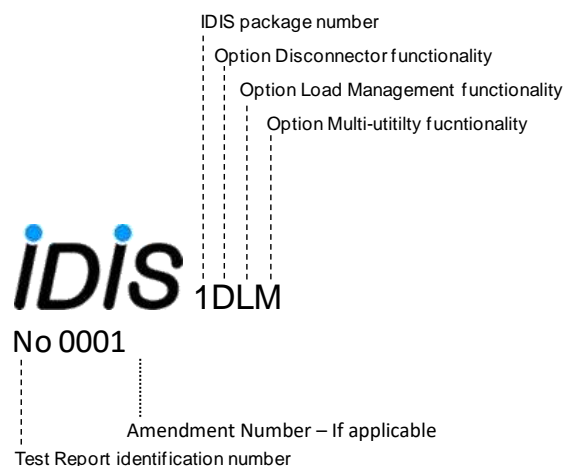# How to get the IDIS Package 2 Certificate
R1.14, v1.0 2023

Note. Package 3 certifications are in the process of being integrated into the DLMS® UA Qualification process, and only re-certifications are possible for Package 1.   It is expected that Package 2 certifications will cease by the end of 2023.

1. PURPOSE

IDIS devices are tested for conformity and interoperability according to procedures set by the IDIS Industry Association (hereinafter referred to as "IDIS association"). As a result, every certified IDIS device carries an IDIS Label which identifies:

- The identification of the IDIS specification package.

- The extensions to the minimal IDIS functionality implemented in this device (as described in the IDIS specification documents).

- Identification of the conformance Test Report produced by the type-testing of this device. Test Reports are available through the IDIS association.

The Test Report clearly identifies:

- The type and manufacturer of the device.

- The Extensions supported by the device.

- The additional Options supported by the device.

Examples of test reports can be found at https://www.idis-association.com , section 'Certified Equipment' Only devices for which an IDIS Certificate is issued are allowed to be labelled with the IDIS Label.
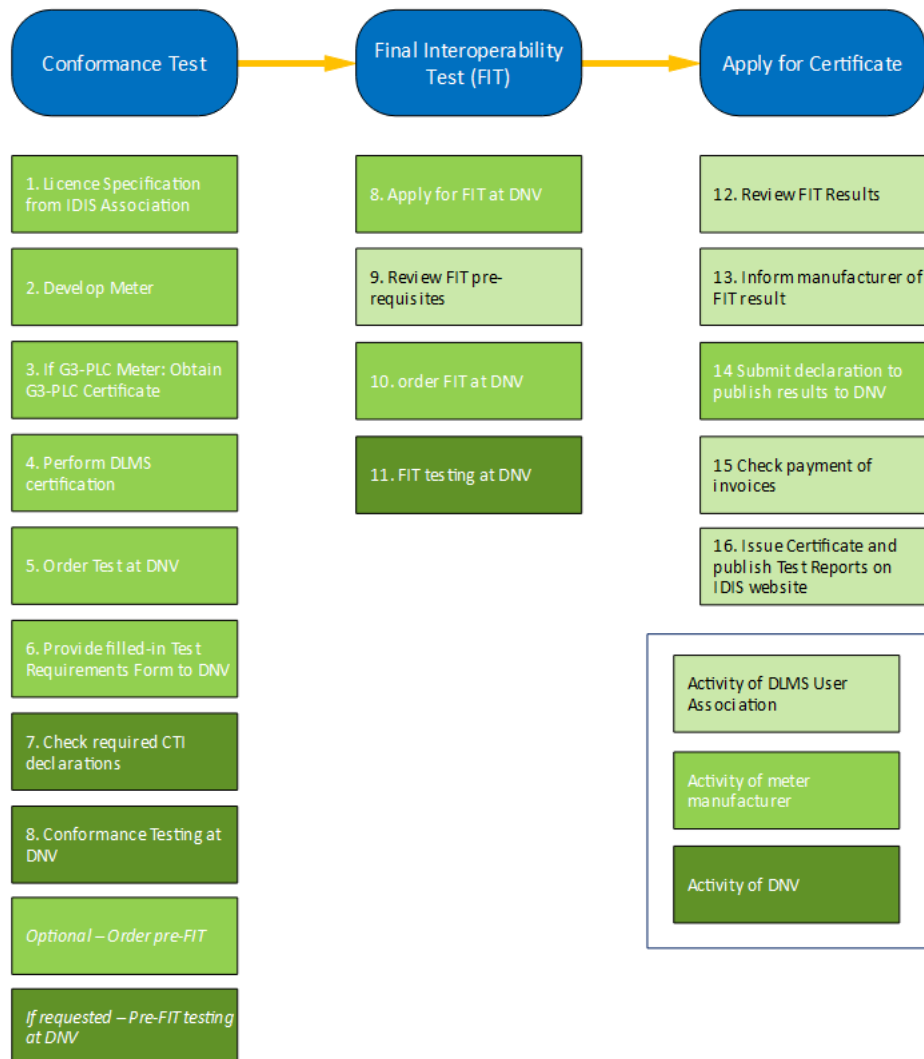
If a device has only minor modifications, a revision number does not need to be shown on the device's label. However, if extension module counts have been altered in either direction, the lowest revision number that contains the specific modules must be used.

