7. Collaboration Using SINET4

SNET is the network for the collaborative research built on SINET4 with L2/L3VPN service. SINET4 is the national-wide academic network operated by National Institute of Informatics (NII). SNET directly connects the universities, research institutes and NIFS. NIFS has operated SNET for the category of "LHD experiment remote participation" since March 2002. The categories of "Remote use of supercomputer system" and "Bilateral collaboration", which is formerly called "All Japan ST research program", were added to SNET in FY 2005.[1-4] The facilities of "Bilateral collaboration" are Kyushu Univ.'s spherical tokamak experiment equipment (QUEST) at Kyushu Univ., GAMMA-10 at Tsukuba Univ. and High Density Plasma Experiment-I (HYPER-I) at NIFS. 24 sites participate to the SNET as shown in Fig. 1.

The categories and remote sites connected by L3VPN are followed; *LHD experiment remote participation*: Tohoku Univ., JAEA, Univ. of Tokyo (Hongo and Kashiwa campus), Tokyo Institute of Technology, Nagoya Univ., Kyoto Univ. (Yoshida and Uji campus), Kyoto Institute of Technology and Hiroshima Univ., *Remote use of supercomputer system*: JAEA, Nagoya Univ., Kyoto Univ. (Yoshida and Uji campus) and Kyushu Univ., *Bilateral collaboration*: Tsukuba Univ. and Hiroshima Univ.

The categories and remote sites connected by L2VPN are followed; *Bilateral collaboration*: Univ. of Tokyo (Kashiwa campus), Kyoto Institute of Technology and Kyushu Univ., *Multicast*: Kyushu Univ., *Hyper-I*: Kyushu Univ.

DaaS trial produced by NII had been closed on November 2014. It was used for QUEST at Kyushu Univ. and GAMMA-10 at Tsukuba Univ. The server was located in NII and the user could use the desktop environment with their own PC anywhere on the network.

1) Yamamoto, T., et al.: Ann. Rep. NIFS (2010-2011) 461
2) Yamamoto, T., et al.: Ann. Rep. NIFS (2011-2012) 453
3) Yamamoto, T., et al.: Ann. Rep. NIFS (2012-2013) 484
4) Yamamoto, T., et al.: Ann. Rep. NIFS (2013-2014) 487

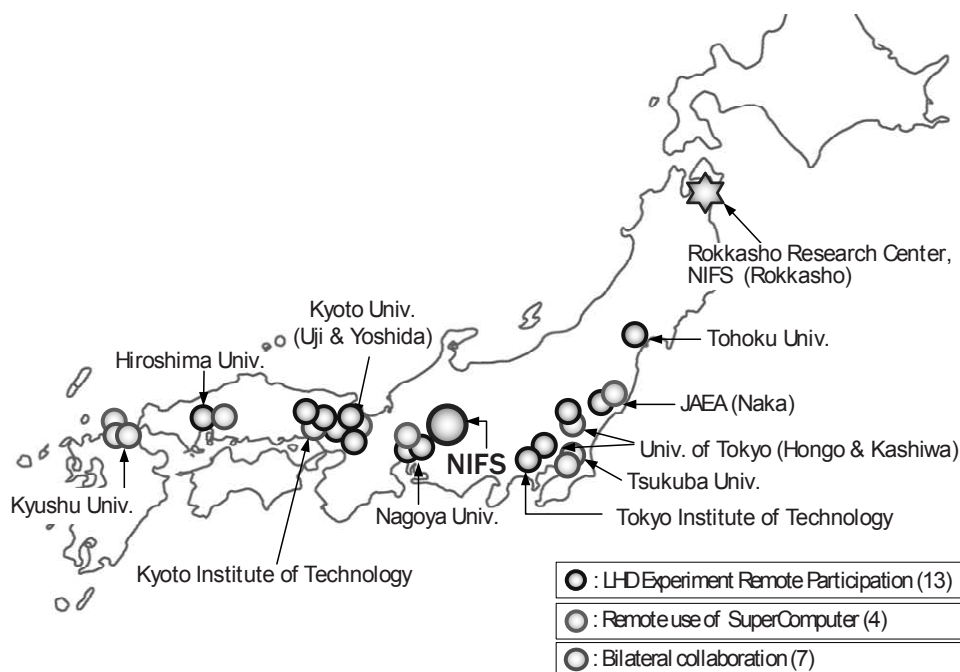(Yamamoto, T., Nagayama, Y., Ishiguro, S., Nakanishi, H., Ohsuna, M., Hasegawa, H. (INTEC Solution Power Inc.))

Fig.1 Connection map of SNET