3GPP TR 30.819 V9.0.0 (2010-10)

Technical Report

3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Telecommunication management; Project scheduling and open issues for SA5, Release 9 (Release 9)

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Keywords
Telecom management, OAM&P, Charging

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1 Scope

The present document contains the up-to-date SA5 Work Item Descriptions (WIDs) and captures the status of all SA5 work items in the current Release.
This TR is used as a mean to provide input to the 3GPP work plan handled by MCC.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] http://www.3gpp.org/ftp/Information/WORK_PLAN/
[2] http://www.3gpp.org/ftp/Information/WI_Sheet/

3 Feature: Enhanced Home NodeB / eNodeB UID_400035

3.1 BB: 3G Home NodeB Gateway OAM&P (HNB-OAM_GW) UID_420035

Technical Specification Group Services and System Aspects **TSGS#42(08)0794**
Meeting #42, 8 - 11 December 2008,
Athens, Greece

Technical Specification Group Services and System Aspects **TSGS#47(10)0087**
Meeting #47; Vienna, Austria; 22-25 March 2010

3GPP TSG-SA5 (Telecom Management) **S5-100889**
Meeting SA5#70, 1-5 Mar 2010, Xiamen, P.R. China *revision of S5-100786*

Source: **China Mobile**
Title: **Update HNB-OAM_GW WID in R9**
Document for: **Approval**
Agenda Item: **6.2**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

3G HNB GW and LTE HeNB GW OAM&P HNB-OAM_GW UID_420036

1 3GPP Work Area *

X	Radio Access
	Core Network
	Services

2 Classification of WI and linked work items

2.0Primary classification *

This work item is a … *

	Study Item (go to 2.1)
	Feature (go to 2.2)
X	Building Block (go to 2.3)
	Work Task (go to 2.4)

2.1Study Item

Related Work Item(s) (if any]

Unique ID	Title	Nature of relationship

Go to §3.

2.2Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship

Go to §3.

2.3Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS
400035	Enhanced Home NodeB / eNodeB	

This work item is … *

X	Stage 1 (go to 2.3.1)
	Stage 2 (go to 2.3.2)
	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)

Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	Title	TS

3 Justification *

3GPP SA5 has agreed to study a SON related OAM interface for the Home NodeB (HNB). 3GPP RAN has agreed on the architecture of UMTS HNB, in which the HNB Gateway (HNB-GW), located in UTRAN, is connected to the legacy CN via the Iu reference point, to the HNB at the Iu-H interface and implements the new functionalities requested for the deployment of HNBs (see TR R3.020 and TS 25.467). The detailed architecture is shown in Figure 1.

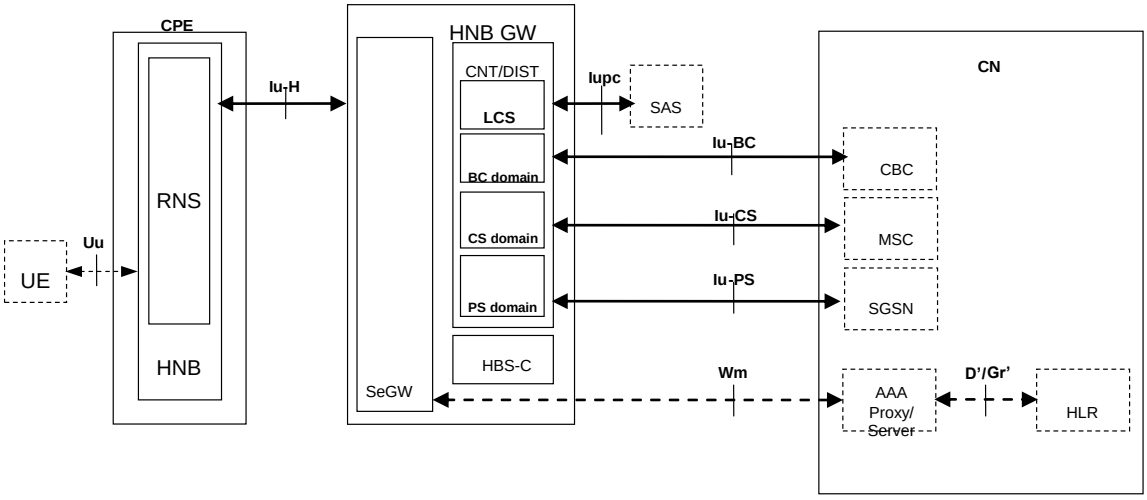

Figure 1 UTRAN HNB logical Architecture

Furthermore, the LTE HeNB architecture has already been specified in TS 36.300, in which HeNB GW functionalities have been determined. The detailed architecture is shown in Figure 2.

According to the TS 36.300, the deployment of HeNB GW can allow the S1 interface between the HeNB and the EPC to scale to support a large number of HeNBs. The HeNB GW serves as a concentrator for the C-Plane, specifically the S1-MME interface.

Therefore, the HNB-GW or HeNB-GW is logical entity implementing specific functionalities requested for the deployment of HNBs or HeNB in UTRAN or E-UTRAN. The corresponding OAM interface has not yet been standardized. The Itf-North bound interface of HNB-GW or HeNB-GW management system needs to be extended to satisfy the requirement of managing HNB-GW or HeNB-GW.

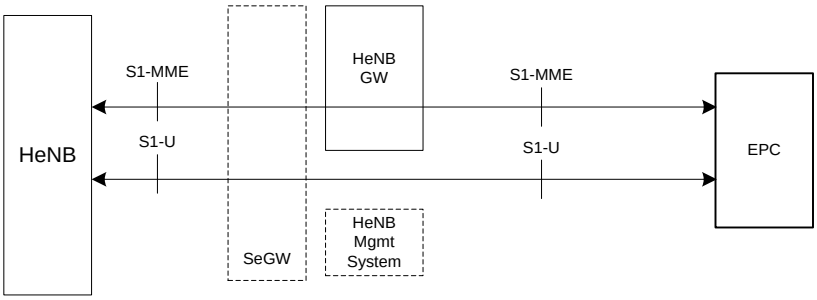

Figure 2 E-UTRAN HeNB logical Architecture

4 Objective *

The following objectives should be addressed:

1. Configuration management

Define configuration data over Itf-N for HNB-GW and HeNB-GW

2 Fault management

Identify the fault detection mode for the HNB-GW and HeNB-GW

Define alarm information & alarm report over Itf-N from the HNB-GW and HeNB-GW

Standardization work on HeNB-GW management over Itf-N shall re-use the results of the standardization work on the HNB GW management to the maximum extent possible.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts *

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

10 Expected Output and Time scale *

New specifications *
[If Study Item, one TR is anticipated]

Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TS 32.771	Telecommunication management; Home Node B (HNB) Subsystem (HNS) Network Resource Model (NRM) Integration Reference Point (IRP); Requirements	SA5		SA#45 Sep 2009	SA#46 Dec 2009	
TS 32.772	Telecommunication management; Home Node B (HNB) Subsystem (HNS) Network Resource Model (NRM) Integration Reference Point (IRP); Information Service	SA5		SA#45 Sep 2009	SA#46 Dec 2009	
TS 32.773	Telecommunication management; Home Node B (HNB) Subsystem (HNS) Network Resource Model (NRM) Integration Reference Point (IRP); Common Object Request Broker Architecture (CORBA) Solution Set (SS)	SA5		SA#45 Sep 2009	SA#46 Dec 2009	
TS 32.775	Telecommunication management; Home Node B (HNB) Subsystem (HNS) Network Resource Model (NRM) Integration Reference Point (IRP); Bulk CM eXtensible Markup Language (XML) file format definition	SA5		SA#45 Sep 2009	SA#46 Dec 2009	
TS 32.781	Telecommunication management; Home enhanced Node B (HeNB) Subsystem (HeNS) Network Resource Model (NRM) Integration Reference Point (IRP); Requirements	SA5		SA#45 Sep 2009	SA#46 Dec 2009	
TS 32.782	Telecommunication management; Home enhanced Node B (HeNB) Subsystem (HeNS) Network Resource Model (NRM) Integration Reference Point (IRP); Information Service	SA5		SA#45 Sep 2009	SA#46 Dec 2009	
TS 32.783	Telecommunication management; Home enhanced Node B (HeNB) Subsystem (HeNS) Network Resource Model (NRM) Integration Reference Point (IRP); Common Object Request Broker Architecture (CORBA) Solution Set (SS)	SA5		SA#45 Sep 2009	SA#46 Dec 2009	
TS 32.785	Telecommunication management; Home enhanced Node B (HeNB) Subsystem (HeNS) Network Resource Model (NRM) Integration Reference Point (IRP); Bulk CM eXtensible Markup Language (XML) file format definition	SA5		SA#45 Sep 2009	SA#46 Dec 2009	

Affected existing specifications *
[None in the case of Study Items]

Spec No.	CR	Subject	Approved at plenary#	Comments
TS 32.632		Core Network Resources Integration Reference Point (IRP): Network Resource Model (NRM)	SA#46 Dec 2009	
TS 32.633		Core network resources Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS)	SA#46 Dec 2009	
TS 32.635		Core network resources Integration Reference Point (IRP): Bulk CM eXtensible Markup Language (XML) file format definition	SA#46 Dec 2009	

11 Work item rapporteur(s) *

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12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
China Mobile
Vodafone
SAMSUNG
HUAWEI
TELECOM ITALIA
QUALCOMM
ZTE
Alcatel-Lucent
MOTOROLA
T-Mobile
Telefonica
Ericsson
Nokia Siemens Networks

Technical Specification Group Services and System Aspects TSGS#43(09)0208

Meeting #43, 9 - 12 March 2009, Biarritz, France

3GPP TSG-SA5 (Telecom Management) **S5-091464**
Meeting SA5#63, 16-20 February 2009, Prague, Czech Republic

Source:	**Huawei Technologies, Qualcomm**
Title:	**WT-level WID on Home NodeB OAM&P and LTE Home eNodeB Interface Type 1 Definition**
Document for:	**Approval**
Agenda Item:	**6.4.4**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

3G Home NodeB and LTE Home eNodeB OAM&P Type 1 Definition
UID_430012

Acronym* : HNB_eHNB-OAM_Type1

1 3GPP Work Area *

X	Radio Access
	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification *

This work item is a … *

	Study Item (go to 2.1)
	Feature (go to 2.2)
	Building Block (go to 2.3)
X	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS

This work item is … *

	Stage 1 (go to 2.3.1)
	Stage 2 (go to 2.3.2)
	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	Title	TS
400035	**Enhanced Home NodeB / eNodeB**	

3 Justification *

In order to complement the work done in RAN, it's SA5 responsibility to provide corresponding OAM solution for 3G Home NodeB and LTE Home eNodeB. SA5 will need to standardize management services that are specific to Home NodeB/eNodeB because of the following Home NodeB/eNodeB characteristics:

The quantity of Home NodeBs and Home eNodeBs is likely to be large

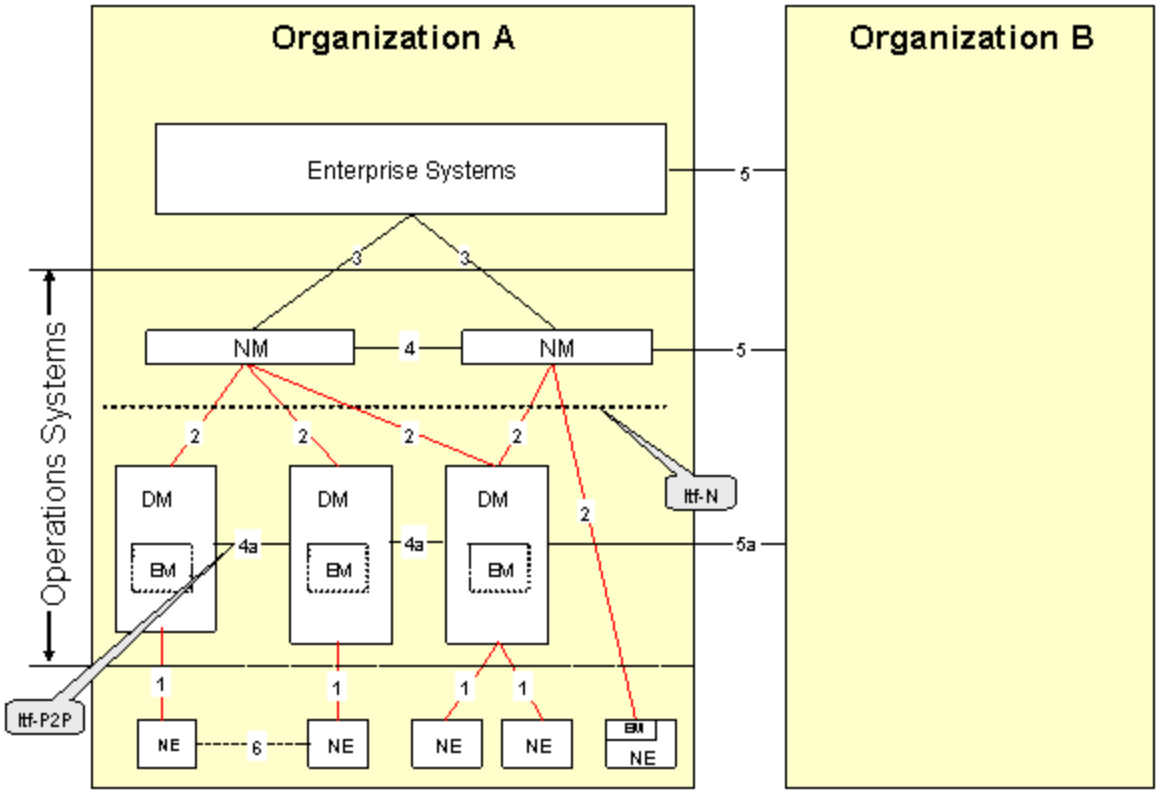
There may be many Home NodeB and Home eNodeB vendors

Home NodeB and Home eNodeB may be purchased easily by end users in market

The location of Home NodeB and Home eNodeB could be in a private residence which may not be accessible for frequent on-site maintenance

SA5 has studied Home NodeB/eNodeB OAM and SON aspects for some time. The management differences between Home NodeB/eNodeB and macro NodeB are listed in TR32.821. The requirements for managing Home NodeB/eNodeB have been provided in the TR32.821 and the consequences on the management interface for Home NodeB/eNodeB are also described.

