

**Source:** Siemens, ~~on behalf of FB-IMS SA2-WI redrafting group~~  
**Revision of SP-040531, [SP-040684](#)**  
**Title:** System enhancements for fixed broadband access to IMS  
**Document for:** Approval  
**Agenda Item** 7.2.3

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### Work Item Description

**Title: System enhancements for fixed broadband access to IMS**

#### **1 3GPP Work Area**

	Radio Access
X	Core Network
X	Services

#### **2 Linked work items**

- 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 fixed broadband access to IMS is addressed by a number of SDOs, e.g. ETSI and ITU-T in the framework of next generation networking (NGN).

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 multimedia services for many types of operators. It is expected that some enhancements of the 3GPP specifications will be needed for IMS to enable external organizations to reuse IMS as a platform for session control for systems with fixed broadband access.

This work item studies and intends to implement the necessary enhancements to IMS within 3GPP for fixed broadband access, as seen appropriate from a 3GPP system perspective. Note that 3GPP SA and CN intend to evaluate whether those enhancements are expected to be generally useful to IMS from a 3GPP perspective when deciding to incorporate them.

#### **4 Objective**

The objective of this work item is to provide possible IMS architectural enhancements necessary in the 3GPP system to support fixed broadband access to IMS, (e.g. as stated in ETSI TISPAN release 1). Where there are impacts to the IMS core, 3GPP intends to develop specifications or changes to specifications necessary to enable reuse of IMS as a platform for session control in systems with fixed broadband access. Any enhancements shall not break the integrity of the 3GPP system.

The requirements for fixed broadband access to IMS, received from other 3GPP OPs and MRPs, shall be considered as well to study the impacts on IMS.

This work item is limited to the current scope of the IMS, i.e. session control (e.g. mobility management is not included).

## 5 Service Aspects

For service requirements related to fixed broadband access to IMS, see ETSI TR 01016: TISPAN\_NGN<sup>1</sup>; Release 1: Release Definition.

Service requirements impacting 3GPP service requirements within the scope of this Work Item have to be analyzed by SA1. Any new requirements deemed applicable to 3GPP system need to be captured by the SA1 service requirements.

SA1 and CN will be involved to ensure consistent stage 1, 2, 3 specifications 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

For the charging aspects of fixed broadband access, see ETSI TR 01016: TISPAN\_NGN<sup>2</sup>; Release 1: Release Definition.

Charging aspects impacting 3GPP charging architecture and mechanisms within the scope of this Work Item have to be analyzed by SA5.

## 8 Security Aspects

For the security aspects of fixed broadband access, see ETSI TR 01016: TISPAN\_NGN<sup>3</sup>; Release 1: Release Definition.

Security aspects impacting 3GPP security architecture and mechanisms within the scope of this Work Item have to be analyzed by SA3.

## 9 Impacts

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

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

<sup>1</sup> Service requirements from other SDO's will also be considered when available

<sup>2</sup> Charging requirements from other SDO's will also be considered when available

<sup>3</sup> Security requirements from other SDO's will also be considered when available

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
						SA2 should consider if a TR capturing the impact on IMS for fixed broadband access is required.
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
23.228		Changes to fulfil requirements for fixed broadband access to IMS		SA#27		
		Other specs may be identified as work progresses, e.g. 23.141 for presence			06/05, in line with TISPAN Rel 1 time frame	
<a href="#">22.228</a>		<a href="#">New requirements deemed useful to the 3GPP system as described in section 5</a>				

**11 Work item rapporteurs**  
Steve Tsang-Kwong-U, Orange

**12 Work item leadership**  
SA 2

**13 Supporting Companies**  
Nortel Networks, Siemens, Lucent, Orange, BT, TeliaSonera, Nokia, Ericsson, Huawei, Alcatel.

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

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

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

Stage 3: Protocol impact from providing IMS services via fixed broadband (~~to be drafted~~[NP-040438](#)).

14b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

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

(one Work Item identified as a building block)