



DLMS® User Association [www.dlms.com](http://www.dlms.com)



# How to Obtain IDIS Package 3 Certification

v2-09

# 1. Introduction

IDIS Package 3 Certification is now integrated into the DLMS UA Qualification Process. All **DLMS UA Members** have the ability to license the IDIS Package 3 specifications.

## 1.1 Purpose

IDIS devices are tested for **Compliance** and **Compatibility** according to the process defined in the **DLMS UA Qualification Program**.

As a result, every certified IDIS device embedding IDIS Pack #3 Generic Companion Profile:

- Carries an IDIS Label which identifies the IDIS specification package 3:



- The Certificate clearly refers to:
  - 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 Certificate of **Compliance** produced for this device.
  - The Applicant (the owner of the device IP) and the Recipient (the owner of the Certificate)
  - The type and model of the tested device.

## 1.2 Terms and Definitions and references

All the terms in bold used within this document are defined in the document [DLMS UA Definitions.pdf](#)

Complementary informations for the following terms

- *Fee* : see paragraph 6.5 of the [Bylaws](#).
- *Eligibility* : see paragraph 6.4.4 of the [Bylaws](#)

## 2. Procedure to obtain the IDIS Certificate

The procedure to obtain **IDIS Package 3** Certification includes the following phases:

### 1. DLMS UA Qualification for **Compliance**:

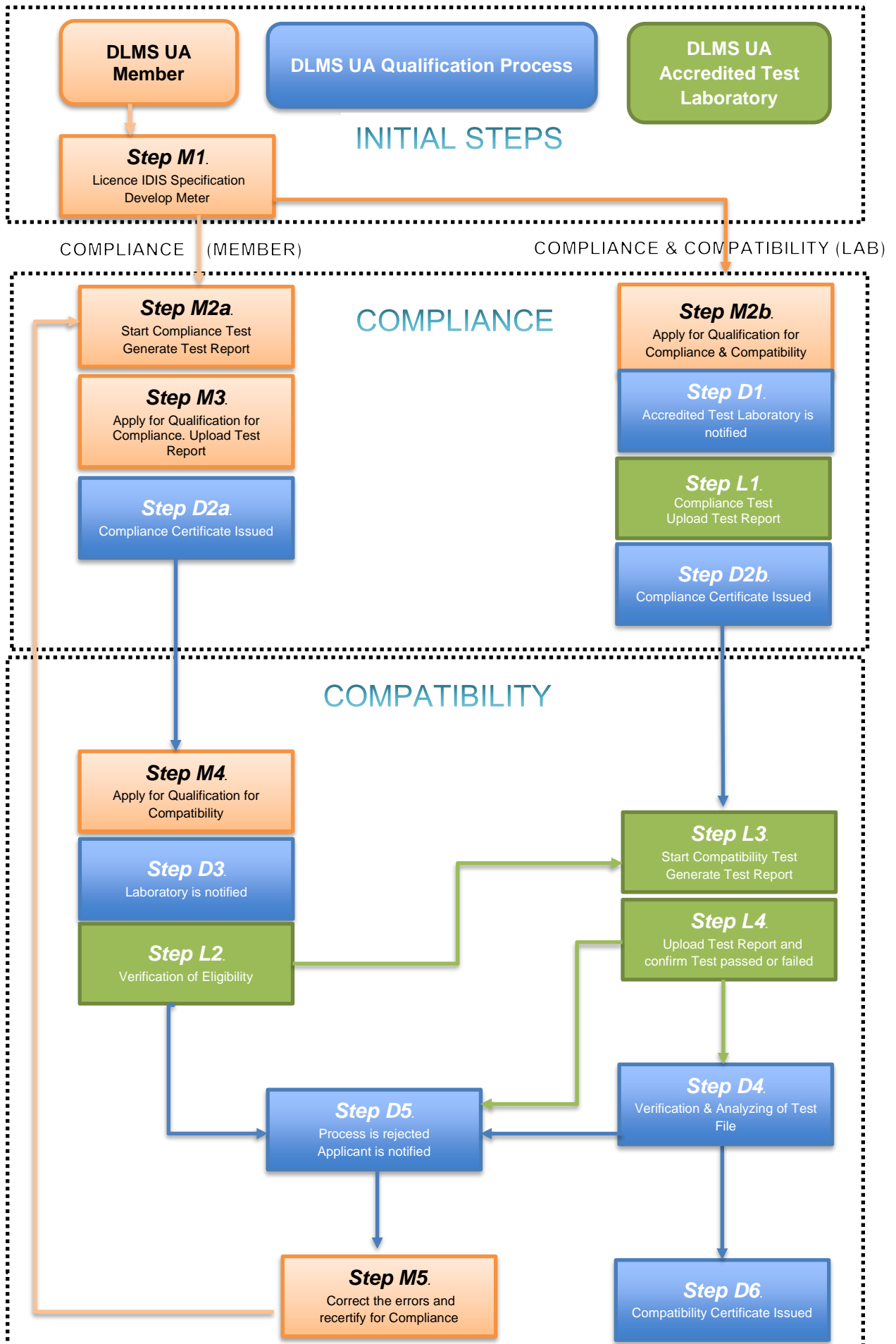
- Provides certification against the core DLMS specifications (Blue Book and Green Book) and act as a badge of excellence for data exchange interoperability.

