



**FUSION
FOR
ENERGY**

13th ILO meeting

**On-going and main forthcoming CFTs
(F4E Business Intelligence-related activities)**

29th September 2011 - Cadarache

Buildings (and site adaptation)



- TB02-Lift and cranes (OPE-285): [list of invited candidates published online](#)
- TB03-Nuclear tokamak building/assembly hall/doors (OPE-286): [on-going dialogue; list published](#)
- TB04- Mechanical & Electrical System: [launched \(Competitive Dialogue\)](#).
- TB05&07- Design & Build packages; TB06- HV electrical equipment; TB08-site infrastructure: [planned publication Q4 & Q1 2012 \(Restricted procedure\)](#)





CODAC (Control Data Access and Communication)

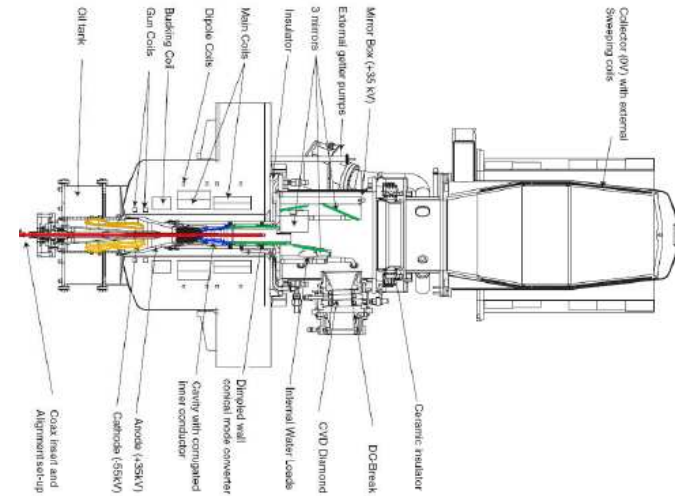
- Service Framework contract for in-sourcing engineering support – OFC-169 contract awarded, first specific agreement foreseen before the end of the year;
- Information day 30 September 2011 in Cadarache for the framework contract concerning manufacturing aspects. EU Industry Mapping and market survey conducted in parallel.

Diagnostics (bolometers, infrared tech, optical, reflectometers, dust measurement etc.) :

- Q3: OFC 322: Integration Port: CFT launched, deadline 17/10/2011
- Q3: FPA-328 (WP 55/01): Dev. & design for diagnostics, deadline:11/10/2011
- Q4: Irradiation & post irradiation testing services (market survey finished) soon
- Q4: Magnetic sensors prototypes & test equipment

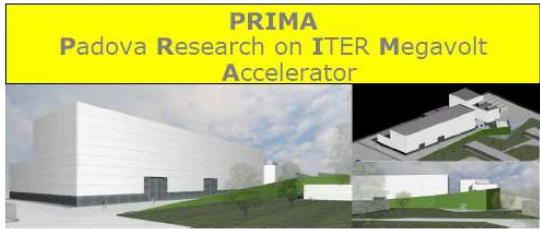
Electron Cyclotron Power Source and supplies (Gyrotron):

- Q4: Superconducting magnet for the gyrotron (OPE-299)



NBTF (Mitica/Prima/Spider):


- Q4: Prima Vacuum and Gas Injection Plant



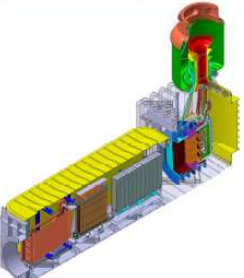
PRIMA
Padova Research on ITER Megavolt Accelerator

Courtesy RFX

Two devices operating in parallel
SPIDER: Full Size Ion Source
MITICA: 1MV injector,



SPIDER
Source for Production of Ion of Deuterium
Extracted from Rf plasma



MITICA
Megavolt ITER Injector & Concept Advancement

Cryoplant:

