

# NTV Norwegian DTT Validation process

1.0

## 1. Validation Process

### 1.1 Step 1 – Non Disclosure Agreement

The first step in the process is to get an NDA in place between the manufacturer and RiksTV. The NDA can be retrieved by sending a request to [validation@rikstv.no](mailto:validation@rikstv.no). Once the NDA is agreed upon and signed it is valid for all new products coming in for validation from the same manufacturer, hence the NDA only needs to be signed once.

When the NDA is signed, the following documents will be sent to the manufacturer:

*[1] - NTV validation standard Terms & Conditions*

This document states the Terms and Conditions that the manufacturer agree upon when ordering the validation services.

*[2] – NTV validation price list*

States the current prices related to the validation services.

*[3] - NTV Basic IRD Specifications DTT Norway*

Specification stating all requirements for Basic IRD's intended for the Norwegian DTT network.

*[4] - MHP Specifications DTT Norway*

Specification stating all requirements for IRD's with MHP functionality intended for the Norwegian DTT network.

*[5] - PVR Specifications DTT Norway*

Specification stating all requirements for IRD's with PVR functionality intended for the Norwegian DTT network.

*[6] – Compliance matrix – NTV and RiksTV*

Compliance matrix to be filled out by the manufacturer and returned to RiksTV prior to validation.

*[7] – NTV SSU Rules of Operations*

Document that explains the SSU Rules of Operations for the Norwegian DDT network.

*[8] – SSU enhanced and simple profile signaling to manufacturers*

This document is filled out by the manufacturer and states the manufacturer specific signalling to be used when testing SSU functionality.

*[9] – Riks TV Test specification ver 1.1c*

This document outlines the test cases and procedures performed during the validation.

Specifications, requirements and tables may be subject to change. The manufacturer is responsible for obtaining the latest updated version of the relevant specifications. Please refer to [www.rikstv.no/validation](http://www.rikstv.no/validation) for further information.

### 1.2 Step 2 - Compliance matrix

When the customer has filled in the compliance matrix it shall be returned to RiksTV before the validation can proceed. The compliance matrix shall be sent to [validation@rikstv.no](mailto:validation@rikstv.no). If the manufacturer, for any reason, is not compliant to any of the requirements, it shall be stated in the compliance matrix. All non compliant requirements shall be discussed and agreed upon before the product can enter the validation.

Please note that by issuing the compliance matrix the manufacturer by default also agrees upon the terms and conditions stated in the “NTV validation standard Terms & Conditions” [1]

### 1.3 Step 3 – Validation

When the “Compliance matrix – NTV and RiksTV” [6] is agreed upon, RiksTV will notify Teracom and the manufacturer can send a formal validation request to Teracom by sending the validation purchase order form to [irdtest@teracom.se](mailto:irdtest@teracom.se) with a copy to [validation@rikstv.no](mailto:validation@rikstv.no). The latest version of the purchase order form can be retrieved by sending a request to [irdtest@teracom.se](mailto:irdtest@teracom.se).

The Validation Test shall be paid by the manufacturer according to the “NTV validation price list” [2].

The Validation Test is an extensive test where the end user device is tested and validated against the NTV specifications as well as selected part of the Nordig specifications.

The manufacturer is provided with the test results upon completion of the test. The manufacturer must correct reported problems if the end user device fails in the test. Depending on the severity of the problems RiksTV will decide if the test is to be started from the beginning or if the problems can be re-tested one by one. The received end user device units may in case of negative test result, upon request by the manufacturer within 2 weeks after notification of the negative test results, be returned to the manufacturer at its cost.

The validation purchase order form shall be accompanied with the following documents in digital version:

1. *Conax SE certificate (If embedded Conax)*  
If the end user device has embedded Conax CA, a certificate from Conax stating that the end user device has passed Conax security test.
2. *Conax CT certificate (If embedded Conax)*  
If the end user device has embedded Conax CA, a certificate from Conax stating that the end user device has passed Conax conformance test.
3. *User manuals in English and Norwegian*  
User manual in both English and Norwegian shall be delivered, preferably in digital version.
4. *Gift box design*
5. *SSU enhanced and simple profile signaling to manufacturers [8]*  
The “SSU Configuration” document shall be completed with the SSU configuration matching the device.
6. *MHP test results (if MHP functionality is supported)*  
Test report or certificate from external test house or MHP middleware provider, stating conformance to the MHP version detailed in the NTV MHP specifications. The testing shall be done by running the MHP test suite on an end user device with the final SW implementation. A general statement for a given middleware version is not acceptable. This requirement only applies to end user devices where MHP is implemented.
7. *Pairing provisioning files (If embedded Conax)*  
Both the “Conax production file” (xml document) and the “Serial number” file (txt document) shall be delivered. The files must contain the information about the end user devices to be used during the validation.

