TÜV Rheinland Japan

OpenADR Certification Testing Service

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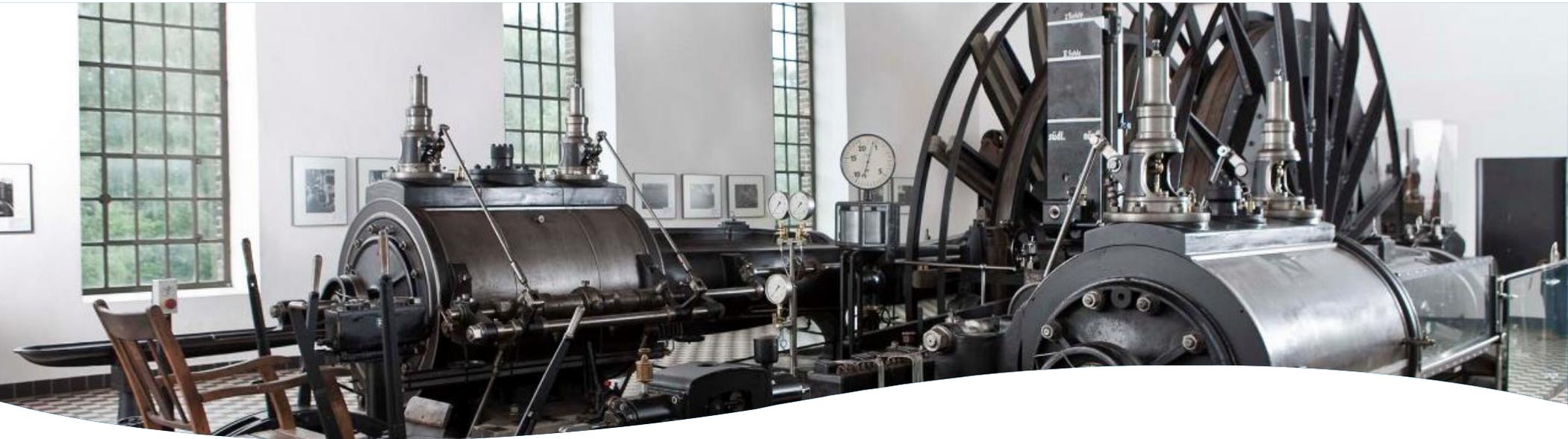
About TÜV Rheinland Group

TÜV?

Technischer   Technology

Überwachungs-   Inspection

Verein   Society

Head office: Cologne, Germany

Established in 1872 as a third-party organization for steam boiler inspection

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TÜV Rheinland in world wide

20,000 employees in over 60 countries worldwide

Specialists, Auditors, Inspectors, Engineers to respond to the Safety and Security of a wide range of Industries

Japan
6 locations
400 employees

Yokohama

Osaka

Fukuoka

Office

Laboratory

Germany	Global
2018	
8,795 employees	**11,665 employees**

Total
20,450

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TÜV Rheinland Japan

TÜV Rheinland Japan	
President	Tobias Schweinfurter
Established	1983
Capital	370 million JPY
Number of Employees	about 400
Annual sales	7,930 million JPY (FY2018)

TÜV Rheinland Japan is a member of the TÜV Rheinland Group, an international technical inspection agency. As a third-party testing organization, we have been providing services in Japan since 1978.

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TÜV Rheinland Japan Test Facility

Technology Center: GTAC (Yokohama)

Technology Center: KTAC (Osaka)

EMC lab. (Fukuoka)

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TRJ's domestic Smart Grid related service status

Smart Grid in Japan
Standards for Communications

TRJ can TEST

ECHONET Lite / SMA		ECHONET Lite / AIF					
Wi-SUN	G3-PLC	Wi-SUN	ZigBee	Wi-Fi	BT	PLC	Ethernet

Utility / Energy Service Provider

Demand Response System Server

Route A

Smart Meter

Route B

HEMS

HAN

Resource

- PV
- Storage Battery
- Fuel Cell
- EV/PHV
- Air Conditioning
- Lighting
- Water Heater

Aggregation Coordinator

Resource Aggregator

Resource Aggregator

- PV
- Storage Battery
- Fuel Cell

Resource Aggregator

- EV charger
- Water Heater

openADR ALLIANCE

TRJ can TEST

Version 1.0 2019.10 ©TÜV Rheinland Japan Ltd.