Based on the study in SA5, it was agreed the interface type 1 and type 2 shown in the following diagram are to be standardized for Home NodeB/eNodeB OAM&P.



4 Objective *

This work Item is to define corresponding OAM solution for 3G Home NodeB and LTE Home eNodeB on interface type 1 management. The work item will include (but not necessarily limited to):

4.1 Management on Standard Interfaces type 1 for 3G and LTE Home NodeB/eNodeB:

Investigate what management standardization work are needed for management of 3G and LTE Home NodeB/eNodeB over interface type 1.

Define the standardization work mentioned above for 3G and LTE Home NodeB/eNodeB management over interface type 1.

Standardisation work on LTE Home eNodeB management over interface type 1 shall re-use the results of the standardisation work on the 3G Home NodeB management to the maximum extent possible.

4.2 This WI shall include specification work for 3G and LTE Home NodeB/eNodeB:

Stage 1 Concepts and Requirements

Configuration and Auto-configuration Management

Fault Management

Performance Management

Security aspects of OAM

Stage 2 Architecture and Information Model

Architecture for HNB and HeNB Management for CM, FM and PM

Object Classes for

Configuration and Auto-configuration Management for

HNB and HeNB Access Network

Core Network (related to HNB and HeNB)

Transport Network (related to HNB and HeNB)

Fault Management

Performance Management

Stage 2 for contents definition for CM, FM, PM & Logging

The HNB and HeNB to Management system procedure flow

OAM Procedural flows for HNB and HeNB Discovery, registration, configuration updates

OAM Procedural flows for FM

OAM Procedural flows for PM

Stage 3 Data Model and XML Data Format

Data Model and XML Data Format for CM, FM & PM

4.3 The standardization work for management on interface type 2 will not be covered by this work item.

5 Service Aspects

N/A

6 MMI-Aspects

N/A

7 Charging Aspects

N/A

8 Security Aspects

N/A

9 Impacts *

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

10 Expected Output and Time scale

New specifications * [If Study Item, one TR is anticipated]						
Spec No.	Title	Prime rsp WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.591	Concepts and requirements for Type 1 interface H(e)NB to H(e)NB Management System (H(e)MS)	SA5		SA#44 Jun 2009	SA#47 Mar 2010	
32.592	Information model for Type 1 interface H(e)NB to H(e)NB Management System (H(e)MS)	SA5		SA#47 Mar 2010	SA#47 Mar 2010	
32.593	Procedure flows for Type 1 interface H(e)NB to H(e)NB Management System (H(e)MS)	SA5		SA#45 Jun 2009	SA#46 Dec 2009	
32.594	Data definitions for Type 1 interface H(e)NB to H(e)NB Management System (H(e)MS)	SA5		SA#47 Mar 2010	SA#47 Mar 2010	

Affected existing specifications * [None in the case of Study Items]				
Spec No.	CR	Subject	Approved at plenary#	Comments
32.581		Concepts and requirements for Type 1 interface HNB to HNB Management System (HMS)	SA#47 Mar 2010	
32.582		Information model for Type 1 interface HNB to HNB Management System (HMS)	SA#46 Dec 2009	
32.583		Procedure flows for Type 1 interface HNB to HNB Management System (HMS)	SA#46 Dec 2009	
32.584		XML definitions for Type 1 interface HNB to HNB Management System (HMS)	SA#46 Dec 2009	

11 Work item rapporteur(s) *

Huawei Technologies (zlan@huawei.com)

12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
Huawei Technologies.
Nokia Siemens Networks
Ericsson
Vodafone
T-Mobile
Telefonica
Alcatel-Lucent
IPAccess
China Mobile
Telecom Italia
Airvana
Motorola
ZTE
Qualcomm
Orange
AT&T
Thomson
Verizon
Samsung

TSG SA Meeting #44 **SP-090315**
01 - 04 June 2009,
Oranjestad, Aruba

3GPP TSG-SA5 (Telecom Management) **S5-092063**
Meeting #64 March 30 ~ April 3, 2009, Hangzhou, China

Source: Huawei Technologies, Nokia Siemens Network, Ericsson
Title: Type 2 Interface for Home NB ad Home eNB OAM&P
Document for: Approval
Agenda Item: 6.2

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

3G Home NodeB and LTE Home eNodeB OAM&P Type 2 Interface (HNB_eHNB-OAM_Type2) UID_440066

1 3GPP Work Area *

X	Radio Access
	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification *

This work item is a… *

	Study Item (go to 2.1)
	Feature (go to 2.2)
X	Building Block (go to 2.3)
	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS
400035	**Enhanced Home NodeB / eNodeB**	**22.220, 22.011**

This work item is … *

	Stage 1 (go to 2.3.1)
	Stage 2 (go to 2.3.2)
	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	Title	TS

3 Justification *

In order to complement the work done in RAN, it's SA5 responsibility to provide corresponding OAM solution for Home NB and Home eNB. SA5 will need to standardize management services that are specific to Home NB and Home eNB because of the following Home NB and Home eNB characteristics:

The quantity of Home NB and Home eNB is likely to be large

There are multiple Home NB and Home eNB vendors

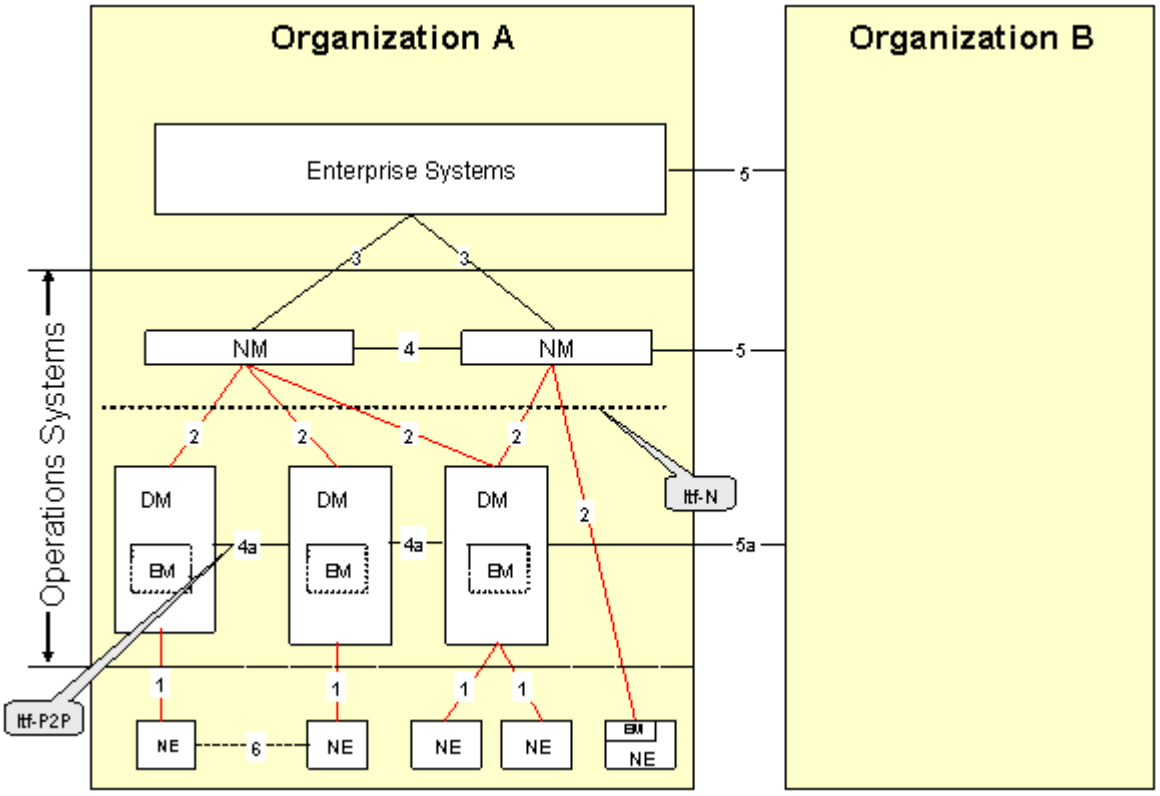
Home NB and Home eNB are consumers' product and are designed to support direct sales to end customers

The location of Home NB and Home eNB could be in a private (end customer's) residence which may not be accessible for frequent on-site maintenance by network operator's staff

SA5 has studied Home NB OAM and SON aspects for some time. The management differences between Home NB and macro NodeB are listed in draft TR 32.821 (submitted for SA#44 approval). The requirements for managing Home NB have been provided in the draft TR 32.821 and the consequences on the management interface for Home NB are also described.

Based on draft TR 32.821, it was agreed the interface type 1 and type 2 currently identified in Figure 1: Management reference model of TS 32.101 (shown below for ease of reference) are to be standardized for HomeNB OAM&P.

In Release 8, SA5 and BBF have collaborated on the specification of the interface Type 1 for Home NB.
The architecture, supporting interface Type 1 for Home NB, can be found in TS 32.583.
SA5 plans to work on interface Type 1 for Home eNB for Release 9.



4 Objective *

This work Item is to define the OAM solution for Home NB and Home eNB for Type 2 Interface.

This work shall take into consideration the work done in TS 32.583 in that the architecture to support this Type-2 Interface would not violate the architecture (published in TS 32.583) supporting the Type-1 Interface.

This WI would include the following:

Enhanced Management on Standard Interfaces Type 2 for Home NB and Home eNB:

Investigate what enhancements (to current set of IRP specifications) are needed for management of Home NB and Home eNB.

Specify the enhancements mentioned above.

Functionalities aspects shall be considered for Home NB and Home eNB management on interface Type 2 (but not necessarily limited to):

Configuration management

Fault management

Performance management

Security management

Specification of a function that, by using device management services offered via the Type 1 Interface for management of H(e)NB, can offer the network management services offered via the Type 2 Interface for H(e)NBs.

The standardization work for management on interface Type 1 will not be covered in this WI.

