

# **ONVIF<sup>®</sup>**

# **Conformance Process Specification**

Version 5.1

March 2023

© 2008 - 2023 by ONVIF: Open Network Video Interface Forum, Inc. All rights reserved.

Recipients of this document may copy, distribute, publish, or display this document so long as this copyright notice, license and disclaimer are retained with all copies of the document. No license is granted to modify this document.

THIS DOCUMENT IS PROVIDED "AS IS," AND THE CORPORATION AND ITS MEMBERS AND THEIR AFFILIATES, MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR TITLE; THAT THE CONTENTS OF THIS DOCUMENT ARE SUITABLE FOR ANY PURPOSE; OR THAT THE IMPLEMENTATION OF SUCH CONTENTS WILL NOT INFRINGE ANY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS.

IN NO EVENT WILL THE CORPORATION OR ITS MEMBERS OR THEIR AFFILIATES BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, ARISING OUT OF OR RELATING TO ANY USE OR DISTRIBUTION OF THIS DOCUMENT, WHETHER OR NOT (1) THE CORPORATION, MEMBERS OR THEIR AFFILIATES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR (2) SUCH DAMAGES WERE REASONABLY FORESEEABLE, AND ARISING OUT OF OR RELATING TO ANY USE OR DISTRIBUTION OF THIS DOCUMENT. THE FOREGOING DISCLAIMER AND LIMITATION ON LIABILITY DO NOT APPLY TO, INVALIDATE, OR LIMIT REPRESENTATIONS AND WARRANTIES MADE BY THE MEMBERS AND THEIR RESPECTIVE AFFILIATES TO THE CORPORATION AND OTHER MEMBERS IN CERTAIN WRITTEN POLICIES OF THE CORPORATION.

## REVISION HISTORY

Vers.	Date	Description	Contributors
1.0	March 2009	Initial conformance requirements	<ul style="list-style-type: none"> <li>• <b>Tim Holloway, Anixter</b></li> <li>• <b>Ann-Elise Lady, Axis Communications</b></li> <li>• <b>Ann-Sofie Rase, Axis Communications</b></li> <li>• <b>Baldvin Gislason Bern, Axis Communications</b></li> <li>• <b>Christian Gehrman, Axis Communications</b></li> <li>• <b>Daniel Elvin (Ed.), Axis Communications</b></li> <li>• <b>Edyta Tomczak, Axis Communications</b></li> <li>• <b>Göran Haraldsson, Axis Communications</b></li> <li>• <b>Hans Olsen, Axis Communications</b></li> <li>• <b>Markus Wierny, Bosch Security Systems</b></li> <li>• <b>Andy Ryu, Samsung</b></li> <li>• <b>Dongseuk Park, Samsung</b></li> <li>• <b>Seungmin Lee, Samsung</b></li> <li>• <b>Younghun Na, Samsung</b></li> <li>• <b>Andreas Schneider, Sony Corporation</b></li> </ul>
2.0	March 2012	Addition of profile conformance	<ul style="list-style-type: none"> <li>• <b>Matt Powers, Anixter</b></li> <li>• <b>Baldvin Gislason Bern, Axis Communications</b></li> <li>• <b>Daniel Elvin, Axis Communications</b></li> <li>• <b>Markus Wierny, Bosch Security Systems</b></li> <li>• <b>Jonathan Doyon (Ed.), Genetec</b></li> <li>• <b>Andreas Schneider, Sony Corporation</b></li> </ul>

Vers.	Date	Description	Contributors
3.0	September 2013	<p>Addition of ONVIF Interface Guide requirement</p> <p>Process adjusted to consider new profiles.</p> <p>Addition of Handling of Disputes</p>	<ul style="list-style-type: none"> <li>• <b>Matt Powers, Anixter</b></li> <li>• <b>Ulf Svensson, Axis Communications</b></li> <li>• <b>Johan Svensk, Axis Communications</b></li> <li>• <b>Gregor Wegrzynek, Bosch Security Systems</b></li> <li>• <b>Markus Wierny, Bosch Security Systems</b></li> <li>• <b>Neelendra Bhandari, Honeywell</b></li> <li>• <b>Ramesh Subbaiah , Honeywell</b></li> <li>• <b>Scott Hudson (Ed.), Pelco by Schneider Electric</b></li> <li>• <b>Joseph Moeller, Pelco by Schneider Electric</b></li> <li>• <b>Andreas Schneider, Sony Corporation</b></li> <li>• <b>Masashi Tonomura, Sony Corporation</b></li> </ul>
3.1	September 2014	<p>Addendum: Temporary client Conformance in case of less than 3 conformant devices available.</p> <p>Clarifications on handling of disputes (Annex D).</p>	<ul style="list-style-type: none"> <li>• <b>Bob Dolan, Anixter</b></li> <li>• <b>Anders Johansson, Axis Communications</b></li> <li>• <b>Johan Svensk, Axis Communications</b></li> <li>• <b>Gregor Wegrzynek, Bosch Security Systems</b></li> <li>• <b>Neelendra Bhandari, Honeywell</b></li> <li>• <b>Ramesh Subbaiah , Honeywell</b></li> <li>• <b>Scott Hudson, Pelco by Schneider Electric</b></li> <li>• <b>Andreas Schneider (Ed.), Sony Corporation</b></li> <li>• <b>Marc Suzuki, Sony Corporation</b></li> </ul>
4.0	August 2016	<p>Merging conformance process for devices and clients as both the ONVIF Device Test Tool and the ONVIF Client Test Tool is available for conformance</p>	<ul style="list-style-type: none"> <li>• <b>Bob Dolan, Anixter</b></li> <li>• <b>Anders Johansson, Axis Communications</b></li> <li>• <b>Johan Svensk, Axis Communications</b></li> </ul>