This phase replace the Step 4. (DLMS Certification) in the procedure for Package 2 (see [How to get the IDIS test label \(package 2\)](#) on the IDIS Website).

### 2. DLMS UA Qualification for **Compatibility**:

- Ensures certified devices are plug and play within a specific application irrelevant of the device manufacturer. Tests performed during this phase correspond to tests performed in the Step 8. (Conformance Test) and 12. (FIT Test) in the procedure for Package 2 [How to get the IDIS test label \(package 2\)](#).

In each phase, a set of steps needs to be completed (see figure on next page):



## 3. Description of the Process:

### 3.1 Initial Steps:

Step M1:

- License the required IDIS Package 3 specification:  
The request to license the IDIS Specification should be made from the **DLMS UA** website or through [info@idis-association.com](mailto:info@idis-association.com) email address. This will involve agreeing to the license conditions and making payment to download the documents.  
Develop an IDIS meter according to the relevant IDIS Package 3 specifications.

You then have the ability to:

- apply for the Qualification for **Compliance** (go to [Qualification Program](#) and upload your test result) and then apply for the Qualification for **Compatibility**  
or
- apply for the Qualification for **Compliance & Compatibility** simultaneously (go to [Qualification Program](#)).

These two possibilities are described in details in the next [paragraph](#).

## 3.2 Qualification:

### 3.2.1 Compliance then Compatibility:

This is the case when a member carries out a self-test for **Compliance** and wishes to obtain a Certificate of **Compliance**. The product must contain all the features described the specifications of the IDIS Package 3.

#### 1. Compliance :

Step M2a:

- ✓ Start Compliance test, generate test report.

Step M3:

- ✓ Go to [Qualification Program](#) and apply for a **DLMS UA Qualification for Compliance** for the product. This involves being a **DLMS UA Member** in good standing, having the right tools, and completing the **DLMS UA Certification**.
- ✓ Upload the self-test results via the online **DLMS UA Qualification Portal** to obtain a **DLMS UA Qualification Certificate for Compliance**. It is essential that the tool is configured correctly to test all mandatory services defined in the IDIS Package 3 specifications and that the product is tested in its native communication technology. If native communication technology is not available in the tool, IP communication technology is accepted. The report obtained must contain the mandatory services stated in the IDIS Package 3 specification.
- ✓ **DLMS UA** confirms the Application and verifies the *Eligibility*.
- ✓ **DLMS UA** confirms the *Eligibility* and issues an invoice to the member covering:
  - Fee for **DLMS UA** assessment of product **Qualification** application *Eligibility* and issuance of **DLMS UA Qualification Certificate for Compliance**.
  - Fee for the **DLMS UA** assessment and verification of the **Qualification** test results.

## Step D2a:

- ✓ Once settlement done, **DLMS UA** confirms the payment and starts analysis of the test result.
- ✓ If **DLMS UA** approves the test result then the Certificate is issued and **DLMS UA Member** is notified.
- ✓ If approval of the test result failed, then the Applicant is notified and invited to upload new test files.
- ✓ **DLMS UA** issues an invoice to the Applicant including *Fees* for the **DLMS UA** assessment and verification of the **Qualification** test results.
- ✓ Once settlement done, **DLMS UA** confirms the payment and starts analysis of the new test result.
- ✓ If **DLMS UA** approves the test result then the Certificate is issued and **DLMS UA Member** is notified else the Applicant has the possibility to upload again new test files.

