

3GPP TR 30.818 V8.0.0 (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 8
(Release 8)**



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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: Operations, Administration, Maintenance & Provisioning (OAM8) UID_340063

3.1 BB: Network Infrastructure Management

Technical Specification Group Services and System Aspects
Meeting #36, 4 – 7 June 2007, Busan, KOREA

TSGS#36(07)0296

Source: SA5 (Telecom Management)
Title: WID Telecom Management Methodology - Unique_ID 35051
Document for: Approval
Agenda Item: 10.4x (OAM8) - OAM&P Rel 8

3GPP TSG-SA5 (Telecom Management)
Meeting #52, Xián, CHINA, 02 - 06 April 2007

S5-070672
revision of S5-050287

Work Item Description

Title:

Telecom Management Methodology UID_35051

Acronym: OAM8

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

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

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

3 Justification

Telecom Management capabilities and functions evolve continuously because for example, new functions are added to manage new kind of nodes introduced into the network, more efficient functions and capabilities are introduced, new technologies are added, old technologies are not longer used. There is a constant need to enhance and further develop the methodology for the evolved Telecom Management area.

To spread the way of working for Telecom Management, the methodology developed by 3GPP is promoted outside 3GPP. The use of the same or similar methodology to develop management capabilities for the various networks would facilitate the integration of these systems and networks where telecom is a part of. Therefore there are some dependencies on external bodies, e.g. 3GPP2, ITU-T and ETSI that are using a methodology that is common to 3GPP. The needs from these external bodies have to be taken into account.

Requirements methodology is developed jointly with ITU-T and ETSI. That work needs to be finished. IS methodology is being developed jointly with ITU-T and ETSI. Also this work needs to be finished. SS methodology needs to be developed jointly with ITU-T and ETSI.

The methodology for XML technology was started in Rel-7 and needs to be completed.

In Rel-7 the SOAP technology was introduced. The methodology for how to use it needs to be developed, so that the same problems do not occur as for XML.

It is still not clear how vendor specific extensions shall be done for XML.

4 Objective

To complete the joint methodology for Requirements and IS together with ITU-T and ETSI.

To develop a joint methodology for SS together with ITU-T and ETSI.

To finish the started methodology for XML.

To develop a methodology for SOAP.

To develop a methodology for vendor specific extensions for XML.

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						
Spec No.	Title	Prime resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.155	Telecommunication management; Requirements template	SA5		SA#36 Jun 2007	SA#37 Sep 2007	
32.153	Telecommunication management; IRP technology specific template	SA5		SA#39 Mar 2008	SA#43 Mar 2009	
Affected existing specifications						
Spec No.	CR	Subject	Approved at plenary#	Comments		
32.150			SA#42 Dec 2008	IRP Concept and definitions		
32.151			SA#42 Dec 2008	IRP Information Service (IS) template		
32.152			SA#42 Dec 2008	IRP Information Service (IS), UML repertoire		
32.154			SA#42 Dec 2008	BFC Concepts and definitions		

11 Work item rapporteur(s)

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12 Work item leadership

SA5

13 Supporting Companies

Ericsson, Huawei, Nokia Siemens Networks, Nortel

14 Classification of the WI (if known)

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

14c The WI is a Work Task: parent Building Block
(one Work Item identified as a building block)

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

Technical Specification Group Services and System Aspects
Meeting #36, 4 – 7 June 2007, Busan, KOREA

TSGS#36(07)0492

Source: SA5 (Telecom Management)
Title: WID Advanced Alarming on Itf-N - Unique_ID 35053
Document for: Approval
Agenda Item: 10.4x (OAM8) - OAM&P Rel 8

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#52, 2 - 6 April 2007, Xi'an, CHINA

S5-070496
revision of S5-050289

Work Item Description

Title:

Advanced Alarming on Itf-N UID_35053

Acronym: OAM8

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

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

3 Justification

The current definitions of Information Object Classes (IOCs) and their notifications in case of alarms and changes related to them put a high burden on both, the IRP managers and IRP agents. In alarm situations the number of notifications to be sent across the Itf-N can be very high, but often the information/data contained in the notifications does not justify their transmission.

It is also possible that one error results in several alarm notifications and/or additional notifications indicating state or attribute value changes.

4 Objective

- Define requirements and methods to improve the information content of alarms (e.g. to help identify the root cause of an alarm and the instances affected by it), thereby contributing to reduce the time-to-repair.
- Define configurable rules for advanced alarm filtering and reducing the number of alarms by applying such advanced alarm filtering.

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 (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TS 32.121	Advanced Alarm Management (AAM) IRP: Requirements	SA5		SA#36 Jun 2007	SA#39 Mar 2008	
TS 32.122	Advanced Alarm Management (AAM) IRP: Information Service	SA5		SA#37 Sep 2007	SA#39 Mar 2008	
TS 32.123	Advanced Alarm Management (AAM) IRP: CORBA Solution Set	SA5		SA#39 Mar 2008	SA#40 Jun 2008	
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	

11 Work item rapporteur(s)

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12 Work item leadership

SA5

13 Supporting Companies

Nokia Siemens Networks, Ericsson, Alcatel-Lucent, China Mobile, Huawei, Motorola, ZTE, Nortel

14 Classification of the WI (if known)

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

14c The WI is a Work Task: parent Building Block
(one Work Item identified as a building block)

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

Technical Specification Group Services and System Aspects **TSGS#36(07)0300**
 Meeting #36, 4 – 7 June 2007, Busan, KOREA

Source: SA5 (Telecom Management)
Title: WID CN CS Bearer Transport Network (BTN) relative NRM - Unique_ID 35056
Document for: Approval
Agenda Item: 10.4x (OAM8) - OAM&P Rel 8

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#53, 7-11 May 2007, Sophia Antipolis, France

S5-071046
revision of S5-050292

Work Item Description

Title:

CN CS Bearer Transport Network (BTN) relative NRM UID_35056

Acronym: OAM8

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

1 3GPP Work Area

	Radio Access
X	Core Network
	Services

2 Linked work items

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

3 Justification

Circuit is a logic link between two exchange network nodes which bear the user data such as voice, e.g. 64K slot of one 2M E1. Traffic route represents the route via which bearer flow to a specific destination.

To learn the detailed circuit connection relationship between network nodes and traffic route configuration status of the CN CS, bearer transport network related NRM need to be defined, such as circuit, traffic route, etc.

4 Objective

Define Bearer Transport Network (BTN) related NRM applicable to CN CS of UMTS.
 Add BTN relative NRM definition of the CN CS to 32.63x Configuration Management (CM); Core network resources IRP.

