

HOT CELL FACILITY - INFO DAY 17-01-2025
QUESTIONS & ANSWERS

ID	Theme	PARTICIPANTS' QUESTION	HCF ANSWER
1	01.admin	Along with the later sharing slides, will you also share the recorded session?	The recorded session will not be shared. The present slides and Q&A log are shared.
2	01.admin	Will you share a Q&R table? Thanks	see Q1 above
3	01.admin	Can we have the list of attendees?	A list of attendees volunteer to appear on that list will be shared: people requesting it at hcc@iter.org and industryportal-info@f4e.europa.eu (please indicate HCF INFODAY LIST OF PARTICIPANTS) will receive that list afterward (by end of January to reduce the number of sent updates). Please note that the Partnership tool available on F4E Industry Portal (https://industryportal.f4e.europa.eu/) facilitates the search for business partners for ITER project.
4	02. definition	what do you call "cubicle rooms" ?	Rooms dedicated to housing collocated Electrical + Instrumentation & Control (I&C) cabinets.
5	02. definition	What do you mean as 'Pre-concept' design	This preconcept was a feasibility proposal. It was not intended to implement further the design effort internally without Contractor's involvement. It is not such a design concept that is overall optimized, this will be the duty of the Design & Build (D&B) contractor.
6	03. RH	After separating Test Blanket Module (TBM) from TBM set, what do you do with the remaining TBM-set ?	TBM "shield" (i.e. TBM set after removing the TBM breeding part) is considered as a discarded component. Therefore it will be buffer stored as RW in HCF.
7	03. RH	whether there is a specific standard system for the design and manufacture of hot cell equipments to be carried out ? if not, can it be implemented in accordance with the standards of the supplier country ?	Guidances will be provided in the specification. It is a topic to be discussed in the frame of the procurement.
8	03. RH	Could you give us some information concerning the weight of the cask ? Have you already defined technical solutions for unloading casks inside red hot cells ?	Main features of the cask are the following: 3m x 3m x 9m - (H x W x L). Mass of the Cask without contents: 40 Tons. Mass of the Cask Transfer System (the equipment that drives it around): ~17 Tons. The definition of the technical solution is in the scope of the D&B contractor.
9	03. RH	Will you provide details on which subsystems/equipments for Remote Handling Maintenance are in/out of HCF scope ?	Yes. The requested information will be provided in the specification.
10	04. RW	Do you manage effluents in case of accident (fire, leak, ...)	Yes. Radioactive liquid effluent that are generated in case of accident (in the Tokamak Complex) are part of the liquid waste inventory that will be provided as an input data, except for the particular case of liquid waste generated in the HCF, which will depend on analyses that are part of the contract scope (e.g. fire analysis or leak in the HCF).
11	04. RW	What are the expected flux of waste (m3), and way to transport them for each material?	The waste inventory will be described in the Technical Specification. The transport of Radwaste is planned with on-the-shelf Radwaste containers that are compliant with transportation rules and ANDRA specification.
12	04. RW	1. Information on the radioactive waste sources received by HCF, including the specific source, type, size, annual production, radioactivity levels, surface dose rate, tritium and other nuclide ratios of radioactive solid waste and liquid waste. 2. Connection or supporting facilities with HCF, and receiving requirements? Whether radioactive solid waste can be transported for external processing? The types of waste that can be transported for external processing, and the reception requirements for external processing? Whether the waste liquid and waste gas containing tritium can be sent to the tritium plant for processing, and the reception requirements of the tritium plant.	The requested information will be provided in the specification.
13	05. HCF scope	In my understanding, the HCB will need to integrate some constraints related to DT2 (Deuterium Tritium 2nd operation phase) (at least to be able to transfer components that will be treated later in the extension building). Could you elaborate on this point (out to anticipate future DT2 needs in the HCB design)?	Yes. HCF shall be designed for DT1, and with some provisions for DT2 (e.g. the function mentioned in the question, and upgrade of shielding). It will be described in the technical specifications.
14	05. HCF scope	We understand that the design for the HCF DT1 should take into account the extension of the HCF for DT2. Is that correct ?	Yes. A space reservation will be required for a potential extension next to the HCB.
15	05. HCF scope	Are the radwaste functions shown in the functional analysis slides in the HCF scope part of the first phase, or the second phase of the HCF (and therefore out of scope for the upcoming opportunity)?	All the functions described in the presented slides are related to DT phase 1. The functions that are in the scope are described in the presentation.
16	05. HCF scope	Could you please specify the exact dimensions of the Sampling Station Machine, control room and Lab Interfaces?	The development of a sampling station for the HCF scope is part of the D&B contractor scope.
