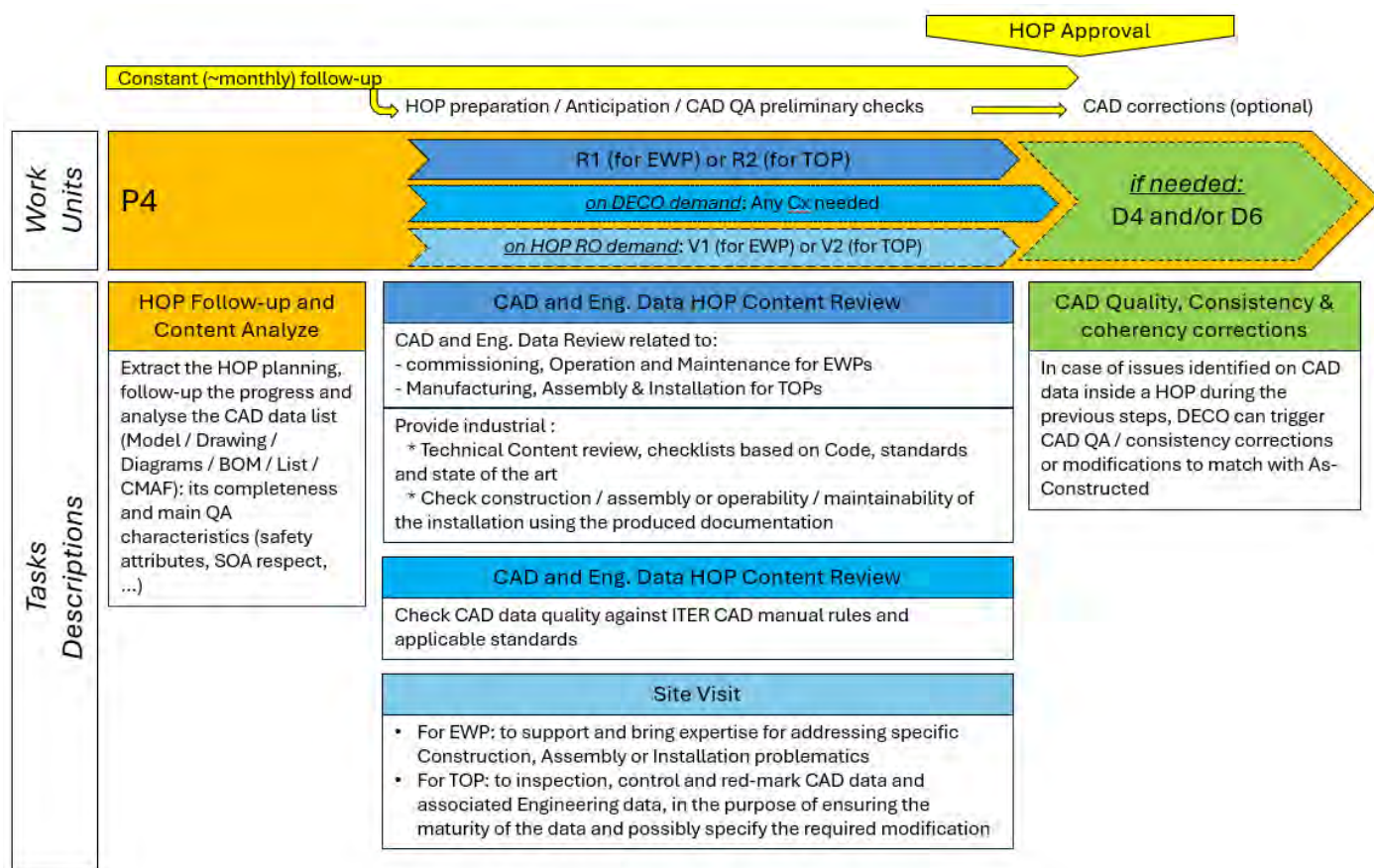


Figure 3: EWP & TOP related tasks and WUs

5.2 Tasks description

The tasks to be covered are described hereunder, classified per categories of activities.

5.2.1 CAD Related Tasks

- CAD data Quality Check:
 - Light Check: random or targeted on specific check of CAD data quality against ITER CAD manual rules and applicable standards - or check that stops at first occurrence of each defined criterion
 - Full Check: complete check CAD data quality against ITER CAD manual rules and applicable standards

Typical context: Cursory Check, QA check before promotion, DET re-integration, Building Takeover preparation, HOP CAD content checking.

