

Guideline
of the certification and verification test
for BPL Coexistence

Owned by HD-PLC Alliance

CONTRIBUTED BY PANASONIC SYSTEM NETWORKS CO. LTD.

Update history

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1. Preface

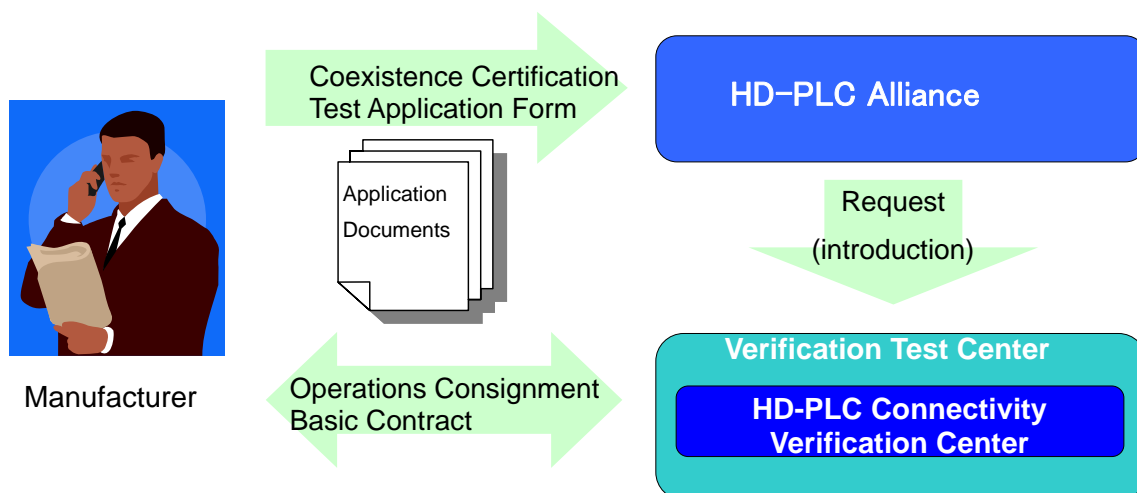
1-1 About the Coexistence Certification Test of an international standard

The Coexistence Certification Test that the HD-PLC Alliance manages targets the Certification Test of the coexistence specification and implementation in accordance with both IEEE1901 coexistence specifications (ISP: Inter System Protocol) and ITU-T G.9972. These two coexistence standards are standardization tasks PAP15 with high priority of SGIP(Smart Grid Interoperability Panel) in research laboratories NIST(National Institute of Standards and Technology) of US Government, and recognition with a common specification is shown. And, NIST recommended the content of assuming the support of all high frequency band PLC in home of this coexistence method to be mandatory. The purpose of this test is to secure the coexistence between the device equipped with the IEEE1901 coexistence method and the device equipped with the ITU-T G.9972 coexistence method.

1-2 Scope of the Coexistence Certification Test

This Certification Test provides the results of testing the device or product with a prescribed set of equipment and environment, and they do not guarantee that the results will be the same if tested with different equipment or under different environments, or with related products. If a device or product that meets the test requirements, we will judge that it passed the Coexistence Certification Test as an Device equipped with coexistence method. But this is not a guarantee of the whole product's quality or features. The whole product's quality and features should of course be guaranteed by the manufacturer.

2. Application and Procedure for the Coexistence Certification Test



2-1 Submitting the Coexistence Certification Test Application Form

The manufacturer that wants to conduct an Coexistence Certification Test must submit the Coexistence Certification Test Application Form to HD-PLC Alliance first. Please describe information about the test device and the device’s manufacturer on this form. If you are delegating the Coexistence Certification Test process to a third party, fill out the information about the third party as well.

And, we will relay it to HD-PLC Connectivity Verification Center by which HD-PLC Alliance recognizes it as Coexistence Certification Test Center. (It is set up in Panasonic System Networks Co, Ltd. as of April, 2011.) And, HD-PLC Connectivity Verification Center contacts you.