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OpenADR Certification Policy

OpenADR Alliance Certification Policy

Revision Number: 1.0

Document Status: Working Text

Document Number: 20110901-1

Certification Policy Summary:

- **To establish a certification program to ensure compliance and interoperability**
- **OpenADR 2.0 certification and testing policies, processes and procedures**
- **Virtual Top Node (VTN) and Virtual End Node (VEN) concepts**
- **VTN / VEN test methods and test tools**
- **OpenADR Logo License**
- **Profile compatibility**
- **Role of certification body and testing body**
- **Accredited Testing Lab**
- **Mandatory and Option feature**
- **Concept of certification/testing of the similar/identical products**
- **Concept of certification/testing of Updated Product**

Refer Documents:

- OpenADR 2.0a/b Profile Specification
- OpenADR 2.0 Protocol Implementation Conformance Statement (PICS)
- OpenADR 2.0 Test Specification
- OASIS Energy Interoperation Specification
- OpenADR Certificate Policy

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OpenADR　Role of Certification Body and Testing Lab

❑ "Certification" is performed by the Certification Body (CB) or the OpenADR Alliance
　　Currently, there is no certification body (CB), and the OpenADR Alliance has all

❑ "Testing" is performed by a Testing Lab accredited by the OpenADR Alliance.
❑ TRJ is one such accredited Testing Lab.

❑ CB and Testing Lab comply with ISO17065 and ISO 17025

Certification	Testing
OpenADR Alliance **ISO17065**	**Testing Lab** **ISO17025**
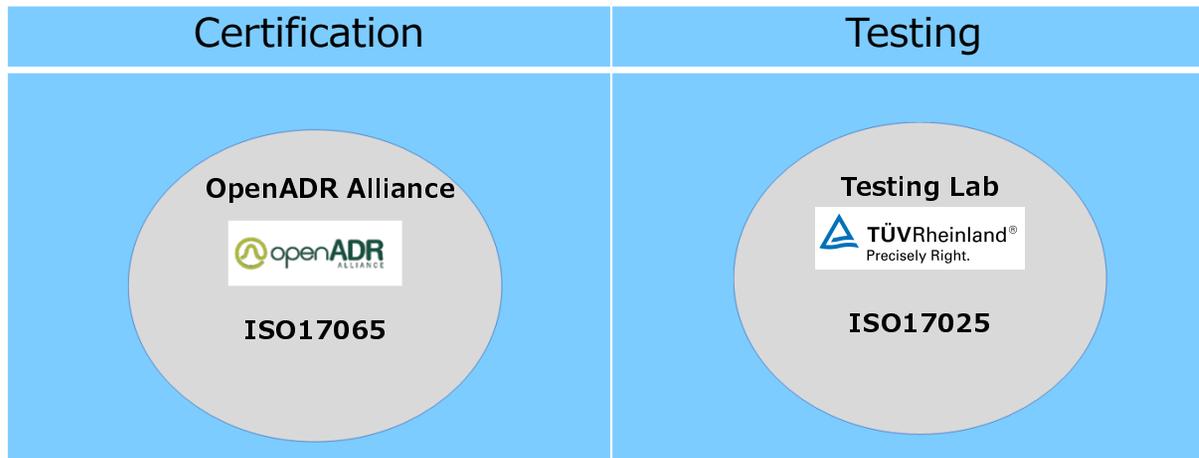
Requirement of OpenADR certification test