## 2. Compatibility:

Prepare for the IDIS Package 3 Certification

- ✓ Applicants must have obtained the **IDIS Package 3** specification and ensure their implementation meets the required specification.
- ✓ **DLMS UA** strongly advises **DLMS UA Members** to ensure product quality :
  - By ordering a pre-**Certification Test Run** at a **DLMS UA Accredited Test Laboratory** using the iCTT3 **DLMS UA Test Tool**.
  - OR testing by using iDTT3 to ensure that there are no Firmware changes required after obtaining the Certificate of **Compliance**.
- ✓ If the Firmware changes in the time between obtaining a Certificate of **Compliance** and a Certificate of **Compatibility** for **IDIS Package 3**, the product will fail.

Step M4:

- ✓ Go to [Qualification Program](#) and apply for a **DLMS UA Qualification** for **Compatibility** against the **IDIS package 3** within the application form. The Certificate of **Compliance** obtained in Step D2a is used to assure that the application for Certification for **Compatibility** will apply on a product having the same serial number and firmware. **DLMS UA** is notified.
- ✓ **DLMS UA** confirms the Application and verifies the *Eligibility*.
- ✓ **DLMS UA** confirms the *Eligibility* and issues an invoice to the member covering:
  - Fee for **DLMS UA** assessment of product **Qualification** application *Eligibility* and issuance of **DLMS UA Product Qualification Certificate** for **Compatibility**.
  - Fee for the **DLMS UA** assessment and verification of the **Qualification** test results.
- ✓ The **DLMS UA Accredited Test Laboratory** is also notified.

Note: It is essential that the prerequisite Certificate of **Compliance** contains the mandatory services stated in the **IDIS Package 3** specification. If this has not been done, then the applicant should use the process below "**Compliance & Compatibility**" where both processes are carried out by a **DLMS UA Accredited Test Laboratory**.



## Step D3:

- ✓ **DLMS UA** notifies the **DLMS UA Accredited Test Laboratory** and the **DLMS UA Member** on receipt of the payment of the application *Fees*.
- ✓ The **DLMS UA Accredited Test Laboratory** contacts the **DLMS UA Member**, and verifies their needs with regards to the certification test runs.
- ✓ The **DLMS UA Accredited Test Laboratory** makes a proposal.
- ✓ Once the **DLMS UA Accredited Test Laboratory** receives the order the delivery of the product will be arranged with the **DLMS UA Member**.

## Step L2:

- ✓ The **DLMS UA** and the **DLMS UA Accredited Test Laboratory** verify the *Eligibility* of the product received.
- ✓ iCTT3.1 **DLMS UA Test Tool** is a **Compatibility Test Tool** and it does not test the functionalities listed in annex A considering that those have been tested during the **Qualification** for **Compliance**. However it will be verified that those functionalities have been tested for **Compliance** and therefore appear on the corresponding certificate. In the case they have not been tested prior running test for **Compatibility** the member will be asked to resubmit his meter to **Qualification** re-certification for **Compliance** with all features used by **IDIS package 3**.
- ✓ If the *Eligibility* is confirmed, the **DLMS UA Accredited Test Laboratory** will conduct the required tests for **Compatibility** (go to **Step L3** of clause 3.2.2) else the **DLMS UA Accredited Test Laboratory** reject the process (then go to **Step D5** of clause 3.2.2).

### 3.2.2 Compliance & Compatibility:

This is the case when the Member wishes to subcontract both the Certification for **Compliance** and the Certification for **Compatibility** to a **DLMS UA Accredited Test Laboratory**.

#### 1. Compliance:

Step M2b:

- ✓ Go to [Qualification Program](#) and apply for a **DLMS UA** Qualification for **Compliance & Compatibility** for the product. This involves being a **DLMS UA Member** in good standing. **DLMS UA** is notified.
- ✓ **DLMS UA** confirms the Application and verifies the *Eligibility*.
- ✓ If *Eligibility* criteria have been fulfilled, **DLMS UA** issues an invoice to the **DLMS UA Member**:
  - *Fee* for Application *Eligibility* and issuance of a **DLMS UA** Product **Qualification** Certificate of **Compliance** and Certificate of **Compatibility**.
  - *Fee* for the **DLMS UA** assessment and verification of the Qualification test results.

Step D1: Contact with the **DLMS UA Accredited Test Laboratory**

- ✓ **DLMS UA** notifies the **DLMS UA Member** and the **DLMS UA Accredited Test Laboratory** on receipt of the payment of the application *Fees* stated in the *Step M2b*.
- ✓ The **DLMS UA Accredited Test Laboratory** contacts the **DLMS UA Member**, and verifies their needs with regards to the certification test runs.
- ✓ The **DLMS UA Accredited Test Laboratory** makes a proposal.
- ✓ Once the **DLMS UA Accredited Test Laboratory** receives the order the delivery of the product will be arranged with the **DLMS UA Member**.