2-2 Basic Service Agreement

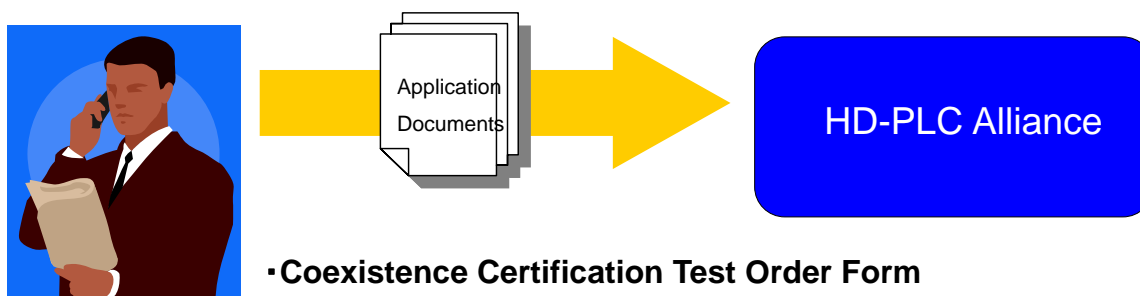
The manufacturer and the Verification Test Center enter into the Basic Service Agreement for testing work, as part of the Coexistence Certification Test. First, the Basic Service Agreement is concluded between the two parties, and then the test application and order form are issued for each product. Should any further detailed agreements be necessary beyond the Basic Contract, separate contracts may be necessary.

2-3 Written estimate of Coexistence Certification Test

After the manufacturer and the Verification Test Center enter into the Basic Service Agreement, the HD-PLC Alliance will submit the estimate of the Coexistence Certification Test to the manufacturer.

2-4 Required Documents for Coexistence Certification Test Order

Manufacturer



- **Coexistence Certification Test Order Form**
- **Delegate Form (When using a delegate)**
- **Web Posting Consent Form**
- **Instruction Manual**

Please submit the following document to the HD-PLC Alliance about you for the order for the Coexistence Certification Test after accepting the estimate.

2-4-1 Coexistence Certification Test Order Form

This is the order form for the Coexistence Certification Test. There is no fixed form format and use the format of the manufacturer, please.

2-4-2 Delegation Form

If you are delegating the Coexistence Certification Test process to a third party, please include the Delegation Form along with the Coexistence Certification Test Order Form. This form is unnecessary if the applicant will be handling the test process oneself. Enter the same information for the delegated party on the Delegation Form and in the delegated party field on the application form, and the same information for the delegating party on the Delegation Form and the applicant field on the application form. Once we have received a Delegation Form, questions and test results from the Verification Test Center will be directed to the delegated party.

2-4-3 Web Posting Consent Form

To increase convenience for costumers, HD-PLC ALLIANCE maintains a web site with information related to HD-PLC technologies on which information about devices that have passed the Coexistence Certification Test will be posted. If you would like your device's information to be posted, include the Web Posting Consent Form with your application.

2-4-4 Instruction Manual

To make the Coexistence Certification Test proceed smoothly, please include the device's instruction manual.

3. Where to Send Your Coexistence Certification Test Application

3-1 Coexistence Certification Test Inquiries

If you would like your device to receive the Coexistence Certification Test, please send the application documents to the HD-PLC Alliance below. If you have any questions, please contact the HD-PLC Alliance.