Vers.	Date	Description	Contributors
		testing and their use becomes mandatory.	<ul style="list-style-type: none"> <li>• <b>Andre Eichhorn, Bosch Security Systems</b></li> <li>• <b>Carrie Feng, Hikvision</b></li> <li>• <b>Andrew Downs, Pelco by Schneider Electric</b></li> <li>• <b>Andreas Schneider (Ed.), Sony Corporation</b></li> </ul>
5.0	September 2019	Updated conformance process flow chart. New Annex C on 'Changes in member status and organization'. Clarification of product family conformance process.	<ul style="list-style-type: none"> <li>• <b>Bob Dolan, Anixter</b></li> <li>• <b>Anders Johansson, Axis Communications</b></li> <li>• <b>Johan Svensk, Axis Communications</b></li> <li>• <b>Andre Eichhorn, Bosch Security Systems</b></li> <li>• <b>Giri Guntipalli, Honeywell</b></li> <li>• <b>Todd Johnson, Pelco</b></li> <li>• <b>Andreas Schneider (Ed.), Sony Corporation</b></li> </ul>
5.1	March 2023	Additional clarification for family of products and editorial changes	<ul style="list-style-type: none"> <li>• <b>2023 TSC</b></li> </ul>

# TABLE OF CONTENTS

<b>ONVIF®</b> .....	<b>1</b>
<b>Conformance Process Specification</b> .....	<b>1</b>
<b>1 Introduction</b> .....	<b>8</b>
1.1 IMPORTANT .....	8
1.2 Scope .....	8
1.3 Normative references .....	8
1.4 Informative references .....	9
<b>2 Terms and definitions</b> .....	<b>10</b>
2.1 Conventions .....	10
2.2 Definitions .....	10
2.3 Abbreviations .....	11
<b>3 ONVIF conformance fundamentals</b> .....	<b>12</b>
3.1 Objectives .....	12
3.2 Conformance process outline .....	12
3.3 Self-declaration .....	14
3.4 Requirement levels .....	14
3.5 Set of Specifications .....	15
3.6 Relations between specifications .....	15
3.7 Compatibility between ONVIF devices and ONVIF clients .....	16
3.8 Restricted liability of ONVIF .....	16
3.9 Conformance testing services .....	17
3.10 ONVIF logo usage with conformant products .....	17
<b>4 Declaration of Conformance</b> .....	<b>18</b>
4.1 Role and responsibility.....	18
4.2 Conformance requirements for ONVIF devices and clients.....	18
4.3 Conformance testing.....	19
4.4 The Declaration of Conformance.....	19
4.5 Temporary Conformance Declaration for ONVIF clients .....	19
4.6 Submission of conformance documentation .....	20
4.7 Family of products .....	20
4.8 OEM products .....	23

- 4.9 Listing by ONVIF ..... 23
- 4.10 Updating a Declaration of Conformance ..... 23
- 4.11 Validity time of the Declaration of Conformance ..... 23
- 4.12 Withdrawal of Declaration of Conformance..... 24
- 5 Plugfest (Informative)..... 25**
- Annex A Member Tools (Normative)..... 26**
- Annex B Handling of disputes (Informative)..... 27**
  - B.1 Handling of interoperability related claims..... 27
  - B.2 Handling of improper claims of conformance ..... 27
- Annex C Changes in member status and organization (Normative)..... 29**
  - C.1 Relisting of conformant products of re-joining members..... 29
  - C.2 Merger of members ..... 29
  - C.3 Affiliate ..... 29
  - C.4 Change of member name ..... 30
  - C.5 Change of brand, product or model name..... 30

# 1 Introduction

## 1.1 IMPORTANT

This ONVIF Conformance Process document v5.1 replaces the previously released version 5.0. As of April 3<sup>rd</sup>, 2023 ONVIF Members shall fulfil all the conditions listed in this document, the ONVIF Conformance Process v5.1, in order to claim product conformance to one or multiple profiles.

## 1.2 Scope

This document defines and describes the Conformance Process of the ONVIF organization for claiming conformance with the ONVIF specifications. It covers both conformance requirements for ONVIF devices and ONVIF clients.

The conformity assessment is the “activity concerned with determining directly or indirectly that relevant requirements are fulfilled,” as stated in the ISO/IEC Guide 2: Standardization and Related Activities: General Vocabulary [ISO/IEC G2].

## 1.3 Normative references

[ONVIF Profile Specs]	All ONVIF Profiles Specifications documents URL: <a href="https://www.onvif.org/profiles/">https://www.onvif.org/profiles/</a>
[ONVIF Interface Spec]	All ONVIF Network Interface Specification Set documents and corresponding WSDL and Schema specifications URL: <a href="https://www.onvif.org/profiles/specifications/">https://www.onvif.org/profiles/specifications/</a>
[ONVIF Interface Guide Spec]	ONVIF Interface Guide Specification document URL: <a href="https://www.onvif.org/profiles/conformance/interface-guide/">https://www.onvif.org/profiles/conformance/interface-guide/</a>
[ONVIF Brand ID]	ONVIF Brand Identity Overview URL: <a href="https://members.onvif.org/membership-tools">https://members.onvif.org/membership-tools</a> (login required)
[ONVIF RoM]	ONVIF Rules of Membership URL: <a href="http://www.onvif.org/">http://www.onvif.org/</a>
[ONVIF Test Spec]	All ONVIF Test Specification documents URL: <a href="https://www.onvif.org/profiles-add-ons-specifications/">https://www.onvif.org/profiles-add-ons-specifications/</a>
[ONVIF Device Test Tool]	ONVIF Device Test Tool URL: <a href="https://members.onvif.org/membership-tools">https://members.onvif.org/membership-tools</a> (login required)
[ONVIF Client Test Tool]	ONVIF Client Test Tool URL: <a href="https://members.onvif.org/membership-tools">https://members.onvif.org/membership-tools</a> (login required)



