

LIAISON STATEMENT

Title: Response to 3GPP on ETSI NFV Interface and Architecture specifications

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Copy to:

Response to: Response to LSin on ETSI NFV Interface and Architecture
(if applicable) specifications (NFV(16)000197r1)

Attachments: None
(if applicable)

1. Introduction

We thank you for your comments TSI NFV Interface and Architecture specifications.

2. Answers to 3GPP SA5 proposals

2.1 Answers to 3GPP SA5 proposals related to 3GPP draft TS 28.500

Proposal 1: 3GPP SA5 asks IFA WG of ETSI ISG NFV to consider the concept of platform (described in clause 4.2.1 [4]) during the present (or future) specification efforts of the VNF packaging and related information modelling in IFA011[1] in order to seek for alignment with 3GPP SA5 defined platform concept.

ETSI NFV IFA WG's response: ETSI NFV IFA WG thinks that the use of the term Platform does not really help clarify the separation of the application part from the virtualized resources. The second figure especially gives the impression that the VNFCs are running on top of a PaaS (Platform as a service) which can be misinterpreted. ETSI NFV IFA WG has used a different approach in the NFV Information Model (IFA015) where the concepts of views (Logical view, Deployment view, Application view) is used to differentiate the different aspects of the VNF. The Application View can be considered as a touchpoint between the NFV Information Model (IFA015) and the 3GPP Information Model. ETSI NFV IFA WG would recommend a similar approach to 3GPP.

Proposal 2: 3GPP SA5 asks IFA WG of ETSI ISG NFV to consider the requirement REQ-NFV-CON-5 (in clause 5.1.1 [4]) on the reference point Os-Ma-nfvo and Ve-Vnfm respectively in IFA013[2] and IFA008[3] to support the query capability and information delivery capability to 3GPP management system (i.e. NM and EM), when 3GPP management system (i.e. NM and EM) plays the consumer role.

ETSI NFV IFA WG's response: All interfaces produced by ETSI NFV IFA WG on reference points Os-Ma-nfvo and Ve-Vnfm supports the Query operation allowing to request details on objects and notification providing changes on objects. ETSI NFV IFA WG considers that the current specifications of IFA013 and IFA008 fulfil this requirement. If 3GPP SA5 thinks a specific capability is missing, please clarify and indicate the details.

Proposal 3: 3GPP SA5 asks IFA WG of ETSI ISG NFV to consider the requirement REQ-NFV-CON-7 (in clause 5.1.1 [4]) and requirement REQ-NFV_FM_SYS-CON-2 (in clause 5.1.2 [4]) on the reference point Os-Ma-nfvo and Ve-Vnfm when 3GPP management system (i.e. NM and EM) plays the consumer role. 3GPP SA5 asks IFA WG of ETSI ISG NFV to inform 3GPP SA5 about the attributes/parameters descriptions in the VR fault report generated by VNFM before they finalize them. 3GPP SA5 needs to figure out whether it is applicable to 3GPP defined virtualized network function management..

ETSI NFV IFA WG's response: The attributes of the Alarm as defined in ETSI NFV specifications are very generic and independent of any application specific content. ETSI NFV IFA WG considers that the 2 requirements from 3GPP SA5 are covered.

Proposal 4: 3GPP SA5 asks IFA WG of ETSI ISG NFV to consider the recovering requirement and use case about virtualization-specific aspect from 3GPP management system and provide the capability to allow 3GPP management system do the recovery

ETSI NFV IFA WG's response: ETSI NFV specifications provide the Heal VNF operation to heal a VNF in IFA008 and the Heal NS operation in IFA013. ETSI NFV IFA WG considers that these 2 operations cover the requirement from 3GPP SA5.

Proposal 5: 3GPP SA5 asks IFA WG of ETSI ISG NFV to consider the VNF LCM requirement REQ-NFV_LCM_SYS-CON-9 (in clause 5.1.5 [4]) both on the Os-Ma-nfvo and Ve-Vnfm Reference Points, when 3GPP management system (i.e. NM and EM) plays the consumer role.

ETSI NFV IFA WG's response: VNF scaling is possible on both IFA013 and IFA008 reference point. On IFA008, 2 operations (Scale VNF and Scale VNF To Level) are offered as part of the VNF Lifecycle Management interface. On IFA013, VNF scaling is done via a scale NS, using a scaleType of SCALE_VNF. ETSI NFV IFA WG considers that these operations cover the requirement from 3GPP SA5.

Proposal 6: 3GPP SA5 asks IFA WG of ETSI ISG NFV to consider the gap between 3GPP management architecture (in clause 6.1.1 [4]) and ETSI ISG NFV Architectural Framework and analyze the impacts to both of the Reference Point Os-Ma-nfvo and Ve-Vnfm.

