

# **Outline of Application for Specification Compliance Certification**

## **Interface Specification for Application Layer Communication between Smart Electric Energy Meters and HEMS Controllers**



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ECHONET Consortium

The original language of this document is Japanese. This English version is a translation of the Japanese version; in case of any queries, please refer to the Japanese version.

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## **1. Overview**

Devices and software complying with the Interface Specifications for Application Layer Communication between Smart Electric Energy Meters and HEMS Controllers (hereinafter, “SMA certification”) are certified for compliance. A certification body authorized to handle SMA certification (hereinafter, “SMA certification body”) performs tests to judge compliance or noncompliance; this document gives an outline of the certification process.

“Smart electric energy meter” in this document refers to a low-voltage smart electric energy meter as set forth in APPENDIX release F or later.

## **2. Objects of Certification**

### **2.1 Types of Object Device**

Certification of SMA compliance applies to the following devices:

- Smart electric energy meters
- HEMS controllers

### **2.2 Categories of Object Device**

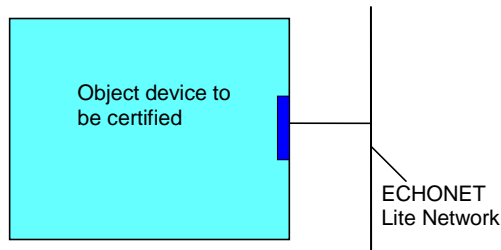
Certification of SMA compliance applies to devices that have the functions stated in the Interface Specification for Application Layer Communication between Smart Electric Energy Meters and HEMS Controllers (hereinafter “SMA device”), including software (hereinafter “SMA software”).

Before applying for SMA certification, an ECHONET Lite certificate registration number must be acquired.

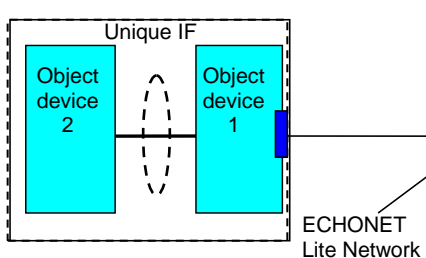
Supplement: Conceptual diagram of objects eligible for specification compliance certification

The concept of evaluation and certification is as follows:

SMA device

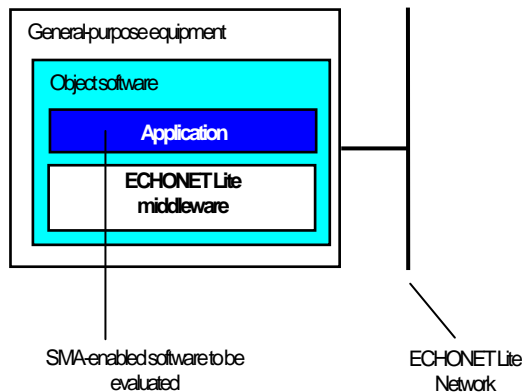


The whole package is certified as an SMA device.  
\*However, the form of implementation is not especially regulated.



If the device constitutes an SMA device through a combination of devices possessing their own unique interface (I/F), compliance may be certified under the fixed combination. (In the figure, the combination of device 1 connecting with ECHONET Lite network and device 2 connecting with device 1 through the use of a unique IF enables certification.)  
Logo marks may be attached to each device.

