

# **I&C for ITER in collaboration with European Industry**

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# F4E I&C Scope



Plant Instrumentation
Plant Control & Protection
Interface to central control: CODAC

Qualification of components for Safety





#### **F4E I&C Organization : Actors**



#### **Management & System engineering:**

- F4E Project Team
- F4E I&C Group
- I&C support contract

#### **Development:**

- Main suppliers of Plant Systems
- F4E I&C Integrator contract
- F4E Nuclear I&C Integrator contract
- Electronic Design contract
- BTP I&C implementation contracts

#### Relevant competences



- Industrial I&C Development experience
- Scientific I&C Development experience
- Nuclear I&C Development experience
- Development of Electronics
- ITER standard development libraries
  - CODAC Core System
  - Unified Control Library
  - MARTe
- Experience in high quality software development

## **Opportunity: BTP Cubicles for Vacuum System**



OPE-1273 cost range B

- 14 full size I&C cubicles
- 17 wall mounted electro-pneumatic enclosures
- 17 wall mounted electro-pneumatic enclosures (Nuclear safety)
- Build to print
- Specific quality requirements to be followed.

**Expect call in Q4 2022 SOON!** 

### **Opportunities: I&C Integrator contract**



OFC-989

cost range C

awarded to **GTD** 

- 7 years long until 2026
- requires knowledge of ITER I&C technologies
- requires experience of system integration
- design of I&C Systems
- small scale manufacturing

#### Expect renewal call in Q4 2023 – Q1 2024.

(Contract ceiling will be reached earlier.)

#### **Opportunities: I&C Support**



## OFC-1015 cost range C awarded to LEONARDO

- Frame contract
- 7 years long
- highly skilled I&C engineering support in F4E-BCN
- System Engineering
- Electronic Engineering
- Experience in I&C System design

**Expect renewal call in 2026.** 

## **Opportunities: Nuclear I&C Support**



OFC-1016 cost range C awarded to JACOBS

- Frame contract
- 7 years long
- Nuclear I&C experience
- I&C qualifications to nuclear standards
- Skilled engineering support to F4E-Cadarache
- Design of Nuclear I&C systems

**Expect renewal call in 2026.** 

#### **Electronic Design opportunity**



# OFC-1087 cost range C awarded to ALTER

- Frame contract
- 7 years long Electronics Design
- Assembling & Manufacturing
- Prototyping
- EMC Qualification

**Expect renewal call in 2027.** 



## Thank you for your attention

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