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## FTP/P1-35: IFMIF: Overview of the Validation Activities

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The International Fusion Materials Irradiation Facility (IFMIF) Engineering Design and Engineering Validation Activities (EVEDA), which started in 2007 under the framework of the Broader Approach (BA) Agreement between EU and Japan, are coming to the final stage with the exception of the Accelerator Prototype Validation subproject (running till 2017). By June 2013, the engineering design of IFMIF will be completed by delivering an Interim IFMIF Engineering Design Report (IIEDR) together with the final reporting for the majority of the validation activities.

IFMIF/EVEDA consists of the following sub projects:

• The engineering design of IFMIF providing all the necessary information to take decisions for its construction, operation and decommissioning.

• The validation of the main challenging technologies of IFMIF through the design, construction and tests of: - an Accelerator Prototype, fully representative of the IFMIF low energy (9 MeV) accelerator (125 mA of D+ beam in continuous wave) to be completed in June 2017;

- a Lithium Test Loop, integrating all elements of the IFMIF lithium target facility, already commissioned in February 2011;

- the High Flux Test Module (different designs) and its internals to be irradiated in a fission reactor and tested in the helium loop HELOKA-LP.

An overview of the engineering design will be reported together with the outcome of the validation activities already achieved and still expected. In particular, the present status of the Accelerator Prototype (LIPAc) Validation activities ahead of the start of the installation of sub-subsystems in Rokkasho BA Site in early 2013 will be a highlight of these validation activities.

## **Country or International Organization of Primary Author**

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## Collaboration (if applicable, e.g., International Tokamak Physics Activities)

Broader Approach

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