HD-PLC Alliance

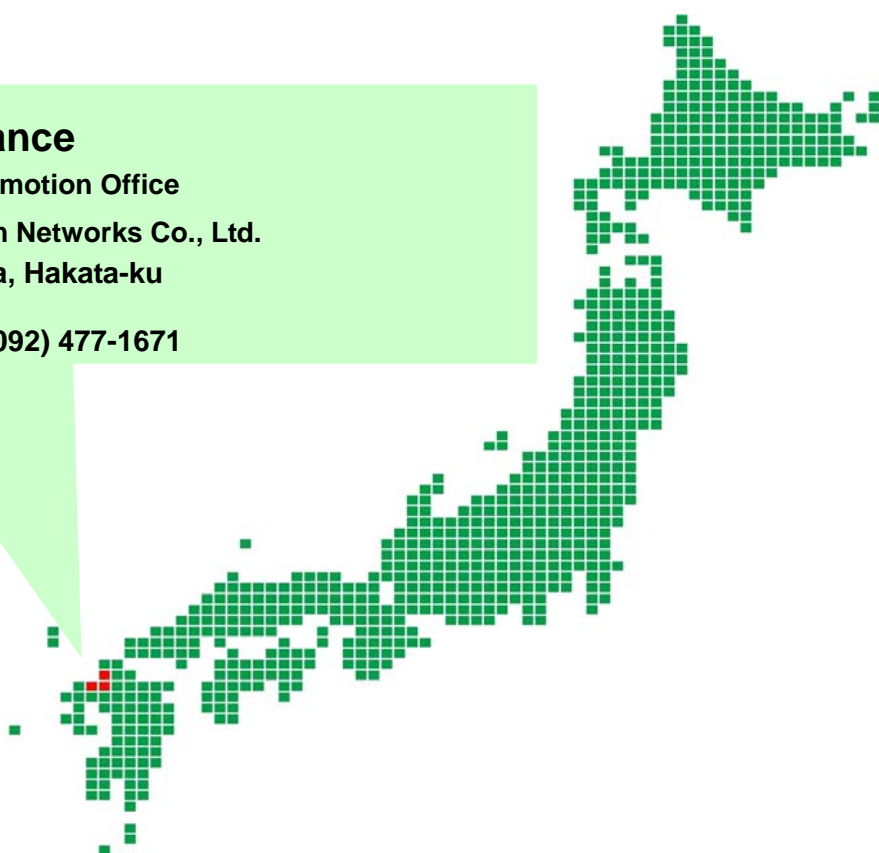
PLC business promotion Office

Panasonic System Networks Co., Ltd.