- CAD data consistency check:
 - check of consistency between 2 or more CAD representations of the same zone or system (for e.g. 3D model vs Diagram)
 - check of consistency between CAD representations and a corresponding list of component (BOM, Equipment List,...)
 - check of relevance and existence in Component Database of tags in CAD representations and/or in list of components (BOM, Equipment List, ...)

SERVICE

Typical context: CAD data comparison from different sources, CAD Exchange import process support, control of FR/TAG relevance.

- CAD Data specific check – specified into the Jira ticket description:
 - only 2 sources of data to compare / check
 - more than 2 sources of data to compare / check
 - Full automatic checks

Typical context: check the 3D integration in a specific zone, check openings, platforms, Wall IDs, perform specific measurement in a 3D mock-up, Bluebox extract, Edge effect report.

- CAD data promotion – following at least a Quality Check before:
 - On IO database with Mass production tool
 - CAD data promotion, Manual on IO database
 - CAD data promotion on a DA database with Mass production tool
 - CAD data promotion, Manual on a DA database

Typical context: support to DECO activity for promotion on IO ENOVIA database (local database in Cadarache) or on any DA ENOVIA database (for which a remote connection is mandatory).

- CMM branch synchronization of CAD context in ENOVIA, including creation / completion of e-log:
 - Basic Leaf Instance synchronization with latest version
 - Standard Leaf Instance synchronization with any version
 - Complex synchronization (intra CATIA WP updates incl. CAD-link edition and update, instance relocation, design change propagation, ...)

Typical context: DM or Context evolution, DET re-integration, Assembly sequence update, config. branch update for CMAF.

- CMM models creation & update / conversion multi-CAD, incl. FR property update:
 - Update of context model from ENOVIA to AVEVA E3D with macro
 - Update of context model from AVEVA E3D to ENOVIA/CATIA
 - Update of context model from ENOVIA/CATIA DM to ENOVIA/CATIA CMM
 - Replacement of model in ENOVIA/CATIA CMM
 - Update of context model from Multi-CAD source to ENOVIA/CATIA CM

Typical context: Correction of inconsistencies in contextual 3D models, replacement of components or space reservations with the appropriate Catalogue Parts, EP and PDS in ENOVIA (following AVEVA configuration), as-built openings, concrete and room volumes in AVEVA.

- Modification of all CAD representations and of their associated Engineering data for a specific scope or area with red-marking and/or detailed specification as input, in the purpose of QA corrections or maturity evolution
- 3DXML context extract / conversion: extraction with macro of 3DXML files extracted from ENOVIA/CATIA based on specific inputs defining the scope of the extract

Typical context: 3D integration & conf. control.

- CAD context preparation: Preparation of 3D context - identification of list of parts according to specific criteria / clear inputs

Typical context: preparatory work for 3DXML creation, CAD Exchange export process support, extraction of specific formats for analysts.

- CAD Data QA correction – based on the CAD quality report or specific request
 - correction of QA issues in CAD models

SERVICE

- Individual CAD data / component / FR / PNI properties update
- Massive CAD data / component / FR / PNI properties update

Typical context: Correction of already identified and listed QA issues (via CAD data QA Light or Full Check for example) mandatory prior executing a specific process such as data promotion or data transfer.

- CAD tree structure creation or update: ENOVIA Structure Exposed and Leaf Instance parts creation or modification, with specific instructions as inputs.

Typical context: support to design work by (re)structuring the ENOVIA product tree.

- SMDD import support:
 - QA manual check of SMDD input metadata: checking list / BOM that are imported together with the drawings and diagrams
 - QA check with macro of SMDD input metadata: same as above with macro dedicated to some specific cases
 - CAD Data manual upload in SMDD: import of drawings and diagrams together with the related list / BOM
 - CAD Data upload in SMDD with macro: same as above with macro dedicated to some specific cases

Typical context: any request from DECO for support on import of 2D CAD data in SMDD.