## Step L1: Start compliance test and generate test report

- ✓ **DLMS UA Compliance Certification Test Run Fees** are invoiced directly by the **DLMS UA Accredited Test Laboratory** to the **Applicant**. These *Fees* are outlined in the **DLMS UA Internal Regulations (Bylaws)**.
- ✓ Once settlement done, the **DLMS UA Accredited Test Laboratory** conducts the **Certification Test Run**.
- ✓ The **DLMS UA Accredited Test Laboratory** generates the report
- ✓ The **DLMS UA Accredited Test Laboratory** uploads the Test File online to the **DLMS UA Qualification Portal**. The **DLMS UA Member** is notified.
- ✓ Applicant acknowledges and accepts the report upload by the **DLMS UA Accredited Test Laboratory**. **DLMS UA** is notified.

## Step D2b:

- ✓ **DLMS UA** does the second level of *Eligibility*. If OK then the **DLMS UA** starts the analysis of the test file :
- ✓ If the analysis of the test files is positive the certificate of Compliance is issued. The **DLMS UA Member** and the **DLMS UA Accredited Test Laboratory** are notified.
- ✓ If the analysis of the test files is negative :
  - **DLMS UA** notifies the **DLMS UA Accredited Test Laboratory**.
  - The **DLMS UA Accredited Test Laboratory** notifies the **DLMS UA Member**.
  - The **DLMS UA Member** makes the correction and a new **Compliance** test run needs to be ordered.

## 2. Compatibility:

### Step L3:

- ✓ The **DLMS UA Accredited Test Laboratory** will issue and send an invoice for the **DLMS UA compatibility Certification Test Run** to the **DLMS UA member**.
- ✓ On receipt of payment, the **DLMS UA Accredited Test Laboratory** will reach out to arrange the testing schedule.
- ✓ The **DLMS UA Accredited Test Laboratory** carries out the test for **Compatibility**.
- ✓ The **DLMS UA Accredited Test Laboratory** conducts pre-**Certification Test Runs** and **Certification Test Runs** using the **DLMS UA Accredited Test Tool**.
- ✓ The following *Fees*, defined in the **DLMS UA Internal Regulations** (Bylaws), apply to the test runs and these *Fees* are invoiced directly by the **DLMS UA Accredited Test Laboratory**:
  - *Fees* for **DLMS UA** compatibility pre-**Certification Test Run**
  - *Fees* for **DLMS UA** compatibility **Certification Test Run**
- ✓ Additional services *Fees* from the **DLMS UA Accredited Test Laboratory** may apply.
- ✓ Member will be notified by the **DLMS UA Accredited Test Laboratory** of the status of the testing.
- ✓ The **DLMS UA Accredited Test Laboratory** generates the report.

### Step L4:

- ✓ The **DLMS UA Accredited Test Laboratory** will upload the report via the online **DLMS UA Qualification Portal** and will confirm if the test has passed or failed.

### Step D4:

**DLMS UA** do the second level of *Eligibility*. If OK then start the analysis of the test file else reject the Application.

### Step D5 Rejected:

- ✓ The **DLMS UA Accredited Test Laboratory** has confirmed that the tests are failed, **DLMS UA** rejects the process and the **DLMS UA Member** is notified then go to Step M5.

### Step D6:

- ✓ When the appropriate *Fees* have been paid and the test results have been positively verified by **DLMS UA**, the certificate is issued, and the device is listed

on the certified product list on the public pages of the **DLMS UA** website if authorized by the Applicant.

Step M5:

- ✓ The **DLMS UA Member** corrects the errors and re-apply for the Qualification for **Compliance**.

# ANNEX A

## Mandatory Features tested in Compliance

Authentication mechanisms :

HIGH\_LEVEL\_SECURITY\_ECDSA  
HIGH\_LEVEL\_SECURITY\_SHA\_256

Security features :

GENERAL\_CIPHERING\_WITH\_IDENTIFIED\_KEY  
GENERAL\_CIPHERING\_WITH\_WRAPPED\_KEY  
GENERAL\_CIPHERING\_WITH\_AGREED\_ONE\_PASS\_DH  
GENERAL\_CIPHERING\_WITH\_AGREED\_STATIC\_UNIFIED  
GENERAL\_DED\_CIPHERING  
GENERAL\_SIGNING  
SERVICE\_SPECIFIC\_GLO\_CIPHERING  
KEY\_TRANSFER  
KEY\_AGREEMENT  
CERTIFICATES