4-1-62 Minoshima, Hakata-ku

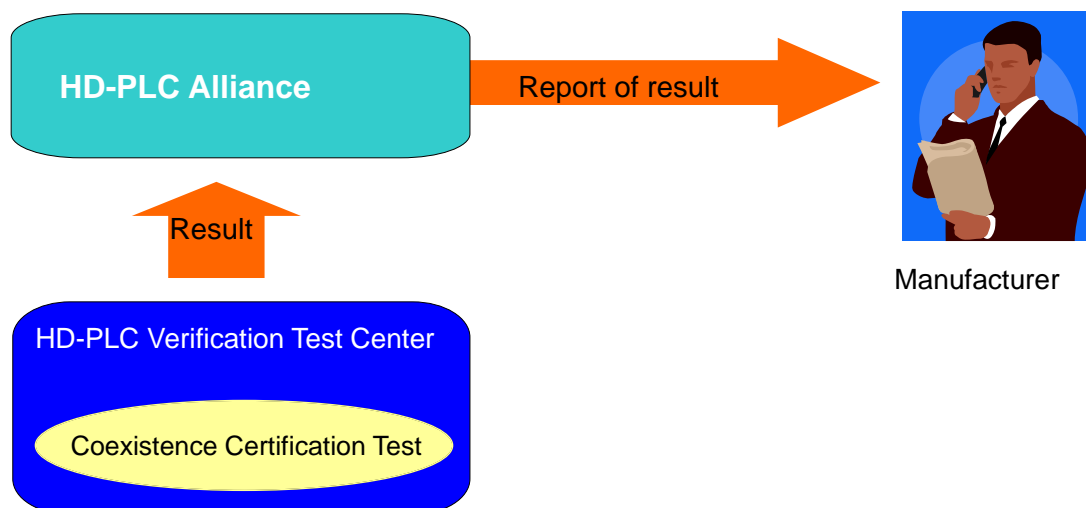
Fukuoka, JAPAN

Telephone: +81 (092) 477-1671



4. After Submitting Your Coexistence Certification Test Application

4-1 Coexistence Certification Test



The Verification Test Center performs the Coexistence Certification Test and sends the results to HD-PLC Alliance. And, HD-PLC Alliance sends the results to the manufacturer (or in the case where the process has been delegated to a third party, to the representing party). Please look over the results once you have received them from the HD-PLC Alliance.

Please refer to the Coexistence Certification Test Overview for the outline of the Test contents. HD-PLC Alliance will describe the test result to the Coexistence Certification Test result report and send it.

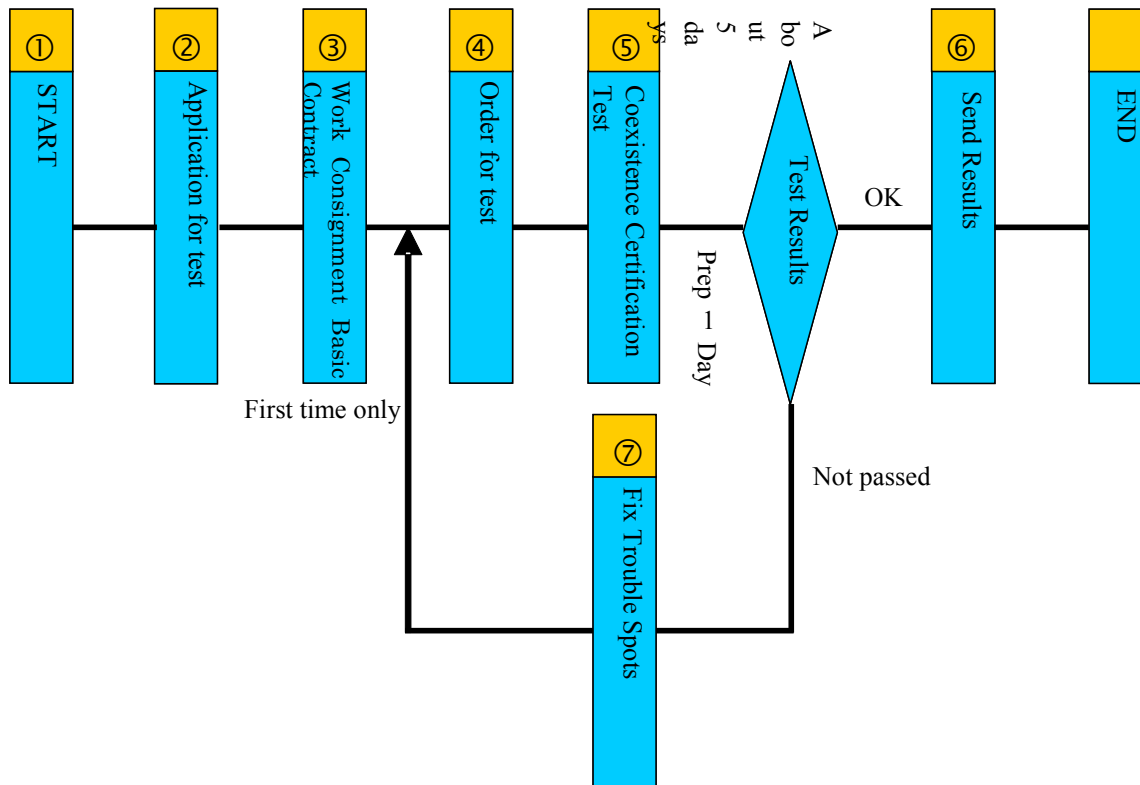
4-2 If You Meet the Test Requirements

This means you have passed the test. If you consented to having your device's information published on the HD-PLC web site and submitted the Web Posting Consent Form, then your device's information will be added to the list of devices that have been verified as Coexistence Certification Test.