5.2.2 Site Related Activities

- Site Visit to support and bring expertise for addressing specific Construction, Assembly, Installation, Commissioning or preparation for Operation and Maintenance problematics
- Site Visit to support CAD & Engineering Maturity Assessment: inspection of specific areas for controlling and red-marking CAD data and associated Engineering data, in the purpose of ensuring the maturity of the data and possibly specify the required modification

5.2.3 CAD and Engineering data Review

- Extract from the HOP management platform (PLM / ICP or any other official relevant and accurate source) the planning and the expected or contained CAD documents of HOP(s) for a designated PBS/scope and follow-up the progress for the 3 to 12 up-coming months
- Provide industrial expertise to DECO, TRO and PBS RO in the frame of mechanical design, plant design, CAD and Eng. Data Review related to:
 - Manufacturing, Assembly & Installation
 - Commissioning, Operation and Maintenance
- Review of the on-site red-marking session outputs for:
 - Assessing their completeness and usability by the designers of the red-marks and annotation performed during site-visits
 - Requesting additional information and details to the site visit RO when necessary for the designer to be able to produce the corresponding update of the annotated CAD documents

SERVICE

5.2.4 Other DO Process Support

Those specific tasks of type G and S as classified hereunder shall only be triggered with the agreement of the TRO of this contract who shall also validate first the scope and the maximum number of WU that can be invested in the specific task.

- CAD exchange support: treat DETs on demand
Typical context: support to CAD exchange team in case of heavy workload
- CAD Data collection / investigation: this task is to cover any kind of technical investigation or data collection mainly involving CAD data
- Produce specific How-Tos or Presentations dedicated to support and/or monitor any activities in relation with this contract
- Preparation and animation of Coaching or Training session dedicated to support any activities in relation with this contract

For each task type mentioned above, a specific WU has been defined. Each WU represents an estimated workload of one hour, except for CAD exchange support activities. You can refer to Section 8 for further details on tasks workload sizing, inputs, outputs and expected deliverables.

WU type	Task Category	Estimated duration in hour
C - CAD Data Check		
C1	CAD data QA Light Check	1
C2	CAD data QA Full Check	1
C3	CAD data consistency check	1
C4	CAD Data specific check	1
D - CAD Data creation, modification, synchronization, promotion in ITER DB		
D1	CAD data promotion	1
D2	CMM branches synchronization	1
D3	CMM models creation & update / conversion multi-CAD, incl. FR property update	1
D4	CAD Data QA correction	1
D5	CAD tree structure creation or update	1
D6	CAD Data Specified Modifications	1
P - data extraction / preparation		
P1	3DXML context extract / conversion	1
P2	CAD context preparation	1
P3	Automatic extraction	1
P4	HOP Follow-up and Content Analyze	1
I - data import		
I1	SMDD import support	1
G - CAD exchange support		
G1	Simple DET treatment	4
G2	Complex DET treatment	12
S - Specific task / investigation		
S1	CAD Data collection / investigation	1
S2	Produce dedicated How-Tos or Presentations	1
S3	Preparation and animation of Coaching or Training session	1
V -Site Visit		

SERVICE

V1	Site Visit to support on-site Activities	4
V2	Site Visit to support CAD & ENG data Maturity Assessment	4
R -CAD and Engineering data Review		
R1	CAD and Eng. Data Review related to Manufacturing, Assembly & Installation	1
R2	CAD and Eng. Data Review related to Commissioning, Operation and Maintenance	1
R3	Review of the on-site red-marking session outputs	1

5.3 Task Management

All tasks shall be implemented through Work-Units.

Each Work-Unit involves a clearly defined task, which is based on specific inputs and consistently results in the same deliverable.

The Work-Units will be launched by DECOs or relevant DO RO/CCT through a JIRA ticket (as “reporter” in the JIRA ticket system) including required inputs. The methodology used for any of activity must be consulted with reporter. Manual work should be avoided as much as possible; the use of macros or other improvements are welcomed and should be capitalized. Deliverables shall be attached to the Jira ticket or a link to it in IDM shall be provided.

Estimated Work-Units durations are only indicative, they are based on actual experience related to the average implementation time of the described tasks.

5.4 Maximum time to deliver

For the tasks to be performed on data stored in local folders or databases (less than 1500 km away from IO ITER site), the maximum time to deliver the service and answer to the corresponding Jira ticket is 1 day for every 4 hours of estimated duration of ticket resolution as they are specified in the columns “WU Criteria” and “estimated duration in hours” in the table of section 8.