General communication product certification

Conformance Test

Interoperability Test
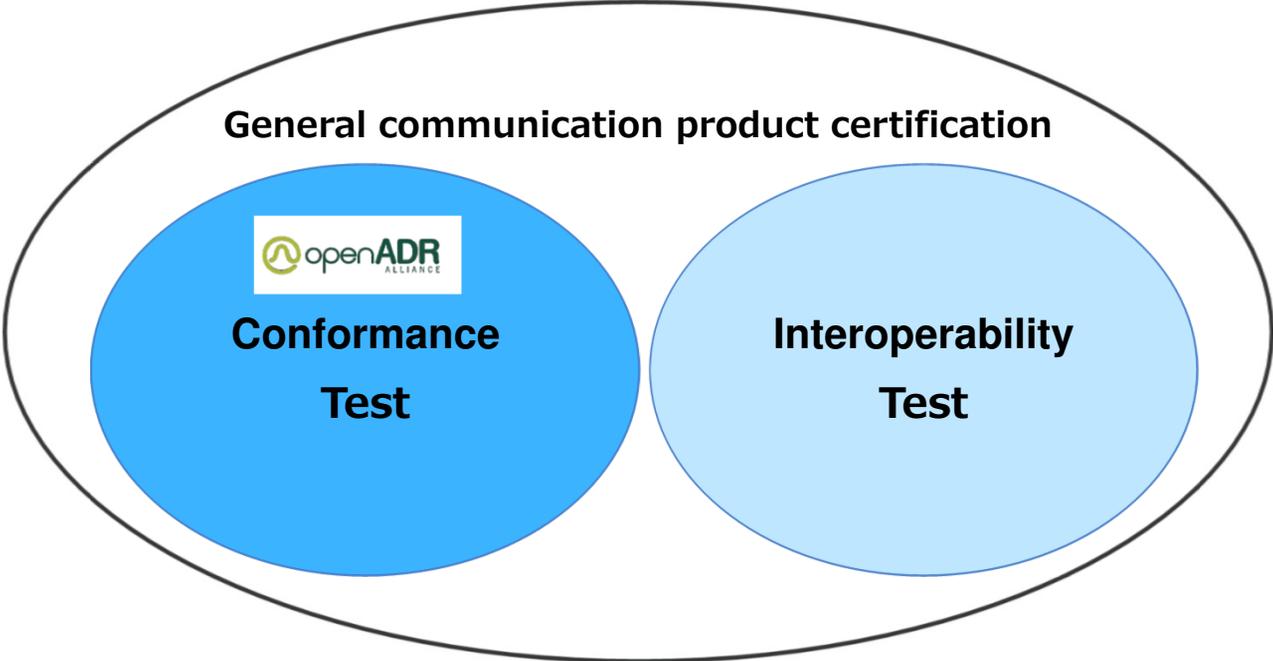
OpenADR covers only Conformance Test

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OpenADR Certification Test Environment

VEN Testing	**Test Harness** (by QualityLogic) — VTN	**DUT** (Device Under Test) — VEN
VTN Testing	**Test Harness** (by QualityLogic) — VEN	**DUT** (Device Under Test) — VTN

