

# **TLN WRO Certification type Document**

< General Certification procedures for AO Euro  
Docsis 3.0 CPE to enable usage of TLN ROBB >



## Document Housekeeping

### Document Category and type

CAT	TYPE	DOC ID	Comment
Broadband	CERT	TLN-WRO-TA-B-C-PAAA	Certification type documents (-CERT) describe the certification process and methodology (so not the interfaces or protocols, those are found in the specification type documents)

### Document Authorization

EDITION	DATE	APPRAISAL AUTHORITY	STATUS	ORIGINATOR
0.6	10.09.2012	Director TLN Wholesale	Draft	TLN WRO Engineering

### Document Effective Date

This document has come into effect as of xx/xx/2012 and remains valid until a valid subsequent Telenet Wholesale Reference offer, substituting this document is published.

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None

## List of Appendixes

This document may refer to further detailed documents that are added in Appendixes to this document.

A reference to an appendix is in this document highlighted with grey background.

The list with appendixes of this document:

A. Appendix A, < APP-B-C-PAAA-A > contains :

1) Appendix A1 - <Test List>

## List of References

This document may refer to external documents or information sources.

A reference to an external document or information source is in this document highlighted with grey background.

The list of referred external documents or information sources in this document:

Reference 1: TLN WRO CAT: Broadband: TLN\_WRO-TA-B-S-PAAA

Reference 2: TLN WRO CAT: General: TLN-WRO-TA-G-C-PDAA

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# 1 Abstract

Certification type documents have as purpose to describe the roles and responsibilities in the certification process of Telenet and the AO, the test procedures and the interaction between TLN and AO throughout the product lifecycle of AO Customer Premises Equipment (CPE) with as main goal to ensure at any moment in time correct interoperability between the AO CPE and TLN infrastructure according to the relevant specifications. The same types of certification documents and procedures are also applicable for TLN network to AO network level of interconnections.

Generic sections specifying certification procedures applicable to all AO CPE or network equipment that will be connected to the TLN network are described in General Certification Procedures Document [TLN-WRO-TA-G-C-PDAA](#).

Section 2 defines the specific test set applicable to the AO CPE or network equipment which is the subject of this specific document.

The feasibility of the technical designs and methods described in this document are subject to verification by a Proof of Concept (POC) test organized by Telenet and may be changed or updated depending on the outcome of this POC.

## **2 Test Specifications for the general certification procedures for AO Euro Docsis 3.0 CPE to enable usage of TLN ROBB**

### **2.1 Introduction**

- (1) The tests will cover all of the requirements specified by TLN in the specification document with identification `TLN_WRO_TA_B_C_PAAA`.

### **2.2 Test list**

- (2) The test list for this AO equipment is included in `Appendix A1` to this document

## 2.3 Test score card

CONFORMANCE TEST SCORE CARD					
Conformance Test Score Card Number	TLN-WRO-TA-TSC-%-P%%%				
Test Identification					
Test Execution Date					
Test Run Type	Full / Reduced (without OOS cases)				
Device / Equipment / Interface Name					
Device / Equipment / Interface Type / Class					
AO Device / Equipment / Interface Identification					
Software Version					
Tested by					
Overall Result Status	Pass / Fail				
Applicability	Select 1 or more : ROTV / ROBB / AIDTV				
CONFORMANCE TEST ITEM LIST					
Test Cases Summary	FORMAT	IN SCOPE	MAN	PASS/FAIL	REM
			"Y/N"	"P/F"	(*xy)
<b>4. AO Euro-Docsis 3.0 CPE General Functional Requirements</b>	<b>HO</b>				
4.1. AO Euro-Docsis 3.0 CPE Hardware and OS			Y		
4.2. Euro-Docsis MAC and IP layer			Y		
4.3 AO Device Management by Telenet Requirements			Y		
<b>5. AO Euro-Docsis CPE Non-Functional Requirements</b>	<b>HO</b>				
5.1. Mechanical Requirements			Y		
5.2. Environmental Requirements			Y		
5.3. Safety Requirements			Y		
5.4. EU Consumer Goods Label Requirements			Y		
<b>Remarks</b>					
(*xy) : "Remark explanation comes here"					

# Appendix A1

Test list for the General Certification procedures for AO Euro Docsis 3.0 CPE to enable usage of TLN ROBB, reference code: TLN-WRO-TA-B-C-PAAA.