For the tasks that can’t be addressed immediately (due to workload of the team) the corresponding Jira ticket should be set “On Hold” status with a justification as ticket comment.

For the tasks to be performed on data stored into remote database locations, in particular P3 and P4, the maximum time to deliver the service and answer to the corresponding Jira ticket is 2 days for every 4 work units.

And specifically for CAD exchange tasks A1 and A2 the maximum time to deliver the service and answer to the corresponding Jira ticket is 3 days.

5.5 Service Duration

The maximum expected duration for this activity is 36 months, including the two foreseen options.

Please refer to Section 8 for a complete list of due dates per deliverable.

6 Location for Scope of Work Execution

Contractor can perform the work at its own location. However, due to the handling of large data volumes and in order to ensure the same access to the database as the DECOs and a quick reaction time (blockers and critical tickets), the location should be within a radius of 1500 km from IO ITER site.

SERVICE

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 organized accordingly as and when required either by the IO-TRO or the Contractor.

7 IO Documents

At the creation of a new request in the CEQAC Jira ticket system ([Catia-Enovia QA QC](#)), the task requester will provide the technical inputs and context necessary to the execution of the task. In case of insufficient information provided here, the contractor should request additional information by commenting the ticket (using the Comments feature of Jira).

The contractor is also free to contact ITER staff other than the reporter to get more information or details, but she/he is not authorized:

- to fix any gentlemen or verbal agreements behalf of reporter without her/his explicit consent;
- to make any assumptions or decisions on methodology of task, or any other decisions that can affect the delivery or reporting result;
- to attend any meetings without reporter explicit consent, and a MoM has to be systematically sent to the reporter after the meeting.

If additional inputs are provided to the contractor outside of the ticket system, she / he shall attach them himself to the related ticket, specifying the source of this information.

8 List of deliverables and due dates

The Supplier shall provide IO with a monthly report listing all the CEQAC Jira tickets closed during the month, including the summary of the WU consumption for the period.

The calculation of WU consumed for each task / ticket shall be made on the basis of the table hereunder, in particular the 3 last columns: *WU criterion* gives for each task category and sub-case (depending on the type of input and / or output) an average volume of data that can be treated within the duration indicated in the next column *Estimated duration in hours*. The *Indicative Quantity* provides an estimation of the quantities to be consumed for the full 30 months' period for each listed Work Units.

Note that the option #1 is a possible increase of the volume of work on the nominal scope of the contract. But the option #2 is on an additional scope for the contract focused on CAD Data specific modifications, mainly based on red-marking and their control on site. None of those options are extending the duration of the contract.

WU type	Task Category	Task Details	Context / motivation examples	Input Information		Task Outputs		WU Criteria	Estimated duration in hour	Indicative Quantities		
				Input CAD type / format	Input source / database	created / modified CAD data format & repository	Typical Deliverables			FIX part	Option #1	Option #2
C - CAD Data Check												
C1	CAD data QA Light Check	random or targeted on specific check of CAD data quality against ITER CAD manual rules and applicable standards - or check that stops at fist occurrence of each defined criteria	Cursory Check, QA check before promotion, DET re-integration, Building Takeover preparation, HOP CAD content checking	Drawings	CATIA/ENOVIA or AVEVA or SMDD or pdf file	n/a	QA issues report, including Q-checker report	up to 5 x A0 or A1 or 10 x A2 or A3 or 15 x A4 pages	1	7000	1200	
				3D CMM	CATIA/ENOVIA			up to 100 unique CATProducts and CATParts				
				AVEVA 3D models	AVEVA E3D			Up to 100 components				
				PnIDs & PFDs	AVEVA Diagrams or SSD or SMDD or pdf file			up to 5 x A0 or A1 or 10 x A2 or A3 or 15 x A4 pages				
				Electrical Diagrams	SSD or SXP or SMDD or pdf file			up to 5 x A0 or A1 or 10 x A2 or A3 or 15 x A4 pages				