## 1.4 Informative references

[ONVIF Profile Policy]	ONVIF Profile Policy URL: <a href="http://www.onvif.org/">http://www.onvif.org/</a>
[ONVIF WG Platform]	ONVIF Working Group Platform URL: <a href="https://wush.net/trac/onvif/wiki/WikiStart">https://wush.net/trac/onvif/wiki/WikiStart</a>
[ISO/IEC G2]	ISO/IEC Guide 2, “Standardization and Related Activities: General Vocabulary”
[ISO/IEC CS]	ISO/IEC 17050, “Conformity assessment – Supplier’s declaration of conformity – Part 1: General requirements”
[ISO/IEC Directives]	ISO/IEC Directives Part 2 “Principles and rules for the structure and drafting of ISO and IEC documents”, Clause 7: “Verbal forms for expressions of provisions”
[ONVIF Schema]	ONVIF, “Schema” URL: <a href="http://www.onvif.org">www.onvif.org</a>

## 2 Terms and definitions

### 2.1 Conventions

The key words “shall”, “shall not”, “should”, “should not”, “may”, “need not”, “can”, “cannot” in this specification are to be interpreted as described in [ISO/IEC Directives].

### 2.2 Definitions

Member	organization participating in good standing in the Full, Contributing, or User Membership level in ONVIF
ONVIF client	networked appliance or software program that uses ONVIF Web services
ONVIF device	networked appliance or software program that exposes one or multiple ONVIF Web services
ONVIF profile	specific and unambiguous set of features implemented by an ONVIF device or ONVIF Client to ease interoperability NOTE to entry: An ONVIF profile is defined by a respective ONVIF profile Specification, the reference document to claim conformance to that profile.
product name	commercially used product identifier Note 1 to entry: ‘product name’ is listed in the xml feature list under <TestInformation>/<ProductName> or <ClientInformation>/<ProductName>. Note 2 to entry: Only ASCII characters shall be used.
model	basic product identifier Note 1 to entry: ‘model’ name is retrieved by GetDeviceInformation (for device) or GetClientInformation (for client) and listed in the xml feature list under <DeviceInformation>/<model> or <ClientInformation>/<model>. Note 2 to entry: Only ASCII characters shall be used.
version number	release number for device software / firmware version or client software version Note 1 to entry: ‘version number’ is retrieved by GetDeviceInformation (for device) or GetClientInformation (for client) and listed in the xml feature list under <DeviceInformation>/<FirmwareVersion> or <ClientInformation>/<Version>. Note 2 to entry: Only ASCII characters shall be used.

## 2.3 Abbreviations

DoC

Declaration of Conformance

WSDL

Web Services Description Language

## 3 ONVIF conformance fundamentals

### 3.1 Objectives

The objectives of the ONVIF Conformance Process are the following:

- Ensure a common understanding of conformance and what is required to claim ONVIF conformance.
- Promote interoperability between ONVIF conforming devices and clients.
- Define common procedures and requirements for all Members towards self-declaration of conformance of relevant product(s) with certain ONVIF profiles and for the resulting possibility to communicate this with the use of the ONVIF Logo.

### 3.2 Conformance process outline

The ONVIF conformance process is a self-declaration scheme under which the Member may state support of one or multiple ONVIF profile(s) for a given ONVIF device or ONVIF client. The declaration of conformity states that the ONVIF device or ONVIF client:

- Implements all functionality for the claimed profile(s) as listed in the [ONVIF profile Specs].
- Respects entirely the specification and methods described in the [ONVIF Interface Spec]. This includes also optional functionalities not listed as conditional or mandatory in the claimed profile(s).
- Adheres to the test routines of the [ONVIF Test Spec] corresponding to the claimed profile(s).
- Successfully passes the [ONVIF Device Test Tool] and / or the [ONVIF client Test Tool] for the claimed profile(s).

The Member submits the Declaration of Conformance, ONVIF Interface Guide, and Feature List files via the Member Tools (see Annex A).

ONVIF conformance means that the requirements stated in the claimed [ONVIF Profile Specs] are fulfilled according to the defined requirement levels. To increase the confidence in the conformance statement, ONVIF also provides [ONVIF Test Spec], [ONVIF Device Test Tool] and [ONVIF Client Test Tool]. This Conformance Process Specification defines how a Member shall use these components to claim conformance to one or multiple ONVIF profiles.

The process flow in Fig. 1 outlines the process steps to be followed by members to declare conformance of a product with at least one ONVIF profile.

Special cases affecting the conformance statement resulting from changes in member status and organization are described in Annex C.