SMA software



Certification as SMA software

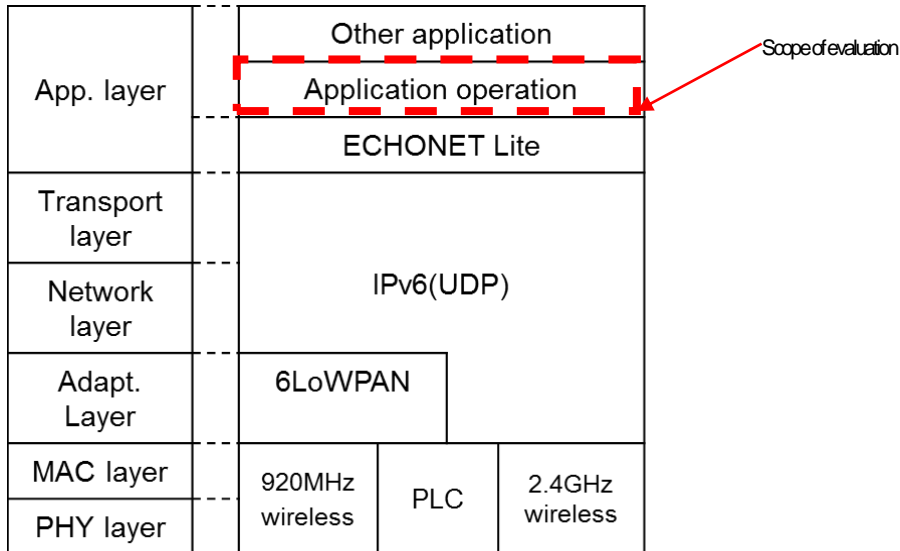
For certification, evaluation equal to that on SMA devices will be carried out. Hardware, OS and application software which does not correspond to SMA, however, will not be evaluated.

Remarks:

- Object of evaluation: An object to be judged as to its conformance to specifications on the basis of the certification test specifications.
- Object of certification: An object to which a certification registration number is issued if conformance is verified by the above evaluation.

### 3. Scope of Evaluation

The scope of evaluation for SMA devices and SMA software is indicated below, with reference to schematic diagrams of the communication layer.



### 4. Applicable Specifications

In this outline, Interface Specification for Application Layer Communication between Smart Electric Energy Meters and HEMS Controllers Ver. 1.0\* shall apply to target SMA devices and SMA software. When the specification is revised, the latest specification shall be applied, in principle.

### 5. Certification Test Specifications

The following are certification test specifications for SMA devices. These describe the content of certification testing, and are released for members only on the web.

(1) ECHONET Device Certification Test Specifications

For Application Communications Interface Specification between Smart Electric Energy Meters and HEMS Controllers Ver. 1.0\*

