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# The Linear IFMIF Prototype Accelerator (LIPAc) Operation under the European-Japanese Collaboration

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The International Fusion Materials Irradiation Facility (IFMIF) aims to provide an accelerator-based, D-Li neutron source to produce high energy neutrons at sufficient intensity and irradiation volume for DEMO materials qualification. The IFMIF/EVEDA project, which is part of the Broader Approach (BA) agreement between Japan and EURATOM, has the mission to work on the engineering design of IFMIF and to validate the main technological challenges, which among a wide diversity of hardware includes a 125mA CW deuteron accelerator up to 9 MeV mainly designed and manufactured in Europe.

The Linear IFMIF Prototype Accelerator (LIPAc) under installation and commissioning at Rokkasho Fusion Institute, QST (Japan) is entering in its second commissioning phase (D<sup>+</sup> beam, 125 mA, 5 MeV) which is to validate the design of the RFQ, the MEBT, the Beam Diagnostics and the RF System.

The organization of the LIPAc Operation Team has undergone a number of challenges to reach the main goal of full assembly, integration and operation of the entire accelerator. The different accelerator subsystems have been provided by Europe as an in-kind contribution and installed by Japan in close cooperation with the European experts, but also to manage efficiently and safely the operation of the machine in order to meet the objectives fixed by the project's governance. An Event Management system has also been developed to support the daily operation and the management of events through preventive and corrective maintenance plan and the feedback to the design.

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