The following shall in addition be delivered to Teracom:

1. Software in original version and test version with different version name/number.
2. Tool to get IRD back to original sw after SSU test (if any).
3. 2 units of the end user device to be validated if it is a STB.
4. 1 unit of the end user device to be validated if it is an IDTV.

The following shall in addition be delivered to RiksTV:

1. Software in original version and test version with different version name/number.

2. Tool to get IRD back to original sw after SSU test (if any).
3. 10 units of the end user device to be validated if it is a STB.
4. 1 unit of the end user device to be validated if it is an IDTV is mandatory. It is optional for the manufacturer to deliver 2 IDTV's. The advantage of sending two devices is to avoid delays if the device for some reason is malfunctioning as a result of e.g. transports software updates etc.

*Delivery address of Teracom:*

Teracom AB  
Att: IRD testing  
Esplanaden 9  
SE- 172 67 Sundbyberg  
Sweden

*Delivery address of RiksTV:*

RiksTV AS  
Attn: Validation Services  
Økernveien 145, 17th floor.  
N-0580 OSLO  
NORWAY

#### 1.4 Step 4 – PVR compliance test (if end user device has PVR functionality)

The PVR Compliance Test is designed for validating that the end user device supports the PVR functionality as specified in the “PVR Specifications DTT Norway” [5]. This test is only mandatory for end user devices where PVR functionality is implemented

The manufacturer is provided with the test results upon completion of the test. The manufacturer must correct reported problems if the end user device fails in the test. Depending on the severity of the problems RiksTV will decide if the test will have to be started from the beginning or if the problems can be re-tested one by one. The received end user device units may in this case, upon request by the manufacturer within 2 weeks after notification of negative test results, be returned to the manufacturer at its cost.

Ordering of the PVR Compliance Test shall be done by using the purchase order form that can be found as Appendix A in the “RiksTV Lab services” document that can be found at <http://www.rikstv.no/validation>. This document also contains the pricelist.

#### 1.5 Step 5 – MHP compliance test (if end user device has MHP functionality)

The MHP Compliance Test is designed for validating that the end user device supports the MHP functionality as specified in the “MHP Specifications DTT Norway” [4] and the applications used in the Norwegian DTT network. This test is only mandatory for end user devices where MHP is implemented

The manufacturer is provided with the test results upon completion of the test. The manufacturer must correct reported problems if the end user device fails in the test. Depending on the severity of the problems RiksTV will decide if the test will have to be started from the beginning or if the problems can be re-tested one by one. The received end user device units may in this case, upon request by the manufacturer within 2 weeks after notification of negative test results, be returned to the manufacturer at its cost.

Ordering of the MHP Compliance Test shall be done by using the purchase order form that can be found as Appendix A in the “RiksTV Lab services” document that can be found at <http://www.rikstv.no/validation>. This document also contains the pricelist.

## 1.6 Step 6 - Approval.

If the end user device passes the validation test successfully, the manufacturer will be notified and the end user device will be approved for use with the DTT services.

The end user device units, Documentation and Tools submitted for validation will not be returned if approved, and RiksTV shall have the right to use such units for testing purposes.

If the end user device units are e.g. pre-production samples, or for other reasons, not comparable with the production version, RiksTV shall be entitled to swap the end user devices with production version at manufacturers cost.

## 2. RiksTV lab services

As we see that manufacturers benefit from visiting Norway during development and testing of the product prior to the validation, we can offer lab and consultancy services at RiksTV premises in Oslo. Please check out the latest validation services information brochure, "RiksTV lab services", for further details. This brochure is available at [www.rikstv.no/validation](http://www.rikstv.no/validation)