PROCEDURE TO GET THE IDIS CERTIFICATE

The procedure to obtain the IDIS Certificate contains the following phases:

1. Conformance Test.
2. Final Interoperability Test.
3. Apply for Certificate.

In each phase, a set of steps need to be completed, see figure below:

The following subsections contain the details.

1.1. Conformance Test procedure steps

1. Licence the required IDIS specification package from the IDIS association. This will involve agreeing to the licence conditions and making payment to download the documents.
2. Develop an IDIS meter according to the relevant IDIS specifications package.

3. *For G3-PLC meters only*: in order to start testing at DNV it is required to be certified for the CENELEC A or FCC band by the G3-PLC Alliance (https://www.g3-plc.com/g3-plc-certification/g3-plc-certified-products/). The "device designation" (type and firmware version) shown on the test certificate of the G3-PLC Alliance must correspond to the meter to be IDIS certified.

4. Certify the device to DLMS®. This involves being a member of the DLMS® UA in good standing, and completing the DLMS® certification – see https://qualification.dlms.com/home

5. Order (an) IDIS Conformance Test(s) at DNV (contact: idis-testing@dnv.com). For prices, see section 5. Upon receipt of a valid Purchase Order, DNV schedules a test date that suits both you and DNV.
6. Fill in the Test Requirements Form and identify the optional objects/attributes you want to be tested. (Both the Test Requirement form and the excel sheet "IDIS Optional Elements" are available from DNV for companies that ordered an IDIS conformance test).

NB: If you do not identify any optional objects/attributes only the mandatory objects/attributes will be tested and will appear on the test report. In this case you do not have to fill in the "IDIS Optional Elements" sheet. The set of mandatory objects/attributes is sufficient to get the IDIS Test Label.

Send the filled-in Test Requirements Form and, if applicable excel sheet with optional objects to DNV (contact: idis-testing@dnv.com). Make sure that the meter is available at DNV on the scheduled test date. An engineer from your company is welcome to attend the test.

7. CTI mandatory declarations :

According to the IDIS specifications, only null values can be written to the Alarm and Error registers. This can be explicitly guaranteed by the following mandatory CTI declarations :

```
InstanceExtraInfo = {
    LogicalName = '0-0:97.98.0.255'
    ClassId = 1
     AttributeExtraInfo = {
        AttributeId = 2
        SetData = '\<Data><DoubleLongUnsigned Value = "00000000" /></Data>'
     }
 }

 InstanceExtraInfo = {
    LogicalName = '0-0:97.98.1.255'
    ClassId = 1
     AttributeExtraInfo = {
        AttributeId = 2
        SetData = '\<Data><DoubleLongUnsigned Value = "00000000" /></Data>'
     }
 }
 InstanceExtraInfo = {
  // Set value for Error register value
  LogicalName = '0-0:97.97.0.255'
  ClassId = 1
   AttributeExtraInfo = {
      AttributeId = 2
      SetData = '\<Data><DoubleLongUnsigned Value="00000000" /></Data>'
   }
 }
```