				BOM / equipment List	excel			up to 100 rows				
C2	CAD data QA Full Check	complete check CAD data quality against ITER CAD manual rules and applicable standards		Drawings	CATIA/ENOVIA or AVEVA or SMDD or pdf file		QA issues report, including Q- checker report	up to 2 x A0 or A1 or 4 x A2 or A3 or 6 x A4 pages	1	7000	1200	
				3D DM	CATIA/ENOVIA			up to 25 unique CATProducts and CATParts				
				3D CMM				Up to 25 components				
				AVEVA 3D models	AVEVA E3D			up to 2 x A0 or A1 or 4 x A2 or A3 or 6 x A4 pages				
				PnIDs & PFDs	AVEVA Diagrams or SSD or SMDD or pdf file			up to 2 x A0 or A1 or 4 x A2 or A3 or 6 x A4 pages				
				Electrical Diagrams	SSD or SXP or SMDD or pdf file			up to 25 rows				
				BOM / equipment List	excel							
C3	CAD data consistency check	check of consistency between 2 or more CAD representations of the same zone or system	CAD data comparison from different sources, CAD Exchange import process support, control of FR/TAG relevance, CMAF check (consistency between Design and the approved configuration)	list of CAD documents to be checked, with specific instructions if needed	any IO CAD source and format used on IO database		check result report	50 parts/components compared	1	3500	700	
		check of consistency between CAD representations and a corresponding list of component (BOM, equipment List,...)						50 parts/components compared				

		check of relevance and existence in Component Database of tags in CAD representations and/or in list of component (BOM, equipment List,...)						1 consistent list of component checked				
C4	CAD Data specific check	only 2 sources of data to compare / check	check the 3D integration in a specific zone, check openings, platforms, Wall IDs, perform specific measurement in a 3D mock-up					50 parts/components checked	1	1500	250	
		more than 2 sources of data to compare / check					15 parts/components checked					
D - CAD Data creation, modification, synchronisation, promotion in ITER DB												
D1	CAD data promotion	On IO database with Mass production tool	support to DECO activity for promotion on IO ENOVIA database	list of Part Instances and/or Drawings	CATIA/ENOVIA (IO)		promoted CAD data list: BOM, IRP, ENOVIA Tree picture	Up to 20 Leaf Instances InDraft/Incheck /Approved (as one unit)*	1	4500	750	
		CAD data promotion, Manual on IO database						Up to 10 Leaf Instances InDraft/Incheck /Approved (as one unit)				
		CAD data promotion on a DA database with Mass production tool	support to DECO activity for promotion on any DA ENOVIA database		CATIA/ENOVIA (DAs)			Up to 15 Leaf Instances InDraft/Incheck /Approved (as one unit)				
		CAD data promotion, Manual on a DA database						Up to 5 Leaf Instances InDraft/Incheck /Approved (as one unit)				
D2	CMM branches synchronization	Basic Leaf Instance synchronization with latest version	DM or Context evolution to be propagated to CMM, DET re-	list of CMM 3D branches to be synchronized	CATIA/ENOVIA any type of branches	CATIA/ENOVIA CMM branches	list of synchronized CMM in CATIA/ENOVIA	Up to 50 Leaf Instances synchronized	1	3000	500	

			integration	with instructions on the reference to be used			A branches: BOM, IRP, ENOVIA Tree picture and completed e-log	(Including unlock of another version)				
		Standard Leaf Instance synchronization with any version						Up to 20 Leaf Instances synchronized (Including unlock of another version)				
		Complex synchronization (intra CATIA WP updates incl. CAD-link edition and update, instance relocation, design change propagation,...)	Assembly sequence update, config. Branch update for CMAF					Up to 20 parts synchronized (Including unlock of another version)				
D3	CMM models creation & update / conversion multi-CAD, incl. FR property update	Update of context model from ENOVIA to AVEVA E3D with macro	Correction of inconsistencies in contextual 3D models	CMM 3D models	CMM branches in ENOVIA	Contextual models updated in AVEVA E3D	list of updated models in AVEVA E3D, 3DXML	half of a set of data	1	6400	1300	
		Update of context model from AVEVA E3D to ENOVIA/CATIA		DM 3D models	AVEVA E3D (STEP files)	CMM models updated in CATIA/ENOVIA		up to 2 zones				
		Update of context model from ENOVIA/CATIA DM to ENOVIA/CATIA CMM			DM branches in ENOVIA		list of updated CMM models in CATIA/ENOVIA: BOM, IRP, ENOVIA Tree picture	Up to 15 parts created or updated				
		Manual update of context model from DM coming from other multi-CAD source to ENOVIA/CATIA CMM			other multi-CAD source							