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 (to be updated at each plenary)

New specifications						
Spec No.	Title	1 st resp. WG	2 nd resp. WG(s)	Presented for Information	Presented for Approval	Comments
Affected existing specifications						
Spec No.	CR	Subject	CR Approved	Comments		
TS 32.632		Add BTN related NRM	SA#42 Dec 2008			
TS 32.633		Add BTN related CORBA SS	SA#42 Dec 2008			
TS 32.635		Add BTN related file format definition	SA#42 Dec 2008			

11 Work item rapporteurs

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12 Work item leadership

SA5

13 Supporting Companies

China Mobile, Huawei, ZTE, Nortel

14 Classification of the WI (if known)

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

(one Work Item identified as a building block)

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

Technical Specification Group Services and System Aspects
Meeting #37, 17 - 20 September 2007, Riga, LATVIA

TSGS#37(07)0618

Source: SA5 (Telecom Management)
Title: WID on End point modelling for reference point (OAM8) - OAM&P Rel 8
Document for: Approval
Agenda Item: 10.22 (OAM8) - OAM&P Rel 8

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#54, 25 - 29 June 2007, Orlando, FL USA

S5-071355

Work Item Description

Title:

End point modelling for reference point UID_370002

Acronym: OAM8

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

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 end point model is necessary for the management of the reference point from NE side, e.g., for the configuration of end point from two NE sides to enable the reference point working well, also necessary for the monitoring of working status of the end point by collecting performance measurements or generating alarms, etc.

Currently, the end point model of reference point is not specified in 3GPP OAM specifications, but only some of reference points are modelled from the network level by referring to the ITU-T recommendation (M.3100). While in ITU-T recommendation (M.3100), both the end point or termination point and the reference point are covered by separate models for different purposes and usages. It is expected that SA5 can standardize the end point model in 3GPP OAM specifications, by referencing the existing ITU-T method (see ITU-T Rec. M.3100).

It is agreed from offline discussion in SA5 to model the end point of reference point as separate models rather than replacing the existing "Link" model in 3GPP OAM NRM IRP specs.

4 Objective

- 1). to generate a gap analysis about current end point modelling in 3GPP SA5 NRMs and comparison to ITU-T M.3100, the analysis will contain the identification of similarities, differences and missing end point models;
- 2). to define the general method for end point modelling;
- 3). to define the detailed end point models, such as the end point model of the Iur reference point, Iu CS/Iu PS reference point, Nc reference point, Mb reference point, etc;
 - Which domain the end point is needed to model is for discussion, and which detailed end model to be defined is for discussion case by case, the initial plan is to define end point model in all of the domains.
- 4). to determine whether the relationship between end point model and reference point (Link) model is needed, define it if needed.
- 5). to generate CRs to define the missing end points of reference point in the 3GPP NRM IRP specs, including the

general end point modelling method and the detailed end point models in the respective NRM IRP specs.

- 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 (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
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#	Comments	
32.62x				SA#42 Dec 2008	Generic NRM IRP	
32.152				SA#42 Dec 2008	IRP Information Service UML repertoire	
32.63x				SA#42 Dec 2008	CN NRM IRP	
32.64x				SA#42 Dec 2008	UTRAN NRM IRP	
32.73x				SA#42 Dec 2008	IMS NRM IRP	

- 11 **Work item rapporteur(s)**
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- 12 **Work item leadership**
SA5
- 13 **Supporting Companies**
Motorola, Nortel, CMCC, ZTE
- 14 **Classification of the WI (if known)**

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

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

(one Work Item identified as a building block)

OAM&P 8 (OAM8) Unique_ID: 340063

Technical Specification Group Services and System Aspects
Meeting #39, 10 - 13 March 2008, Puerto Vallarta, Mexico

TSGS#39(08)0068

Source: SA5 (Telecom Management)
Title: New WID Alignment with eTOM and NGNM
Document for: Approval
Agenda Item: 10.38 (OAM8) - OAM&P Rel 8

Work Item Description

Title

Alignment with eTOM and M.3060 architectural concepts UID_390016

Acronym: OAM8

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

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

**OAM&P 8 (Operations, Administration, Maintenance & Provisioning), Feature: OAM8
UID_340064 Network Infrastructure Management 8 (OAM8)**

3 Justification

The PLMN Management architecture is based on ITU-T TMN recommendation, as defined in M.3010 and early work of TMForum addressing common working procedures in Telecom called "Telecom Operations Map" (TOM).

TMForum has developed the extended TOM (eTOM), superseding TOM and now widely adopted among telecom operators. ITU-T has published a new set of TMN documents incorporating requirements for the management of Next Generation Networks (NGN), a service-oriented architecture and also alignment with the new updated business process views from eTOM. Valuable new concepts are presented to better support network services, business processes and to reduce operational costs.

The 3GPP TM specifications need to adopt the development of the telecom operators market and the challenges the new services will have on management of our networks. The prime approach of the 3G TM work was to reuse functions, methods and interfaces already defined (or being defined) that were suitable to the management needs of a PLMN.

The fundamental reused platforms have been updated and our specifications need to be updated accordingly.

4 Objective

The TMN NGN architecture have included a new business process view, based on eTOM.

The goal of NGN is to provide the capabilities to make the creation, deployment, and management of all kinds of services possible. In order to achieve this goal, it is necessary to decouple and make independent, the service creation/deployment infrastructure from the transport infrastructure. Such decoupling is reflected in the NGN architecture as the separation of the Transport and Service strata and shown as two independent stratum.

New referencepoints enabling more run-time flexibility are added. The BML layer is obsolete. A new management layered architecture is introduced. Significant redefinitions of basic concepts as management function blocks, WSF is absorbed into OSF and NEF.

The new concepts implies a better alignment between 3GPP management standards and ITU-T TMN NGN, ETSI TISPAN NGN OSS Architecture standards. The following major workitems tasks can be recognized:

- 1) Update of 3GPP TS 32.102: "3G Telecom Management Architecture", related to reuse of ITU-T TMN material.
- 2) Update of 3GPP TS 32.101: "Telecommunication management; Principles and high level requirements", related to primarily reuse of Telecom Operations Map (TOM).
- 3) Identify any other 3GPP series 32 specification affected by the new TMN architecture and the extended TOM (eTOM).