8. Perform the Conformance Testing of your device at DNV. This testing is done independently from the IDIS Association. You may perform as many test trials as you like until you achieve a "Conformance Test Report" (CTR) with no failed, inconclusive, fatal and disabled test cases. DNV will hand over the CTR to you after each Conformance Test.

If you wish, you can order a pre-FIT test report. This may assist if you are doing a few certifications of your meter (MID, etc) in parallel with your IDIS certification, and wish to ensure that the formal FIT is as straightforward as possible. The process is exactly as below, except there is no verification of MID certificate or G3-PLC certificate verification (steps 8 and 9 below are simplified). It is important to note that the test report from the pre-FIT is an IDIS association confidential document that may not be shared with any third parties.

The next step to get the IDIS Certificate is the formal Final Interoperability Test (FIT).

1.2. FIT Procedure

The purpose of the FIT is to confirm interoperability between your meter, a set of reference IDIS meters (only in case of Package 1) and/or other system components like MBUS meters. If applicable, the Consumer Information Port is tested. The test will be performed at the premises of DNV in presence of a representative of your company. The FIT can be typically done within one day.

Only meters that have passed conformance testing can apply for the FIT.

9. Apply for a FIT at DNV. The following prerequisites shall be present:

    a. State File of Conformance Test (iCTT configuration file, CTR and loggings) of Conformance Test. DNV obtains this State File from the IDIS Test Tool.

        i. The DUT (Device Under Test) provided for FIT must be identical (same hardware and firmware version) to the one submitted for Conformance Test.

    Note: The IDIS association may waive the obligation for a CTR if the meter has undergone only minor modifications (e.g. small bug fixing, change in Flag ID). In this case a detailed description of the modifications shall be sent to the IDIS association for approval.

    b. MID Certificate or similar. To be send by manufacturer to DNV.

        MID certificate (or similar) to be approved by the IDIS association. The "type" (hardware and software version) shown in the MID certificate shall correspond to the "type" listed on the name plate and in the CTR. The MID certificate shall show the firmware version and its identification number (checksum). The same firmware version and checksum must be readable from the meter.

    c. G3-PLC certificate (if applicable). To be sent by manufacturer to DNV

        The "device designation" (type and firmware version) shown on the test certificate of the G3-PLC Alliance must correspond to the meter to be IDIS certified.

    Upon your request, DNV will promptly (except in case of bank holidays) distribute the prerequisites for the FIT to the technical team of the IDIS Association. Requests can only be done if all prerequisites are available for DNV. Technical team will review and confirm the pre-requisites to DNV.

10. The IDIS Association will review the pre-requisites mentioned in step 8 including the "State File" and – if the CTR fulfils the final verdict (see section 4) and the "State File" is consistent - approve the meter for participating for the Final Interoperability Test (FIT). The outcome of the approval step is communicated to you after 10 working days counted from your request to distribute the pre-requisites. If the meter is approved, the IDIS representatives that are involved in the approval process indicate if they want to attend the FIT.

11. Order a FIT test with Certification Fee at DNV (contact: idis-testing@dnv.com)

    Upon receipt of a valid Purchase Order, DNV schedules a test date that suits both you, the IDIS representative (if applicable) and DNV. The Certification Fee applies per certification. FIT re-tests can be ordered without certification fee.