		Replacement of model in ENOVIA/CATIA CMM	replacement of components or space reservations with the appropriate Catalogue Parts	Catalogue	CATIA/ENOVIA		Up to 30 parts replaced and /or repositioned				
D4	CAD Data QA correction	correction of QA issues in CAD models	Correction of already identified and listed QA issues (via CAD data QA Light or Full Check for example) mandatory prior executing a specific process such as data promotion or data transfer.	QA issues report or list & instructions for corrections to be performed	CATIA/ENOVIA 3D model	corrected CAD data list: BOM, IRP, ENOVIA Tree picture	Up to 25 QA issues corrected	1	8000	1650	
					CATIA/ENOVIA 2D drawing		Up to 25 QA issues corrected				
					AVEVA E3D 3D models		Up to 25 QA issues corrected				
					AVEVA E3D Isometric drawings		Up to 25 QA issues corrected				
					AVEVA Diagrams		Up to 25 QA issues corrected				
					SSD or SXP Diagrams		Up to 25 QA issues corrected				
		Individual CAD data / component / FR / PNI properties update Massive CAD data / component / FR / PNI properties update			any CAD metadata		Up to 25 QA issues corrected 1 set of data				
D5	CAD tree structure creation or update	ENOVIA Structure Exposed / Leaf Instance parts creation or modification	design work support	list of structure modifications to be performed	ENOVIA product structure	updated product structure in ENOVIA: BOM, IRP, ENOVIA Tree picture	Up to 20 Parts	1	1000	200	
D6	CAD Data Specified Modifications	Modify existing CAD data according to very specific instructions	convergence of CAD on: - As-Design to As-Built (implementation on CAD of PCR, FCR, NCR,...) - various representations (1D, 2D, 3D) consistency	red-marking or inconsistency report or CAD modification spec.	CATIA/ENOVIA 3D model	corrected CAD data list: BOM, IRP, ENOVIA Tree picture	Up to 25 modifications implemented	1			6000
					CATIA/ENOVIA 2D drawing						
					AVEVA E3D 3D models						
					AVEVA E3D Isometric drawings						
					AVEVA Diagrams						
					SSD or SXP Diagrams						

P - Data extraction / preparation												
P1	3DXML context extract / conversion	creation from ENOVIA/CATIA based on specific inputs	3D integration & conf. control	CMM 3D models	CATIA/ENOVIA	3DXML files	report listing DAD data saved in 3DXML format	1 set of data	1	400	100	
P2	CAD context preparation	Preparation of 3D context - identification of list of parts according to specific criteria / clear inputs	preparatory work for 3DXML creation, CAD Exchange export process support	any CAD data global context with clear instructions / boundary conditions	any	n/a	CAD data list or instance path list for data from ENOVIA: BOM, IRP, ENOVIA Tree picture, mail to CAD Exchange and DET form if relevant		1	1800	200	
P3	Automatic extraction	Full automatic extractions and checks with existing macros	bluebox extract, edge effect report	specific instructions with description of the scope and output expectation	any IO CAD source and format used on IO database		extract result report		1	400	100	
P4	HOP Follow-up and Content Analyse	Extract the HOP planning, follow-up the progress and analyze the CAD data list completeness and QA	Preparation for EWP and TOP anticipation activities, preliminary analyse of HOP CAD content QA (doc. Properties, proper SOA including DO review) and completeness	n/a	HOP platform: PLM / ICP or any other official relevant and accurate source		detailed planning on excel AND/OR HOP content list and first analyze		- Extraction of the planning for one full PBS for the six upcoming months OR - Follow-up of one specific HOP progress, list its CAD doc. content with main QA characteristics (safety attributes, SOA respect, ...)	1	250	30
I - data import												
I1	SMDD import support	SMDD input metadata QA manual check	clean import of 2D CAD data in SMDD	equipment list to be checked / corrected /	BOM in excel table	updated version of the excel table imported in SMDD: IDM link	Up to 10 drawings		1	550	100	