For Smart Electric Energy Meters

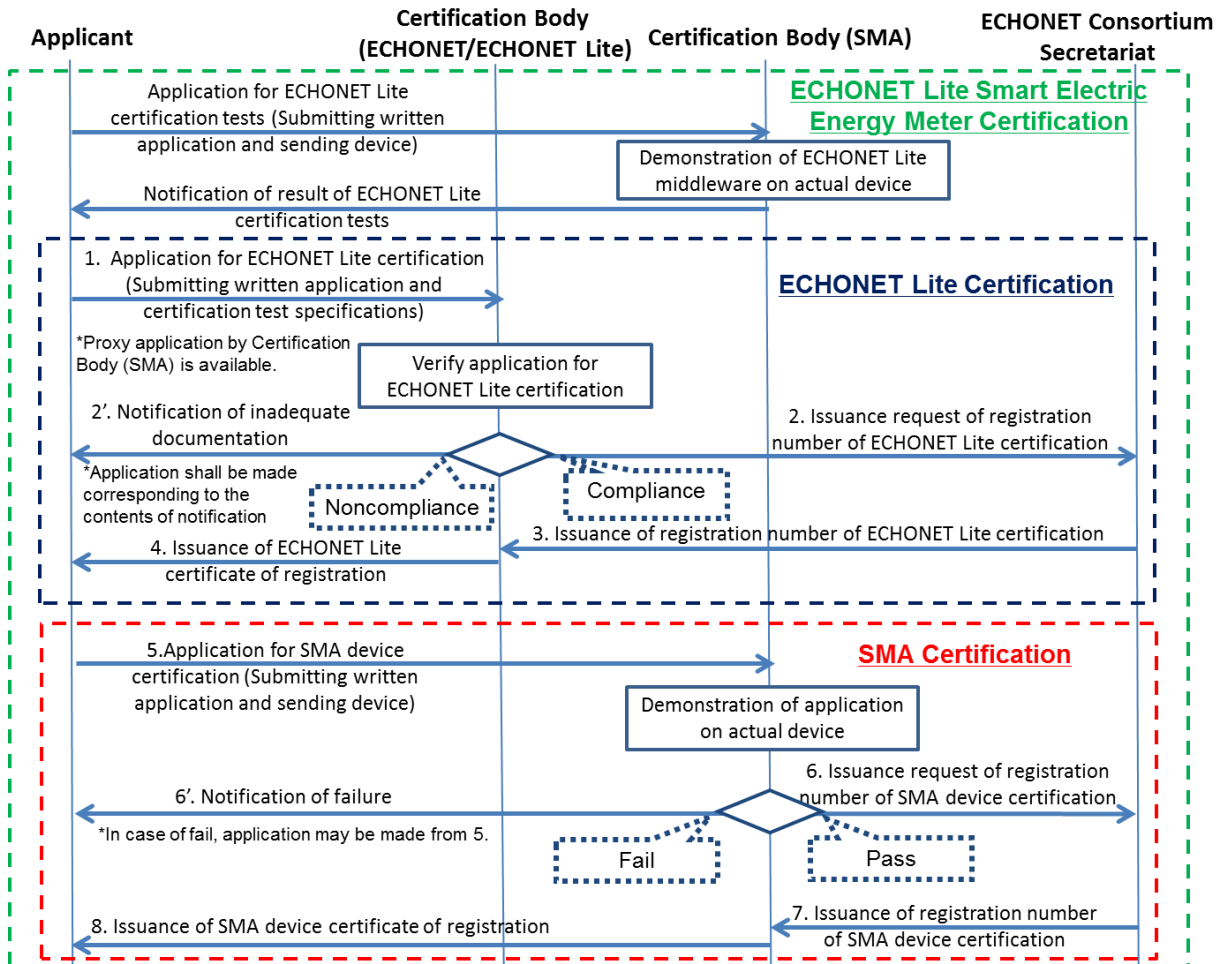
(2) ECHONET Device Certification Test Specifications

For Application Communications Interface Specification between Smart Electric Energy Meters and HEMS Controllers Ver. 1.0\*

For HEMS Controllers

## 6. Steps in the Certification Process

The steps approved by the Smart House/Building Standardization and Business Promotion Study Group and the Study Group on the Smart Meter Scheme in certifying compliance of smart electric meters and HEMs controllers are outlined below.



Adapted from documents distributed at the 14th Study Group on the Smart Meter Scheme

[http://www.meti.go.jp/committee/summary/0004668/pdf/014\\_06\\_00.pdf](http://www.meti.go.jp/committee/summary/0004668/pdf/014_06_00.pdf)

## **7. Method of Certification Testing**

- An SMA certification body conducts compliance tests on the applicable scope and testing range of the device or software by using the latest version of the certification test specifications, including errata.
- When the certification test specifications are updated, the previous version can be used for six months from the release of the updated specification.

## **8. Application for Specification Compliance Certification**

It is possible to apply for specification compliance certification by submitting the completed application form released by the SMA certification body for members of the ECHONET Consortium.

### **(1) Applicant**

- Only a member of the ECHONET Consortium may be an applicant.
- Even if an agent is filing the application, the applicant must be a member of the ECHONET Consortium.

### **(2) Agent**

- The agent need not be a member. If an agent is filing on the applicant's behalf, a power of attorney from the applicant is required.

## **9. Certification Registration**

- In case of compliance, a certificate of specification compliance registration will be issued in writing.
- Please contact each SMA certification body concerning the cost of certification and the period of time from application to testing or issuance of the certificate of registration.
- In case of compliance, the name of the company, the product name and number, the certification registration number and its date shall be posted on the ECHONET Consortium website. The date of publication must be stated on the form.

## **10. Inquiries**

Please send any inquiries about this outline to the ECHONET Consortium website.