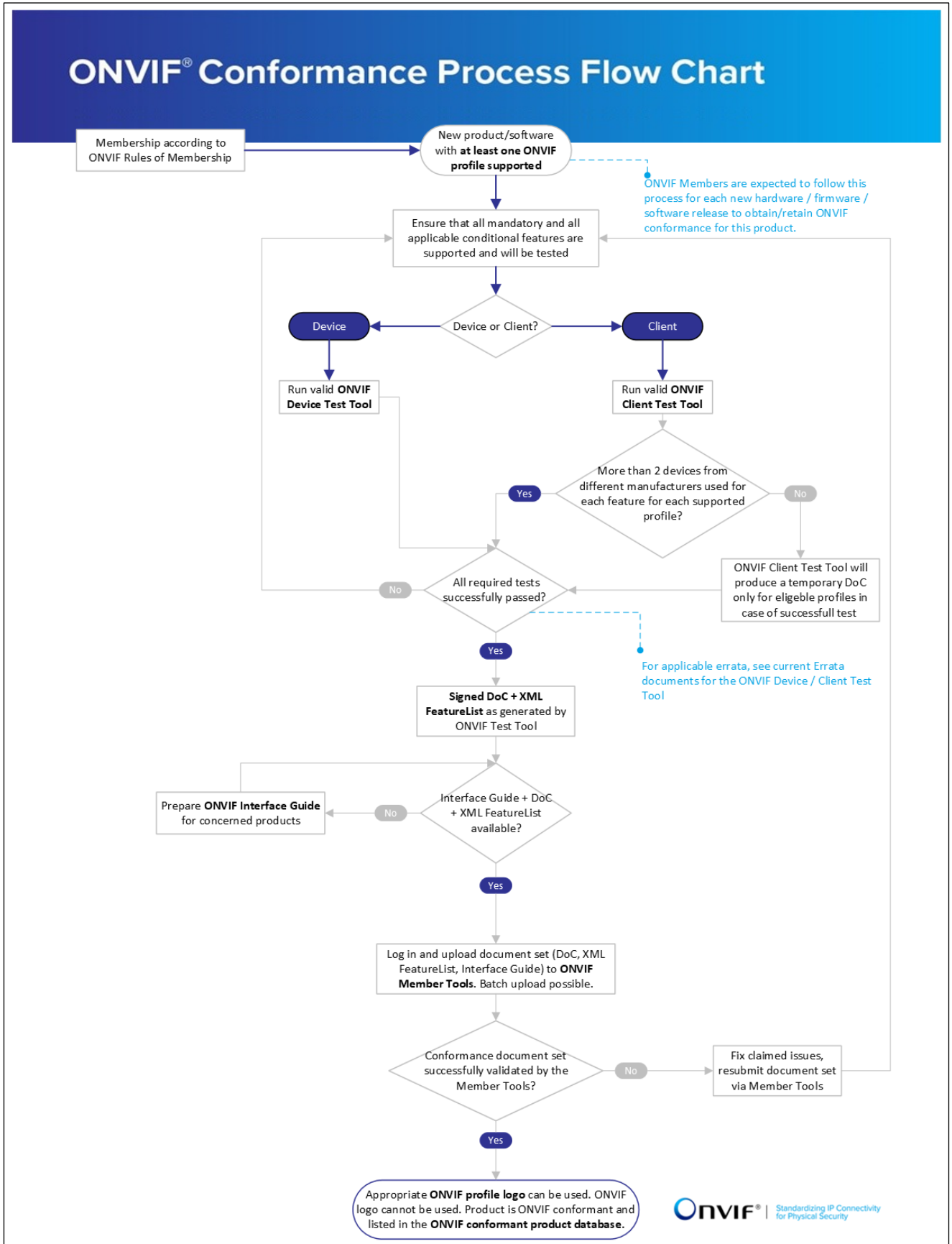


Fig. 1: ONVIF Conformance Process flow chart

## 3.3 Self-declaration

The ONVIF Conformance Process is a self-declaration process. For a Member to claim conformance to one or multiple profiles, the Member shall ensure that all the requirements of this ONVIF Conformance Process are fulfilled, according to Section 4.2, *Conformance Requirements for ONVIF devices and clients*.

The responsibility for the conformance statement solely belongs to the Member. See also Section 3.8, *Restricted Liability of ONVIF*.

## 3.4 Requirement levels

The [ONVIF Profiles Specs] include lists of required functionalities with the different requirement levels as listed below:

- MANDATORY
- CONDITIONAL
- OPTIONAL

The following sections describe the use of these keywords in the ONVIF specifications.

### 3.4.1 MANDATORY

If a service, feature, or functional block is marked as “mandatory”, an ONVIF conforming device or client shall unconditionally support this function. **Failure to comply with this is a violation** of the ONVIF Conformance requirement.

### 3.4.2 CONDITIONAL

Devices and clients shall implement the “conditional” feature if they support that functionality in any way, including any proprietary way. Features that are conditional are marked with “if supported” in [ONVIF Profile Specs]. **Failure to comply with this is a violation** of the ONVIF Conformance requirement.

EXAMPLE 1 (informative): An ONVIF device with mechanical pan, tilt and zoom capabilities shall unconditionally support the PTZ service as described in the appropriate [ONVIF Profile Specs].

EXAMPLE 2 (informative): An ONVIF client with support for PTZ-control using a proprietary protocol shall unconditionally support the PTZ service as described in the appropriate [ONVIF Profile Specs].

### 3.4.3 OPTIONAL

If a service, feature, or functional block is marked as “optional”, an ONVIF conforming device or client may support this function. To not support such a function is not a violation of the ONVIF Conformance requirement. **If implemented**, it shall be implemented as defined in [ONVIF Interface

Spec] and successfully pass the tests described in [ONVIF Test Spec] and executed by the [ONVIF Device Test Tool] or [ONVIF Client Test Tool]. **Failure to comply** with the [ONVIF Interface Spec], [ONVIF Test Spec] and [ONVIF Device Test Tool] or [ONVIF Client Test Tool] when implementing an optional service, feature or functional block, **is a violation** of the ONVIF Conformance requirement.

### 3.5 Set of Specifications

The following specifications comprise the ‘Set of Specifications’ referred to in this ONVIF Conformance Process Specification:

- [ONVIF Conformance Process Specification] – This document.
- [ONVIF Interface Guide Spec] – The specification defining the ONVIF Interface Guide document.
- [ONVIF Interface Spec] – A group of documents defining the core technical specification and its accompanying WSDL and schema specifications.
- [ONVIF Profile Specs] – A group of documents that define each profile and the list of mandatory and conditional requirements.
- [ONVIF Test Spec] – A group of documents specific for ONVIF devices or ONVIF clients defining basic test routines and procedures to ensure a subset of [ONVIF Interface Spec] is fulfilled.
- [ONVIF Device Test Tool] – The software tool used to test a device for conformance to a given profile according to the [ONVIF Profile Spec]. The test tool produces a Declaration of Conformance document and may also produce a Test Report.
- [ONVIF Client Test Tool] – The software tool used to test a client for conformance to a given profile according to the [ONVIF Profile Spec]. The test tool produces a Declaration of Conformance document and may also produce a Test Report.

In addition to these specifications and tools, all errata issued for any of these as well as all amendments at the time of referencing the Set of Specifications, shall be regarded as parts of the Set of Specifications.