ETSI NFV IFA WG's response: The gap identified by 3GPP SA5 is that the EM is possible to be as a VNFC of one VNF. This means there is no existing EM to manage the VNF until the VNF is instantiated. The flows present in MAN001 v.1.1.1 are just informative and there is no assumption in IFA that the EM is present before a VNF can be instantiated. The VNFM is sending notifications to the EM. These notifications cover VNF Lifecycle Management, VNF Configuration Management, VNF Fault Management and VNF Performance Management. It is the responsibility of the EM to resynchronize with the VNFM when starting. A new WI (IFA021) has been started to study the management of NFV-MANO and automated deployment of EM and other OSS functions and the use case of the EM defined as a VNFC might be further studied as part of this WI. ETSI NFV IFA WG would like 3GPP to explain in more details the problems they foresee by having the EM being a VNFC of the VNF being deployed.

2.2 Answers to 3GPP SA5 proposals related to 3GPP draft TS 28.510

Proposal 1: 3GPP SA5 asks IFA WG of ETSI ISG NFV to consider the requirement REQ-NFV_CM_Ve-Vnfm-em-FUN-1 (in clause 6.1.3 of [1]) on reference point Ve-Vnfm-em in IFA008 [2] when EM acts as the consumer role for VNFM to support the query request from EM.

ETSI NFV IFA WG's response: The Query VNF operation allows to get information about a VNF instance, including the VNFCs and the details of the virtualised resources assigned to them. ETSI NFV IFA WG considers that this operation covers the requirement from 3GPP SA5.

2.3 Answers to 3GPP SA5 proposals related to 3GPP draft TS 28.515

Proposal 1: 3GPP SA5 asks IFA WG of ETSI ISG NFV to consider the requirements identified by 3GPP SA5 in subclause 3.2 Rationale above as input for IFA specifications during current [2] or future publication of IFA specifications.

ETSI NFV IFA WG's response: The Fault Management interface offered by the VNFM allow providing alarms on VNF and/or VNFC instance related to virtualized resource failures. ETSI NFV IFA WG considers that this interface covers the first 2 requirements (REQ-NFV_FM_Ve-Vnfm-em-FUN-1 and REQ-NFV_FM_Ve-Vnfm-em-FUN-2). The VNF Lifecycle Management interface on IFA008 offers a Heal VNF operation. ETSI NFV IFA WG considers that this operation covers the third requirement (REQ-NFV_FM_Ve-Vnfm-em-FUN-3). ETSI NFV IFA WG would like some clarification on the 4th requirement (REQ-NFV_FM_Ve-Vnfm-vnf-FUN-1). Our understanding is that this requirement implies that the VNF can send alarms about faulty virtualization-specific aspects of the VNF to VNFM. Today the only interface exposed by the VNF for sending notifications is the VNF Indicator interface, but this interface covers VNF indicators and not virtualization-specific aspects of the VNF.

2.4 Answers to 3GPP SA5 proposals related to 3GPP draft TS 28.520

Proposal #1: 3GPP SA5 asks IFA WG of ETSI ISG NFV to consider adding the PM job suspension and PM job resume operations to section 7.6, and the associated requirements to section 5.2.1.6 in GS NFV-IFA008.

ETSI NFV IFA WG's response: ETSI NFV IFA WG thanks 3GPP for this requirement. It is unfortunately too late to include new operations in IFA008 at this stage. This requirement can be re-considered once the specifications are published.

Proposal #2: 3GPP SA5 asks IFA WG of ETSI ISG NFV to consider adding the threshold operations requirements to section 5.2.1.6 VNF Performance Management interface requirements in GS NFV-IFA008.

ETSI NFV IFA WG's response: These requirements have been added in the latest draft of IFA008. ETSI NFV IFA WG considers that this covers the proposal from 3GPP SA5.

Proposal #3: 3GPP SA5 asks IFA WG of ETSI ISG NFV to consider adding the threshold crossing notification requirement to section 5.2.1.6 VNF Performance Management interface requirements in GS NFV-IFA008.

ETSI NFV IFA WG's response: These requirements have been added in the latest draft of IFA008. ETSI NFV IFA WG considers that this covers the proposal from 3GPP SA5.

Proposal #4: 3GPP SA5 asks IFA WG of ETSI ISG NFV to consider adding the performance alarm requirement and function in GS NFV-IFA008.

ETSI NFV IFA WG's response: When a threshold is crossed, a ThresholdCrossedNotification is generated, but this notification is not an Alarm. ETSI NFV IFA WG asks 3GPP SA5 if the ThresholdCrossedNotification can be considered as sufficient to fulfil the requirement.

3. Actions

We respectfully request 3GPP SA5 to review the responses provided above and clarify the points requiring clarification.

4. Date of next meetings of the originator

Next plenary meeting of the ISG NFV:
Next IFA F2F meeting:

19-23 September 2016, Sophia-Antipolis, France
25-29 October 2016, Budang, Korea