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 resp. WG	2ndary resp. 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	
32.102: "3G Telecom Management Architecture".		Update of ITU-T TMN NGNM architectural concepts			SA#42 Dec 2008		
32.101: "Telecommunication management; Principles and high level requirements".		Update of primarily Telecom Operation Map references.			SA#42 Dec 2008		
TS 32.*		Updates of TMN and TOM references, to be identified.			SA#42 Dec 2008		

11 Work item rapporteur(s)

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12 Work item leadership

SA5

13 Supporting Companies

TeliaSonera, Nortel, T-Mobile, Telefonica

14 Classification of the WI (if known)

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

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

UID_340064 Network Infrastructure Management 8 (OAM8)

**3GPP TSG SA Plenary Meeting #40
Prague, Czech Republic, 2 - 5 June 2008**

SP-080276

Source: SA5 (Telecom Management)
Title: SOAP Solution Sets
Document for: Approval
Agenda Item: 10.42

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

S5-080871
revision of S5-080844

Source: Ericsson
Title: SOAP Solution Sets
Document for: Approval
Agenda Item: 6.02 New OAM Work Item proposals

Work Item Description

Title:

SOAP Solution Set UID_400030

Acronym: OAM8

(few words)

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

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

- Currently, the 3GPP SA 5 32-series IRP specifications are mainly using one type of Solution Set (SS), namely CORBA.
- The CMIP SS technology has been discontinued after Rel-6.
- SA5 has defined SOAP SSs for the Interface IRPs (such as Basic CM IRP in 32.60x) supporting Subscription Management NRM IRP (TS 32.17x), but SOAP SSs are lacking for other IRPs such as the Alarm IRP (TS 32.111-x).
- 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 *all* IRPs that do not already have SOAP SSs defined, excluding Subscription Management IRP. The word “all” here implies all Rel-7 defined IRPs and all new IRPs planned for Rel-8, such as EUTRAN NRM IRP.

This WI does not need to cover Requirements or Information Services of these IRPs.

The overall characteristics of this set of SOAP SSs are:

1. evaluate the existing message design patterns, such as the one being worked on at the moment by the “Joint XML Guidelines discussion group” (cooperation group between 3GPP SA 5, TMF mTOP, ITU-T SG4, TISPAN WG8 and ATIS TMOG holding virtual meetings with the objective to define common guidelines for XML specifications)

and the one employed by the current SOAP SSs (designed for Subscription Management), and choose one for use by all new SOAP SSs.

2. In the event that SA5 does not want to use the output of the “Joint XML Guidelines discussion group” because of some identified problems, then SA5 should consider the use of other SDOs' guidelines, such as MTOSI XML recommendation provided that it does not have the same problems.
3. These SOAP SS shall be based on Internet transport protocols such as HTTP, FTP and SMTP and excepting MIME encoded binary data attachment (if any), messages shall be in XML and carried by SOAP. Note at the present time, the W3C has defined bindings for HTTP and eMail (RFC 2822). There is not standardized binding for FTP.
4. There is no a priori requirement that these new SOAP SS be SOAP RPC style or SOAP document-centric style. It shall be decided on per IRP case by case basis.
5. Prior to production of SOAP SSs, SA5 shall have substantial agreement in its SS guidelines for usage of SOAP. This work should naturally take into account recommendations of other SDOs' work (see bullet one and two)
6. The description of a service shall be in [WSDL](#).
7. This WI goal is to follow the conclusion reached by 3GPP TR 32.809 and TR 32.818.

It is unlikely that all SOAP SSs identified in section 10 can be produced within the Re1-8 time frame. Like any 3GPP work, the SOAP SS production priority is also driven by company contributions. There is no need for this WI to set or agree a priority list.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

Capabilities to secure the capabilities shall be defined.

Network operators have sole responsibility to decide if such 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			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
32.111-7	Alarm IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.617	Bulk CM IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.417	Performance Management (PM) IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.367	Entry Point (EP) IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.627	Generic network resources IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.327	Test management IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.337	Notification Log (NL) IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.347	File Transfer (FT) IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.357	Communication Surveillance IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.387	Partial Suspension of Iff-N IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.397	Delta Synchronization RP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.447	Trace Management IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.637	Core network resources IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.647	UTRAN network resources IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.657	GERAN network resources IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.677	State Management IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.697	Inventory Management network resources IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.717	Transport Network interface NRM IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.727	Repeater network resources IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.737	IMS NRM IRP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.747	Signalling Transport Network interface NRM RP SOAP SS	SA5		SA#43 Mar 2009	SA#43 Mar 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, Nortel, Huawei, TeliaSonera, Motorola

14 Classification of the WI (if known)

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

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

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

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

UID_340063 **OAM&P 8**

OAM8

UID_340064 **Network Infrastructure Management 8**

OAM8-NIM

UID_340065 **Performance Management 8**

OAM8-PM

3GPP TSG SA Plenary Meeting #45
Seville, Spain, 21 - 24 September 2009

SP-090553

3GPP™ Work Item Description

For guidance, see [3GPP Working Procedures](#), article 39; and [3GPP TR 21.900](#).

Creation of Missing Rel-8 Specifications UID_450052

Acronym: OAM8

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
340064	OAM Network Infrastructure Management (OAM8-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 *

The XML definitions for the IRPs below were not specified in Rel-8. These definitions are required for implementation of a Rel-8 Notification Log IRP. It is not possible to log the notifications generated by Rel-8 implementations of these IRPs. Furthermore, these XML definitions are needed in the specification of SOAP Solution Sets for these IRPs. Without these XML definitions it will not be possible to complete the Rel-9 WI “IRP SOAP Solution Sets continuation from Rel-8 (OAM9) (UID_440065)”.

4 Objective *

The objective is to create the missing specifications listed below. These specifications are needed to support a Rel-8 Notification Log implementation.

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 resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TS 32.125	“Telecommunication management; Advanced Alarm Management (AAM) Integration Reference Point (IRP);”	SA5		SA#46	SA#46	
TS 32.355	“Telecommunication management; Communication Surveillance (CS) Integration Reference Point (IRP)”	SA5		SA#46	SA#46	
TS 32.505	“Telecommunication management; Self-Configuration of Network Elements Integration Reference Point (IRP)”	SA5		SA#46	SA#46	
TS 32.535	“Telecommunication management; Software management Integration Reference Point (IRP)”	SA5		SA#46	SA#46	Note that this is related also to the Rel-9 WID “Management of software entities residing in Network Elements UID_420031” which will need 32.535 to create 32.537 as proposed in that WID.
Affected existing specifications *						
[None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#	Comments	
TS 32.150		Add XML file format definition into IRP concepts (today it only includes RS, IS, SS), as agreed in S5-093318			Telecommunication management; Integration Reference Point (IRP) Concept and definitions	
TS 32.153		Add XML template and XML definition and usage guidelines, as agreed in S5-093318			Telecommunication management; Integration Reference Point (IRP) technology specific templates, rules and guidelines	
TS 32.335		Add missing XML namespaces to tables and import in schema.			Telecommunication management; Notification Log (NL) Integration Reference Point (IRP); eXtensible Markup Language (XML) solution definitions	