		SMDD input metadata QA check with macro		complemente d				Up to 20 drawings				
		CAD Data manual upload in SMDD		CAD data to be imported with its BOM	CAD data & BOM in excel table	updated version of the excel table imported in SMDD: IDM link		Up to 20 drawings				
		CAD Data upload in SMDD with macro						Up to 6 batches				
G - CAD exchange support												
G1	Simple DET treatment	Treat simple DET as defined by the CAD exchange team	Support to CAD exchange team in case of overloading	DER acknowledgement including Exchange request input data and DET Entry registered in the DET Logs		- DET Logs updated with attributes and history - DET form completed with auxiliary documents - Archive of communications - DET BOMs, with comparison checks - zipped data set for the asynchronous exchange.	1 DET with: - Low volume of data on asynchronous export - Low volume synchronous for both directions of the exchange - Async. Export where the dataset is provided by the requestor / DECO	4	150	25		
G2	Complex DET treatment	Treat complex DET as defined by the CAD exchange team					1 DET with: - Mid-size volume of data on async. export - Large sync. context export/import - DET with data identification not supported by precise information	12	100	15		
S - Specific task / investigation												
S1	CAD Data collection / investigation	Any kind of technical investigation or data collection task mainly involving CAD data	any investigation task requested and validated by the contract TRO	any	any	n/a	list, report, presentation, how-to	To be assessed case by case with the contract TRO	1	2000	350	

S2	Produce dedicated How-tos or Presentations	Support CAD and ENG activities by: - Defining and documenting Process and Methodology dedicated to address any specific activities covered by this contract - Preparing How-Tos to support specific methods or resolution of recurring difficulties/issues - Identification of issues encountered	any production of How-tos or Presentations dedicated to support and/or monitor any activities in relation with this contract, only on the specific request and validation of the contract TRO										
S3	Preparation and animation of Coaching or Training session	Prepare and animate coaching or training session dedicated to support aany activities in relation with this contract	any coaching and/or training requested and validated by the contract TRO				Produced dedicated training material, Training session report, Attendance sheet.						
V -Site Visit													
V1	Site Visit to support on-site Activities	Support and bring expertise for addressing specific Construction, Assembly or Installation problematics	Preparation or exploitation of activities executed through an X1 WU	n/a	n/a	n/a	Site-visit Report, IDM review, CAD data red-marking, EXCEL/PDF checklist	1 area inspected	4	500	100		

		Support and bring expertise for addressing specific Commissioning and preparation for Operation and Maintenance problematics	Preparation or exploitation of activities executed through an X2 WU										
V2	Site Visit to support CAD & ENG data Maturity Assessment	Inspection of specific areas for controlling and red-marking CAD data and associated Engineering data, in the purpose of ensuring the maturity of the data and possibly specify the required modification	Participate to official Walkdown, Support EWP or TOP preparation	any	any	n/a							
R -CAD and Engineering data Review													

R1	CAD and Eng. Data Review related to Manufacturing , Assembly & Installation	<ul style="list-style-type: none"> - Provide industrial expertise to DECO, TRO and PBS RO in the frame of mechanical design, plant design, construction and operation: <ul style="list-style-type: none"> * Technical Content review, checklists based on Code, standards and state of the art; * Check coherency and achievability of geometrical dimensioning, tolerances, welding; * Highlight possible design issues, assembly and welding feasibility; * Check compliance of the functional interface when described in an associated “functional tolerance drawing”; - During task execution maintain communication with stakeholders and organize or 	preparation of EWP or execution follow-up	any	any	n/a	Review Reports, Communication tracking	5 pages of technical document reviewed and commented if needed	1	3000	500	
----	---	--	---	-----	-----	-----	--	--	---	------	-----	--

		participate to progress meeting.										
--	--	-------------------------------------	--	--	--	--	--	--	--	--	--	--

R2	CAD and Eng. Data Review related to Commissioning, Operation and Maintenance	<ul style="list-style-type: none"> - Provide industrial expertise to DECO, TRO and PBS RO in the frame of mechanical design, plant design, Commissioning, Operation and Maintenance: * Technical Content review, checklists based on Code, standards and state of the art; * Check operability and maintainability of the installation using the produced documentation; - During task maintain communication with stakeholders and organize or participate to progress meeting. 	preparation of TOP or execution follow-up	any	any	n/a			1	1500	250	
R3	Review of the on-site red-marking session outputs	<ul style="list-style-type: none"> - To review and assess the completeness and usability by the designers of the red-marks and annotation performed during site-visits - To request additional information and details to the site 	preparation of Design task for updating CAD Models to As-Built maturity (typically using WU D6)	any	any	n/a	Review report including exhaustive list of missing information, Communication tracking	5 pages of red-marked / annotated CAD document (or equivalent) reviewed and commented if needed	1	500	100	2350

		visit RO when necessary for the designer to be able to produce the corresponding update of the annotated CAD documents										
--	--	--	--	--	--	--	--	--	--	--	--	--