4-3 If You Did Not Meet the Test Requirements

Please consult with an HD-PLC Alliance regarding the areas that need improvement and taking the Coexistence Certification Test again.

5. Coexistence Certification Test Application Flowchart



5-1 About the Flowchart

This chart represents a high-level view of the steps in taking the Coexistence Certification Test. The reference materials for each step in the chart are listed in section 5-2.

If you have any questions, please contact an HD-PLC Alliance.

5-2 Relevant Materials from the Flowchart

- ① Coexistence Certification Test Guide
- ② Coexistence Certification Test Application Form (sends it to the HD-PLC Alliance)
- ③ Basic Service Agreement (Verification Test Center)
- ④ Order Form, Delegation Form, Web Posting Consent Form (sends it to the HD-PLC Alliance)
- ⑤ Coexistence Certification Test Overview,
- ⑥ Coexistence Certification Test result report (From HD-PLC Alliance)
- ⑦ Please consult with an HD-PLC Alliance.

6. Appendix

6-1 Coexistence Certification Test Application Form

Date of Application: / /

Attn: HD-PLC Alliance

Coexistence Certification Test Application Form

I hereby submit my application for the Coexistence Certification Test.
 Furthermore, I consent to the conditions stipulated in the Basic Service Agreement, regarding the handling of this application form and other attached documents relating to the application.

1. Application Test Device

| | | | |
|--|---|--|---|
| Device (Product) Name | | | |
| Product No. | | | |
| Country of Sale | | | |
| Country of Sale PLC Regulations Approval | <input type="checkbox"/> Approval Granted | <input type="checkbox"/> In-progress | <input type="checkbox"/> Pending |
| Product development phase | <input type="checkbox"/> Mass-produced | <input type="checkbox"/> Mass production prototype | <input type="checkbox"/> Reference sample |
| Additional Information | | | |
| | | | |

2. Applicant

| | | | |
|---------------------|--|---------|--|
| Name | | | |
| Company | | | |
| Company Address | | | |
| Department/Position | | | |
| E-mail | | | |
| Phone No. | | FAX No. | |
| Signature | | | |

3. Delegate

| | | | |
|---------------------|--|---------|--|
| Name | | | |
| Company | | | |
| Company Address | | | |
| Department/Position | | | |
| E-mail | | | |
| Phone No. | | FAX No. | |

————— For Official Use Only —————

| | | | |
|------------------|--|----------------|--|
| Application No. | | Received on: | |
| Registration No. | | Registered on: | |
| Notes | | | |

6-2 Delegate Form

Delegate Form

Attn: HD-PLC Alliance

Delegate Company: _____

Delegate Department: _____

Delegate Phone No./E-mail: _____

Delegate Name: _____

I hereby appoint the above as our delegate, and confer the following rights to him/her.

All activities involved with the Coexistence Certification Test Application.

Date: ____ / ____ / ____

Delegating Company: _____

Delegating Department: _____

Delegating Phone No./E-mail: _____

Delegating Person's Name: _____

Signature: _____

6-3 Web Posting Consent Form

Date: / /

Attn: HD-PLC Alliance

Web Posting Consent Form

I grant the permissions indicated below to HD-PLC Alliance with respect to publishing information about the device that has passed the Coexistence Certification Test on its HD-PLC related web site.

| | | |
|--|---|--|
| Device (Product) Name | | |
| Product No. | | |
| Permission to publish information for devices that pass the Test | <input type="checkbox"/> I grant permission | <input type="checkbox"/> I do not grant permission |
| Date on which to allow publishing | | |
| Contact for communications regarding web posting | Contact Information Company/Department: Phone: E-mail: | |

Company:
 Department:
 Name:

Signature:

Office Use

| | |
|-------------------------|--|
| Application Receipt No. | |
| Registration No. | |
| | |