11 Work item rapporteur(s) *

Shuqiang Huang (ZTE), huangsq@ZTE.COM.CN

Work item leadership *

SA5

13 Supporting Individual Members *

Supporting IM name
Ericsson
Nokia Siemens Networks
Huawei
ZTE

3.2 BB: Performance Management

Technical Specification Group Services and System Aspects **TSGS#36(07)0301**
 Meeting #36, 4 – 7 June 2007, Busan, KOREA

Source:	SA5 (Telecom Management)
Title:	WID IP bearer network Performance measurement definitions - Unique_ID 35061
Document for:	Approval
Agenda Item:	10.4x (OAM8) - OAM&P Rel 8

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

S5-071047
revision of S5-050297

Work Item Description

Title:

IP bearer network Performance measurement definition UID_35061

Acronym: OAM8

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

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

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

3 Justification

Standardising performance measurements can bring a unified criterion for operators to evaluate the performance of networks provided by different vendors. With the evolution of RAN and All-IP Networks, it is very important to measure the performance of IP network between any two among RNCs, SGSNs, GGSNs, MGWs and MSC Servers. At present, 3GPP does not have performance measurements for it. Hence, it is necessary for us to look into ways to define these measurements. This WT proposes to widen the scope of TS 32.32x TestIRP to include 3GPP support of IP network performance measurements either by reference to existing measurements from other standards bodies or by initiating an effort in those standards bodies to include the counters that we would identify in this WT. IP performance mainly deals with the time delay, jitter, packet loss etc between any two NEs.

Some of the IP network performance measurements methods have been defined in other standard bodies, such as IETF, so their work can be used as reference.

4 Objective

Include support of Performance Measurement Counters for IP bearer network in TS 32.32x Test IRP either by reference to existing measurements from other standards bodies (ITU-T, IETF) or by initiating an effort in those standards bodies to include the counters that we would identify in this WT.

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 (to be updated at each plenary)

New specifications						
Spec No.	Title	1 st resp. WG	2 nd resp. WG(s)	Presented for Information	Presented for Approval	Comments
Affected existing specifications						
Spec No.	CR	Subject	CR Approved	Comments		
32.321			SA#42 Dec 2008	Test management IRP: Requirements		
32.322			SA#42 Dec 2008	Test management IRP: Information Service		
32.323			SA#42 Dec 2008	Test management IRP: CORBA Solution Set		

- 11 Work item rapporteurs**
 China Mobile (lilianyuan@chinamobile.com)
- 12 Work item leadership**
 SA5
- 13 Supporting Companies**
 China Mobile, Huawei, ZTE, Motorola
- 14 Classification of the WI (if known)**

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

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

(one Work Item identified as a building block)

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

Technical Specification Group Services and System Aspects
Meeting #38, 03 - 06 December 2007, Cancun, MEXICO

TSGS#38(07)0835

Source: SA5 (Telecom Management)
Title: WID HSUPA performance measurements
Document for: Approval
Agenda Item: 10.4x (OAM8) - OAM&P Rel 8

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#56, 22 - 26 Oct 2007, Guangzhou, CHINA