LAN
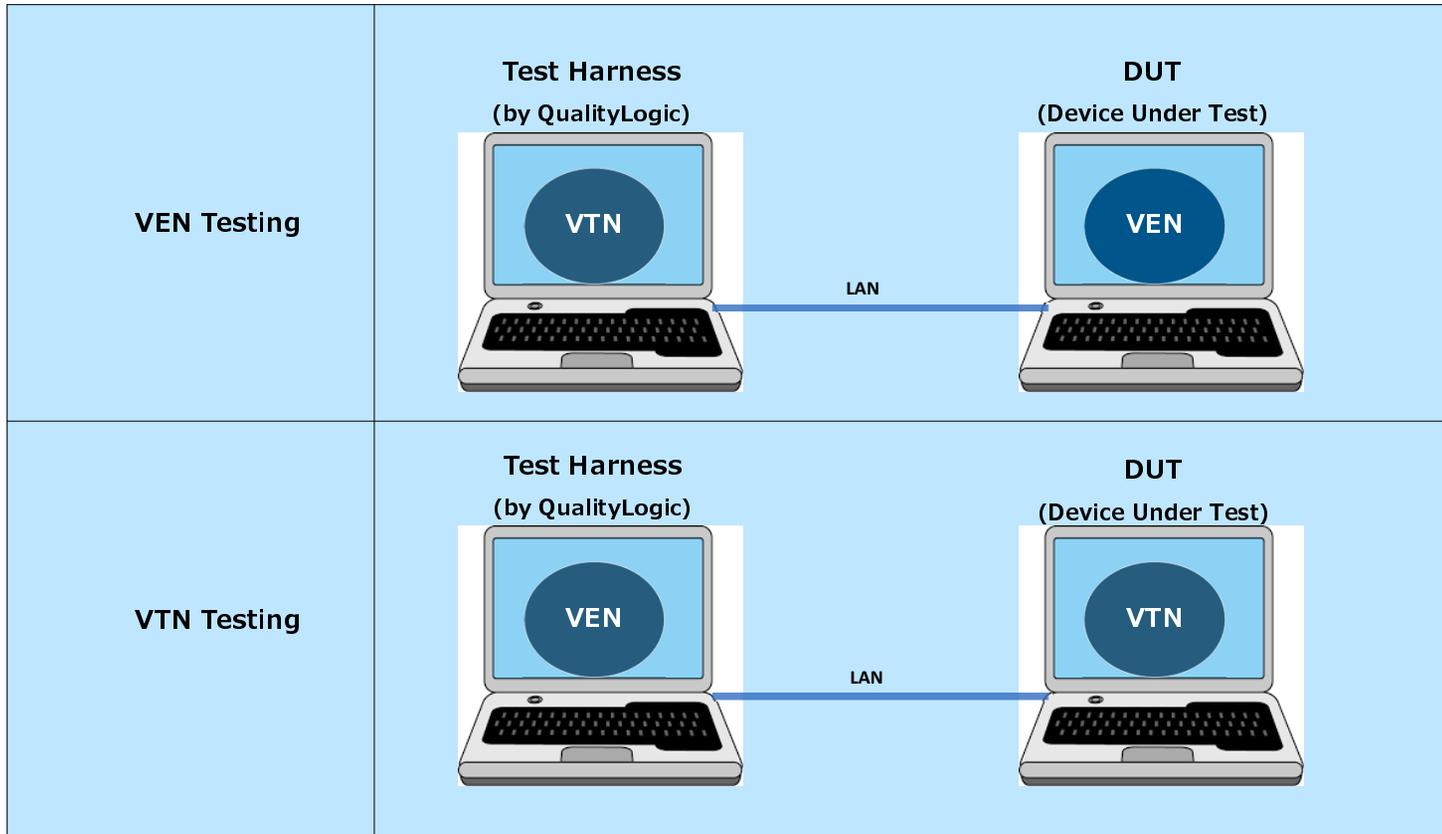
Note)
If you want to perform a certification test in a real environment where the DUT is in the Cloud Server, please consult with Testing Lab.

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Fee required for OpenADR Certification

(1) Member Fee

    Pay membership fee as license to OpenADR Alliance

(2) Certification Fee

    Pay the certification fee for the certification process by the OpenADR Alliance

(3) Test Fee

    Pay the testing fee to accredited test lab

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OpenADR Alliance Japanese members and certification status