12. Perform the FIT at DNV.

    DNV only accepts meters that are approved to participate in the FIT. The meter provided for FIT must be identical (same hardware and firmware version) to the one tested at conformance testing. It is recommended to send a representative of your company to attend the FIT. DNV will hand over the FIT report to you after the FIT. If a FIT report has achieved with no failed, inconclusive, fatal and disabled test cases, you can apply for the IDIS Label. The IDIS representative can abstain from participating in retest(s).

The next step to get the IDIS label is to apply for the Label and Certificate.

1.3. Apply for Certificate

13. Upon your request, DNV sends the FIT State File to the IDIS association for review. The IDIS association will review the FIT results and will communicate the outcome to you and DNV within 10 working days after your request to send the state file to IDIS (except in a period of e.g. summer holiday, which will be communicated to you upfront).

14. The IDIS association will inform you of the outcome of the review.

15. If you agree with the outcome, then submit to DNV a written declaration that you agree that the IDIS association publishes the Conformance Test Report and FIT Report on its website. See appendix for the template of the declaration.

16. If all invoices are paid, DNV will send your declaration to the IDIS association.

17. The IDIS association publishes the CTR and FIT results and the IDIS certificate will be issued to you by the IDIS association within another 10 working days.

2. TEST RESULTS

The following table summarises the actions to be taken should the test result be different from "PASSED".

verdict	owner of the DUT (Device Under Test)	DNV	IDIS
INCONCLUSIVE	INCONCLUSIVE results are produced if a test could not be performed (e.g. due to the non-availability of the necessary data). Configure DUT to meet the pre-conditions for the IDIS testing.	No action.	Typically, INCONCLUSIVE results are an indication that the DUT does not fulfil the pre-conditions listed above. In these cases, the result is not accepted.
INAPPLICABLE	Check if the INAPPLICABLE tests conform with your test plans. No action is required to get the IDIS Test Label.	No action.	INAPPLICABLE indicates that the test concerns elements which are optional. INAPPLICABLE results are accepted.
FATAL	Depending on the error message, Modify the DUT or provide DNV with modified configuration data for the DUT.	Cooperate with IDIS to resolve FATAL errors in cases where it cannot be assigned to the DUT or the provided configuration for the DUT.	Supports DNV to resolve FATAL errors in cases where it cannot be assigned to the DUT or the provided configuration data for the DUT. FATAL tests are not accepted.
FAILED	Modify the DUT or provide DNV with a modified configuration data for the DUT	No action.	No further actions by IDIS. FAILED tests are not accepted.
DISABLED	No action.	Enable all necessary tests.	No further actions by IDIS. DISABLED tests are not accepted.

3. FINAL VERDICT

The IDIS association only accepts complete test reports (i.e. DISABLED tests are not accepted) according to the following conditions:

FAILED: 0

FATAL: 0

DISABLED: 0

INCONCLUSIVE: 0

INAPPLICABLE: not considered

4. FOR MODULAR METERS

For meters with exchangeable communication modules the following rule applies:

The IDIS certification test will always be done with a specific combination of meter and communication module. The corresponding IDIS Test Label must be put on the meter and on the module. In case of a later module exchange the labels should be changed accordingly. If a change of the label on the meter is not possible then the communication module might have a different label from the meter.

5. PRICING SCHEME

All prices in €, excluding VAT.

Test		Charged by DNV
Pack 1 Recertification Conformance test **based on S-FSK-PLC**	per test run	5000
Recertification FIT1 **based on S-FSK-PLC**	per device	2500[1]
(please note that new Pack 1 certifications are no longer available)		
Pack 2 Conformance test – G3-PLC or GPRS/LTE	per test run	6500
FIT2	per device	2500[1]
Certification Fee (to be ordered together with the first FIT for a certification) – covers review of the certificates and the tests files	Per certification	5000[2]
Certification Update due when minor change	Per certification	1500
Optional confidential pre-FIT	Per Device	2500
Optional pre-Certification full test run (go through all tests once)	Per device and Telco connectivity technology	3000
Optional pre-Certification test run (as many test as desired limited to 6 hours)	Per device and Telco connectivity technology	3000

This document is for information only; it does not represent any legally binding offer. Processes and prices may change after publication of this document, please ensure that you have the most up to data version/information.