Test reference or description	OK/KO /NA	Comment
<b>4 AO Euro-DOCSIS 3.0 CPE General Functional Requirements</b>		
4.1 AO Euro-Docsis 3.0 CPE Hardware and OS		
4.2 AO Euro-Docsis MAC and IP layer		
4.2.1.1 Check if AO Cable Modem tunes the downstream frequency properly		
4.2.1.2 Check if AO Cable Modem get upstream frequency through tuned DS frequency properly		
4.2.1.3 Check if Management IP address assignment for AO Cable Modem; of which MAC Address is not added to database; is unsuccessful		
4.2.1.4 Check if Management IP address assignment for AO Cable Modem; of which MAC Address is added to database; is successful		
4.2.1.5 Check if Cable Modem gets its configuration file successfully		
4.2.1.6 Check if default GRE tunnel is established successfully for broadband connection		
4.2.1.7 Check if End user Equipment Public IP assignment is done successfully from subscribed AO IP Address Range		
4.2.1.8 Check if Cable Modem successfully adds or overwrites End User Equipment DHCP options before forwarding in GRE tunnel.		
4.3 AO Device Management by TLN Requirements		
4.3.1.1 Check if TLN remote modem reset by using SNMP is successful		
4.3.1.2 Check if TLN remote modem disabling by using SNMP is successful		
4.3.1.3 Check if TLN Remote US / DS FTP upload/download test is successful		
4.3.1.4 Check if TLN SNMP Queries on DOCSIS related MIB defined appendix-2 are successful		
4.3.1.5 Check if AO customer's status view is successful through API based management proxy server		
4.3.1.6 Check if AO CPE link speed test is successful through API based management proxy server		
4.3.1.7 Check if AO CPE suspend/not suspend network access for AO CPE is successful through API based management proxy server		
4.3.1.8 Check if AO CPE read /write SNMP access is successful through API based management proxy serve		
4.3.1.9 Check if AO Cable Modem reset is successful by clicking reset button on it within specified duration		
<b>5 AO Euro-Docsis 3.0 CPE-Non Functional Requirements</b>		
5.1 Mechanical Requirements		
5.1.1 Housing	NA	

5.1.2	<i>Diagnostic Leds</i>		
5.1.2.1	<i>Check if DS Led is active when Cable Modem is locked for DS frequency.</i>		
5.1.2.2	<i>Check if US Led is active when when Cable Modem is locked for US frequency.</i>		
5.1.2.3	<i>Check if ONLINE Led is active when when Cable Modem becomes online status</i>		
5.1.2.4	<i>Check if POWER Led is active when Cable Modem is powered on.</i>		
5.1.2.5	<i>Check if LINK Led is active when another AO CPE is connected to Cable Modem.</i>		
5.1.3	<i>Labels</i>		
5.1.3.1	<i>Check if AO logo and HFC-MAC-ID are clearly visible on Cable Modem</i>		
5.1.4	<i>Connectors</i>		
5.1.4.1	<i>Check if RF connector which is connected to Wall Outlet is Type (IEC 169-2)</i>		
5.2	<i>Environmental Requirements</i>		
5.3	<i>Safety Requirements</i>		
5.3.1	<i>Surge and Lightning Protection</i>		
5.3.1.1	<i>Check if every item in related Surge and Lightening Protection Appendix is tested (Differs depending on AO)</i>		
5.3.2	<i>Temperature and Humidity</i>	NA	
5.3.3	<i>Fire Resistance</i>	NA	
5.4	<i>EU Consumer Goods Label Requirements</i>		