



TECHNICAL SUMMARY

Call For Tender IO/20/CFT/19411/ERA

Manufacturing design and procurement of COM PA-EB-EP subsystems

Purpose

The COMmunication for Fisrt Plasma system covers on ITER:

- Public Address (PA; system to broadcast voice messages and alerts in buildings and on the site),
- Emergency Phones (EP; “red” phones for call in emergency situations),
- Emergency Buttons (EB; Call buttons for emergency cases).

The purpose of the contract is to perform the PA-EB-EP manufacturing design, procurement, manufacturing, configuration, installation, integration, commissioning and training.

Background

ITER is a joint international research and development project for which initial construction activities have recently started. The project aims to demonstrate the scientific and technological feasibility of fusion power for peaceful purposes. The seven Members of the ITER Organization are 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 will be constructed in Europe, at Cadarache, in southern France, where the ITER Organization (IO) has its headquarters.

ITER is a 180-hectare site with more than 30 buildings. The facility is a nuclear research site and a Basic Nuclear Installation (INB according to French wording).

The PA-EP-EB subsystems shall contribute to the safety, the security and the operation of the facility.

Scope of work

The scope of the work to be performed by the Contractor covers the following activities for the complete PA-EP-EB subsystems:

- Manufacturing Design (including Acoustic measures of rooms with control of reverberation time, background noise level and acoustic simulations confirming speakers positions and numbers for all buildings);
- Manufacturing Readiness Review (MRR) organization, and MRR meeting execution until success;
- Procurement of all components part of this Contract specifications;
- Creation of a test platform;
- Components pre-integration at contractor's premises;
- Testing in factory;
- Packaging and shipping;
- Installation;
- Components integration in buildings;
- System integration with Central Components (servers);
- Testing on site;
- Commissioning;
- Warranty;
- Complete documentation of all components and systems delivered within this Contract.

The main hardware components to deliver are (provisional list with orders of magnitude):

- Cubicles equipped with power supplies, PA components, and cables marshalling for field devices (about 18),
- Wall Mounted Panels equipped with power supplies, PA components, and cables marshalling for field devices (about 3),
- Loudspeakers (about 1100),
- Emergency Phones (about 250),
- PABX (Private Automatic Branch eXchange ; 1)
- Light signals (about 90)
- Emergency Buttons (about 130)
- All associated software licences.

The PA system shall comply with the EN54-16 Fire detection and fire alarm systems - Part 16: Voice alarm control and indicating equipment.

For the PABX, ITER has decided to stay consistent with the site existing phone system and use Alcatel Lucent OXE System.

The hardware components listed below are not in the scope of the contract:

- Servers hardware,
- PC, screen, keyboard, mouses for all operator stations/clients,
- Network switches (if any),
- Cabling between field components and enclosures.

The software components listed below are not in the scope of the contract:

- Windows base software
- Software related to IT base services.

Contract schedule

The Contract is scheduled to come into force end of 2021 for a duration of 3 years and an half (3.5 years). It will be phased as following:

1. Phase 1: Manufacturing design
2. Phase 2: installation and commissioning of Central Components (up to autumn 2022). Central components are especially the PABX, the PA main “controllers” that will control the corresponding nodes in each buildings, the PA call stations,
3. Phase 3: Buildings components installation, acceptance and commissioning (up to 09/2024). Buildings components are those deployed on In the buildings and on the outdoor functions: Emergency buttons, Emergency Phones, loudspeakers, Buildings cubicles and wall mounted panels...
4. Phase 4: Overall Final Acceptance (up to end 2024)

Procurement timetable

The tentative timetable is as follows:

Call for Nomination Release	August 2020
Receipt of Nominations	September 2020
Issuance of Pre-qualification Application	October 2020
Receipt of Prequalification Application	November 2020
Notification of Prequalification Results	January 2021
Issuance of Call for Tender	February 2021
Tender Proposals Due Date:	April 2021
Estimated Contract Award Date:	May 2021
Estimated Contract Start Date:	June 2021

Experience

The company’s experience shall cover a broad range as listed below.

- Design of Public Address for large sites, including acoustic measures of rooms with control of reverberation time, background noise level and acoustic simulations confirming speakers positions and numbers for all buildings,
- Design of Phones systems
- Experience of deployment of such systems on complex worksites.

Candidature

Participation is open to all legal persons participating either individually or in a grouping (consortium). All legal persons including all consortium members should be established in an

ITER Member State. A legal person cannot participate individually or as a consortium partner in more than one application or tender. 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. The consortium cannot be modified later without the approval of the ITER Organization.

Legal entities belonging to the same legal grouping are allowed to participate separately if they are able to demonstrate independent technical and financial capacities. Bidders' (individual or consortium) must comply with the selection criteria. IO reserves the right to disregard duplicated references and may exclude such legal entities from the tender procedure.

On 31 January 2020, the UK left the EU and Euratom with a transition period from 1st February to 31 December 2020 to be used to determine the conditions of their future relationship. Euratom is the ITER Member and the withdrawal of the UK from Euratom leads to the fact that UK is not anymore party to the ITER project.

Until the 31 December 2020, current end date of the transition period, UK entities retain the right to participate in IO procurement procedures.

After the end of the transition period, when the EURATOM Treaty ceases to apply to and in the UK, any UK entities bidding as a prime contractor or consortium partner will be rejected from the IO procurement procedures. UK entities will no longer be recognised as entities of an ITER Member and will no longer have the right to participate in IO procurement procedures, unless the UK has entered into an agreement with EURATOM. Where UK entities can demonstrate a unique and specific competence in a certain field the IO, with approval of the ITER Council, may also allow them to participate in a procurement procedure.

Reference

Further information on the ITER Organization procurement can be found at:
<https://www.iter.org/proc/generalinfo>.