5 Service Aspects

` N/A

6 MMI-Aspects

N/A

7 Charging Aspects

N/A

8 Security Aspects

N/A

9 Impacts *

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

10 Expected Output and Time scale *

New specifications * **[If Study Item, one TR is anticipated]**						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.571	Home NB and Home eNB OAM&P concepts and requirements (for interface Type 2)	SA5		SA#46 Sep 2009	SA#47 Mar 2010	
32.572	Home NB and Home eNB OAM&P models and mapping functions (for interface Type 2)	SA5		SA#47 Mar 2010	SA#47 Mar 2010	

Affected existing specifications * **[None in the case of Study Items]**				
Spec No.	CR	Subject	Approved at plenary#	Comments

11 Work item rapporteur(s) *

Edwin Tse (Ericsson)

12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
China Mobile
Ericsson
Qualcomm
Huawei Technologies
Nokia Siemens Networks
ZTE

4 Multi-Media Telephony Service enhancements UID_400032

Technical Specification Group Services and System Aspects **TSGS#43(09)0051**

Meeting #43, 9 - 12 March 2009, Biarritz, France

3GPP TSG-SA5 (Telecom Management) ***S5-091540***
Meeting SA5#63, 16-20 February 2009, Prague, CZ *revision of S5-091174*

Source:	**SA5 (Telecom Management)**
Title:	**New WID on Multimedia Telephony Service and Supplementary Services : (MMTel) Online Charging and completion for Offline Charging (all supplementary services)**
Document for:	**Approval**
Agenda Item:	**7.02**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

Multimedia Telephony (MMTel) Service and Supplementary Services - Online Charging and completion for Offline Charging (all supplementary services) UID_430031

1 3GPP Work Area *

	Radio Access
X	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification *

This work item is a … *

	Study Item (go to 2.1)
	Feature (go to 2.2)
	Building Block (go to 2.3)
X	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship
370059	IMS Multimedia Telephony and Supplementary Services (Acronym: IMSTSS)	

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS
370062	IMS Multimedia Telephony Service (Acronym: IMS-MMTel)	

This work item is … *

	Stage 1 (go to 2.3.1)
	Stage 2 (go to 2.3.2)
X	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	Title	TS

3 Justification *

The Current MMTel charging specification covers a subset of defined TS 22.173 Supplementary Services for Offline charging. The Online charging is also not fully specified. This work proposes to specify Online charging, and also to complete the Offline charging for "MMTel service and Supplementary services".

4 Objective *

This work item proposes to complete the MMTel service and supplementary services offline charging work for covering the whole set of TS 22.173 defined supplementary services. It will enhance existing SA5 TS 32.275, TS 32.299 and TS 32.298 by adding description, associated AVPs and corresponding charging fields in the charging data records.

This work item also proposes to fully cover online charging in 3GPP TS 32.275, and enhance TS 32.299 for the defined credit-control application for MMTel service and supplementary services.

5 Service Aspects

None.

6 MMI-Aspects

None

7 Charging Aspects

This is a charging Work Item

8 Security Aspects

None

9 Impacts *

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

10 Expected Output and Time scale *

New specifications * [If Study Item, one TR is anticipated]						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.275	MultiMedia Telephony (MMTel) charging : online charging and missing supplementary services for offline charging				SA#47 Mar 2010	
32.299	MMTel offline charging: complete AVPs for missing supplementary services.				SA#47 Mar 2010	
32.298	AVPs descriptions for online charging				SA#47 Mar 2010	

Affected existing specifications * [None in the case of Study Items]				
Spec No.	CR	Subject	Approved at plenary#	Comments

11 Work item rapporteur(s) *

Maryse Gardella (Alcatel-Lucent)

Email: Maryse.Gardella@alcatel-lucent.fr

12 Work item leadership *

SA WG5

13 Supporting Individual Members *

Supporting IM name
Alcatel-Lucent
ZTE
Deutsche Telekom
Orange
Verizon
Ericsson
Nokia Siemens Networks

Technical Specification Group Services and System Aspects TSGS#43(09)0055
Meeting #43, 9 - 12 March 2009, Biarritz, France

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

Support of RTTI in IMS charging UID_430042

Acronym * : IMSTSS-RTTI-CH

1 3GPP Work Area *

	Radio Access
X	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification *

This work item is a … *

	Study Item (go to 2.1)
	Feature (go to 2.2)
X	Building Block (go to 2.3)
	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS
400032	Multi-Media Telephony Service enhancements	22.173, 22.115

This work item is … *

	Stage 1 (go to 2.3.1)
	Stage 2 (go to 2.3.2)
X	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS
400032	Multi-Media Telephony Service enhancements	22.173, 22.115

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	Title	TS

3 Justification *

The specification 3GPP TS 29.658 describes the SIP transfer of tariff information for both charging and advice of charge purposes. This specification is also known as the specification describing the Real-time Transfer of Tariff Information (RTTI).

In the current work item "AoC support in IMS Charging", the support of this specification is needed. In order to cover AoC for Charging (AoCC) when tariff information is received according to RTTI, it was pointed out that not only the AoC aspects but also the charging aspects of this specification were required (S5-091027).

Moreover, some operators require also the charging aspects of the 3GPP TS 29.658 in order to support online and offline charging with external tariff/add-on charge information. This requirement relies on several points. On one side, due to the multiplication of interconnection scenarii and the multiplication of the service providers (*e.g.* third party service providers), the handling of RTTI for charging purposes is needed to clear up the charging of prepaid and postpaid customers. On another side, the operators have to cope with new legislative constraints (*e.g.* loi Chatel in France) regarding consumers protection.

The IMS charging specifications currently do not consider the possibility to handle tariff/add-on charge information received according to 3GPP TS 29.658 (RTTI). The charging functions must be capable of arbitrating incoming RTTI in order to decide whether it shall be considered or rejected, for offline or online charging. This gap should be covered as soon as possible.

4 Objective *

The work item proposes to create a framework to handle RTTI information for offline and online charging purposes in 3GPP IMS charging. It is proposed to create a new Technical Specification and to enhance existing 3GPP TS 32.240, TS 32.298 and TS 32.299 by adding functionalities, descriptions, AVPs and may add charging fields in the charging data records. The work item proposes also to update the AoC service specification 3GPP TS 32.280 according to the enhancements that would be introduced in the other specifications. Additionnally, in order to grant a secure and reliable transfer of RTTI, the work must be coordinated with SA3 and probably with CT3 which handles the TS 29.658.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

This is a charging work item

8 Security Aspects

In order to use it for charging, the transfer of SIP messages carrying Tariff information (RTTI) must be both reliable and secure. SA3 shall handle the security issues they could identify in the SIP transfer of tariff information

9 Impacts *

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

10 Expected Output and Time scale *

New specifications * [If Study Item, one TR is anticipated]						
Spec No.	Title	Prime rsp WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.27x	TBD	SA5		SA#46	SA#46	

Affected existing specifications * [None in the case of Study Items]				
Spec No.	CR	Subject	Approved at plenary#	Comments
32.240		Charging architecture and principles	SA#46 Dec2009	
32.260		IMS Charging	SA#47 Mar 2010	
32.280		Advice of Charge (AoC) service	SA#47 Mar 2010	
32.298		Charging Data Record (CDR) parameter description	SA#47 Mar 2010	
32.299		Diameter charging applications	SA#47 Mar 2010	

11 Work item rapporteur(s) *

Jean-Luc Garcia (Orange)

Email: jl.garcia <at> orange-ftgroup.com

12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
Orange
Deutsche Telekom
Alcatel-Lucent
Ericsson
Huawei
AT&T

5 User Data Convergence

TSG SA Meeting #44 **SP-090309**
01 - 04 June 2009,
Oranjestad, Aruba

3GPP TSG-SA5 (Telecom Management) **S5-092483**
Meeting SA5#65, 11-15 May 2009, Tallinn, Estonia *revision of S5-092426*

Source:	**China Mobile, T-Mobile, Ericsson**
Title:	**New Umbrella BB-level WID for the SA5 work on User Data Convergence - Modelling and Management**
Document for:	**Approval**
Agenda Item:	**6.02**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

User Data Convergence - Modelling and Management (UDC-MMAN)
UID_440060

1 3GPP Work Area *

	Radio Access
X	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification *

This work item is a … *

	Study Item (go to 2.1)
	Feature (go to 2.2)
X	Building Block (go to 2.3)
	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS
400034	User Data Convergence	22.101, 22.985

This work item is … *

	Stage 1 (go to 2.3.1)
X	Stage 2 (go to 2.3.2)
	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS
400034	User Data Convergence	22.102, 22.985

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block

Unique ID	Title	TS

3 Justification *

The User Data Convergence (UDC) concept is described in TS 22.101:

"The User Data Convergence concept supports a layered architecture, separating the data from the application logic in the 3GPP system, so that user data is stored in a logically unique repository allowing access from core and service layer entities, named application front-ends. Network elements and functionalities should be designed to access profile data remotely and without storing them permanently locally, i.e. the front-ends shall work in a user dataless configuration."

The UDC will simplify the overall network topology and interfaces, avoid data duplication and inconsistency and simplify creation of new services by providing easy access to the user data.

TR 22.985 and TS 22.101 provide the requirements for User data convergence enabling user data be moved from local storage to a facility called User Data Repository (UDR) where it can be accessed, stored and managed in a common way.

Convergence of user data will unify the user data access interface and its protocol. In addition, the logical centralization of user data implies the support of user data provisioning, that is, user data manipulation like creation, deletion, reading, modification and other operations.

In order to accommodate multiple applications and services, existing and new ones, a framework for model handling and management of the UDC has to be developed including:

- UDC information models
- UDC information model handling
- Application management
- Consolidated data model management

4 Objective *

The objective of this work item is to develop the overall management of the User Data Convergence by specifications developed in a number of dependent work tasks.

In order to accommodate multiple applications and services, existing and new ones, a framework for model handling and management of the UDC shall be developed as identified by TS 22.101. This framework includes the following items:

- UDC information models:
  - UDC information model infrastructure containing the common baseline information model, application information models, and the specialised information model.
- the specification of the common baseline information model
- UDC information model handling:
- provide a template and guidelines explaining the design of application information models to be used together with the common baseline information model to create the specialized information model.
- describe the process to combine the common baseline information model with application information models in order to produce an operator-specific specialised information model
- Application management data:
- access control data for an application to UDC: identification and authentication

- assignment to an application data model, including linkage to the consolidated data model
- subscription rights for specific events on specific data of specific users
- Consolidated data model management
  - lifecycle management of the consolidated data model in the UDR and in the provisioning entity.
  - activation/deactivation of application adaptation

Existing SA5 solutions for modelling and management will be used when adequate.

Due to UDC management aspects existing specifications, such as 3GPP TS 32.172 might be affected.

The work should take into account existing work on the area, such as the Common Profile Storage and the Subscription Management.

The work may require synchronization with other SDOs, such as OMA ServUserProf enabler.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts *

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

10 Expected Output and Time scale *

New specifications * **[If Study Item, one TR is anticipated]**						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
Affected existing specifications * **[None in the case of Study Items]**						
Spec No.	CR	Subject		Approved at plenary#	Comments	

11 Work item rapporteur(s) *

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Lan Si Zhong <lansizhong <at> chinamobile.com>

Miguel Garcia, <Miguel.A.Garcia <at> ericsson.com>

12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
T-Mobile
China Mobile
Huawei
ZTE
Alcatel-Lucent
Verizon
Vodafone
HP
Nokia Siemens Networks
Ericsson

TSG SA Meeting #44 **SP-090310**
01 - 04 June 2009,
Oranjestad, Aruba

3GPP TSG-SA5 (Telecom Management) **S5-092484**
Meeting SA5#65, 11-15 May 2009, Tallinn, Estonia *revision of S5-092427*

Source:	**China Mobile, T-Mobile, Ericsson**
Title:	**New WID User Data Convergence - Common Baseline Information Model**
Document for:	**Approval**
Agenda Item:	**6.02**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

User Data Convergence (UDC) - Common Baseline Information Model (UDC-CBIM) UID_440061

1 3GPP Work Area *

	Radio Access
X	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification *

This work item is a … *

	Study Item (go to 2.1)
	Feature (go to 2.2)
	Building Block (go to 2.3)
X	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS

This work item is … *

	Stage 1 (go to 2.3.1)
	Stage 2 (go to 2.3.2)
	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *

Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	Title	TS
	User Data Convergence - Modelling and Management	

3 Justification *

The User Data Convergence (UDC) concept is described in TS 22.101:

"The User Data Convergence concept supports a layered architecture, separating the data from the application logic in the 3GPP system, so that user data is stored in a logically unique repository allowing access from core and service layer entities, named application front-ends. Network elements and functionalities should be designed to access profile data remotely and without storing them permanently locally, i.e. the front-ends shall work in a user dataless configuration."

TR 22.985 and TS 22.101 provide the requirements for User data convergence so that user data can be moved from where it originated, to a facility called User Data Repository (UDR) where it can be accessed, stored and managed in a common way.

Convergence of user data will unify the user data access interface and its protocol. In addition, the logical centralization of user data implies the support of user data provisioning, that is, user data manipulation like creation, deletion, reading, modification and other operations.

In order to accommodate multiple applications and services, existing and new ones, a common baseline information model shall be developed as identified by TS 22.101. This is the goal of this work item.

An Information Model denotes an abstract, formal representation of entity types, including their properties and relationships, the operations that can be performed on them, and related rules and constraints.

4 Objective *

The objective of this work item is to develop a common baseline information model that is to be used as the starting structure to create the specialized information model for the User Data Convergence to be used in an operator's network. Existing SA5 solutions for modelling will be used when adequate.. Specialized information models or data models, though, are not standardized within this work item.