S5-071807

Work Item Description

Title

HSUPA performance measurements UID_360001

Acronym: OAM8

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

1 3GPP Work Area

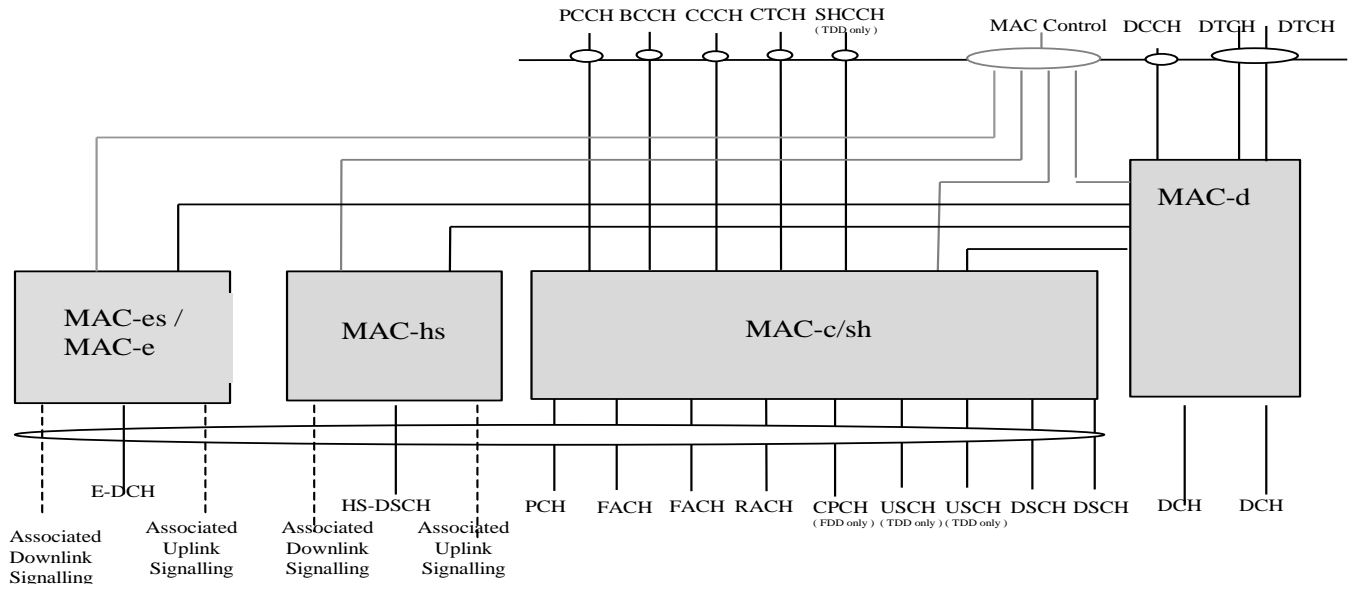
X	Radio Access
	Core Network
	Services

2 Linked work items

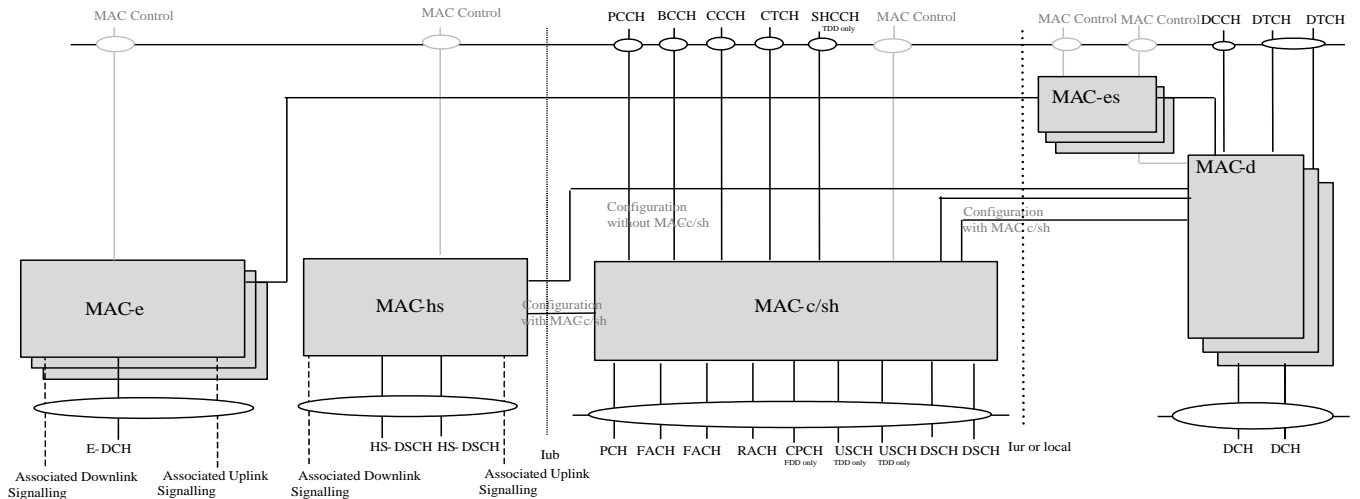
OAM&P 8 (Operations, Administration, Maintenance & Provisioning), Feature: OAM8

3 Justification

High Speed Uplink Packet Access (HSUPA) is a UMTS / WCDMA uplink evolution technology has been standardised by 3GPP in Release 6. HSUPA boosts the UMTS / WCDMA uplink data rate up to 5.8Mbps. To realize HSUPA, the overall UE/UTRAN MAC architecture, which is shown as following figure, includes a new MAC-es/MAC-e entity which controls access to the E-DCH. A new connection from MAC-d to MAC-es/MAC-e is added to the architecture, as well as a connection between MAC-es/MAC-e and the MAC Control SAP.



UE side MAC architecture (Figure 7.2.1-1 in RAN2 TS 25.309)



UTRAN side MAC architecture (SHO not shown) (Figure 7.3.1-1 in RAN2 TS 25.309)

HSUPA and HSDPA are complimentary to each other to enhance data transfer speed for receiving and sending. What both of them have in common is that Hybrid ARQ (HARQ) error correction on the radio interface, shorter TTI than on Rel.99 DCH and code bundling. While there are some differences between of them, such as the E-DCH for HSUPA is power controlled and dedicated channel. And HS-DSCH for HSDPA is no power control mechanism and shared channel. In HSUPA, unlike in HSDPA, soft and softer handovers will be allowed for packet transmissions.

So that performance measurements of HSUPA are different with HSDPA and Rel.99 DCH. Now the UTRAN performance measurements from 3GPP TS 32.405 cannot satisfy the requirement, therefore the HSUPA performance measurements should be specified.

This WT is addressing the need and solutions for HSUPA with FDD and TDD mode performance measurements.

4 Objective

Specify HSUPA with FDD and TDD mode performance measurements. Such as measurements related to E-DCH successful and failure assignment, measurements related to E-DCH normal and abnormal release, serving cell change, soft and hard handover etc.

- 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 (to be updated at each plenary)**

New specifications [If Study Item, one TR is anticipated]				
Affected existing specifications [None in the case of Study Items]				
Spec No.	CR	Subject	Approved at plenary#	Comments
32.405	#0040/1/2/3		SA#42 Dec 2008	Performance Management (PM); Performance measurements UTRAN

- 11 **Work item rapporteur(s)**
China Mobile, Li Jian (lijian@chinamobile.com)
- 12 **Work item leadership**
SA5
- 13 **Supporting Companies**
China Mobile, Huawei, ZTE, Nortel, Motorola, Nokia Siemens Networks
- 14 **Classification of the WI (if known)**

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

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

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

Technical Specification Group Services and System Aspects
Meeting #36, 4 – 7 June 2007, Busan, KOREA

TSGS#36(07)0299

Source: SA5 (Telecom Management)
Title: WID Key Performance Indicator (KPI)
Document for: Approval
Agenda Item: 10.4x (OAM8) - OAM&P Rel 8

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#52, 2 - 6 April 2007, Xi'an, CHINA

S5-070744

Work Item Description

Title:

Key Performance Indicator (KPI) UID_360002
Acronym: OAM8

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

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

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

3 Justification

Key Performance Indicators (KPIs) and definition of performance measurements are in the scope of network performance management. Currently, performance measurements related to UMTS have been specified in 3GPP as follows:

- Performance Management (PM); Performance measurements – GSM
- TS 32.404 Performance Management (PM); Performance measurements - Definitions and template
- TS 32.405 Performance Management (PM); Performance measurements UTRAN
- TS 32.406 Performance Management (PM); Performance measurements Core Network PS domain
- TS 32.407 Performance Management (PM); Performance measurements Core Network CS domain
- TS 32.408 Performance Management (PM); Performance measurements Teleservice
- TS 32.409 Performance Management (PM); Performance measurements IP Multimedia Subsystem (IMS)

Definitions of KPIs are missing in the 3GPP series of specifications, on the other hand they are very important for operators to monitor their UMTS network. Currently, vendors and / or operators define their KPIs in different proprietary ways which puts a big overhead on the evaluation of network performance and leads to an unfair rating of different vendors and/or operators. Hence KPI should be standardized by 3GPP.

4 Objective

Specify UMTS KPIs, where SA5's TR 32.814 shall be used as input.

TR 32.814 Telecommunication management; UTRAN and GERAN Key Performance Indicators (KPI)

Specification of KPIs shall:

- a) Give an exact definition of the term KPI. This may also lead to referencing an existing definition.

- b) Define a classification of KPIs, e.g. like given in the **ETSI 102.250** series of specification.
- c) Provide a template to describe KPIs.
- d) In general, wherever possible and meaningful, a KPI shall be defined including the formula. Only in exceptional cases a textual description may be enough.
- e) Cover UTRAN, CN CS and CN PS domain.