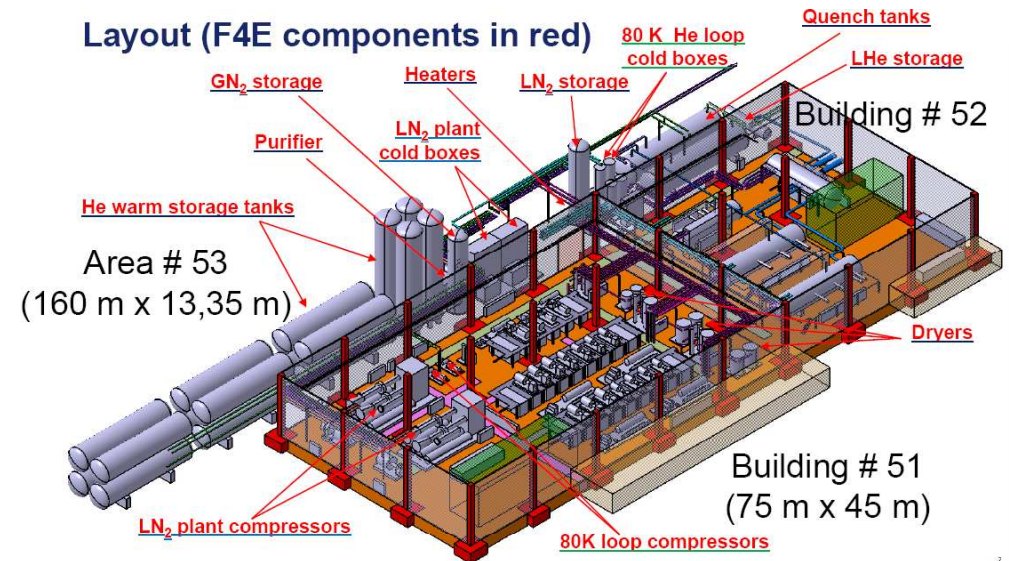
- PA signed during last ITER Council in Japan.
- Q4: CFT
- IO CFT not yet launched

Vacuum Pumping and Fuelling:

- Q4: CFT pre-production cryopumps (prototype)
- Survey online finished

Tritium Plant:

- WDS tanks: procurement activity postponed.



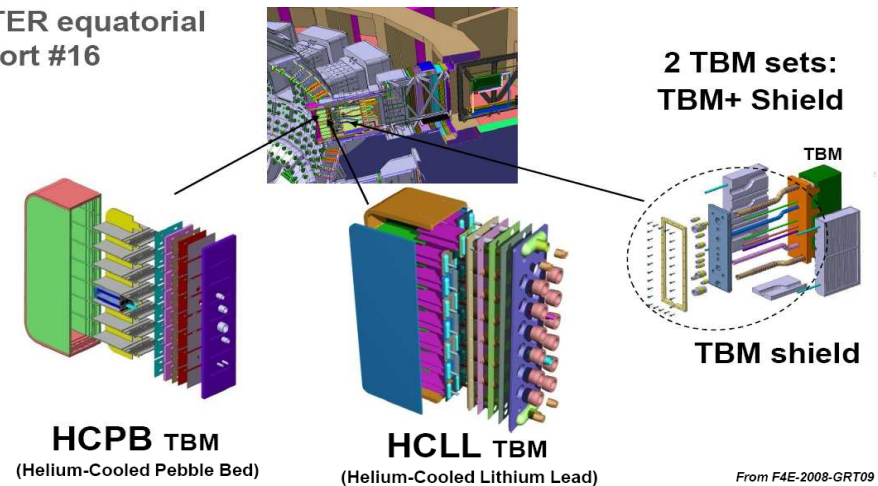
Test Blanket Module, Materials development, and Engineering Support



TBMs:

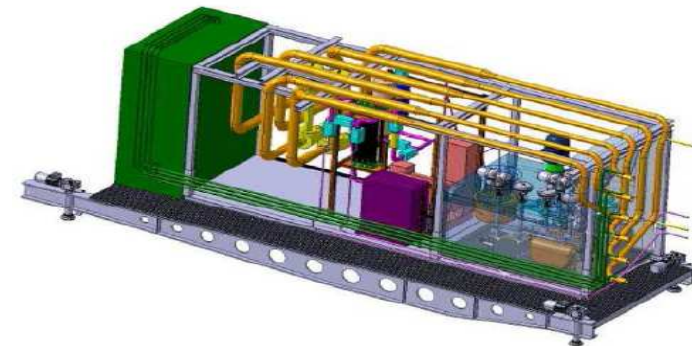
- Q4: FPA for R&D in support of the conceptual design of ancillary system
- Q4: FPA for Characterization of functional materials
- Q4: FPA for Development of TBM related diagnostics, instrumentation and sensors

ITER equatorial Port #16



HCPB TBM
(Helium-Cooled Pebble Bed)

HCLL TBM
(Helium-Cooled Lithium Lead)



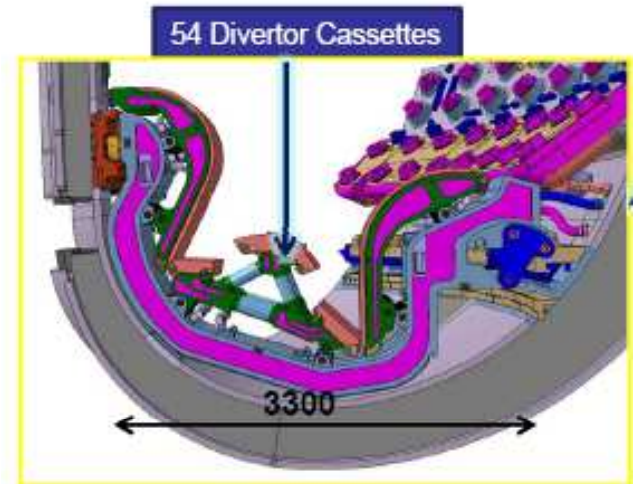
Ancillary system

Project Office:

