

3GPP TSG-CN Meeting #10
3GPP TSG-RAN Meeting #10
3GPP TSG-T Meeting #10

Tdoc NP-000731
Tdoc RP-000704
Tdoc TP-000252

Bangkok, Thailand, 6 - 8 December, 2000

Source: SA WG5 (Telecom Management)
Title: SA5-led Work Items for Release 2000 (R4/R5)
Document for: Information
Agenda Item: 8 (CN); 7(RAN); 4.1 (T)

1. Introduction

In the Hawaii meeting, SA#9 provisionally approved SA5 proposals for two feature-level work items requesting SA5 to resubmit to the SA#10 Bangkok meeting revised work item descriptions in which the interrelation of the proposed work items with other work led by other groups to be clarified. This contribution presents to TSG-T, TSG-RAN and TSG-CN for their information the revised descriptions of the two provisionally approved feature-level work items [*Subscription Management*; and *UTRAN O&M*] together with a description of another feature level work item [*Charging and OAM&P*] newly proposed by SA5.

The purpose of this contribution is to prompt information exchange between various related groups of other TSGs and SA5 to facilitate the project co-ordination concerning these new work items.

2. Work Item Descriptions

2.1 Subscription Management

Work Item Description

Title: **Subscription Management** (Feature: SM)

1 3GPP Work Area

	Radio Access
X	Core Network (<i>A work item needs to be identified in conjunction with CN to enable subscription data management in the Core Network</i>)
X	Services (specifically, 3G Telecom Management: Service Operations Management)
X	Terminals (<i>for</i> <i>1: subscriber management interaction;</i> <i>2: management information transportation; and</i> <i>3: subscription profile modification on USIM if applicable</i>)

2

Linked work items

- VHE Enhancements (SA1)
- (U)SIM Toolkit enhancements (T3)
- MExE enhancements: 22.057 (SA1) and 23.057 (T2)
- Charging and OAM&P (SA5 Feature) – see Tdoc S5-000510
- Principles, high-level requirements and architecture (SA5 BB) – see Tdoc S5-000522
- Configuration Management (SA5 BB) – see Tdoc S5-000512
- Charging Management (SA5 BB) – see Tdoc S5-000516
- Core Network work item to be identified jointly between SA5 and CN by March 2001.

3

Justification

The move in Release 5 towards supporting complex services will substantially increase the Subscription Management challenge from purely voice network concerns to include:

- Multimedia
- Data services
- Value Added Services
- End-to-end applications

4

Objective

This work item will capture the operational requirements leading to solutions necessary for this Subscription Management challenge.

There is an expectation that some of the Work Tasks will need to be carried out by other 3GPP TSGs/WGs, or jointly between SA5 and other 3GPP TSGs/WGs.

This work item will derive all necessary Release 5 Subscription Management Work Tasks to support these detailed Subscription Management requirements.

5

Service Aspects

This Work Item will develop Subscription Management solutions to support the Services Framework proposed in Release 5 as developed by SA1.

6

MMI-Aspects

Yes for end-user/consumer Subscription Management interactions with their Service Provider.

7

Charging Aspects

Yes

8

Security Aspects

Yes

9

Impacts

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

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

New specifications						
Spec No.	Title	Prime resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.140	Service Operations Management: Subscription Management	SA5	SA1 (for service definitions) SA2 (for architecture) T2 (for terminal capabilities) T3 (for USIM aspects) CN (to be identified)	TSG#13 (09/01)	TSG#14 (12/01)	Proposed timescale – Release 5
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
22.121 (SA1)				TSG#14 (12/01)	Release 5	
22.127 (SA1)				TSG#14 (12/01)	Release 5	
32.101 (SA5)				TSG#14 (12/01)	Release 5	
32.105 (SA5)				TSG#14 (12/01)	Release 5	
32.106 (SA5)				TSG#14 (12/01)	Release 5	

11 Work item raporteurs

32.140 – Geoff CARYER (BT) geoff.caryer@btinternet.com

12 Work item leadership

SA5

13 Supporting Companies

BT, VoiceStream, Telenor, Telia, Sonera, Bouygues Telecom, FT

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**

- **OAM-AR** Principles, high level Requirements and Architecture – (SA5) (WT:(Service Operations Management Framework) – see Tdoc S5-000522
- **OAM-CM** Configuration Management (SA5) – see Tdoc S5-000512
- **OAM-CH** Charging (SA5 BB) – see Tdoc S5-000516
- **VHE1-PSE** Personal Services Environment (PSE), user profiles and user profile management (SA2), (Part of the VHE Enhancements Feature), SA5 may need to place requirements under this building block to achieve Subscription Management.
- SA5 may need to request a building block, Subscription profile management under one or both of the following building blocks in the release 5 timeframe:
 - **USAT1** (U)SIM Toolkit enhancements (T3), SA5 may need to request a building block , Subscription profile management on USIM.
 - **MEXE1-ENHANC** MExE Improvements and Investigations, SA5 may need to request a building block, Subscription profile management on USIM.

2.1 UTRAN O&M

Work Item Description

Title: UTRAN Operations and Maintenance procedures (Feature: UOAM)

1 3GPP Work Area

	Radio Access
	Core Network
X	Services (specifically, 3G Telecom Management: UTRAN O&M procedures)
	Terminals

2 Linked work items

- RAN Enhancements (RAN3 Feature)
- RRM Support over Iub and Iur: RRM optimisation (RAN3 BB)
- Charging and OAM&P (SA5 Feature) – see Tdoc S5-000510
- Principles, high level Requirements and Architecture (SA5 BB) – see Tdoc S5-000511
- Configuration Management (SA5 BB) – see Tdoc S5-000512
- Fault Management (SA5 BB) – see Tdoc S5-000513
- Performance Management (SA5 BB) – see Tdoc S5-000514

3 Justification

The use of multi-vendor networks increases the need to have a common network management method. This concept is already covered by the IRPs. However, in order to verify the completeness of the IRPs and their co-operation with other resource management interfaces, a total overview of management procedures is needed. These procedures were deduced from experiences of operating GSM networks.