The Common Baseline Information Model will cover a number of concepts as entity types required by 3GPP TS 22.101:

- Subscriber with relation to several users (e.g. a company and its employees),
- A user attached to different subscriptions (e.g. for a private and a professional service usage)

- A user using multiple devices (e.g. mobiles or fixed)
- Grouping of users to certain categories
- A particular user as member of a certain group
- Service providers' services provided by network operators
- Enterprise services provided by network operators

The work should take into account existing work in the area, such as the Common Profile Storage (CPS) and Subscription Management (SuM).

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts *

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

10 Expected Output and Time scale *

New specifications * **[If Study Item, one TR is anticipated]**						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.182	User Data Convergence; Common Baseline Information Model	SA5		SA#46 Dec 2009	SA#47 Mar 2010	

Affected existing specifications * **[None in the case of Study Items]**				
Spec No.	CR	Subject	Approved at plenary#	Comments
32.172			SA#46 Dec 2009	Might be affected due to new classes or attributes in the UDC information model

11 Work item rapporteur(s) *

Miguel Garcia, <Miguel.A.Garcia <at> ericsson.com>, Lan Si Zhong <lansizhong <at> chinamobile.com>

12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
Ericsson
China Mobile
Huawei
HP
ZTE
Alcatel-Lucent
Verizon
Vodafone
Nokia Siemens Networks
T-Mobile

TSG SA Meeting #44 **SP-090311**
01 - 04 June 2009,
Oranjestad, Aruba

3GPP TSG-SA5 (Telecom Management) **S5-092486**
Meeting SA5#65, 11-15 May 2009, Tallinn, Estonia *revision of S5-092426*

Source:	**China Mobile, T-Mobile, Ericsson**
Title:	**WID User Data Convergence - Framework for Model Handling and Management**
Document for:	**Approval**
Agenda Item:	**6.02**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

User Data Convergence (UDC) – Framework for Model Handling and Management (UDC-MFRM) UID_440062

1 3GPP Work Area *

	Radio Access
X	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification *

This work item is a … *

	Study Item (go to 2.1)
	Feature (go to 2.2)
	Building Block (go to 2.3)
X	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS

This work item is … *

	Stage 1 (go to 2.3.1)
	Stage 2 (go to 2.3.2)
	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	Title	TS
	User Data Convergence - Modelling and Management	

3 Justification *

The User Data Convergence (UDC) concept is described in TS 22.101:

"The User Data Convergence concept supports a layered architecture, separating the data from the application logic in the 3GPP system, so that user data is stored in a logically unique repository allowing access from core and service layer entities, named application front-ends. Network elements and functionalities should be designed to access profile data remotely and without storing them permanently locally, i.e. the front-ends shall work in a user dataless configuration."

TR 22.985 and TS 22.101 provide the requirements for User data convergence so that user data can be moved from where it originated, to a facility called User Data Repository (UDR) where it can be accessed, stored and managed in a common way.

Convergence of user data will unify the user data access interface and its protocol. In addition, the logical centralization of user data implies the support of user data provisioning, that is, user data manipulation like creation, deletion, reading, modification and other operations.

In order to accommodate multiple applications and services, existing and new ones, a framework for model handling and management of the UDC has to be developed including:

- UDC information model infrastructure
- UDC information model handling
- Application management
- Consolidated data model management.

The above are the goal of this work item.

4 Objective *

The objective of this work item is to develop the framework for overall management of the User Data Convergence.

In order to accommodate multiple applications and services, existing and new ones, a framework for model handling and management of the UDC will be developed as identified by TS 22.101. This framework includes the following items:

- UDC information models:

- UDC information model infrastructure containing the common baseline information model (CBIM), application information models (AIM), and the specialised information model (SIM). The CBIM is standardised in separate work item.

- UDC information model handling:

- provide a template and guidelines explaining the design of application information models to be used together with the common baseline information model to create the specialized information model

- describe the process to combine the common baseline information model with application information models in order to produce an operator-specific specialised information model

- Application management data:

- access control data for an application to UDC: identification and authentication

- assignment to an application data model, including linkage to the consolidated data model

- subscription rights for specific events on specific data of specific users

- Consolidated data model management

  - lifecycle management of the consolidated data model in the UDR and in the provisioning entity.

  - activation/deactivation of application adaptation

Existing SA5 solutions for modelling and management will be used when adequate.

The work should take into account existing work in the area, such as the Common Profile Storage (CPS) and Subscription Management (SuM).

The work may require synchronization with other SDOs, such as OMA ServUserProf enabler.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts *

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

10 Expected Output and Time scale *

New specifications * **[If Study Item, one TR is anticipated]**						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.181	User Data Convergence; Framework for Model Handling and Management	SA5		SA#47 Mar 2010	SA#48 Jun 2010	

Affected existing specifications * **[None in the case of Study Items]**				
Spec No.	CR	Subject	Approved at plenary#	Comments
32.172			SA#47 Mar 2010	Might be affected due to new classes or attributes in the UDC information model

11 Work item rapporteur(s) *

Istvan Aba <istvan.aba <at> t-mobile.at>

12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
T-Mobile
Ericsson
China Mobile
ZTE
Nokia Siemens Networks
Vodafone
HP

6 MBMS support in EPS UID_400039

Technical Specification Group Services and System Aspects **TSGS#43(09)0052**

Meeting #43, 9 - 12 March 2009, Biarritz, France

3GPP TSG-SA5 (Telecom Management) ***S5-091541***
Meeting SA5#63, 16-20 February 2009, Prague, CZ *revision of S5-091309*

Source: SA5 (Telecom Management)
Title: New WID on MBMS support in EPS: MBMS Charging in EPS
Document for: Discussion and Approval
Agenda Item:

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

MBMS Charging in EPS UID_430033

1 3GPP Work Area *

	Radio Access
X	Core Network
X	Services

2 Classification of WI and linked work items

2.0 Primary classification *

This work item is a … *

	Study Item (go to 2.1)
	Feature (go to 2.2)
	Building Block (go to 2.3)
X	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship
400039	MBMS support in EPS (Acronym: MBMS_EPS)	

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS

This work item is … *

	Stage 1 (go to 2.3.1)
	Stage 2 (go to 2.3.2)
X	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block

Unique ID	Title	TS

3 Justification *

The Current MBMS charging specification does not cover MBMS support in EPS. This work item proposes to specify MBMS charging in EPS.

SA2 has studied MBMS support in EPS in TS 23.246 and their expected finish time is in June, 2009. SA5 should do the alignment work from the charging perspective.

4 Objective *

This work item proposes to work on charging for MBMS in EPS in align with the work on MBMS in EPS in SA2. It will enhance the existing SA5 TS 32.273, TS 32.251, TS 32.298 and TS 32.299 by adding description, associated AVPs and corresponding charging fields in the charging data records.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

This is a Charging Work Item

8 Security Aspects

None

9 Impacts *

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

10 Expected Output and Time scale *

New specifications * [If Study Item, one TR is anticipated]						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments

Affected existing specifications * [None in the case of Study Items]				
Spec No.	CR	Subject	Approved at plenary#	Comments
32.273		MBMS in EPS (MBMS_EPS) charging: update charging for MBMS in EPS	SA#46 Dec 2009	
32.251		MBMS in EPS (MBMS_EPS) charging: update charging for MBMS in EPS	SA#46 Dec 2009	
32.299		MBMS in EPS (MBMS_EPS) charging: update AVPs description	SA#46 Dec 2009	
32.298		MBMS in EPS (MBMS_EPS) charging: update offline charging fields for MBMS charging in EPS	SA#46 Dec 2009	

11 Work item rapporteur(s) *

GUO Wenjie (ZTE) Email: guo.wenjie1@zte.com.cn

12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
ZTE
China Mobile
Huawei
Orange
Ericsson
T-Mobile

7 Feature: OAM&P 9 UID_420029

BB: Network Infrastructure Management UID_420030

Technical Specification Group Services and System Aspects **TSGS#42(08)0756**
Meeting #42, 8 - 11 December 2008, Athens, Greece

3GPP TSG-SA5 (Telecom Management) **S5-081836**
Meeting SA5#61, 13~17 October 2008, Dalian, China *(revision of S5-081557)*

Source: **Huawei Technologies, Nokia Siemens Network**
Title: **New WT-level WID on Software Management**
Document for: **Approval**
Agenda Item: **6.2**

3GPP™ Work Item Description

Title:

Management of software entities residing in Network Elements UID_420031

Acronym: **OAM9-NE_SWM**

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification

This work item is a …

	Study Item (go to 2.1)
	Feature (go to 2.2)
	Building Block (go to 2.3)
X	**Work Task (go to 2.4)**

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	**Title**	**TS**
420029	OAM&P 9	OAM9
420030	Network Infrastructure Management 9	OAM9-NIM

3 Justification

The Software Management functionality includes management of software entities residing in network elements. Although these software entities are vendor specific, the management operations performed on these software entities are generic enough and hence can be standardized. As service providers expand their networks we are increasingly looking at networks that are built not by a single vendor but to de-risk the entire activity, service providers typically purchase equipments from multiple vendors. However, service providers in turn expect that each vendor should seamlessly integrate with existing network topology. For example, the behaviour of software entities when executed or activated is vendor specific but the interfaces exposed to execute these operations from a management interface can be generic and vendor independent. Importance is placed integrating new software into a network without causing unnecessary service disruptions and maintaining high level of quality for the network [1].

Software Management function is useful especially when we need to manage a large number of managed elements widely distributed geographically. The main focus is the management of new software releases and correction patches [1]. A standardized interface for software management will therefore allow service providers to rollout new services quickly and efficiently in a multivendor environment.

[1] 3GPP TS32.101 V8.2.0 Telecommunication management; Principles and high level requirements

4 Objective

The objective of this technical work is to provide non-automated software management features. These features may be invoked independently and can be considered complimentary to automated software management features specified in release 8. This in turn will provide flexibility to service providers. These new features will be specified based on IRP methodology principles:

Define appropriate IRP requirement specifications for Software Management

Define Information Service (IS) specifications related to Software Management

Define Solution Set (SS) specifications for Software Management over CORBA and SOAP
For example, the following functionalities may be considered in this work item (but not necessarily limited to):
Downloading software
Installation of software
Activation of software
Backup and Restore of software
Fallback of software
Validation and Terminate Validation operations on software

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

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

10 Expected Output and Time scale

New specifications [If Study Item, one TR is anticipated]					
Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
Affected existing specifications **[None in the case of Study Items]**					
Spec No.	CR	Subject	Approved at plenary#	Comments	
TS 32.531 Telecommunication management; Software management concepts and Integration Reference Point (IRP) requirements	SA5		SA#43 (Mar 2009)		The TS will be extended to describe the non-automated concepts for Software Management and IRP requirements
TS 32.532 Telecommunication management; Software management IRP Information Service (IS) (stage 2)	SA5		SA#44 (Jun 2009)		This TS shall define the functionalities, procedures, interfaces needed to support the requirements defined in 32.531
TS 32.533 Telecommunication management; Software management Integration Reference Point (IRP); Common Object Request Broker Architecture (CORBA) Solution Set (SS) (stage 3)	SA5		SA#46 (Aug 2009)		This TS shall describe and define the interfaces over CORBA
TS 32.535 Telecommunication management; Software management Integration Reference Point (IRP); eXtensible Markup Language (XML) definitions	SA5		SA#47 (Mar 2010)		
TS 32.537 Telecommunication management; Software management Integration Reference Point (IRP); SOAP Solution Set (SS) (stage 3)	SA5		SA#47 (Mar 2010)		This TS shall describe and define the interfaces over SOAP

11 Work item Rapporteur(s)

Bidipta Das (bidipta@huawei.com), Clemens Suerbaum (clemens.suerbaum@nsn.com)

TSG SA Meeting #44 **SP-090313**
01 - 04 June 2009,
Oranjestad, Aruba

3GPP TSG-SA5 (Telecom Management) **S5-092003**
Meeting #64 March 30 ~ April 3, 2009, Hangzhou, China

Source:	**Ericsson**
Title:	**New WT-level WID on Service Oriented Architecture (SOA) for IRP**
Document for:	**Approval**
Agenda Item:	**6.x**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

Service Oriented Architecture (SOA) for IRP UID_440064

1 3GPP Work Area *

x	Radio Access
x	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification *

This work item is a … *

	Study Item (go to 2.1)
	Feature (go to 2.2)
	Building Block (go to 2.3)
x	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *

Unique ID	Title	Nature of relationship

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS
420030	Network Infrastructure Management	OAM9-NIM

This work item is … *

	Stage 1 (go to 2.3.1)
	Stage 2 (go to 2.3.2)
	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	Title	TS

3 Justification *

Service Oriented Architecture (SOA) is gaining acceptance in the IS/IT industry. It promises to manage change [1], automate and simplify IT processes [1], optimize implementation [2], maximize (implementation) flexibility and

scalability [3], facilitate integration beyond the enterprise (between companies, between partners and customers) [4], simplify development [5] and maintenance; etc.