### 3.6 Relations between specifications

The Set of Specifications, as defined in Section 3.5, contains separate specifications and tools, each with its independent version numbering. While the [ONVIF Test Spec] and [ONVIF Device Test Tool] / [ONVIF Client Test Tool] are counterparts, they only cover a subset of the [ONVIF Interface Spec]. [ONVIF Test Spec] and [ONVIF Device Test Tool] / [ONVIF Client Test Tool] will not completely cover all services, features, or functional blocks, or all possible fault scenarios. As stated in Section 4.2, passing the test of [ONVIF Device Test Tool] or [ONVIF Client Test Tool] is a necessary but not sufficient condition to claim conformance with the ONVIF Specifications.

The statements below highlight the relationship between the components of the ONVIF Specifications.

- [ONVIF Interface Spec] is the technical specification to which an ONVIF device or ONVIF client shall conform.
- [ONVIF Profile Specs] defines the list of mandatory, conditional, and optional functionality required to claim conformance to the profile defined in the specification.
- [ONVIF Test Spec] provides the test cases that shall be executed in order to claim conformance for an ONVIF device (Device Test Specifications) or for and ONVIF client (Client Test Specifications).
- [ONVIF Device Test Tool] is a test tool for ONVIF devices that executes subsets of the test routines specified in [ONVIF Test Spec] and generates a Declaration of Conformance (DoC) document, a Feature List, and a Test Report.
- [ONVIF Client Test Tool] is a test tool for ONVIF clients that executes subsets of the test routines specified in [ONVIF Test Spec] and generates a Declaration of Conformance (DoC) document, a Feature List, and a Test Report.
- [ONVIF Interface Guide Spec] – defines the mandatory structure and content for a document that provides the initial steps required to operate an ONVIF client or device using the ONVIF API.

As the scopes of the specifications are independent, the documents are developed independently.

### 3.7 Compatibility between ONVIF devices and ONVIF clients

An ONVIF profile is an invariant subset of technical and test specifications, such that the requirements and functionalities of a profile will never change over time. A new release of an [ONVIF Interface Spec] will not impact the existing profiles; hence the latest [ONVIF Interface Spec] document shall always be used for new implementations.

This means that an ONVIF device with a specific profile can interoperate with an ONVIF client that supports the same profile. Both systems will successfully communicate together regardless of the specification version used to implement these products.

### 3.8 Restricted liability of ONVIF

Each Member is solely responsible for ensuring conformance for all ONVIF devices and ONVIF clients for which the Member has declared conformance. The Member shall compile and maintain documentation on procedures and test results for each of those ONVIF devices and ONVIF clients. The Member shall provide this documentation upon request to ONVIF or its assigned representative for proof.

The ONVIF organization has no liability for Members who claim conformance for ONVIF devices and/or ONVIF clients.

- The ONVIF organization has no liability for manufacturers' self-declaration.
- The ONVIF organization has no liability for performance and/or quality of products stating ONVIF conformance.



- The ONVIF organization has no liability for the actual implementation of the ONVIF specifications.

Instead the ONVIF organization:

- Provides and maintains on a best effort basis Test Tools or alternatively other interoperability test means, for basic testing as defined in the Test Specification.
- Relays product claims from customers to the concerned Member.
- Maintains its right to publish all or selected parts of the information provided in the Declaration of Conformance, the Interface Guide, the Feature List (if applicable) and other documents and/or files submitted in accordance with the conformance statement.
- Maintains its right to request test protocols and related product documentation for conformance verification.
- Maintains its right to withdraw product listings from its database (if this service is provided).
- Maintains its right to temporarily suspend the Membership or exclude Members failing to follow its statutes according to [ONVIF RoM].

### 3.9 Conformance testing services

Neither the ONVIF organization nor its committees provide conformance testing services.

### 3.10 ONVIF logo usage with conformant products

A Member with an ONVIF device and/or an ONVIF client that fulfils the conformance requirements as stated in Section 4.2, may use the ONVIF Logo according to [ONVIF Brand ID]. The ONVIF Logo shall not be changed or modified, as regulated in [ONVIF Brand ID].

## 4 Declaration of Conformance

ONVIF devices and ONVIF clients shall conform to the requirements stated in Section 4.2, *Conformance requirements for ONVIF devices and clients*.

### 4.1 Role and responsibility

Successful testing using [ONVIF Device Test Tool] or [ONVIF Client Test Tool] is necessary but not sufficient for claiming ONVIF Conformance. The Member is solely responsible for ensuring proper implementation of [ONVIF Interface Spec] in accordance with the [ONVIF Profile Specs]. The [ONVIF Test Spec] and the accompanying [ONVIF Device Test Tool] and [ONVIF Client Test Tool] are available to assist in the conformance process but do not guarantee complete conformance.

In addition, it is in the sole responsibility of each member to check for regulatory and other local market requirements affecting its products and services.

As the conformance process is a self-declaration process, each Member is solely responsible for securing conformance according to the procedures stated herein.

### 4.2 Conformance requirements for ONVIF devices and clients

This section defines the requirements of the conformance process for ONVIF devices and clients. Conformance shall be validated for any of the ONVIF supported versions of [ONVIF Network Interface Spec] (see Section 3.5), including all published errata and amendments related to the specification version at the time of testing. The versions of the specifications included in the Set of Specifications are an essential part of the conformance statement.

To claim product conformance with the ONVIF Specification and at least one ONVIF profile, the manufacturer of the ONVIF device or client shall ensure all of the following requirements are fulfilled:

- a) Approved membership in good standing according to the [ONVIF RoM].
- b) The ONVIF device or client shall claim conformance with at least ONE (1) ONVIF profile.
- c) The ONVIF device or client shall support all mandatory services, features, and functional blocks of the claimed profile(s) as listed in [ONVIF Profiles Specs] and defined in [ONVIF Interface Spec].
- d) The ONVIF device or client shall support all applicable conditional services, features, and functional blocks of the claimed profile(s) as listed in [ONVIF Profiles Specs] and defined in [ONVIF Interface Spec].
- e) All non-mandatory or non-conditional services, features, and functional blocks supported by the ONVIF device or client shall be properly implemented according to [ONVIF Interface Spec].