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	X
No	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 resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TS 32.410	Key Performance Indicators (KPIs) for UMTS/GERAN	SA5		SA#42 Dec 2008	SA#43 Mar 2009	
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#		Comments

11 Work item rapporteur(s)

Liang Shuangchun (liangshuangchun@sjy.chinamobile.com)

12 Work item leadership

SA5

13 Supporting Companies

China Mobile, Huawei, ZTE, Nortel, Nokia Siemens Networks

14 Classification of the WI (if known)

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

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

(one Work Item identified as a building block)

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

3.3 BB: Trace Management

This BB has been created in the 3GPP Work Plan in order to host the CT1 Work Task

UID_11067 Service Level Tracing in IMS (OAM8-Trace)

3.4 OAM&P Studies (OAM8-Study) UID_340067

Technical Specification Group Services and System Aspects
 Meeting #36, 4 – 7 June 2007, Busan, KOREA

TSGS#36(07)0307

Source:	SA5 (Telecom Management)
Title:	WID Study of Element Operations Systems Function (EOSF) definition - Unique_ID 35065
Document for:	Approval
Agenda Item:	11.28 (OAM-Study) - OAM&P Studies

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#53, 7-11 May 2007, Sophia Antipolis, France

S5-071048

Work Item Description

Title:

Study of Element Operations Systems Function (EOSF) definition UID_35065

Acronym: OAM-Study

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 Rel-8 Studies (OAM-Study), UID_340067

3 Justification

In the Logical Layered Architecture (LLA) of TMN, Network OSFs (N-OSF) are concerned with the management function on network level, and Element OSFs (E-OSF) with the management function on network element level. These two logical layers respectively play the role of network management function.

The Element Management System developed by vendors may mainly cover network management functions described in E-OSF and or N-OSF.

3GPP TS 32.101 also state that the Element Manager (EM) has two aspects of function, element management and sub-network management. However, 3GPP 32.xxx series does not provide a clear definition for Element OSF which can help operators and vendors clarify what are required and can be used as a guide when they deploy network.

It is necessary to state that EM provided by vendor is an entity, which implement E-OSF logical functions and may or may not implement N-OSF functions and even more. The Network Management System (NMS) may or may not direct access to NE and implement part of E-OSF. This scenario (i.e. whether NMS implement or not any E-OSF and whether EM implement any N-OSF or not) is outside the 3GPP standardization scope. The mapping rule between physical entities (e.g. EMS, NMS) and logical function entities (e.g. E-OSF and N-OSF) is outside of this WID scope.

The definition of E-OSF specification has to be based on the network operating and maintaining experience and consider the potential application environment of UMTS network. Up to now the existing specification from 3GPP may not enough as a guideline for the products. More E-OSF detail function definition is necessary to be defined in a TR as a reference for operator and vendor.

4 Objective

The intention of this TR is to identify and define what will be needed in the E-OSFs. The intention of this TR is not to define new requirements for the eventual standardization of new Interface IRP and/or NRM IRP and/or System Context.

This WI proposes to define the E-OSFs including the following main aspects.

- Define functional scope of Element OSF (E-OSF)
- Define functional requirement of Elements OSF (E-OSF)
- Define the usage (use case) of the result of this WID.

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 (to be updated at each plenary)

New specifications						
Spec No.	Title	1 st resp. WG	2 nd resp. WG(s)	Presented for Information	Presented for Approval	Comments
TR 32.819	Element Operations Systems Function (E-OSF) definition			SA#39 Mar 2008	SA#40 Jun 2008	

11 Work item rapporteurs

China Mobile, Jian LI, (lijian@chinamobile.com)

12 Work item leadership

SA5

13 Supporting Companies

China Mobile, CATT, Huawei, TeliaSonera, 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
Meeting #36, 4 – 7 June 2007, Busan, KOREA

TSGS#36(07)0305

Source:	SA5 (Telecom Management)
Title:	WID Study on SA5 MTOSI XML Harmonization - Unique_ID 35074
Document for:	Approval
Agenda Item:	11.28 (OAM-Study) - OAM&P Studies

3GPP TSG-SA5 (Telecom Management)
Meeting #52, Xi'An, China, 02 – 06 April 2007

S5-070743
revision of S5-060030r1

Work Item Description

Title:

Study on SA5 MTOSI - XML Harmonization UID_35074

Acronym: OAM-Study

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

1 3GPP Work Area

X	Radio Access
X	Core Network
X	Services

2 Linked work items

OAM&P Re1-8 Studies (OAM-Study), UID_340067

3 Justification

Industry-wide there is a need for harmonization of XML specification methodologies, best practices and guidelines.

4 Objective

This updated WID is re-assessing the technical direction and the supporting companies at the transition from R7 to R8.

The core of the WID remains the same. The Rapporteur is asking for support to conclude this study, based on new contributions submitted to SA5# 52 (April 2007). The aim of these contributions is to facilitate taking decisions, whether or not 3GPP SA5 decides to follow or at least consider MTOSI XML recommendations (excluding NRM IRPs and SuM Interface SOAP SS) in SA5 XML implementations.

TMF MTOSI recognizes the need to co-operate with 3GPP SA5, to refine, if needed, those XML recommendations.

On methodology, SA5 is ready to co-operate with MTOSI, depending on workload and availability of SA5 experts.

Finally, all the references in the study to the 3GPP NRMs will be for information only. It is not the goal, at this stage, to consider any harmonization with MTOSI on the 3GPP NRMs.

To study MTOSI solutions with respect to XML specification methodologies, best practices and guidelines.

This WI will include sharing of information, discussion of the shared information, and determination of harmonization items with respect to the 3GPP and TMF 608 XML specifications. This WI includes the identification of possible updates to the MTOSI XML framework based on the discussion between 3GPP SA5 and the TM Forum MTOSI team as well as the identification of possible updates to the 3GPP SA5 XML specifications. Based on current understanding, the following tasks are envisioned:

- The MTOSI team is to share information concerning XML framework and transport. All of MTOSI Release 1 documents shall be shared with 3GPP SA5. However, the following documents are of particular interest with regards to the topic of an XML framework:

- TMF854, MTOSI XML Solution Set (the XML itself)
- SD2-2, MTOSI XML Implementation User Guide
- SD2-5, MTOSI Communication Styles (describes various message exchange patterns)
- SD2-6, MTOSI Versioning and Extensibility (methodology and rules for extending MTOSI)
- The MTOSI team is also willing to review any information that 3GPP SA5 may suggest on this topic. After the relevant information is shared and everyone has had sufficient time to review the material, one or more conference calls should be arranged for further discussion. Assuming 3GPP decides to go forward with XML, the desired goal of this collaboration is for 3GPP SA5 and the TM Forum mTOP to agree on the same XML framework.
- Also, 3GPP shall also share (with the TM Forum) the work that they have already done concerning the usage and transport of XML.

It is to be noted that 3GPP SA5 standardization scope will not include aspects that relate to system internal implementation strategy, such as a choice of programming language, choice of operating system. Therefore, the following document is not of particular interest with regard to the topics of an XML framework:

SD2-9, Using JMS as an MTOSI Transport (describes XML binding to JMS and requirements for using JMS).