- Following the information day on July 18th currently 2 calls are ongoing for Service FW Contracts

Divertor

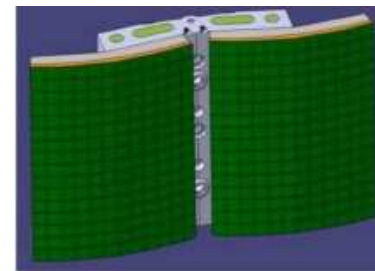
- Q4: pre-production qualification (supply of 3 prototypes)
- Q4: manufacturing of full scale prototype
- Q4: high heat flux testing on W and CFC proto



Cassette Size: 3.3 x 2.5 m
Cassette Weight: 9 to 11 t

First Wall:

- Q4: manufacture of a full scale prototype
- Q4: CFT for preliminary analysis (sharp bending)
- Q4: CFT for friction test

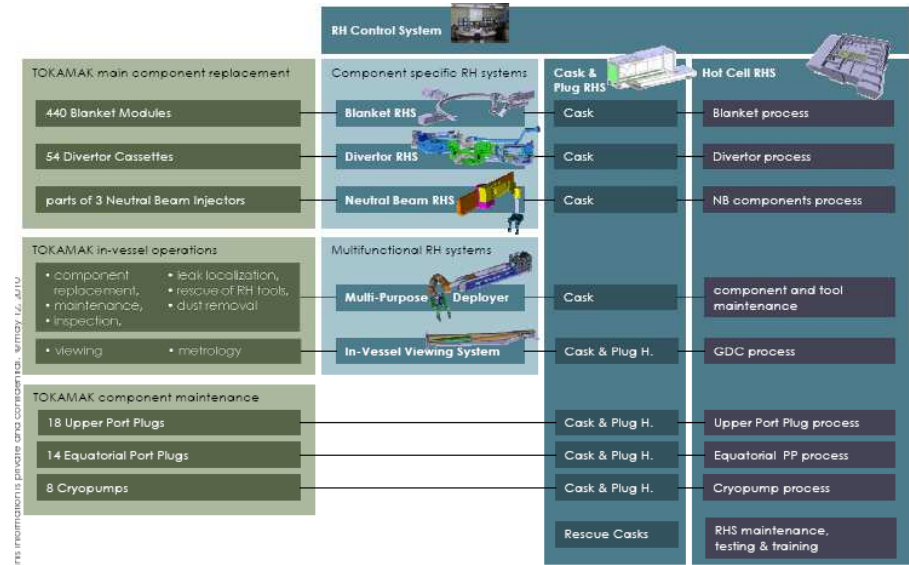


Remote Handling:

- Q3: CFT for 3 packages to be launched very soon
 - Neutral beam RH
 - Divertor RH
 - Transfer cask

A slightly different strategy is under consideration.

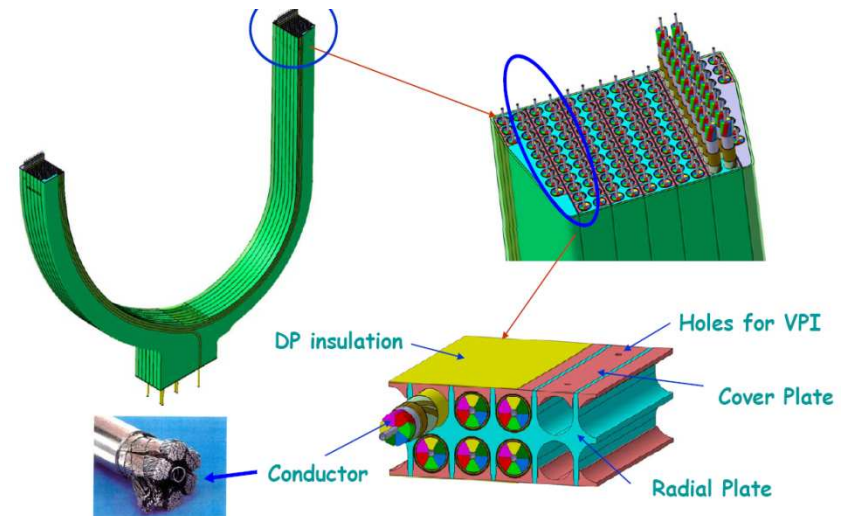
- The In vessel Viewing System procurement action will be launched within 6 months. This is due to the different level of maturity of the relating conceptual design which has been recently amended according to new ITER requirements.



- F4E -272 – OPE**
Awarding foreseen by November

Magnets:

- Q3: The 2 Radial Plates prototypes have been delivered by CNIM and SIMIC in September
- Q4: CFT for the series production
- Following Info Day, presentations are online.



End of part 2