- f) The ONVIF device or client shall successfully pass all the tests identified for the claimed profile(s) as defined in [ONVIF Test Spec] and [ONVIF Profile Spec]. If any test case has been invalidated by an errata for the [ONVIF Test Spec] or test tool, the Member shall explicitly state in the test tool the applicable errata number invalidating a (failed) test case.
- g) The ONVIF device or client shall pass the corresponding test suite for the claimed profile(s) as executed by current [ONVIF Device Test Tool] or [ONVIF Client Test Tool]. The Test tool will produce a Declaration of Conformance (DoC) in PDF format and a Feature List in XML format if all the tests successfully pass.
- h) An ONVIF Interface Guide document shall describe the initial steps required for operation of the ONVIF device or client using the ONVIF API according to [ONVIF Interface Guide Spec]. The document shall be successfully validated against the approved DocBook XML schemas and schematron rules, as specified in the [ONVIF Interface Guide Spec].

### 4.3 Conformance testing

Each ONVIF product shall execute the tests for conformance to one or multiple ONVIF profiles as described in the [ONVIF Profile Specs] documents and the implementation shall conform to the ONVIF [ONVIF Interface Spec] versions at the time of the test.

A Member shall execute a complete conformance test, using a currently and at the time of conformant document submission valid ONVIF test tool, incorporating all applicable errata, amendments, and updates. Conformance shall successfully be verified for:

- a) Any hardware affecting ONVIF functionality
- b) Any generally available software / firmware release

### 4.4 The Declaration of Conformance

To state conformance with [ONVIF Profile Specs] and related [ONVIF Interface Spec] the Member shall use and sign the Declaration of Conformance (DoC) document as generated by the [ONVIF Device Test Tool] for ONVIF devices or [ONVIF Client Test Tool] for ONVIF clients respectively. The Member shall also provide an accompanying ONVIF Interface Guide according to the [ONVIF Interface Guide Spec].

Failure to comply with this is a violation of the ONVIF Conformance requirement.

### 4.5 Temporary Conformance Declaration for ONVIF clients

The [ONVIF Client Test Tool] shall create a temporary DoC for a client under test, if only 1 or 2 traces from conformant devices (as listed on the ONVIF conformant product database) are available for one or multiple test cases of the [ONVIF Test Spec].

The temporary DoC is valid for ONE (1) year only after the date of listing by ONVIF ('Date approved'). The ONVIF office may delete such a temporary DoC without notice from the public

records any time after the end of this ONE (1) year period. It is the responsibility of the submitting Member to retest the client for conformance with the applicable profile and resubmit a new DoC with a later service release of the [ONVIF Client Test Tool], after the ONE (1) year period has passed.

## 4.6 Submission of conformance documentation

Access to the Member Tools (see Annex A) is granted upon approval of ONVIF membership. The main member contacts may grant additional access for conformance documentation submission to additional personal in their organization.

A Member shall upload the following documents to the Member Tools (For further instructions see help section in the Member Tools):

- Signed Declaration of Conformance (DoC) in PDF format
- Feature List in XML format
- ONVIF Interface Guide in XML format

For ONVIF devices and clients, following the successful completion of mandatory testing with the [ONVIF Device Test Tool] or [ONVIF Client Test Tool] respectively, the DoC is generated automatically in PDF format together with the XML Feature List. The Declaration of Conformance (DoC) as generated by the ONVIF test tool shall be signed (electronically using the test tools) by an authorized representative of the Member.

If the ONVIF office finds problems with the submitted documents, it will require that the Member make corrections and resubmit the documents. The ONVIF office will not send a confirmation of approval until it is satisfied with the documents.

The Member shall not publicly claim ONVIF conformance for the concerned product(s) until the confirmation of approval has been received from the ONVIF office.

## 4.7 Family of products

A Member can submit a single DoC and the ONVIF Interface Guide for a group of products with the common core model name, where variations do not affect ONVIF functionality. Even seemingly minor changes in a product have the potential to be exercised by the ONVIF Test Tools differently, causing the potential for individual test cases to fail. Therefore, only products that exercise the exact same ONVIF functionality will be allowed for this process.

A Family of Products shall meet the following criteria:

- The product name and version number used shall explicitly demonstrate that these products are related and are variations of the same product.
- Products must be of the same form factor. For example, dome cameras and bullet cameras must be submitted separately, regardless of how common the designs are.
- All products within the family shall use the exact same software.

- All products within the family shall expose the same ONVIF features and functionality to the end user. ONVIF features/functionality are listed e.g. in the Profile Specification or in the feature list of the test tools.
- [camera specific] The image sensor shall be identical in all products of a family.
- All products in the family shall be commercialized under the same brand.
- The DoC and ONVIF Interface Guide shall include all applicable product names and the respective version numbers.

The following are acceptable ways of using the Family of Products Process:

- Products that are available in different colors or bubble options
- Products that offer slight mechanical differences or added accessories of the same form factor (sun shield vs. no sun shield, for example). Also includes products that have IR and non-IR accessory options
- Products that offer different fixed lens options (not including those that are user controlled for example, products with electrically controlled optical zoom or focus must be tested separately)
- Products that offer different power input options
- Products that allow for pre-installation of SD card or other peripherals that were included when the product was under test
- Products that differentiate language in the UI

The Primary Product is one of the family members that achieves a DoC. The Member uploads the signed DoC, the feature list and the Interface Guide for the Primary Product via the Member Tools, following the normal procedure. The Family of Products form shall be completed and submitted within 72 hours of submission of the Primary Product DoC to the ONVIF help desk ([helpdesk@help.onvif.org](mailto:helpdesk@help.onvif.org)). **In addition to submitting the Family of Products submission form, member companies shall submit redlined spec sheets, clearly highlighting the minor differences in product for each model submitted.**

The Family of Products submission form template is available in the Member Tools/Download ONVIF Files under “Templates” (login required). The template also sets the limit for how many related family products that are allowed for each Primary product.