October 2019, 20 Japanese companies, all contributors
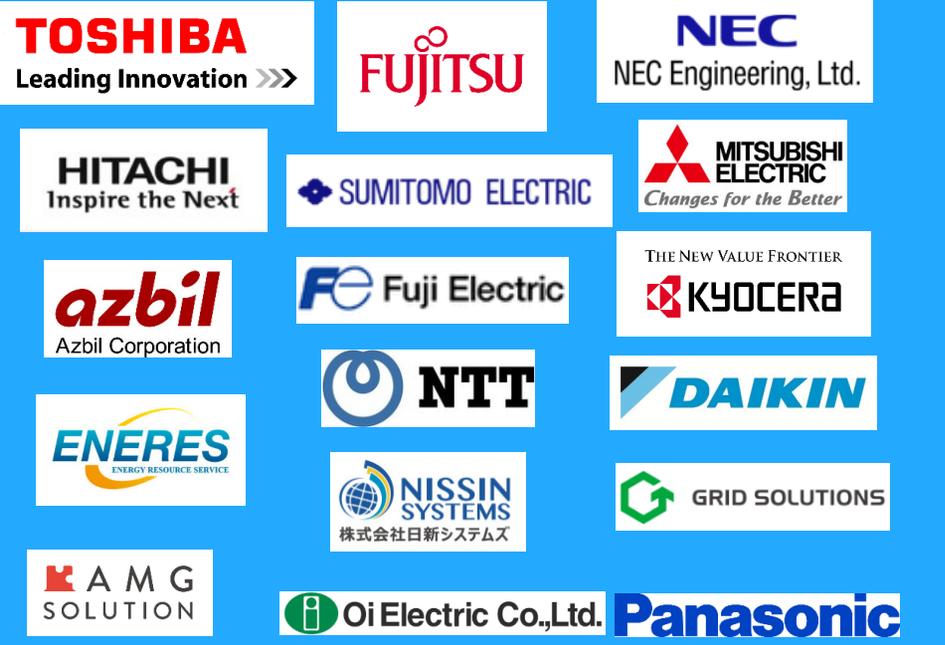
TRJ OpenADR Certification Test Service

TRJ always provides certification tests based on the latest test specifications

Certification Test	
Supported Profile	2.0a, 2.0b
Product Roles	VTN, VEN
Transports	Simple HTTP, XMPP(2.0b only)
Message Exchange Patterns	Pull, Push

Pre-Test Service
• Before the certification test, you can test using the certification test tool
• You can practice the actual certification test with the test engineer
• You receive a technical consultation on certification testing

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Features of TRJ's OpenADR Certification Test service

- Test in Japan (TÜV Yokohama Test Lab or On-site)

- Witness test

- Pre-test service

- Technical Support on certification test

- Certification Process support with OpenADR Alliance

- Real environment tests such as "Cloud environments"

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OpenADR Certification Flow chart

Applicant | openADR ALLIANCE | TÜVRheinland® Precisely Right.