We have noted that the principles of SOA are currently being applied to the field of network management [8,9].

IRP (Interface Reference Point) is the predominant standard for wireless network management since 2000. 3GPP developed it with 3GPP2 close collaboration. IRP architecture follows closely with that defined by ITU-T TMN work [6]. Besides publishing the IRP specifications, 3GPP also publishes its IRP methodology (e.g., the guidelines, templates on how to develop, maintain and publish IRP specifications). Today, the IRP specification methodology is being shared and jointly evolved and maintained by consortium of SDOs, such as ITU-T.

Based on the above, SA5 have submitted for SA#44 Information + Approval TR 32.824 (Study Ion SOA IRP [7]. The purpose of that SI was to analyse the IRP architecture and to provide a "gap analysis" on what enhancement would be needed for the current set of IRP specifications such that it could claim to have the full set of characteristics of SOA.

References:

[1] SOA Management and Security

[2] IBM CICS Service Flow Feature enables composition of CICS applications to create CICS business services

[3] SOA/Web services-based applications

[4] Extending the Benefits of SOA beyond the Enterprise, TIBCO

[5] BEA Announces WebLogic 9.2; Award-Winning Family Raises the Bar on SOA Enablement

[6] ITU-T TMN

[7] Draft TR 32.824: Study on SOA compliant need and additional capabilities for existing/currently planned Interface IRPs

[8] TS 188 001 NGN Management OSS Architecture, ETSI

[9] M.3060 Principles for the Management of Next Generation Networks, ITU-T

[10] 3GPP TS 32.101 Telecommunication management; Principles and high level requirements.

[11] 3GPP TS 32.102 Telecommunication management; Architecture

[22] 3GPP TS 32.150 Telecommunication management; Integration Reference Point (IRP) Concept and definitions

4 Objective *

SOA provides methods for systems development and integration where systems group functionality around business processes and packages these as interoperable services. An SOA infrastructure allows different applications to exchange data with one another as they participate in business processes.

The IRP's approach is well suited for operating within an SOA environment (see Section 6 of [7]). In operator's environment, the FCAPS types of service, supported by the various IRPs such as AlarmIRP, PMIRP, are one of many key inputs to the aforementioned business processes.

The various IRPs will be evolved further, modified in such that they can fit even better into an SOA infrastructure. Specifically, this paper calls for a new Work Item for Release 9 entitled "SOA and IRP". This Work Item would:

Enhance 32.101 [10] to include the support of SOA infrastructure as part of its Principles and high level requirements.

Enhance 32.102 [11] and 32.150 [12] to include descriptions of a) the SOA infrastructure and b) the relationship between the SOA infrastructure and the IRP Architecture.

Enhance the relevant Interface IRPs (for example Entry Point IRP if needed) in areas that require amendments for its implementations to improve participation in an SOA infrastructure environment.

5 Service Aspects

N/A

6 MMI-Aspects

N/A

7 Charging Aspects

N/A

8 Security Aspects

N/A

9 Impacts *

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

10 Expected Output and Time scale *

New specifications * **[If Study Item, one TR is anticipated]**						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments

Affected existing specifications * **[None in the case of Study Items]**				
Spec No.	CR	Subject	Approved at plenary#	Comments
32.101		High level SOA principles and high level SOA requirements shall be listed in this document.	SA#47 (Mar 2010)	Telecommunication management; Principles and high level requirements
32.102		The overall SOA infrastructure shall be listed in this document. Its relation to the Telecommunication management architecture shall also be described in this document	SA#47 (Mar 2010)	Telecommunication management; Architecture
32.150		The overall concepts of SOA service providers and service consumers shall be described in this document. The relation of SOA service providers to the IRP defined IRPAgent and XyzIRP will be described in this document. The relation of SOA service consumers to the IRP defined IRPAgent and managed nodes will be described in this document.	SA#47 (Mar 2010)	Telecommunication management; Integration Reference Point (IRP) Concept and definitions

11 Work item rapporteur(s) *

Edwin Tse, Ericsson

Joerg Schmidt, Nokia Siemens Networks

12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
Ericsson
Nokia Siemens Networks
Huawei Technologies
Orange
Vodafone
TeliaSonera
Alcatel Lucent
Motorola
T-Mobile

TSG SA Meeting #44 **SP-090314**
01 - 04 June 2009,
Oranjestad, Aruba

3GPP TSG-SA5 (Telecom Management) **S5-092006**
Meeting #64 March 30 - April 3, 2009, Hangzhou, CHINA

Source:	**Ericsson**
Title:	**New WT-level WID on IRP SOAP Solution Sets continuation from Rel-8**
Document for:	**Approval**
Agenda Item:	**6.x**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

IRP SOAP Solution Sets continuation from Rel-8 (OAM9) UID_440065

1 3GPP Work Area *

X	Radio Access
X	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification *

This work item is a … *

	Study Item (go to 2.1)
	Feature (go to 2.2)
	Building Block (go to 2.3)
X	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS

This work item is … *

	Stage 1 (go to 2.3.1)
	Stage 2 (go to 2.3.2)
X	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	Title	TS
420029	OAM&P 9	

3 Justification *

Work task UID_400030 in Rel-8 initiated the introduction of SOAP Solution Sets in 3GPP SA5.
The initially planned work was not completed in Rel-8.
This work task proposes to complete the work started in Rel-8.

SP-080697 / S5-082470 is the Rel-8 Work Item Exception sheet, which also lists outstanding SOAP Solution Sets to be produced in Rel-9.

Without this work, SA5 will have an incomplete portfolio of SOAP Solution Sets to the IRPs.

Both SA5 TR 32.809 (Feasibility Study of XML-based (SOAP/HTTP) IRP Solution Sets) and TR 32.818 (Study on 3GPP SA5 / MTOSI XML harmonization) recommended the use of SOAP/XML-based SSs to support all IRPs.

4 Objective *

To provide SOAP SS for Interface IRPs that do not already have SOAP SSs defined.

Advanced Alarm Management IRP

Test Management IRP

Notification Log IRP

Communication Surveillance IRP

Partial Suspension of Itf-N IRP

Delta Synchronization IRP

Trace Management IRP

To update the other specifications in these IRPs to include references to the SOAP SS.

5 Service Aspects

None.

6 MMI-Aspects

None.

7 Charging Aspects

None.

8 Security Aspects

None.

9 Impacts *

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

10 Expected Output and Time scale *

New specifications * **[If Study Item, one TR is anticipated]**

Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.127	Advanced Alarm Management IRP SOAP Solution Set	SA5		SA#45 Sep 2009	SA#47 Mar 2010	Ok. Needs 32.125
32.327	Test Management IRP SOAP Solution Set	SA5		SA#46 Dec 2009	SA#47 Mar 2010	
32.337	Notification Log IRP SOAP Solution Set	SA5		SA#46 Dec 2009	SA#47 Mar 2010	
32.357	Communication Surveillance IRP SOAP Solution Set	SA5		SA#46 Dec 2009	SA#47 Mar 2010	Needs 32.355
32.387	Partial Suspension of Itf-N IRP SOAP Solution Set	SA5		SA#46 Dec 2009	SA#47 Mar 2010	
32.397	Delta Synchronization IRP SOAP Solution Set	SA5		SA#46 Dec 2009	SA#47 Mar 2010	
32.447	Trace Management IRP SOAP Solution Set	SA5		SA#45 Sep 2009	SA#47 Mar 2010	Ok

Affected existing specifications *
[None in the case of Study Items]

Spec No.	CR	Subject	Approved at plenary#	Comments
32.121		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.122		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.123		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.321		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.322		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.323		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.325		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.331		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.332		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.333		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.335		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.351		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.352		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.353		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.381		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.382		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.383		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.385		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.391		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.392		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.393		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.395		Include reference to SOAP Solution Set specification	SA#47 Mar 2010	
32.441		Include reference to SOAP Solution Set specification	SA#46 Dec 2009	
32.442		Include reference to SOAP Solution Set specification	SA#46 Dec 2009	

32.443		Include reference to SOAP Solution Set specification	SA#46 Dec 2009	
32.445		Include reference to SOAP Solution Set specification	SA#46 Dec 2009	

11 Work item rapporteur(s) *

John POWER (Ericsson)

12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
Ericsson
Motorola
ip access
Huawei

BB: Performance Management UID_420032

Technical Specification Group Services and System Aspects **TSGS#43(09)0053**

Meeting #43, 9 - 12 March 2009, Biarritz, France

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

Enhancement of performance measurements for E-UTRAN (EPME) UID_430041

1 3GPP Work Area *

X	Radio Access
	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification *

This work item is a … *

	Study Item (go to 2.1)
	Feature (go to 2.2)
	Building Block (go to 2.3)
X	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS

This work item is … *

	Stage 1 (go to 2.3.1)
	Stage 2 (go to 2.3.2)
	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
X	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	Title	TS
????		

3 Justification *

The performance measurements for E-UTRAN were defined in Rel-8 3GPP TS 32.425, and the corresponding work task was finished.

However, there are still some performance measurements need to be defined in the new releases, for example, the performance measurements for the manual network optimization purpose (e.g., interference control and optimization, coverage and capacity optimization) and SON (in particular the self-optimization part) purpose.

Like the performance measurements defined in 3GPP TS 32.425, any enhancement of the E-UTRAN performance measurements shall be motivated by the use case or requirement for performance management or SON purpose. For the manual network optimization , the discussion on the use case or requirement for each proposed performance

measurement is in the scope of this work item; For SON, the discussion on the use case or requirement is out of the scope of this work item, this work item is just to define the related E-UTRAN performance measurements which are clearly stated as mandatory over Itf-N in the SON use cases, requirements, or solutions, in case of these SON use cases, requirements, or solutions are agreed by relevant work items covering SON functionalities in 3GPP SA5.

It shall be ensured in this work task that PM IRP can be reused for E-UTRAN performance management, so the enhanced performance measurement definition for E-UTRAN should be managed via PM IRP, e.g., the performance measurement definition should have a consistent format which can be collected and monitored via PM IRP

4 Objective *

To enhance the performance measurements needed to be transferred over Itf-N for E-UTRAN in 3GPP TS 32.425 to support the performance management or SON purpose, and the same rules listed below for Rel-8 E-UTRAN performance measurements work task shall be followed in this work item:

The performance measurements that are not necessary to be transferred over Itf-N are not in the scope of this work item, but it is also allowed to enlarge the scope of this work item to define the E-UTRAN performance measurements for other management interfaces (e.g., Itf-P2P) if necessary.

This work item covers the performance measurements for both macro eNodeB and home eNodeB, and it should be clearly stated in the definition if the performance measurement is only applicable for one but not both of macro eNodeB and home eNodeB.

The E-UTRAN performance measurements shall be defined by top-down approach, each measurement definition should get at least one supporting use case or requirement agreed before being inserted into the specification. For supporting performance management purpose of E-UTRAN, the related use case or requirement should be discussed and agreed in this work item.

This WI will not discuss the use cases and requirements for SON related measurements agreed in other places, but only to specify the measurement definitions.

The enhancement of performance measurements should have identical characteristics as those defined in Rel-8 3GPP TS 32.425.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts *

Affects:	UICC apps	ME	AN	CN	Others
Yes			X		
No	X	X		X	

Don't know					X

10 Expected Output and Time scale *

New specifications * [If Study Item, one TR is anticipated]						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
Affected existing specifications * [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#		Comments
32.425				SA#48 June, 2010		

11 Work item rapporteur(s) *

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12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
Motorola
Huawei
Vodafone
T-Mobile
Telefonica
ZTE
Qualcomm

Technical Specification Group Services and System Aspects TSGS#43(09)0049
Meeting #43, 9 - 12 March 2009, Biarritz, France

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

Enhancement of performance measurements for EPC (OAM9-PM)
UID_430042

1 3GPP Work Area *

	Radio Access
X	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification *

This work item is a … *

	Study Item (go to 2.1)
	Feature (go to 2.2)
	Building Block (go to 2.3)
X	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS

This work item is … *

	Stage 1 (go to 2.3.1)
	Stage 2 (go to 2.3.2)
	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
X	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	Title	TS
????		

3 Justification *

Performance Management is one of basic management function for EPC, and performance measurements are the base for performance management. Some EPC measurements have been defined in 32.426 for Release 8, but the measurement definition is not complete and still some measurements needs to be defined, e.g. measurements related to S4, S5, S12 interface. Then it will impact performance management implementation. It is, therefore, necessary to define new performance measurements for EPC Release 9.

