

SPECIFICATIONS

“Investigation on security specifications of Smart House in Asian countries”

1. Subject Matter

Investigation on security specifications of Smart House in Asia

2. Objectives

ECHONET (Energy Conservation and Homecare Network) was conceived in 1997 to provide the base technology for the development of next-generation home network systems. The aims for a universal communication standards is to link home appliances made by different manufacturers and providing various services using easily installed transmission media, in both new and existing homes.

ECHONET Lite is the improved version of ECHONET and it has more flexibility in communication media and expanded controllable devices heading to energy creation, energy storage and energy saving for HEMS (Home Energy Management System). On February 2012, Smart House Standardization Council recommended ECHONET Lite as the public and standard interface for HEMS in Japan. The ECHONET Lite certification support center was established on November 2012, which provides interoperability certification and development support in order to spread ECHONET Lite in Japan.

The ECHONET Lite certification support center in Malaysia was established and begun to be operated in JFY 2013. This year, as the preliminary research for the adaption of the ECHONET Lite certification support center to the Asian communication environment, the investigation on security specifications will be conducted.

3. Contents of implementations

It is the current trend: the international standard applications for HEMS appliances, such as ECHONET Lite and so on, employ the Internet Protocol as their communication protocol. The international standard applications employ the publicly known and

standard technology of WiFi etc. for connecting to the Internet. If needed, the international standard applications implement the encryption and authentication methods as their security specifications that are specified in the connection technologies. The implemented security specification varies depending on the network environment and to the country.

Then, the Contactor must investigate the security specifications of the HEMS system for one country extracted from ASEAN countries that is the growing market, and must submit a report to IAE.

The Contactor must receive the IAE's acceptance of the Contractor's improvement plan before implementation of the upgrading

4. Meeting to report about project

IAE will hold a meeting to report about this implementation. The contractor should dispatch a researcher to the meeting, and should report information and findings of research which will be available up to the meeting. The meeting will be held in Tokyo. The details will be adjusted based on the progress of implementation.

5. Contract Period

From: The date of contract signing

To: February 27, 2015

6. Interpretation of specifications and treatment of matters not stipulated herein

Any matter not stipulated herein shall be discussed with the Director of Research and Development Division IAE and his directions followed.

7. Submission of Outcomes

(1) Interim Report

1) Items of Delivery

One set of electric files of the report

2) Delivery Deadline

The details will be adjusted based on the progress of project.

(2) Final Report

1) Items of Delivery

- Two sets of hard copy
- One set of electronic files of the report

2) Delivery Deadline

February 27, 2015

(3) Place for Delivery

Research and Development Division, The Institute of Applied Energy

8. Acceptance

Acceptance inspection comprises receive of the completion notice and check of the final report.