

These Terms of Reference were approved remotely by ETSI ISG NFV in Oct-Nov 2014.  
See Remote Consensus [NFV\(14\)DEC016](#).

### 3 Terms of Reference for ETSI ISG NFV

In the following clauses, deviations from the applicable ETSI TWP (Technical Working Procedures) as agreed by the members of ISG NFV, including deviations to the ETSI TWP made in the ISG Membership Agreement, are stipulated.

#### 3.1 Scope

The original target of ISG NFV consisted in providing a pre-standardisation study before considering later a broader standards proposal in a new or existing standardisation group. It was important at that stage to first clearly define, agree, and share the goals of virtualising network functions with the whole industry. This was addressed in the 2013-2014 time frame, and resulted in the publication of the first ISG NFV specifications release.

In 2015 and 2016, the purpose of ISG NFV remains to produce the technical specifications for the virtualisation of network functions.

This will be achieved by delivering both **informative** documents (analysis, Use Case descriptions, feasibility studies, reports, etc...) and **normative** documents (requirements, architecture, interface specification, etc...) aiming at helping the industry in its quest for interoperability.

Through these documents ISG NFV will address technical challenges that include:

- Ensuring that virtualised network platforms will be simpler to operate than what exists today.
- Achieving high performance virtualised network appliances which are portable between different hardware vendors, and with different hypervisors.
- Achieving co-existence with legacy hardware-based network platforms whilst enabling an efficient migration path to fully virtualised network platforms which re-use network operator BSS and OSS.
- Management and orchestration of virtual network appliances (particularly alongside legacy management systems) while ensuring security from attack and misconfiguration.
- Maintaining network stability and service levels without degradation during appliance load and relocation.
- Ensuring the appropriate level of resilience to hardware and software failures.
- Enable the creation of virtual network appliances which will run, ideally without recompilation, on any hypervisor and hardware configuration, and integrate "on the fly" into the network operators' existing EMS, NMS, OSS, BSS and orchestration systems.

ISG NFV will also perform a requirement analysis for future technical specifications & standards in ad hoc standardisation organisation & groups to be identified or created at ETSI and other relevant standards development organisations.

#### 3.2 Membership

Membership in ISG NFV is restricted in accordance with Clause 3.4 of the ETSI Technical Working Procedures to ETSI Full/Associate Members and applicants for Full/Associate membership, who have signed the ISG NFV agreement.

Observers and non-members of ETSI may not become members of the ISG but may participate in the ISG according to the rules as described in the ISG NFV Participant Agreement. Participation of non-members of ETSI is subject to acceptance of the ISG NFV Participant Agreement, and payment of a per-meeting participation fee as described in the ISG NFV Participant Agreement.

#### 3.3 Dues

Dues for membership and operation are fixed on an annual basis by the members, based on the costs the members anticipate to incur. Currently no or minimal annual dues are anticipated.

Observers and non-members of ETSI are required to pay a per-meeting participation fee as described in the ISG NFV Participant Agreement. This per-meeting fee is set initially at €100 (excluding taxes) per person per meeting day. These fees may be modified by a decision of the members of the ISG NFV.

#### 3.4 Duties and Rights of Members

Members have the duty to constructively cooperate on the development of ISG Group Specifications within the scope of the ISG NFV and under the responsibility of the ISG NFV Chairman.

Members have the right to cast their vote on the approval of a specification when necessary, and in other instances when decisions by the members are required. Members have the right to appeal directly to the ETSI Board to challenge a Chairman's decision.

Voting is by weighted individual vote, and voting rights are dependent on regular participation in the ISG NFV: members are required to have been physically present during the 2 plenary meetings preceding any vote in order to have the right to vote.

### **3.5 Preparation of Group Specifications**

Group Specifications are prepared within the ISG NFV or within specific working groups. Working groups are chaired by working group chairs, who are appointed according to the rules of operation of the ISG NFV. All draft specifications must be approved by the ISG NFV members using the decision making process detailed in the rules of operation of the ISG NFV. If a specification is prepared in a working group and fails to be approved by the members, it is referred back to the working group.