Fig. 2 shows the process flow for a family of products declaration.

The ‘Family of Products’ process is limited to cases where technical validation is possible for third parties. In all other cases model specific conformant product information shall be submitted via the Member Tools.

# ONVIF® Family of Products Process Flow Chart

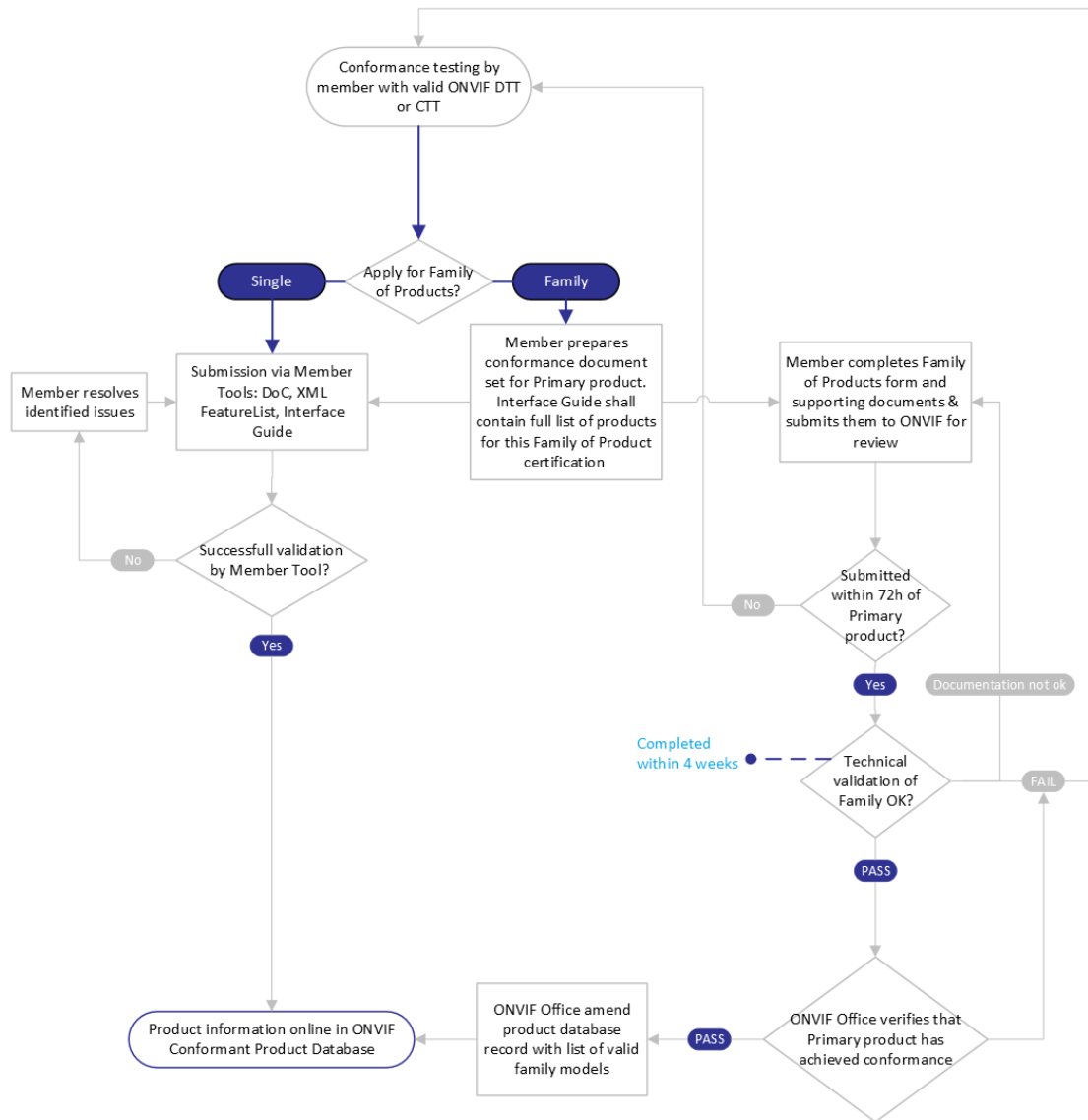


Fig. 2: Family of products flow chart

## 4.8 OEM products

Any Member reselling an ONVIF conformant product under a different brand or product name shall complete all the requirements of the conformance process as if it was a totally independent product. The specific conformant product information set shall be submitted via the Member Tools.

The Member shall not reference another Declaration of Conformance (DoC). The product name and model name in the documentation shall reflect the information returned by respective test tool queries.

## 4.9 Listing by ONVIF

ONVIF provides the service of listing ONVIF conformant devices and clients for members in 'good standing' [ONVIF RoM] on the website <http://www.onvif.org/>. The listing will be based on the information submitted in the Declaration of Conformance and the Feature List. The details for this service are, however, outside the scope of this specification. See the ONVIF website <http://www.onvif.org/> and the ONVIF conformant product database for details.

ONVIF may limit the period of time during which a device or client is listed on the ONVIF website. ONVIF may exclude products from the list that are being reported as non-conforming as per Annex B. In the latter case, the Member will be informed.

## 4.10 Updating a Declaration of Conformance

In order to continue using the ONVIF profile logo, when either hardware or software modifications are made to a product previously declared as ONVIF conformant which affect ONVIF functionality, members shall submit a new set of conformance documents via the ONVIF Member Tools, as defined in Section 4.6.

For each product conformant with ONVIF profiles, only one Declaration of Conformity covering all relevant ONVIF profiles shall be listed. If the range of profiles to which a product conforms changes, a new DoC considering actual conditions shall be submitted and replace the DoC that was previously issued. Members are encouraged to submit a new set of conformance documents to the ONVIF Office, as defined in Section 4.6.