- 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 32.818	Study on 3GPP SA5 / MTOSI XML harmonization	SA5		SA#35 Jun 2007	SA#37 Sep 2007	
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#	Comments	

- 11 **Work item rapporteur(s)**
Jean DUGUAY [jduguay@nortel.com]
- 12 **Work item leadership**
SA5
- 13 **Supporting Companies**
Nortel, Huawei, Alcatel-Lucent, Ericsson, 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
Meeting #32, 5 - 8 June 2006, Warsaw, POLAND**
TSGS#32(06)0263

Source:	SA5 (Telecom Management)
Title:	WID Study of Common Profile Storage Framework of User Data for network services and management
Document for:	Approval
Agenda Item:	10.38

Work Item Description

Title:

Study of Common Profile Storage Framework of User Data for network services and management UID_320006
Acronym: OAM-Study

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

1 3GPP Work Area

X	Radio Access
X	Core Network
X	Services

2 Linked work items

- 3GPP Rel-6 Subscription Management (SuM)
- 3GPP Rel-6 GUP

3 Justification

The introduction of a Common Profile Storage Framework of User Data ("Common" in the sense of common to all applications) for network services and management applications could significantly enhance the ability of 3GPP based networks to offer complex and combined services in the areas of:

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

In light of developments both within 3GPP (e.g. IMS, MBMS, OCS, PCC) and outside 3GPP (e.g. NGN, OMA, etc.) with a growing number of physically disjoint but logically correlated user data stored in several data bases a consolidation and co-ordination of these is needed to prevent further redundancy and possible contradiction and to enable operators to administer and provision complex and combined services.

Initial study of the user related data within and outside 3GPP is necessary to assess the properties of such a Common User Profile Storage Framework based on

- the needs of Network Elements like MMS-RS, HLR, HSS, BM-SC and
- features like Service Management, Subscription Management and Charging Management.

On-going efforts within the mobile and NGN community to define advanced services within the network (i.e. 3GPP, TISPA-N) should provide valuable drive for developing the Common Profile Storage Framework functionality for 3GPP.

4 Objective

- To analyse the consequences of creating one common data model structure for an end user
 - Look at the existing data specifications in 3GPP, ...
 - Address issues like minimizing data redundancy, access control, providing views for applications
 - Analyze the relationship between an end user and a subscriber as defined by 3GPP.
- To analyse and evaluate current initiatives inside and outside 3GPP.
- Gap analysis between 3GPP's current status of specifications (e.g. GUP, SuM, etc.) and existing/emerging solutions with centralised respectively distributed storage models.

- Propose a way forward for the standardization of the "Gap" (if existent) inside or outside 3GPP. There is an expectation that some of the WT will need to be carried out jointly between SA5 and other 3GPP TSGs/WGs (e.g. SA 1, SA2,..).

5 Service Aspects

This Work Item will investigate specific features of the storage of user data arising from the fact that the user data are being handled within a Common Profile Storage Framework (with centralised or distributed storage models) and accessed from a variety of network elements and enterprise applications.

This Work Item will study the need to develop user data management capabilities arising from service requirements (as defined by SA1)

6 MMI-Aspects

Study the Interface aspects between subscriber/user and service provider

7 Charging Aspects

Study TBD (Handling of user data related to CAMEL, OCS and PCC)

8 Security Aspects

Study TBD (To the extent possible CPS will align its security solution with those being proposed within SA5 and SA3.)

9 Impacts

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

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

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.808	Telecommunication management; Services Operation Management Study on Common Profile Storage Framework of User Data	SA5	SA1, SA2	SA#34 Dec 2006	SA#36 Jun 2007	

11 Work item rapporteur(s)

Istvan ABA, T-Mobile, (Istvan.Aba@t-mobile.at)

12 Work item leadership

SA5

13 Supporting Companies

T-Mobile, Siemens, Nokia, Cingular, Vodafone, Huawei, Orange

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
Meeting #34, 04 – 07 December 2006, Budapest, HUNGARY**

TSGS#33(06)0753

Source: SA5 (Telecom Management)
Title: WID Study of Management for LTE and SAE
Document for: Approval
Agenda Item: 11.5 (SAES) - System Architecture Evolution Specification

**3GPP TSG-SA5 (Telecom Management)
Meeting #50, Fairfax, VA, USA, 30 Oct - 3 Nov 2006**

S5-061651

Work Item Description

Title

Study of Management for LTE and SAE UID_340036

Acronym: OAM-Study

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

- LTE?
- SAE?

3 Justification

The LTE and SAE systems need to be managed. As LTE and SAE are evolutions of UMTS, the management should also evolve from UMTS.

A reuse of the existing UMTS management standard solutions will have the following benefits:

- It is proven in operation;
- It will minimise both the standardisation and product development efforts (i.e. the cost and time);
- It provides a base for on which more functionality can be developed (compared with making everything new from the start);
- It will shorten the time to market for LTE and SAE systems;
- It will facilitate a seamless coexistence with UMTS management systems.

The complexity of the LTE network will also place new demands on the Operations and Maintenance of the Network, therefore as well as re-using and evolving existing Management solutions, Management solutions for LTE will also need to encompass some revolutionary elements (e.g. Auto-Configuration, Auto-Optimisation, Information Model Discovery, and development of P2P Interfaces)

Functionality shall be supported by clear use cases or other documented justification.

4 Objective

To study the reuse of UMTS management for LTE and SAE to decide on which parts shall be reused without any change and which parts shall be changed and which existing parts cannot be reused at all.

To decide on management principles for LTE and SAE, e.g. the management architecture, auto-configuration and KPIs, P2P Interface for exchange of Inter Cell Parameters and Information Model Discovery.

5 Service Aspects

Not known.

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 resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.816	Telecommunication management; Study on Management of Evolved Universal Terrestrial Radio Access Network (E-UTRAN) and Evolved Packet Core (EPC)	SA5		SA#36 Jun 2007	SA#42 Dec 2008	
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#	Comments	

- 11 **Work item rapporteur(s)**
Robert PETERSEN, Ericsson (robert.petersen@ericsson.com)
- 12 **Work item leadership**
SA5
- 13 **Supporting Companies**
Ericsson, Nortel, Nokia, Vodafone, Huawei, Motorola, Siemens, China Mobile, 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)

Title:

Study of System Maintenance over Itf-N UID_360006 - Moved to Rel-9

Study on Self-healing of SON UID_390017 - Moved to Rel-9

Study on SOA for IRP UID_400029 - Moved to Rel-9

4 Feature: Charging Management small Enhancements (CH8) UID_350016

Technical Specification Group Services and System Aspects
Meeting #35, 12 - 15 March 2007, Lemesos, Cyprus

TSGS#35(07)0077

Source: SA5 (Telecom Management)
Title: R8 WID Online charging correlation
Document for: Approval
Agenda Item: 13 Proposed New WIDs (not part of an existing feature)