### **3.6 Detailed deviations from the ETSI Technical Working Procedures (TWP)**

In the following, deviations from the applicable ETSI TWP as agreed by the members of ISG NFV, including deviations to the ETSI TWP made in the ISG NFV Membership Agreement, are stipulated.

Section 3.6 is included in these Terms of Reference only for information as the prevailing document in respect of changes to the TWP is the ISG NFV Membership Agreement.

#### **3.6.1 Participation in the work of the Industry Specification Group (clarification of TWP 3.4)**

Observers or non-members of ETSI must agree to the ISG NFV Participant Agreement in order to be authorized to participate. The ISG NFV Participant Agreement will be terminated if the Participant has not participated in at least 1 meeting of the ISG NFV in a 12 months period. A revocation notice under article 9.1 (c) of the ISG NFV Participant Agreement is sent to the Participant in this case. The ISG NFV Chairman will periodically review the participation record of authorized Participants.

The Participant shall pay to ETSI a per-meeting attendance fee amounting to €100 (excluding taxes) per delegate per day. In addition, access to meeting documents, mailing lists etc. will be removed from authorized Participants if they fail to participate in, or register and pay participation fees for 6 months or for two successive meetings of the ISG if they are separated by more than 6 months. Such access will be restored upon registration for a subsequent meeting of the ISG NFV.

#### **3.6.2 Convening an ISG meeting (TWP 3.5)**

##### **3.6.2.1 Invitation to an Industry Specification Group meeting (TWP 1.5.1)**

The invitation to an Industry Specification Group meeting and the necessary logistical information shall be disseminated by the hosting organization at least 30 days before the meeting to all on the Industry Specification Group membership list (see clause 1.5.5).

The first meeting of a new Industry Specification Group will be announced in a Collective Letter, with at least 30 days notice, by the ETSI Secretariat.

##### **3.6.2.2 Agenda for an Industry Specification Group meeting (TWP 1.5.2)**

The draft agenda shall be disseminated by the responsible Chairman to all on the Industry Specification Group membership list at least 30 days before a meeting. The draft agenda shall include details of draft ETSI Group Specifications for approval and officials for appointment. Any other subject matters where voting may be required shall also be included and indicated in the draft agenda.

The draft agenda for the first meeting of a new Industry Specification Group will be announced in a Collective Letter, with at least 30 days notice, by the ETSI Secretariat.

### **3.6.2.3 Documentation for an Industry Specification Group meeting (TWP 1.5.3)**

Documents shall be numbered as shown in the following example:

#### **ETSI/NFVx**

This numbering system has three logical elements:

- 1) **ETSI:** to indicate that it is an ETSI document;
- 2) **NFV:** the name of the Industry Specification Group or Working Group;
- 3) **x:** to indicate any additional information concerning the unique number of the or its status, etc.

The third item (x) can be used in any way that an individual Industry Specification Group sees fit.

### **3.6.2.4 Registration for an Industry Specification Group meeting (TWP 1.5.4)**

Every Attendee shall register on arrival at each meeting. Each Attendee who represents an ISG NFV member or ISG NFV Participant shall declare the precise name of that organization. An Attendee may only represent one ISG NFV member or one ISG NFV Participant.

### **3.6.2.5 Maintaining an Industry Specification Group membership list (TWP 1.5.5)**

The ISG NFV shall maintain a membership list within an email exploder list established specifically for that purpose. Any individual may join this email exploder list if he/she is a representative of an organization that has signed the ISG NFV Member Agreement or the ISG NFV Participant Agreement and has an ETSI server user account, and those who join this email exploder list will be considered as being on the ISG NFV membership list. Failure to reconfirm the intention to remain on the email exploder list at regular intervals will result in removal from this email exploder list.

The ISG NFV membership list shall be used for the dissemination of information and for decision making within the ISG NFV.

## **3.6.3 Decision making (TWP 1.7 and TWP 3.7)**

### **3.6.3.1 Principles of decision making (TWP 1.7.1)**

An Industry Specification Group shall endeavour to reach Consensus on all issues, including the approval of draft Group Specifications and the adoption of Group Specifications. If Consensus cannot be achieved, the Chairman should in the first instance seek the views of the Network Operators Council, on a consultative basis only. If Consensus taking account of these views still cannot be achieved, the Chairman can then decide to take a vote which may be performed by a secret ballot. A vote may be conducted during an Industry Specification Group meeting or by correspondence.

