

## ITER 遠隔実験に向けた技術検討 (3. サテライトトカマクにおけるその整備計画) Technical study of ITER Remote Experiment System (3. Modification Plan in Satellite Tokamak)

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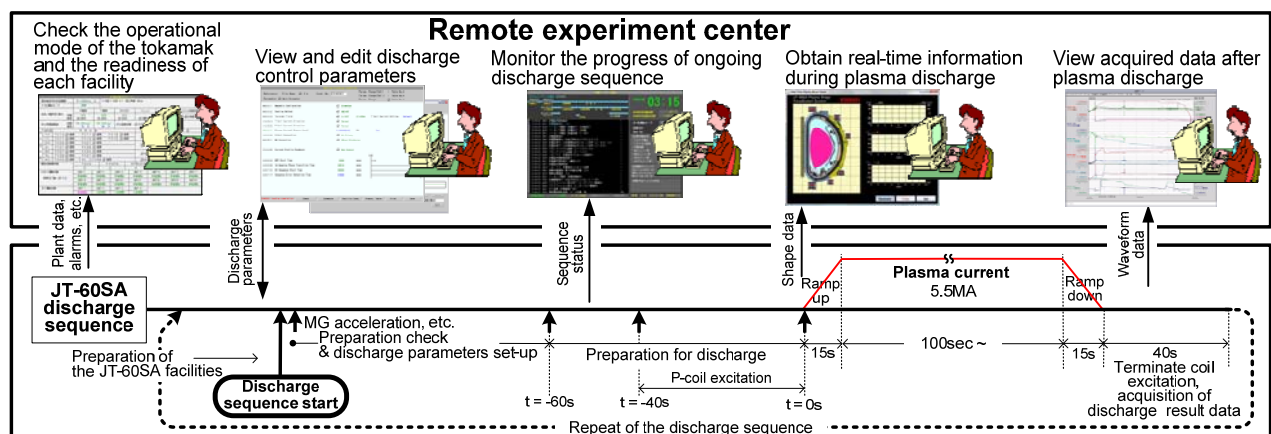
### ➤ Introduction

A demonstration of remote experiment system using the JT-60SA is planned in March 2017 as the project of the ITER Remote Experiment Center (REC) of the International Fusion Energy Research Center (IFERC). In this demonstration, feasibility of Remote Experiment System (RES) will be verified using JT-60SA in Naka from the REC of the IFERC located at Rokkasho in Aomori. RES provides the same experimental environment with that of JT-60SA control room to remote users of dedicated PC installed in REC room by accessing to the Remote Experiment Server (RESV) connected to a backbone-network of Naka fusion institute. Participation to other tokamaks such as European machine is also in the scope of this system.

### ➤ Functional requirements

The software development of RES shall satisfy the following functional requirements.

- RES provides the identical functions available at JT-60SA control room for the monitoring of the overall status of the machine and the plant systems, the discharge setup, the monitoring of the plasma status and the access to stored experimental data after the plasma discharge.
- All RES functions must be tested by executing a mock discharge sequence.



### ➤ Summary and schedule

To realize the functional requirements required here, we have designed the main function of RES, and are investigating the detailed specifications. The manufacturing of the software will be started from April 2014. The final demonstration is planned in middle of March 2017.