Technical Specification Group Services and System Aspects Meeting #25, Palm Springs, USA

Source: TSG SA WG2 (S2-042954)

Title: New WID on IMS enhancements for NGN

Document for: Approval Agenda Item 7.2.3

Work Item Description

Title: System impact from providing IMS services via fixed broadband

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
 - o 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 Networksì (32061)
- IP flow based bearer level charging (32030)
- All-IP Feasibility Study (SP-040303). Depending on the outcome of the All-IP Feasibility Study in SA1, this WI may be linked.

3 Justification

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

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 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. Note that 3GPP SA and CN intend to evaluate whether those enhancements are expected to be generally useful to IMS when deciding to incorporate them.

4 Objective

The objective of this work item is to provide possible architectural enhancements necessary in the 3GPP system to support NGN based on IMS, for NGN release 1 (ETSI TISPAN release 1). Where there are impacts to the IMS core, 3GPP intends to develop specifications or changes to specifications to meet the NGN requirements, as seen appropriate from a 3GPP system perspective.

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

5 Service Aspects

For NGN requirements, refer to ETSI TR 01016: TISPAN_NGN; Release 1: Release Definition. NGN requirements impacting 3GPP service requirements within the scope of this Work Item have to be analyzed by SA1.

Moreover, proposals arising from this activity considered as providing new advantageous service capabilities to both 3GPP and NGN users should be dealt within new work items, with their own work item descriptions. If appropriate, those work items could be work tasks or building blocks of this Feature work item.

SA1 and CN 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

For NGN charging aspects, refer to ETSI TR 01016: TISPAN_NGN; Release 1: Release Definition.

NGN 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 NGN security aspects, refer to ETSI TR 01016: TISPAN_NGN; Release 1: Release Definition. NGN security aspects impacting 3GPP security architecture and mechanisms within the scope of this Work Item have to be analyzed by SA3.

9 Impacts

Affects:	UICC apps	ME	AN	CN	Others
Yes				X	
No		X	X		
Don't know	X				X

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

			New spe	ecifications		
Spec No.	Title	Prime rsp. WG	rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
		Aff	ected existi	ng specifica	tions	
Spec No.	CR	Subject	Approved a	at plenary#	Comments	
23.228		Changes to fulfil NGI requirements	N	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	

Work item rapporteurs

Steve Tsang-Kwong-U, Orange

Work item leadership

SA₂

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).

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)