

**Source:** CN Vice-Chair (Iain Sharp)

**Work Item Description**

**Title: Protocol impact from providing IMS services via fixed broadband**

**1 3GPP Work Area**

	Radio Access
X	Core Network
	Services

**2 Linked work items**

- Stage-2: System impact from providing IMS services via fixed broadband (to be drafted)
- QoS Improvements (32016)
- FS on Dynamic Policy control enhancements for end-to-end QoS (32017)
- WLAN - UMTS Interworking (32018)
- QoS Improvements
  - Gq interface specification for Dynamic Policy control enhancements (13016)
- Interworking aspects and migration scenarios for IPv4 based IMS Implementations (32062)
- Interoperability and Commonality between IMS using different "IP-connectivity Networks" (32061)
- IP flow based bearer level charging (32030)

**3 Justification**

The standardization of the Next Generation Network (NGN) is addressed by a number of SDOs, e.g. ETSI and ITU-T.

3GPP recognises that external standards organisations are in the process of defining ~~During the joint 3GPP/TISPAN workshop it was agreed that ETSI/TISPAN will define~~ NGN session control using IMS as a platform. This will embed IMS as the framework for advanced services for many types of operators. It is expected that some enhancements of the 3GPP specifications will be needed for IMS to meet the NGN requirements.

This work item studies and intends to implement the necessary enhancements to IMS within 3GPP for NGN as seen appropriate from a 3GPP system perspective. 3GPP will evaluate whether those enhancements are expected to be generally useful to IMS when deciding to incorporate them.

**4 Objective**

This work item provides for possible enhancements of protocols used in the IMS in order to support a NGN ~~based on IMS in ETSI TISPAN release 1~~. Guided by a 3GPP system perspective 3GPP intends to develop specifications, changes or addenda to specifications to meet the NGN requirements.

~~Additional input received from other 3GPP OPs and MRPs shall be considered as well to study the impacts on IMS.~~

The following issues may require protocol enhancements:

- Simulation of existing PSTN/ISDN services
- Presence extension
- NGN QoS requirements
- NGN security requirements
- NGN charging requirements
- NGN architectural requirements
- NGN service requirements
- non 3GPP access networks

Duplication of work should be avoided. Where appropriate changes should be integrated in appropriate existing works items, e.g. WLAN Interworking, IMS Commonality.

## 5 Service Aspects

None within the context of this work item.

NGN requirements impacting 3GPP service requirements will be analyzed in the context of the corresponding SA2 work item.

SA1 and SA2 will be involved to ensure consistent stage 1, 2, 3, and to ensure there are no conflicting requirements.

## 6 MMI-Aspects

No MMI aspects are expected in the context of this WI.

## 7 Charging Aspects

None within the context of this work item.

Impact on 3GPP system will analyzed in the context of the corresponding SA2 work item

## 8 Security Aspects

None within the context of this work item.

Impact on 3GPP system will be analyzed in the context of corresponding SA2 work item.

## 9 Impacts

<b>Affects:</b>	<b>UICC apps</b>	<b>ME (Note)</b>	<b>AN</b>	<b>CN</b>	<b>Others</b>
<b>Yes</b>				X	
<b>No</b>			X		
<b>Don't know</b>	X	X			X

NOTE: No impacts are envisaged on 3GPP IMS UE, however the work item includes the specification and requirements for the NGN IMS UE with regards to the usage of SIP and SDP.

## 10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TR	Protocol impact from providing IMS services via fixed broadband	CN1		CN# <del>26</del> 27	CN# <del>27</del> 28	Contributions under the new WI shall be written against this TR initially. The TR will be used as a holding place until the material has reached stability. <del>The TR will be approved 03/05, with CRs to existing specs being implemented until 06/05</del>
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
24.229		Changes to fulfil NGN requirements		CN#28		
29.163		Changes to fulfil NGN requirements		CN#28		
29.209		Changes to fulfil NGN requirements on Gq		CN#28		
29.229		Changes to fulfil NGN requirements		CN#28		
		Other specs may be identified as work progresses, e.g. 24.141 for presence		CN#28	<del>06/05, in line with TISPAN Rel 1 time frame</del>	

**11 Work item rapporteurs**

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**12 Work item leadership**

CN 1

**13 Supporting Companies**

Siemens, Orange, France Télécom, Lucent Technologies, Nortel Networks, GET, Alcatel, Ericsson

**14 Classification of the WI (if known)**

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

14b The WI is a Building Block: parent Feature

Stage-2: System impact from providing IMS services via fixed broadband

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)