Performance measurement definitions reuse the template defined in 32.404.

4 Objective *

Define performance measurements for EPC with the same template as defined in 32.404.

S4, S5, S12 interface related measurements and more MME related measurements should be defined. And performance measurements enhanced in Rel-9 should have identical characteristics as those defined in Rel-8 3GPP TS 32.426.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts *

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

10 Expected Output and Time scale *

New specifications * [If Study Item, one TR is anticipated]						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
Affected existing specifications * [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#		Comments
32.426				SA#46 Dec 2009		

11 Work item rapporteur(s) *

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12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
China Mobile

Motorola
ZTE
Huawei
Nokia Siemens Networks
T-Mobile
Vodafone

TSG SA Meeting #44 **SP-090308**
01 - 04 June 2009,
Oranjestad, Aruba

3GPP TSG-SA5 (Telecom Management) **S5-092429**
Meeting SA5#65, 11-15 May 2009, Tallinn, Estonia *revision of S5-092345*

Source:	**China Mobile, Qualcomm, Huawei, ZTE**
Title:	**New WT-level WID on Enhancement of UTRAN measurement (OAM9-PM)**
Document for:	**Approval**
Agenda Item:	**6.02 New OAM Work Item proposals**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

Enhancement of UTRAN performance measurements (OAM9-PM)
UID_440059

1 3GPP Work Area *

X	Radio Access
	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification *

This work item is a … *

	Study Item (go to 2.1)
	Feature (go to 2.2)
	Building Block (go to 2.3)
X	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS

This work item is … *

	Stage 1 (go to 2.3.1)
	Stage 2 (go to 2.3.2)
	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	Title	TS

3 Justification *

In order to optimize network more accurately and trouble shooting quickly, measurements related air interface from UE and RNC should be collected and analyzed. It is better than drive test to learn whole network coverage to some extent, because the number of UE is larger and distribution of UEs is more widely. It also can help trouble shooting based on cell level, such as according to UE measurements: P-CCPCH RSCP of own and neighbour cell and SIR to analyze handover failure reasons.

Many measurements have been defined in TS25.215 and TS25.225. Measurement results are transferred by measurement reporting procedure from the UE to UTRAN, the MEASUREMENT REPORT message can be transferred periodic according to the IE "Periodical Reporting Criteria" or an event in stored IE "Measurement reporting criteria" was triggered.

It is proposed to analyze the MEASUREMENT REPORT message to define performance measurements in 32.405.

4 Objective *

Define performance measurements in 32.405 based on measurements defined in TS25.215 and TS25.225 that are reported to RNC using RRC protocol specified in 25.331. For this purpose, a new collection method will be defined: PDF(Probability Distribution Function). For example, the performance measurement result of measurement P-CCPCH RSCP should be the number of each reported value (P-CCPCH RSCP_LEV_00.. P-CCPCH RSCP_LEV_91), namely how many UEs with RSCP_LEV_00, how many UEs with RSCP_LEV_01 etc, not the reported value itself.

5 Service Aspects

None.

6 MMI-Aspects

None.

7 Charging Aspects

None.

8 Security Aspects

None.

9 Impacts *

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

10 Expected Output and Time scale *

New specifications * **[If Study Item, one TR is anticipated]**						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
Affected existing specifications * **[None in the case of Study Items]**						
Spec No.	CR	Subject			Approved at plenary#	Comments
32.405		Define performance measurements based on the RRC MEASUREMENT REPORT message			SA#46	Performance Management (PM); Performance measurements UTRAN

11 Work item rapporteur(s) *

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12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
China Mobile
Qualcomm
Huawei
ZTE

BB: Trace UID_420033

Void.

TSG SA Meeting #44 **SP-090307**
01 - 04 June 2009,
Oranjestad, Aruba

3GPP TSG-SA5 (Telecom Management) **S5-092428**
Meeting SA5#65, 11-15 May 2009, Tallinn, Estonia *revision of S5-09xyzw*

Source:	**Ericsson, Verizon Wireless, Alcatel-Lucent, Nokia Siemens Networks**
Title:	**New WID on Subscription Management (SuM) evolution**
Document for:	**Approval**
Agenda Item:	**6.02 New OAM Work Item proposals**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

BB: Subscription Management (SuM) evolution (SuM)
UID_440058

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification

This work item is a

	Study Item (go to 2.1)
	Feature (go to 2.2)
X	Building Block (go to 2.3)
	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS
420029	OAM&P 9 (Acronym: OAM9)	

This work item is … *

X	Stage 1 (go to 2.3.1)
X	Stage 2 (go to 2.3.2)
X	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks
TS 32.140 SuM requirements		This stage 1 document is to be updated as part of the work item.

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks
TS 32.172 SuM NRM IRP IS		This stage 2 document is to be updated as part of the work item.

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	Title	TS

3 Justification *

There is a need expressed from service providers and operators to provide a holistic and coherent view of customer/user/subscriber related information in the network, from the viewpoints of service and resource management layers as specified by the TeleManagement Forum's eTOM processes. The current version of the 3GPP SuM specifications covers the service management layer only to a very limited extent; instead, the focus has been on the resource layer and its management. There is a need to couple information models of the service layer with the information models of resource layer within the information domain related to customer/user/subscriber. Furthermore, to obtain flexible product offerings, it is required that this be a "loose" coupling in order to support configuration changes in the service layer while avoiding unnecessary changes in the resource layer. The current version of the information model found in SuM NRM (3GPP TS 32.172) does not offer such coupling.

The current model is also inconsistent in its modelling of user identifiers. In general, a more coherent approach for modelling user's service data profiles is of interest.

SuM should offer a framework to enable rapid development of provisioning support for new services in a way conforming to a standard model.

Besides 3GPP's own interest in addressing the abovementioned concerns to support the 3GPP/LTE networks and services delivered on top of these networks, ETSI TISPAN has requested 3GPP to address these concerns so that they may re-use the evolved 3GPP SuM specifications as the basis for extensions to support the TISPAN NGN network.

4 Objective *

The Work Item objective is to provide an evolved SuM information model that offers loose coupling to service layer data and logic, as well as offering a generic framework for modelling of user's service data profiles. It has to consider backward compatibility with the existing SuM information model. Other improvements to the information model a re to be determined.

Consistency with information entities to be defined in the User Data Convergence baseline common information model shall be ensured.

A use case analysis followed by requirement re-assessment are part of the objectives to be driving updates of the Information Service and Solution Set.

5 Service Aspects

The WI aims to provide enhances management support for services.

6 MMI-Aspects

None.

7 Charging Aspects

None.

8 Security Aspects

No additional security aspects compared to existing SuM specifications.

9 Impacts *

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

10 Expected Output and Time scale *

New specifications * **[If Study Item, one TR is anticipated]**

Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments

Affected existing specifications *
[None in the case of Study Items]

Spec No.	CR	Subject	Approved at plenary#	Comments
32.140		Revised requirements	SA#46	Subscription Management (SuM) requirements
32.141		Revised architecture	SA#46	Subscription Management (SuM) architecture
32.172		Revised information model	SA#48	Subscription Management (SuM) Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS)
32.175		Revised XML definitions	SA#48	Subscription Management (SuM) Network Resource Model (NRM) Integration Reference Point (IRP): eXtensible Markup Language (XML) definition
32.152		UML repertoire updates	SA#46	Integration Reference Point (IRP) Information Service (IS) Unified Modelling Language (UML) repertoire
32.607			SA#47	

11 Work item rapporteur(s) *

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12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
Ericsson
Verizon Wireless
Alcatel-Lucent
T-Mobile
Nokia Siemens Networks

BB: Self-Organizing Networks (SON) UID_430043

Technical Specification Group Services and System Aspects ***TSGS#39(08)0067***
Meeting #39, 10 - 13 March 2008, Puerto Vallarta, Mexico

Source:	**SA5 (Telecom Management)**
Title:	**New WT-level WID on SON Self-Optimization & Self-Healing handling**
Document for:	**Approval**
Agenda Item:	**10.34 (SAES) - 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects)**

Work Item Description

Title

SON Self-Optimization & Self-Healing handling UID_390007 - Moved from Rel-8

Acronym: LTE_SON-OAM

Technical Specification Group Services and System Aspects **TSGS#47(10)0091**
Meeting #47; Vienna, Austria; 22-25 March 2010

3GPP TSG-SA5 (Telecom Management) **S5-101077**
Meeting SA5#70, 1 Mar- 5 Mar 2010, Xiamen, China *revision of S5-100956*
TSG SA Meeting #46 **SP-090762**
07 - 10 December 2009,
Sanya, China

3GPP TSG-SA5 (Telecom Management) **S5-094355**
Meeting SA5#68 09-13 Nov 2009, Shanghai, China

Source:	**Huawei Technologies**
Title:	**Revised WID on SON self-optimization management**
Document for:	**Approval**
Agenda Item:	**6.5.1**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

Title * : SON Self-Optimization & Self-Healing handling

Acronym * : LTE-SON-OAM

Unique identifier * 390007

1 3GPP Work Area *

X	Radio Access
X	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification *

This work item is a … *

	Study Item (go to 2.1)
	Feature (go to 2.2)
	Building Block (go to 2.3)
X	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any) *		
Unique ID	Title	Nature of relationship

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS

This work item is … *

	Stage 1 (go to 2.3.1)
	Stage 2 (go to 2.3.2)
	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any) *		
Organization	Document	Remarks

Go to §3.

2.3.2 Stage 2 *

Corresponding stage 1 work item		
Unique ID	Title	TS

Other source of stage 1 information		
TS or CR(s)	Clause	Remarks

If no identified source of stage 1 information, justify: *

Go to §3.

2.3.3 Stage 3 *

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS

Else, corresponding stage 1 work item		
Unique ID	Title	TS

Other justification		
TS or CR(s) Or external document	Clause	Remarks

If no identified source of stage 2 information, justify: *

Go to §3.

2.3.4 Test spec *

Related Work Item(s)

Unique ID	Title	TS

Go to §3.

2.3.5 Other *

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task *

Parent Building Block		
Unique ID	Title	TS
430043	Self-Organizing Networks (SON) - OAM aspects (OAM9-SON)	

3 Justification *

The target of SON is to maintain network quality and performance with a minimum of manual intervention from the operator.

Self-optimization functionality will monitor and analyse performance management data, and will automatically trigger optimization action on the affected network node(s) when necessary. This will significantly reduce manual interventions and replace them with automatically triggered re-optimizations, re-configurations, or software reloads/upgrades thereby helping to reduce operating expense.

The ongoing work in TSG RAN on SON for RRM also requires OAM support.
As a consequence the scope of SON self optimization also includes:

Load balancing

Handover Parameter optimization

Interference control

Capacity and coverage optimization

RACH optimization

4 Objective *

Collect and document Self-Optimization OAM requirements for SON.

Define in cooperation with RAN WGs inputs to and outputs from the Self-Optimization Entity, its location in the management architecture, and the degree of standardisation of the associated algorithms.

Identify and document required Self-Optimization related additions to the affected specifications.

Ensure that the OAM specifications support load balancing, HandOver (HO) parameter optimization, interference control, capacity and coverage optimization and RACH optimization.

Based on the above, a set of new TSs should capture the "SON Self-Optimization OAM Requirements". Some existing specifications (i.e., NRM, PM, etc.) may need some modification according to the output of the work task.