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[1] if more than one device (maximum 3) can be tested per working day, then the price for the second and the third device is reduced to 1'500 €.

[2] note that certification fee is due even if the certificate is not delivered

6. RECERTIFICATION

It is possible to recertify, as noted above. The base certificate number remains the same.

When a device is certified for the first time, it is assigned a certification number, this is the 4 main digits shown below.

Any subsequent recertifications of the same device, whether for renewal, administrative or other reasons, will receive a new number, and this will be retained in the database.

However, the print on the device will not change.

Past record certificates should be retained for reference.

APPENDIX 1: AGREEMENT TO PUBLISH THE TEST REPORTS

The applicant herewith agrees that the IDIS industry association publishes the "Conformance Test Report" and the "FIT Test Report(s)" provided for IDIS Test Label registration. The test reports will be made publically available through the IDIS-association web site.

FIT Test Report(s), FIT #:

(as appearing in the header of the report)

....

Conformance Test Report, date/time:

(as appearing in the header of the report)

....

Applicant (company name and address):

....

....

....

....

Represented by (name, job title and signature):

....

....

....

Place/Date:

.... / ....

Please email the completed form to info@idis-association.com

7. APPENDIX 2. LICENCE CONDITIONS FOR THE IDIS PACKAGES

In paying this invoice the client ("Licensee") recognizes accepting the following licensing conditions ("Agreement"). DLMS User Association ("Licensor") hereby grants to the Licensee these IDIS Package 3, Package 2 or Package 1 specifications ("Specifications") licensing rights based on worldwide, non-exclusive, non-transferable, right to use the Specifications in relation to the evaluation, study, benchmarking, development of Products, and internal use of Specifications for any activity with the scope of helping the Licensee to learn and understand how to use these Specifications. Rights include the right to extend the Specifications' use to allow third parties to perform work on behalf of the Licensee as long as the parties are operating under the Licensee control and supervision. The Licensee acknowledge that Licensor has any and all rights to the Specifications and that except for the rights to use expressly set forth here above, Licensee shall have no other interest or right to the Specifications. Except as provided here above in no event shall anything in this Agreement be construed as granting, expressly or by implication, estoppel or otherwise, any right to any Licensor Members' or Licensor member's affiliate(s)' to any Licensor's intellectual property other than for the Specifications and Licensee further acknowledges and agrees that any breach of the terms and conditions of this Agreement by his affiliate(s) and/or contracted third party shall constitute a breach of this Agreement and upon its discretion Licensor may consider starting any legal compensation action for any damages incurred. Licensor grants Licensee as well a worldwide, non-exclusive, transferable, license to use part or all of the Specifications for the production, supply, promotion, marketing, sale, lease or other distribution of Products embedding part or all of the Specifications as long as these Products prior being produced, supplied, promoted, marketed, sold, leased or other distributed should be certified by Licensor's accredited test laboratory and such Product have obtained a Certification for Compatibility certificate issued by Licensor and are marked with the IDIS mark ("Certified Products"). In the case Licensee will make any change to the Certified Product firmware or embedded software once the Certification for Compatibility certificate has been issued by Licensor, Licensee is obligated to verify with Licensor if the modifications implemented into the Certified Product will require the Certified Product being resubmitted to the Certification for Compatibility test performed by the Licensor accredited test laboratory, in which case Licensee will be required to re-apply to the test for Compatibility and obtain successfully a new Compatibility certificate issued by Licensor prior the Certified Product is manufactured and shipped with these modifications. Licensor or its agents shall have the right to inspect from time to time, as reasonably necessary, the Licensee and its Affiliates' commercially available Licensee's Certified Products identified by IDIS mark to ensure conformance with this Agreement. All the costs of such an inspection will be borne by Licensor, except the Licensee cost to coordinate such inspection and to provide the Certified Product to be inspected.