17	05. HCF scope	I understand that you've planned some centralized control rooms for maintaining operations. Control rooms are out of scope. But are they located in the HCF building ? Are the IHM also out of scope ?	The control room of the Hot Cell Facility is physically located out of the Hot Cell Building. The IHM is in the scope: IHM is indeed part of the design process for such nuclear facility and the HCF must be compatible with remote control. Out of scope: hardware and its integration into a control room. Note that the Tokamak Remote Handling System is using its own IHM that is developed in parallel (PBS23.07), which is out of the scope
18	05. HCF scope	Is there still a RadLab requirement?	Yes. There are still radlab requirement (e.g. radiab for characterization of solid and liquid RW). It will be described in the technical specifications.
19	05. HCF scope	How will you transfer the samples of Tungsten to the labs?	Transfer of samples from the TKM (Tokamak) to HCF interface is out of scope and will be provided in the technical specifications. The transfer of samples within HCF (e.g. sampling for RW characterization) is in the D&B contractor scope.
20	06. Interface	Which type of remote handling cask are you intending to use ? Is it defined yet ?	To transfer activated and contaminated in Vessel Components, "remote Handling casks" are used. They are out of scope (PBS 23.03)
21	06. Interface	Is the central Air Detritiation System housed in the HCF building ? In such a case, will you provide interfaces data between "ADS" and HCF scope ?	Yes, the Central ADS (provided by another entity) is located in the HCF, and all interfaces (physical and functional / loads) will be provided in the technical specifications.
22	06. Interface	I am surprised that no input comes from the Tritium Plant.	We are not sure to understand the comment. We confirm that the Water Detritiation System (WDS) located in the Tritium Plant will be managing tritiated water generated by the ADS and tritiated distillate generated by the Liquid Waste process in the HCF. Interface data will be provided in the technical specifications.
23	07. Operation	Will you specify requirements concerning duration of maintaining operations ?	There is a sequence of 8 months shutdown of the TKM machine (6 months window for remote handling maintenance and 2 months for stop/restart) + 16 months plasma - every 2 years. Therefore, some maintenance and radwaste activities shall be performed during the shutdown period, and some other activities (e.g. management of RW) will be performed continuously.
24	07. Operation	Are there operations through windows using telemanipulators?	For the upcoming contract: It is the Design and Build Contractor's work to propose its solution. Note that telemanipulator shall comply notably with Tritium Tightness and dynamic confinement requirement.
25	08. Technical solution	Do we have an approximate figure of the surface of the liner, or will this need to be calculated as part of the design?	For info, we had roughly estimated it at approx 4500m2 max (conservative value). This shall be designed and calculated by the D&B contractor in its own design.
26	08. Technical solution	can we use the crane or power manipulator to transfer the component in hot cell?	This is upon Design and Build contractor to propose the best solution complying with requirements, performance, nuclear safety, cost and schedule.
27	08. Technical solution	Regarding the handling systems, is there any "overhead crane" required?	See answer to Q26 above.
28	08. Technical solution	Is it allowed to use crane or power manipulator for the transportation of service objects with heavy weights in hot cell?	See answer to Q26 above.
29	08. Technical solution	What is the "contingency" of square meters not used already and that could be dedicated to manage changes?	Provided that a space is secured for the HCF extension, the contractor will be free to plan for a contingency space.
30	08. Technical solution	Question on Cells design : will the control room include the control of all teleoperated handling for the hot cells (red zone), or are local operators also possible ?	Local operator are possible. This is D&B contractor to define the most appropriated solution between local operator versus remote operations.
31	09. Schedule	Planning&schedule of detailed design + construction for this contract ? What are the schedule constraints from Iter ?	DT1 is planned in 2039. See Press release (ref. provided slide#18). More information will be provided in the future information day.
32	10. procurement	What will be the contracts configuration and expectation ?	We plan a design & build contract for the complete scope presented today. More information will be provided in the future information day.
33	10. procurement	Do you have already milestones and deadlines to communicate (reverse schedule) and when do you expect to launch the calls for tenders?	Current vision is mid 2025. A dedicated info day will be organized.
34	10. procurement	Do you know when you will release the technical specifications ?	The first set of technical documentation will be published with the Invitation To Tender, and the full set of documents will be sent to the selected/qualified tenderers.
35	10. procurement	Having the patent for a specific process, will this be considered in the contract structure?	Yes. We will address this concern in the frame of the procurement process.
36	10. procurement	will there be a mandatory site visit?	In the frame of the procurement process, visit on site will most likely be needed for the bidders.