10 Expected Output and Time scale *

New specifications * [If Study Item, one TR is anticipated]						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.521	Self-Organizing Networks (SON) Policy Network Resource Model (NRM) Integration Reference Point (IRP): Requirements	SA5		SA#44 Jun 2009	SA#47 Mar 2010	
32.522	Self-Organizing Networks (SON) Policy Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS)	SA5		SA#47 Mar 2010	SA#47 Mar 2010	
32.523	Self-Organizing Networks (SON) Policy Network Resource Model (NRM) Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS)	SA5		SA#47 Jun 2010	SA#47 Jun 2010	
32.525	Self-Organizing Networks (SON) Policy Network Resource Model (NRM) Integration Reference Point (IRP): Bulk CM eXtensible Markup Language (XML) file format definition	SA5		SA#48 Jun 2010	SA#48 Jun 2010	

Affected existing specifications * [None in the case of Study Items]				
Spec No.	CR	Subject	Approved at plenary#	Comments
32.425		Addition of measurements for SON	SA#48 Jun 2010	

11 Work item rapporteur(s) *

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12 Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
Huawei Technologies.
China Mobile
Motorola
Nokia Siemens Networks
Nortel
Orange
Telecom Italia
Telefonica
TeliaSonera
T-Mobile
Vodafone
ZTE

3GPP TSG-SA5 (Telecom Management) **S5-100311**
Meeting SA5#69, 18 – 22 January 2010, Valencia, SPAIN

TSG SA Meeting #46 **SP-090869**
07 - 10 December 2009,
Sanya, China

TSG SA Meeting #44 **SP-090317**
01 - 04 June 2009,
Oranjestad, Aruba

3GPP TSG-SA5 (Telecom Management) **S5-092066**
Meeting #64 March 30 - April 3, 2009, Hangzhou, CHINA

Source:	**Nokia Siemens Networks, Orange, Telefonica**
Title:	**New WT-level WID on Automatic Radio Network Configuration Data Preparation (AURANCODAP)**
Document for:	**Approval**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

Automatic Radio Network Configuration Data Preparation - OAM9 – UID_440067

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Classification of WI and linked work items

2.0 Primary classification

This work item is a Feature

	Study Item (go to 2.1)
	Feature (go to 2.2)
	Building Block (go to 2.3)
X	Work Task (go to 2.4)

2.1 Study Item

Related Work Item(s) (if any]		
Unique ID	Title	Nature of relationship

Go to §3.

2.2 Feature

Related Study Item or Feature (if any)		
Unique ID	Title	Nature of relationship

Go to §3.

2.3 Building Block

Parent Feature (or Study Item)		
Unique ID	Title	TS

This work item is …

X	Stage 1 (go to 2.3.1)
X	Stage 2 (go to 2.3.2)
X	Stage 3 (go to 2.3.3)
	Test spec (go to 2.3.4)
	Other (go to 2.3.5)

2.3.1 Stage 1

Source of external requirements (if any)		
Organization	Document	Remarks
none		

Go to §3.

2.3.2 Stage 2

Corresponding stage 1 work item		
Unique ID	Title	TS
[this WI]	[this WI]	

Other source of stage 1 information

TS or CR(s)	Clause	Remarks
None		

If no identified source of stage 1 information, justify:

Go to §3.

2.3.3 Stage 3

Corresponding stage 2 work item (if any)		
Unique ID	Title	TS
[this WI]	[this WI]	

Else, corresponding stage 1 work item		
Unique ID	Title	TS
None		

Other justification		
TS or CR(s) Or external document	Clause	Remarks
None		

If no identified source of stage 2 information, justify:

Go to §3.

2.3.4 Test spec

Related Work Item(s)		
Unique ID	Title	TS

Go to §3.

2.3.5 Other

Related Work Item(s)			
Unique ID	Title	Nature of relationship	TS / TR

Go to §3.

2.4 Work task

Parent Building Block		
Unique ID	Title	TS

3 Justification

Self-Configuration, 3GPP TS 32.501 has a chapter 6.5.2.6 titled “Radio Configuration Data”, but its only content is “FFS”. Consequently 32.502 and 32.503 contain nothing to fulfil some of the requirements listed in clause 5.1.5.1 of TR 32.816.

When radio Network Elements (e.g. cells and/or eNBs) are inserted into an operational radio network, some network configuration parameters cannot be configured before-hand because they have interdependencies with the configuration of operational Network Elements. ”Dynamic Radio Network Configuration Data Preparation” comprises the generation and distribution of such interdependent parameters to the newly inserted network element and optionally already operational Network Elements.

This functionality is urgently needed to allow a fully automatic establishment of an eNB into a network. Otherwise a network operator would have to administer these configurations manually. Without this functionality self-configuration cannot be considered not fully as “self”.

4 Objective

It is proposed to work on technical solutions for Automatic Radio Network Configuration Data Preparation, i.e.:

Analyse which configuration parameter cannot be determined before-hand by the IRPAgent or by the self-configuration process and what input might be needed to generate them.

Define new functionality to trigger distribution of such parameters. This functionality should fit to the existing self-configuration functionalities and re-use existing IRPs, if possible.

The required activities to achieve these objectives may include:

Refine/define the requirements

Define the Resource model

Define operation and notifications (information service)

Define solution set/s

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	UICC apps	ME	AN	CN	Others

Yes			X		
No	X	X		X	
Don't know					X

10 Expected Output and Time scale

New specifications [If Study Item, one TR is anticipated]						
Spec No.	Title	Prime rsp WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.507	Self Configuration of Network Elements Integration Reference Point (IRP): SOAP Solution Set (SS) (Release 9)			SA#47 Mar 2010	SA#47 Mar 2010	

Affected existing specifications [None in the case of Study Items]				
Spec No.	CR	Subject	Approved at plenary#	Comments
32.501			SA#47 Mar 2010	Self-Configuration of Network Elements; Concepts and IRP Requirements
32.502			SA#48 Jun 2010	Self-Configuration of Network Elements IRP; Information Service
32.503			SA#48 Jun 2010	Self-Configuration of Network Elements IRP; CORBA Solution Set
32.505			SA#48 Jun 2010	Self-Configuration of Network Elements IRP: XML file format definition

11 Work item rapporteur(s)

Clemens Suerbaum, Nokia Siemens Networks, clemens.suerbaum@nsn.com

12 Work item leadership

SA5

13 Supporting Individual Members

Supporting IM name
Nokia Siemens Networks
Orange
Telefonica
Ericsson
Huawei
Alcatel-Lucent
T-Mobile
Vodafone

8 Charging Management and Small Enhancements (CH9) UID_440068

Technical Specification Group Services and System Aspects **TSGS#47(10)0090**
Meeting #47; Vienna, Austria; 22-25 March 2010

3GPP TSG-SA5 (Telecom Management) **S5-101075**
Meeting SA5#70, 1-5 Mar 2010, Xiamen, P.R. China *revision of S5-100975*

TSG SA Meeting #44 **SP-090312**
01 - 04 June 2009,
Oranjestad, Aruba

3GPP TSG-SA5 (Telecom Management) **S5-092656**
Meeting SA5#65, 11-15 May 2009, Tallinn, Estonia *revision of S5-092540*

Source:	**Orange**
Title:	**New WID on IWLAN mobility charging**
Document for:	**Approval**
Agenda Item:	**7.02**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

IWLAN mobility charging (eIWLAN_Mob) UID_440063 Moved to Rel-10

9 Feasibility Studies

Technical Specification Group Services and System Aspects ***TSGS#36(07)0306***
Meeting #36, 4 – 7 June 2007, Busan, KOREA

Source:	**SA5 (Telecom Management)**
Title:	**WID Study of System Maintenance by Itf-N**
Document for:	**Approval**
Agenda Item:	**11.28 (OAM-Study) - OAM&P Studies**

3GPP TSG-SA5 (Telecom Management) **S5-071006**
Meeting SA5#53, 07 - 11 May 2007, Sophia Antipolis, FRANCE

Work Item Description

Title:
Study of System Maintenance over Itf-N UID_360006 - Moved from Rel-8

Acronym: FS_OAM-Maint-Itf-N

Is this Work Item a "Study Item"? (Yes / No):.....Yes

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

OAM&P 8 (Operations, Administration, Maintenance & Provisioning) Feature: OAM8, ID 340063

3 Justification

The EMS (Element Management System) plays an important role in network management architecture.
In general, the EMS is provided by Vendors of the nodes and
Operators, using IRPManager, can manage the nodes through the EMS.

Therefore, when EMS is unavailable or down, the Operator, using IRPManager, would not be able to manage the nodes.
Vendors of EMS supply proprietary interface via which the EMS itself can be managed and maintained.
Currently, the management of EMS is not standardized.

Issues to be part of this study:

1) If new 3GPP specification is required (e.g. use potentially existing industry or de facto commercial standards)
2) EMS configuration data backup and restoration
3) Time Synchronization between IRP Manager and IRP Agent
4) Resources monitoring on IRP Agent
5) Software version management of EMS
6) Should Communication Surveillance IRP, e.g. enhancement, to be included in this study

The currently existing 3GPP SA5 IRPs are mainly focused on the management of nodes such as UMTS network nodes (e.g. CM IRPs, Common IRPs, FM IRPs, PM IRP, Trace IRP).
As shown in figure1, currently there are no IRPs to support the management of EMS.

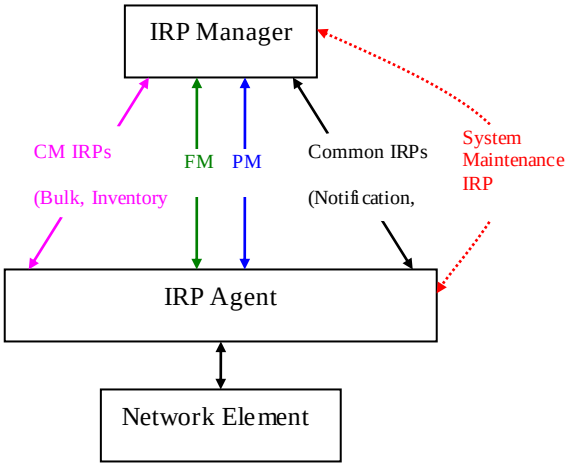

Figure 1

4 Objective

The EMS (e.g. IRPAgent and its associated YyyIRPs) is vital for network management in that network management activities would cease if EMS is unavailable or down. Because of its vital role, it is important that the EMS should be properly managed and maintained.

No doubt, vendors have been providing proprietary means to manage their EMS.

This study is to evaluate if some key or core EMS management functions can be standardized to support a better (most cost/effective) management paradigm in a multi-vendor network environment.

This study will focus on managing the EMS, including as examples:

1) what kind of maintenance operations can be standardized,
2) what kind of information in IRPAgent and YyyIRP shall be modelled.
3) what standard/de facto standards currently exist; comparison; benefits of having a 3GPP specified solution.

The study result can be the baseline of the maintenance of IRPAgent system and may lead to define a new interface IRP in a subsequent implementation work item.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

Not known

9 Impacts

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

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

New specifications [If Study Item, one TR is anticipated]						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TR 32.822	Study on System Maintenance over ltf-N	SA5		SA#45 Sep 2009	SA#45 Dec 2009	

Affected existing specifications [None in the case of Study Items]				
Spec No.	CR	Subject	Approved at plenary#	Comments

11 Work item rapporteur(s)

Huang Shuqiang, ZTE (huangsq@zte.com.cn)

12 Work item leadership

SA5

13 Supporting Companies

ZTE, China Mobile, Vodafone, Huawei, Nortel

14 Classification of the WI (if known)

X	Study Item (no further information required)
	Feature (go to 14a)
	Building Block (go to 14b)
	Work Task (go to 14c)

Technical Specification Group Services and System Aspects **TSGS#41(08)0461**
Meeting #41, 15 - 18 September 2008,
Kobe, Japan

Source:	**SA WG5**
Title:	**Extend the study scope of TR32.821**
Document for:	**Approval**
Agenda Item:	**10.31**

3GPP TSG-SA5 (Telecom Management) **S5-0801234**
Meeting SA5#60, 7 - 11 July 2008, Sophia Antipolis, France *revision of S5-081192*

Source:	**Huawei**
Title:	**Extend the study scope of TR32.821**
Document for:	**Discussion & approval**
Agenda Item:	**6.10.1**

3GPP TSG-SA5 (Telecom Management) **S5-071061**
Meeting SA5#52, 02 - 06 Apr 2007, Xi'an, China

Work Item Description

Title

Study of Self-Organising Networks (SON) related OAM interfaces for Home NodeB UID_360007 - Moved from Rel-8

Acronym: FS_OAM-SON-HNB

Is this Work Item a "Study Item"? (Yes / No): YES

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

- SA5 WT Study of Management for E-UTRAN and SAE UID_340036

3 Justification

3GPP SA5 has agreed to accept Self-Organising Networks (SON) in studying E-UTRAN&SAE OAM architecture, and 3GPP RAN has agreed to study UTRAN home NodeB (see RP-070257) and E-UTRAN home NodeB (see RP-070262).

For SON, it is expected that UE, NodeB, OAM system (both Element Management System (EMS) and Network Management System (NMS) in E-UTRAN/UTRAN system are involved in supporting SON as listed below:

1) Interface between NMS and EMS
2) Interface between 2 EMSs
3) Interface between EMS and NodeB
4) Interface between 2 NodeBs
5) Interface between UE and NodeB.

For both E-UTRAN and UTRAN home NodeB, SON is expected to be necessary because:

1) Number of home NodeB can be very big.

2) Subscriber may switch on and off home NodeB frequently.
3) Operator may not be able to access home NodeB physically as it is located in subscriber's place.

Since 3GPP SA5 plays a leading role in defining GSM, 3G OAM specifications, it is expected that 3GPP SA5 can also play a leading role in the study of SON from OAM aspect and OAM related interfaces, especially for E-UTRAN and UTRAN home NodeB.