## 4.11 Validity time of the Declaration of Conformance

The Declaration of Conformance (DoC) has no expiration. The DoC is consequently valid indefinitely for the ONVIF device or ONVIF client it covers.

As for the exceptional case described in clause 4.5, ONVIF Members may submit a temporary DoC of a client conforming to a certain profile. This temporary DoC for an ONVIF client is valid for only one year.

## 4.12 Withdrawal of Declaration of Conformance

In the event an ONVIF device and/or ONVIF client no longer meets ONVIF conformance requirements, the Member shall immediately inform the ONVIF Office and withdraw the Declaration of Conformance.

The ONVIF organization has the right to request from the Member reasonable material proving the conformance requirements. Failure to provide this may result in a withdrawal of the ONVIF Conformance statement, and thus the right to claim the ONVIF device and/or ONVIF client is ONVIF conformant.



## 5 Plugfest (Informative)

Developer oriented plugfests are organized by ONVIF to enhance interoperability of ONVIF clients and devices that implement [ONVIF profiles]. Participation in plugfests is strongly encouraged. ONVIF periodically offers on-site plugfests, but may also host plugfests for remote participation. Information concerning a plugfest is announced in advance to all Members of the ONVIF organization.

## Annex A

### Member Tools

#### (Normative)

Members shall use the Member Tools as communication interface to submit sets of conformance documents as defined in Section 4.4, to ONVIF for approval and upload to the ONVIF Conformance Product database. Context help is available in the Member Tools.

ONVIF Member Portal: <a href="https://members.onvif.org/membership-tools">https://members.onvif.org/membership-tools</a>
--

Only family of product conformance document sets and such conformance documents which cannot be submitted via the ONVIF Member Tools, shall be submitted electronically through ONVIF support helpdesk or sent to the following e-mail address:

E-mail address:           helpdesk@help.onvif.org
---

## Annex B

### Handling of disputes

(Informative)

#### B.1 Handling of interoperability related claims

A Member or user that discovers an interoperability issue between two profile conformant products should follow these steps:

1. Concerned parties should first seek to communicate directly and handle/solve the identified issue. The product Interface Guide provides contact information. Alternatively, the ONVIF office ([help@onvif.org](mailto:help@onvif.org)) may provide contact information where needed. Members may also address technical interoperability issues related to the ONVIF specs in the ONVIF Forum.
2. If one party requests escalation: The Member or user shall report the interoperability issue by using the improper conformance webform provided on the ONVIF homepage at <http://www.onvif.org/contact/report-improper-conformance-claim/>.
3. The ONVIF Executive Director shall request supporting material from all involved parties:
  - a) Claim description and supporting evidence of non-conformity
  - b) DoC and test report (should already be available at the ONVIF office)
  - c) Supported Feature List
4. The ONVIF office shall forward the issue to the TSC and issue a ticket in the [ONVIF WG Platform] with the information related to the case.
5. TSC to address and respond (via e-mail) to the ONVIF Executive Director after the next conference call (twice a month) with a proposal on how to handle the claim.

#### B.2 Handling of improper claims of conformance

Here are several examples of improper conformance cases:

- A. An ONVIF Member claims conformance for a product or specific version of a product and has not yet submitted a DoC to the ONVIF office (specific product not listed on the ONVIF homepage)
- B. The conformance claim for a specific product by the ONVIF Member differs from or exceeds the DoC submitted and listed on the ONVIF homepage
- C. A company which is not or no longer an ONVIF Member is claiming ONVIF conformance for a product.

Process:

1. Member or user shall report the improper conformance claim by using the webform provided on the ONVIF homepage at <http://www.onvif.org/contact/report-improper-conformance-claim/>

2. ONVIF Executive Director shall request from the concerned Member a proper DoC for the concerned product and to temporarily halt publication of any conformance claims for the concerned product (website, PR, product material) until the Member's ONVIF Membership is in good standing and respective conformance documents are submitted to, and accepted by, the ONVIF office.

## Annex C

### Changes in member status and organization

#### (Normative)

#### C.1 Relisting of conformant products of re-joining members

In case a member re-joins ONVIF within 6 months of the renewal date of its original membership it results in the reactivation of the original membership (keeping original renewal date) [ONVIF RoM]:

- Conformant products of the member are relisted as originally submitted and stored in the ONVIF conformant product database archive.

In case a member joins ONVIF again after 6 months of the renewal date of its original membership it results in a new membership (new renewal date applies):

- Conformant products have to be tested with actual test tools and new conformant product information shall be submitted via the Member Tools.

#### C.2 Merger of members

In case two ONVIF members merge and only one member remains as legal entity visible, the new acting member can take over the original conformant products without change in branding, product or model name (e.g. also in case of change in the legal naming of a member). Users searching the database will no longer see results when referencing the old member name.

Products with changed brand, product or model name shall be submitted as new products.

Upon request, conformant products approved under the old brand name can continue to be listed in the conformant product database, however no updates are possible. Model or software / firmware updates have to be submitted as new product entry under the valid member name.

In case of a merger of 2 members where the original brands shall remain, one shall be registered as Affiliate (see C.3).

#### C.3 Affiliate

If a parent company is already an ONVIF member, its subsidiaries may join ONVIF as Affiliate to have its conformant products listed under its own name / brand and logo. The Affiliate member status is a mechanism that allows companies the ability to list multiple brands. To have Affiliate products listed as a conformant products, the Affiliate shall complete the conformance process for the products under their own name/brand.

## C.4 Change of member name

In case a member changes its name all the concerned conformant products will be listed under the new member name in the database, not affecting the individual product information. The old member name will not be visible in the list of members anymore.

## C.5 Change of brand, product or model name

Even if a product is claimed to be technically identical, this product represents a new entity and has to be submitted individually as new conformant product with its new brand, product or model name by the respective member, which includes individual documentation. All the original conformant products remain in the database as long as they are not withdrawn by the member.