Where voting is used, this shall be on the basis of a weighted individual vote. ISG Participants do not have the right to vote.

Decisions concerning:

- (i) the ISG Budget under Article 3.1(b) of the ISG NFV Agreement,
  - (ii) Additional Costs under Article 3.1(c) of the ISG NFV Agreement, and
  - (iii) the allocation of costs among members of the ISG NFV under Article 3.2 of the ISG NFV Agreement,
- require unanimous support.

For all other decisions, except for the appointment of officials of the ISG NFV, a proposal shall be deemed to be approved if 71 % of the votes cast are in favour. Abstentions or failure to submit a vote shall not be included in determining the number of votes cast.

For interpreting the result of an election for an official of the Industry Specification Group, a simple majority of the votes cast shall be used (see 3.6.3.1.3 below).

#### **3.6.3.1.1 Voting during an Industry Specification Group Meeting (TWP 1.7.1.1)**

The following procedures apply for voting during an Industry Specification Group meeting:

- before voting, a clear definition of the issues shall be provided by the Chairman;
- voting shall be on the basis of a weighted individual vote;
- if an ETSI full or associate Member has more than one representative, only one may vote;
- ISG members are only eligible for voting (voting members), if they have been present during the previous 2 meetings;
- Founding members of the ISG NFV as identified in the ISG NFV Agreement shall be eligible to vote during and up to the end of the first three meetings following the creation of the ISG NFV. Thereafter they are subject to the above participation requirements as for all other members;
- if manual voting procedures are used, each ETSI full or associate Member may only cast the vote once. If electronic voting procedures are used, votes may be changed prior to the closure of the vote;
- the opinions of Counsellors should be noted;
- voting by proxy is not permitted;
- there are no quorum requirements;
- the result of the vote shall be recorded in the meeting report.

#### **3.6.3.1.2 Voting by correspondence (TWP 1.7.1.2)**

The following procedures apply for voting by correspondence:

- before voting, a clear definition of the issues shall be provided by the Chairman and disseminated to all on the ISG membership list;
- the voting period shall be defined by the ISG Chairman and communicated to all on the Industry Specification Group membership list;
- voting shall be on the basis of a weighted individual vote;
- ISG members are only eligible for voting (voting members), if they have been present during the previous 2 meetings;
- Founding members of the ISG NFV as identified in the ISG NFV Agreement shall be eligible to vote during and up to the end of the first three meetings following the creation of the ISG NFV. Thereafter they are subject to the above participation requirements as for all other members;
- electronic voting only shall be used for voting by correspondence;
- votes may be changed prior to the closure of the vote;
- there are no quorum requirements;
- at the end of the voting period the Chairman shall count the votes as described in clause 3.6.3.1;
- the result of the vote should be disseminated to everybody on the ISG membership list within 15 days.

#### **3.6.3.1.3 Voting for the election of an ISG NFV official (TWP 1.7.1.3)**

For the purpose of electing any ISG NFV official the procedures given in clauses 3.6.3.1, 3.6.3.1.1 and 3.6.3.1.2 shall apply.

In the case where there is more than one candidate, a secret ballot shall be used. When, in the first ballot, no candidate has obtained more than 50% of the votes cast, a second ballot shall be held. The second ballot shall be held among the two candidates who have obtained the highest number of votes in the first ballot. The candidate obtaining the higher number of votes in the second ballot is then elected.

The ISG NFV Chairman shall be responsible for the voting process and shall ensure that confidentiality is maintained.

If the vote is conducted during an ISG NFV meeting only the final result shall be recorded in the meeting report.

If the vote is conducted by correspondence only the final result of the vote shall be disseminated.

#### **3.6.3.2 Appealing against a Chairman's decision (TWP 1.7.2)**

Any member of the ISG NFV who is against the Chairman's ruling on a vote may submit its case to the Board for decision. In such cases the member shall also inform the ISG NFV Chairman.

When the ISG NFV Chairman has made a ruling, his decision shall be taken as the basis for future operations, unless overturned by the Board.