Member Registration →

Download Spec / Test Spec /PICS ←

Request of TEST

fill-in PICS → **Test Plan**

Certification Test | Pre-Test by hope

Create Test Report → Receive Test Report

fill-in DoC | Submission Certification Documents → Certification Work

Certified ← Issuance Certificate

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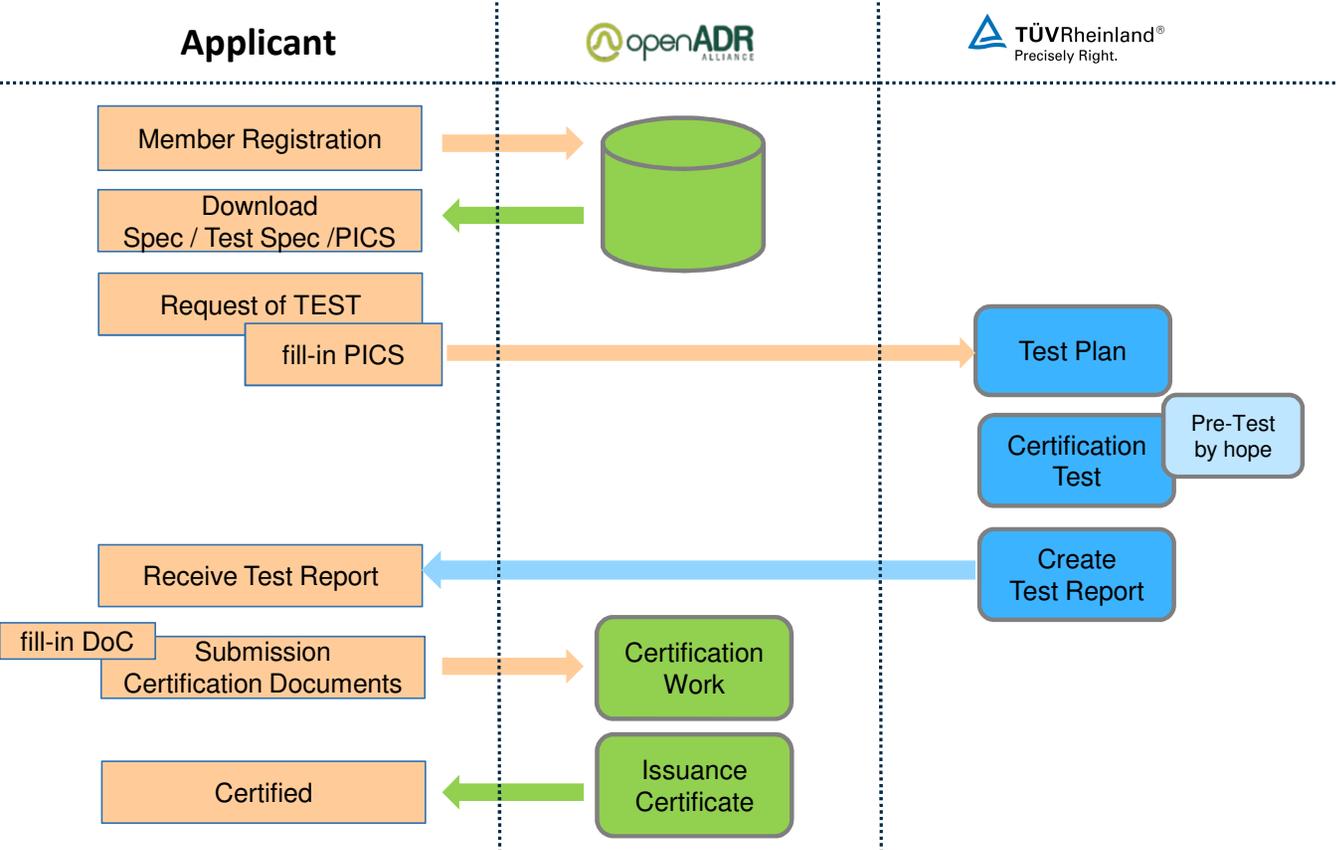
Documents required for OpenADR certification

for Test	for Certification

❑ Submit to : Testing Lab（TRJ）
 	
❑ Documents:
 	
  1) OpenADR Test Application Form
    o Fill in Applicant information and Product information
 	
  2) PICS (Protocol Implementation Conformance Statement)
    o Fill in the application details required for the certification test
    o TRJ creates a test plan based on PICS
	❑ Submit to : OpenADR Alliance
	
	❑ Documents:
	
	  1) Declaration of Conformity
	    o Fill in Applicant information and Product information
	
	  2) Test Report
	    o Test Report delivered from TRJ
	
	  3) PICS (Protocol Implementation Conformance Statement)
	    o PICS submitted to TRJ for testing

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OpenADR Certification Test Location and Contact Information

TUV Rheinland Japan Ltd.
Global Technology Assessment Center
4-25-2 Kita-Yamata, Tsuzuki-ku,
Yokohama 224-0021

Tel : (+81) 45-470-1850

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e-mail: telecom-lab@jpn.tuv.com

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