9 Quality Assurance requirements

The Quality class under this contract is QC3, [Ref 1] GM3S section 8 applies in line with the defined Quality Class.

10 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] (Please refer to [ITER_D_4EUQFL - Overall supervision plan of external interveners chain for Protection Important Components, Structures and Systems and Protection Important Activities](#)).

11 Special Management requirements

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

11.1 Contract Gates

n/a

11.2 Work Monitoring

As specified in Section 5.3, each task under this contract shall be strictly triggered and monitored through a dedicated CEQAC jira tickets ([Catia-Enovia QA QC](#)) where all technical inputs, discussions and outputs shall be logged. The cost of each task in terms of Work Unit (as defined in this contract) shall also be strictly logged into its jira ticket i) at the beginning of the task as an estimate and ii) at the closure of the task for the final cost agreed with the task requester and the IO TRO. The task requester, designated in jira as the “Reporter” (a DECO in most of the cases) shall validate the estimation prior to the job to start. And she/he shall also validate the final cost prior to the ticket closure in case it doesn’t match with the agreed estimation.

11.3 Meeting Schedule

The Contractor shall attend to regular progress meeting as specified by the TRO at the beginning of the contract in order to keep the her/him informed of the current status of the request treatment.

And a weekly report shall be provided to provide a statement of the activities treated during the past week.

11.4 CAD design requirements

The Contractor shall ensure that all designs, CAD data and drawings delivered to IO comply with the [Procedure for the Usage of the ITER CAD Manual \(2F6FTX\)](#).

The reference scheme is for the Contractor to work in a fully synchronous manner on the ITER CAD platform (see detailed information about synchronous collaboration in the [Specification for CAD data Production in ITER direct contracts \(P7Q3J7\)](#).

This implies the usage of the CAD software versions as indicated in [CAD Manual 07 - CAD Fact Sheet \(249WUL\)](#) and the connection to one of the ITER project CAD data-bases. Any deviation against this requirement shall be defined in a Design Collaboration Implementation Form (DCIF) prepared and approved by DO and included in the all-for-tender package. Any cost or labor resulting from a deviation or non-conformance of the Contractor with regards to the CAD collaboration requirement shall be incurred by the Contractor itself.

[CAD Requirements & Deliverables Relative to Functional Design Milestone \(P49NTN\)](#) introduces CAD methodologies and details on required CAD deliverables for deliverable based Task aiming at Functional Design stage completion. **The non-respect of these requirements can lead to withhold of deliverable acceptance.**

On the top of the software listed in the documents above, the contractor shall be able to perform activities using the following CAD software solutions:

- CATIA Mechanical & Plant, including Equipment And System modules (EnS)
- AVEVA suite (E3D, Diagrams and AVEVA ENG)
- SSD
- SXP
- AutoCAD

11.5 Resources availability

Due to the focus on CAD quality for all the tasks covered by this contract, the expertise on CAD activities and the experience on ITER DO environment is a must at the very beginning of the contract.

Therefore as part of the main team the contractor shall be able to provide at the start of the activity:

- Minimum 4 PBSAs with more than 6 months experience
- Minimum 1 DESA with more than 6 months experience as back-up
- Minimum 1 designer with 1 year experience in AVEVA E3D CAD quality detailed review in ITER context
- Minimum 1 designer with 3 months experience in AVEVA Diagram CAD quality detailed review in ITER context
- Minimum 1 designer with 3 months experience in SSD CAD quality detailed review in ITER context

- Minimum 1 designer with 1 month experience in SXP CAD quality detailed review in ITER context

11.6 Conflict of interest

As part of the tasks consists of CAD data checking on behalf of IO, the contractor shall not be involved in any other CAD activity for the IO.

The contractor selected will be disqualified from any other CAD task for the IO.