

Status of the JT-60SA Project

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Satellite Tokamak Programme

Broader Approach Activities

Construction and exploitation of the JT-60SA will be conducted in Japan under the Satellite Tokamak Programme (STP), to be undertaken as part of the Broader Approach (BA) agreement jointly implemented between the Government of Japan and the European Atomic Energy Community (EU), which was launched in June 2007, and the Japanese national programme.

The mission of the JT-60SA project is to contribute to the early realization of fusion energy by supporting the exploitation of ITER and research towards DEMO by addressing key physics issues associated with these machines. The JT-60SA will be capable of confining break-even equivalent class high-temperature deuterium plasmas at a plasma current I_p of 5.5 MA and a major radius of ~3 m lasting for ~100 sec, pursue full non-inductive steady-state operation with high plasma beta close to and exceeding no-wall ideal stability limits, and establish ITER-relevant high density plasma regimes well above the H-mode power threshold.

Re-baselining of the project was completed in late 2008, where all the scientific missions are preserved with the newly designed machine to meet the cost objectives. The JT-60SA project made a large step forward towards its construction, which now foresees the first plasma in 2016. Construction of JT-60SA begins at Naka in Japan with launching the procurement of PF magnet, vacuum vessel and in-vessel components by Japan. In 2009, the procurement of TF magnet, cryostat and power supply is planned to be launched by Europe.

The presentation will overview the latest status of the JT-60SA project including the new machine design, R&D activities, manufacturing and disassembly activities at the Naka site in Japan.