4 Objective

By studying SON related interfaces from OAM aspect, 3GPP SA5 should:

1. Define SON and OAM solution for both E-UTRAN and UTRAN home NodeB.
2. Identify differences between SON and OAM solution architecture for E-UTRAN Macro eNodeB and that for E-UTRAN and UTRAN home NodeB; Propose aligned SON OAM solution architecture.
3. Identify what can be standardized for SON and OAM for E-UTRAN and UTRAN NodeB in 3GPP SA5.
4. Prepare the work for a later implementation work item.

5 Service Aspects
None

6 MMI-Aspects
None

7 Charging Aspects
None

8 Security Aspects
It is necessary to take Security aspect into account when studying Itf-S.

9 Impacts

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

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

New specifications [If Study Item, one TR is anticipated]						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TR 32.821	Study of OAM and SON for Home NodeB	SA5		SA#42	SA#46 Dec 2009	
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#	Comments	

11 Work item rapporteur(s)
Zou Lan (zlan@huawei.com)

12 Work item leadership
SA5

13 Supporting Companies
Huawei, Nortel, Nokia Siemens Networks, T-Mobile, Vodafone, ZTE

14 Classification of the WI (if known)

X	Study Item (no further information required)
	Feature (go to 14a)
	Building Block (go to 14b)
	Work Task (go to 14c)

Technical Specification Group Services and System Aspects ***TSGS#39(08)0076***
Meeting #39, 10 - 13 March 2008, Puerto Vallarta, Mexico

Source:	**SA5 (Telecom Management)**
Title:	**New WID on Study of Self-healing of SON (OAM8-Studies)**
Document for:	**Approval**
Agenda Item:	**12.14 (OAM8-Studies) - OAM&P Studies**

Work Item Description

Title

Study on Self-healing of SON UID_390017 - Moved from Rel-8

Is this Work Item a "Study Item"? (Yes / No):.....Yes

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

UID_340063 OAM&P 8 (Operations, Administration, Maintenance & Provisioning) - OAM8
UID_340036 Study of Management for LTE and SAE (draft TR 32.816) under OAM8-Studies

3 Justification

The target of SON is to maintain network quality and performance with a minimum of manual intervention from the operator.
Self-optimization and self-healing functionality will monitor and analyse fault management data, alarms, notifications, and self-test results and will automatically trigger corrective action on the affected network node(s) when necessary. This will significantly reduce manual interventions and replace them with automatically triggered re-optimizations, re-configurations, or software reloads/upgrades thereby helping to reduce operating expense.

The ongoing work in TSG RAN on SON for RRM also requires OAM support.
As a consequence the scope of SON self optimization also includes:

- Load balancing
- Handover Parameter optimization
- Interference control
- Capacity and coverage optimization
- RACH optimization

4 Objective

This work item focuses only on Self-healing. The object of this work item is to study the solution of Self-healing and collect the requirements for Self-Healing.

5 Service Aspects
None

6 MMI-Aspects
None

7 Charging Aspects
None

8 Security Aspects
None

9 Impacts

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

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

New specifications [If Study Item, one TR is anticipated]						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TR 32.823	Study on Self-healing of SON	SA5		SA#45 Sep 2009	SA#45 Dec 2009	
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#	Comments	

11 Work item rapporteur(s)

Zhu Weihong, ZTE (zhu.weihong@zte.com.cn)

12 Work item leadership

SA5

13 Supporting Companies

ZTE, Vodafone, T-Mobile, Telecom Italia, Telefonica, Motorola

14 Classification of the WI (if known)

X	Study Item (no further information required)
	Feature (go to 14a)
	Building Block (go to 14b)
	Work Task (go to 14c)

Technical Specification Group Services and System Aspects ***TSGS#40(08)0281***
Meeting #40, 2 - 5 June 2008, Prague, Czech Republic

Source: **SA5**
Title: **Study on SOA for IRP**
Agenda Item: **12.15**

3GPP TSG-SA5 (Telecom Management) **S5-080872**
Meeting SA5#59, 21 - 25 April 2008, Chengdu, CHINA *revision of S5-080845*

Source: **Ericsson**
Title: **Study on SOA for IRP**
Document for: **Approval**
Agenda Item: **6.02 New OAM Work Item proposals**

Work Item Description

Title:
Study on SOA for IRP UID_400029
Acronym: FS_OAM_SOA_IRP

Is this Work Item a "Study Item"? (Yes / No):.....Yes

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

UID_340063 OAM&P 8 (Operations, Administration, Maintenance & Provisioning), Feature: OAM8

3 Justification

Service Oriented Architecture (SOA) is currently gaining high attention and acceptance in the IS/IT industry.
It promises to manage change & automate and simplify IT processes (SOA Management and Security), optimize implementation, maximize (implementation) flexibility and scalability (SOA/Web services-based applications), facilitate integration beyond the enterprise (between companies, between partners and customers), simplify development and maintenance; etc.
The IRP (Interface Reference Point) concept and set of specifications developed by 3GPP is the predominant standard for wireless network management since year 2000. 3GPP and 3GPP2 have developed it in close collaboration.
The IRP architecture follows closely the ITU-T TMN work.
Besides publishing the IRP specifications, 3GPP also publishes its IRP methodology (e.g., the guidelines, templates on how to develop, maintain and publish IRP specifications). Today, the IRP specification methodology is being shared and jointly evolved and maintained by a number of organizations, such as ITU-T.
The descriptions or definitions of SOA have been produced by various groups.
The principles of SOA are currently being applied to the field of network management.

4 Objective

a) Identify the need (Requirement) for an IRP to be SOA compliant.

b) Once the need identified, identify subsequently if there are additional capabilities needed for the existing and currently planned Interface IRPs such that they can be considered SOA compliant.
"Compliant" does not mean protocol compliance, where protocol test cases are needed to test if the subject is "in compliance" or not.

c) Based on the identification done in b), revise the identified Interface IRPs accordingly.
If step b) has identified e.g. that Entry Point IRP needs an extra capability allowing YyyIRPs to register their services such that IRPManagers can discover the availability of the services, then
step c) should revise the Entry Point IRP Requirement, IS and SSs accordingly.

NOTE: For step c) a new Implementation Work Item will be created.

5 **Service Aspects**
None

6 MMI-Aspects
None

7 Charging Aspects
None

8 Security Aspects
Capabilities to secure the capabilities in existing YyyIRP shall be used to secure the capabilities mentioned in steps b) and c) above.
Network operators have sole responsibility to decide if such security capability is needed or not. 3GPP should/could not make such decision.

9 Impacts

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

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

New specifications [If Study Item, one TR is anticipated]						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TR 32.824	Study on SOA compliant need and additional capabilities for existing/currently planned Interface IRPs	SA5		SA#43 Sep 2009	SA#44 June 2009	
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#		Comments

11 Work item rapporteur(s)
Edwin TSE (Ericsson)

12 Work item leadership
SA5

13 Supporting Companies
Ericsson, Huawei, Nortel, TeliaSonera, Nokia Siemens Networks

14 Classification of the WI (if known)

X	Study Item (no further information required)
	Feature (go to 14a)
	Building Block (go to 14b)
	Work Task (go to 14c)

Technical Specification Group Services and System Aspects **TSGS#41(08)0464**
Meeting #41, 15 - 18 September 2008,
Kobe, Japan

Source:	**SA5**
Title:	**New SID on Rc Reference Point**
Document for:	**Approval**
Agenda Item:	**12.18**

3GPP TSG-SA5 (Telecom Management) **S5-081204**
Meeting SA5#60, 7 - 11 Jul 2008, Sophia Antipolis, FRANCE

Source:	**Huawei, China Mobile**
Title:	**New SID on Rc Reference Point**
Document for:	**Approval**
Agenda Item:	

Study Item Description

Title

Study on Rc Reference Point Functionalities and Message Flows

UID_410044 -Moved to Rel-10

Technical Specification Group Services and System Aspects TSGS#43(09)0048

Meeting #43, 9 - 12 March 2009, Biarritz, France

3GPP TSG-SA5 (Telecom Management) **S5-091460**
Meeting SA5#63, 16-20 February 2009, Prague, Czech Republic

Source:	**Alcatel-Lucent, China Mobile, Huawei, Orange, Telefonica, T-Mobile, Vodafone**
Title:	**Proposal for a new Study Item on Energy Savings Management**
Document for:	**Approval**
Agenda Item:	**6.02 – New OAM Work Item proposals**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

Telecommunication Management; Energy Savings Management (ESM)

UID_430044-Moved to Rel-10

TSG SA Meeting #44 **SP-090318**
01 - 04 June 2009,
Oranjestad, Aruba

3GPP TSG-SA5 (Telecom Management) ***S5-092147***
Meeting SA5#64, 30 Mar – 3 Apr 2009 Hangzhou, CHINA *revision of S5-091xyw*

Source:	**SA5 (Telecom Management)**
Title:	**New SID on Study on EPC Charging enhancement**
Document for:	**Approval**
Agenda Item:	**7.02**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

Study on EPC Charging enhancement (FS_EPCcharg) UID_440050-Moved to Rel-10

TSG SA Meeting #44 **SP-090462**
01 - 04 June 2009,
Oranjestad, Aruba

3GPP TSG-SA5 (Telecom Management) **S5-092064**
Meeting #64 March 30 - April 3, 2009, Hangzhou, CHINA

Source:	**Motorola, Qualcomm Europe, Vodafone, T-Mobile, Telefonica, Telecom Italy, Orange**
Title:	**New SID on Study on User Equipment Management (UEM)**
Document for:	**Approval**
Agenda Item:	**6.x**

3GPP™ Work Item Description

For guidance, see 3GPP Working Procedures, article 39; and 3GPP TR 21.900.

Study on Integration of device management information with Itf-N (FS_UEM)

UID_440069-Moved to Rel-10

Annex A:
Status list of Work items

This list reflects work items, ongoing, completed or stopped.

400035	**Enhanced Home NodeB / eNodeB**	EHNB
420036	**3G HNB Gateway and LTE HeNB Gateway OAM&P**	HNB-OAM_GW
430012	**3G HNB and LTE HeNB OAM&P Type 1 Interface**	HNB_eHNB-OAM_Type1
440066	**3G HNB and LTE HeNB OAM&P Type 2 Interface**	HNB_eHNB-OAM_Type2
400032	**Multi-Media Telephony Service enhancements**	eMMTel
430031	**Multimedia Telephony (MMTel) Service and Supplementary Services - Online Charging and completion for Offline Charging (all supplementary services)**	eMMTel-SS-CH
430032	**Support of Real-time Transfer of Tariff Information (RTTI) in IMS charging**	IMSTSS-RTTI-CH
400034	**User Data Convergence**	UDC
440060	**User Data Convergence - Modelling and Management**	UDC-MMAN
440062	UDC – Framework for Model Handling and Management	UDC-MMAN-MFRM
440061	UDC – Common Baseline Information Model	UDC-MMAN-CBIM
400039	**MBMS support in EPS**	MBMS_EPS
430033	**MBMS Charging in EPS**	MBMS_EPS
420029	**OAM&P 9**	OAM9
420030	**Network Infrastructure Management**	OAM9-NIM
420031	Software Management for Network Elements	OAM9-NE_SWM
440064	Service Oriented Architecture (SOA) for IRP	OAM9
440065	IRP SOAP Solution Sets continuation from Rel-8	OAM9
420032	**Performance Management**	OAM9-PM
430041	Enhancement of E-UTRAN Performance Measurements	OAM9
430042	Enhancement of EPC Performance Measurements	OAM9
440059	Enhancement of UTRAN Performance Measurements	OAM9
420033	***Deleted - Trace***	*OAM9-Trace*
430043	**Self-Organizing Networks (SON) - OAM aspects**	OAM9-SON
390007	SON self-optimization management	LTE_SON-OAM
440067	Automatic Radio Network Configuration Data Preparation	OAM9
440058	**Subscription Management (SuM) evolution**	OAM9-SuM
440068	**Charging Management small Enhancements**	CH9
360006	**Study on System Maintenance over Itf-N**	FS_OAM-Maint-Itf-N
360007	**Study on Self-Organizing Networks (SON) related OAM interfaces for Home NodeB**	FS_OAM-SON-HNB
390017	**Study on Self-healing of Self-Organizing Networks (SON)**	FS_OAM-SON-SH
400029	**Study on Service Oriented Architecture (SOA) for IRP**	FS_OAM_SOA_IRP

Annex B:
Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
2010-09	SA#49	SP-100525	--	--	Presentation to SA for Information and Approval	---	1.0.0
2010-10	--	--	--	--	Publication	1.0.0	9.0.0