4 Objective

To capture procedures and guidelines for identifying solutions to manage a multi-vendor network effectively. It shall develop:

- Use cases for the complete O&M process from NMC to Node B
- Guidelines for solutions
- General O&M requirements

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

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

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

New specifications						
Spec No.	Title	Prime resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.800	Management level procedures and interaction with UTRAN	SA5	RAN3	TSG#11 (03/01)	TSG#12 (06/01)	Release 4
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
32-Series (SA5)				TSG#12 (06/01)	Release 4	
25.433 (RAN3)				TSG#12 (06/01)	Release 4	
25.430 (RAN3)				TSG#12 (06/01)	Release4	

11 Work item raporteurs

Bert Boden (Mannesmann Mobilfunk)

12 Work item leadership

SA5

13 Supporting Companies

Mannesmann Mobilfunk, T-Mobil, Viag Interkom, Vodafone Group, France Telecom, Telenor.

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**

- Principles, high level Requirements and Architecture (SA5) – see Tdoc S5-000511
- Configuration Management (SA5) – see Tdoc S5-000512
- Fault Management (SA5) – see Tdoc S5-000513
- Performance Management (SA5) – see Tdoc S5-000514

15 Work Tasks under this Feature

Building Block	Work Task	Release
To be Identified	Consistency check with RAN3 NBAP (25.433) document.	Release 4
	Consistency check with RAN3 IUB Interface: General Aspects and Principles (25.430) document.	Release 4

2.1 Charging and OAM&P

Work Item Description

Title: Charging and OAM&P (Operations, Administration, Maintenance & Provisioning) (Feature: OAM)

1 3GPP Work Area

	Radio Access
	Core Network
X	Services (specifically, Charging and OAM&P)
	Terminals

2 Linked work items

- Evolutions of the transport in the UTRAN (RAN Feature)
- Evolutions of the transport in the CN (CN4 Feature)
- Security enhancements (SA3 Feature)
- VHE enhancements (SA1 Feature)
- OSA enhancements (SA1 Feature)
- MExE enhancements (T2 Feature)
- Subscription Management (SA5 Feature) – see Tdoc S5-000517
- UTRAN Operations & Maintenance Procedures (SA5 Feature) – see Tdoc S5-000515
 - Principles, high level Requirements and Architecture (SA5 BB) – see Tdoc S5-000511
 - Configuration Management (SA5 BB) – see Tdoc S5-000512
 - Fault Management (SA5 BB) – see Tdoc S5-000513
 - Performance Management (SA5 BB) – see Tdoc S5-000514
 - Charging (SA5 BB) – see Tdoc S5-000516

3 Justification

The 3GPP specifications need to evolve in Rel4 to allow Charging and OAM&P additions and enhancements.

4 Objective

The objective of this work item (Feature) is to continue to lay down the Charging and OAM&P Framework to be followed by the 3G Telecom Management standardization and met by all other subsequent specifications - to be produced by all 3GPP TSGs (e.g. SA5, SA3 Security, RAN O&M, GERAN O&M, ...- pertinent to 3G Systems' Telecom Management).

5 Service Aspects

OAM&P enhancements arising from Service Aspects (as defined by S1) of Rel4/5.

6 MMI-Aspects

Unknown at this time.

7 Charging Aspects

None

8 Security Aspects

Charging and OAM&P enhancements arising from Security Aspects (as defined by S3) of Rel4/5.

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes	X (potentially)	X (potentially)	X (potentially)	X (potentially)	
No					
Don't know					X

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

New specifications						
Spec No.	Title	Prime resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
None						
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
32-series (SA5)				TSG#12 (06/01)	Release 4	

11 Work item rapporteurs

Albert YUHAN (SA5 Chair, VoiceStream Wireless), Michael TRUSS (SA5 Vice-Chair, Motorola)

12 **Work item leadership**

SA5

13 **Supporting Companies**

VoiceStream Wireless, Motorola, Telia, Telenor, Vodafone Group, BT, France Telecom, Sonera, Ericsson, Siemens, Bouygues Telecom, Mannesmann MobilFunk, Nortel Networks, T-Mobil.

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**
- Principles, high level Requirements and Architecture (SA5) – see Tdoc S5-000511
 - Configuration Management (SA5) – see Tdoc S5-000512
 - Fault Management (SA5) – see Tdoc S5-000513
 - Performance Management (SA5) – see Tdoc S5-000514
 - Charging (SA5) – see Tdoc S5-000516
 - Billing, charging and management aspects for IP-based multimedia services in UMTS (SA5 BB requested by SA1 under Feature: Provisioning of IP-based multimedia services)
Status: Work Item unclear. No concrete request received from SA1. No SA5 Work Item Description available.
 - LCS network management in UMTS (SA5 BB requested by SA2 under Feature: Location Services enhancements) Status: Work Item unclear. No concrete request received from SA2. No SA5 Work Item Description available.
 - Charging aspects (SA5 BB requested by SA2 under Feature: Ensure reliable QoS for PS domain)
Status: Work Item unclear. No concrete request received from SA2. No SA5 Work Item Description available.