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#51, 22 - 26 Jan 2007, Seville, ES

S5-070315

Work Item Description

Title

Online charging correlation UID_350038

Acronym: CH8

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

1 3GPP Work Area

	Radio Access
X	Core Network
	Services

2 Linked work items

Charging Management small Enhancements (CH8) (Unique_ID 350016)

3 Justification

3GPP Technical Specification 32.240 (Charging architecture and principles) provides the possibility to aggregate and correlate charging information produced by different domains (e.g. IMS, PS) and different sources (e.g. x-CSCF, GGSN, etc.). This intra-domain and inter-domain correlation is specified for the offline charging method. However, such functionality is not offered for online charging. The Online Charging System (OCS) which performs event/session based charging, credit control and rating features collects charging events at the bearer level, the IMS level and at the service level. On the one hand, by controlling the network and application usage separately, the OCS is not able to apply special charging handling to one charging level against the other (e.g. zero rate bearer usage when an IMS session is active). On the other hand, when multiple services are rendered simultaneously to the subscriber, the OCS is not able to perform service bundling of these services.

As such correlation functionality needs to be defined for online charging.

4 Objective

As per the above justification, it is required to update the charging specifications as follows:

- Update the OCS internal architecture to combine the EBCF (Event Based Charging Function) and SBCF (Session Based charging Function) into a single OCF (Online Charging Function) that performs both event and session based charging. This allows to optimize the handling of correlation.
- Introduce a correlation function within the OCS as part of the above OCF which would be implement the service logic for correlation
- Introduce a context monitoring function that defines a context related to the multiple sessions/services activated by a user simultaneously

- 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 (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
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#	Comments	
32.296		Update the OCS architecture Add online charging correlation functions Add message flows to describe online correlation		SA#37 Sep 2007		
32.240		Introduce additional correlation principles specific to online charging Define the common identifiers used to perform correlation between different CTFs Possibly define correlation between different OCS		SA#38 Dec 2007		

- 11 **Work item rapporteur(s)**
Alain Bibas, Orange [alain.bibas@orange-ftgroup.com]
- 12 **Work item leadership**
SA5
- 13 **Supporting Companies**
Orange, Alcatel-Lucent, Nortel, Ericsson, Openet, CMCC, Telefonica, Huawei

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

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

- 14c The WI is a Work Task: parent
Charging Management s mall Enhancements (CH8) (Unique_ID 350016)

Technical Specification Group Services and System Aspects
Meeting #36, 4 – 7 June 2007, Busan, KOREA

TSGS#36(07)0293

Source: SA5 (Telecom Management)
Title: WID SMS online charging
Document for: Approval
Agenda Item: 10.17 (CH8) - Charging Management small Enhancements

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#52, 2 - 6 April 2007, Xi'an, CHINA

S5-070658

Work Item Description

Title:

SMS online charging UID_ **360003**

Acronym: CH8

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

1 3GPP Work Area

	Radio Access
X	Core Network
	Services

2 Linked work items

- SA2 – Support of SMS over IP networks (Unique_ID 32081)
- CT4 – Routing of MT-SMS via the HPLMN (Unique_ID 340016)

3 Justification

The above linked work items introduce new nodes into the SMS architecture. These new nodes are the IP-SM-GW and the SMS Router respectively. These new nodes are currently not covered within any charging specifications. Both of these nodes are located within the home PLMN and therefore direct online charging (not reusing CAMEL) is possible. This work item does not replace existing SMS related charging performed at the MSC and SGSN according to SA5 TS 32.250 and TS 32.251.

TS 32.250	Charging management; Circuit Switched (CS) domain charging
TS 32.251	Charging management; Packet Switched (PS) domain charging

4 Objectives

The objective of work item is to define a new online charging specification to enable online charging of SMS at the new nodes introduced by linked WIs 32081 (SA2) and 340016 (CT4).

The objective is also to update the existing specifications TS 32.298 and 32.299 as necessary.

TS 32.298	Charging management; Charging Data Record (CDR) parameter description
TS 32.299	Charging management; Diameter charging applications

The need for creating new CDR containers from the IP-SM-GW and SMS Router should be investigated during the course of the work.

- 5 **Service aspects**
None
- 6 **MMI aspects**
None
- 7 **Charging Aspects**
Charging aspects of SMS
- 8 **Security Aspects**
None

9 **Impacts**

Affects:	USIM	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						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TS 32.274	SMS charging	SA5		SA#37 Sep 2007	SA#38 Dec 2007	New specification to capture online charging aspects of SMS.
Affected existing specifications						
Spec No.	CR	Subject			Approved at plenary#	Comments
32.240		Introduce SMS as a standalone service into charging architecture			SA#37 Sep 2007	Charging architecture and principles
32.299		Introduce new SMS specific information necessary to enable the relevant SMS charging models			SA#38 Dec 2007	Diameter charging applications
32.298		Introduce new CDR formats / data if necessary.			SA#38 Dec 2007	Charging Data Record (CDR) parameter

- 11 **Work item rapporteurs**
Gavin WONG, Vodafone (gavin.wong (at) vodafone.com)
- 12 **Work item leadership**
SA5
- 13 **Supporting Companies**
Vodafone, Alcatel-Lucent, Ericsson, Huawei, Nokia Siemens Networks, Orange
- 14 **Classification of the WI (if known)**

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

- 14c The WI is a Work Task: parent Building Block
Charging Management s mall Enhancements (CH8) (Unique_ID 350016)

Technical Specification Group Services and System Aspects
Meeting #37, 17 - 20 September 2007, Riga, LATVIA

TSGS#37(07)0621

Source: SA5 (Telecom Management)
Title: WID to Add Interconnection Border Control Function (IBCF) to IMS Charging (CH8)
Document for: Approval
Agenda Item: 10.23 (CH8) - Charging Management small Enhancements

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#55, 27 - 31 August 2007, Bucharest, ROMANIA

S5-071658

Work Item Description

Title:

Add IBCF to IMS Charging UID_370003

Acronym: CH8

The Interconnect Border Control Function (IBCF) is becoming available in 3G networks, but 3GPP IMS Charging documents do not recognize nor keep charging records for the IBCF. This work proposal recommends adding full functionality for IBCF into IMS Charging.

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

1 3GPP Work Area

	Radio Access
X	Core Network
	Services

2 Linked work items

- Systemenhancements for fixed broadband access to IMS (32074)
- Systemenhancements for fixed broadband access to IMS - TISPAN Rel 1 related aspects (7001)

3 Justification

The current 3GPP IMS Charging specifications provide for all other IMS entities (including S-CSCF, I-CSCF, P-CSCF, SIP-AS, MGCF, MRFC and BGCF).

Notably the IBCF is not present.

Thus it is impossible to generate CDRs in the IBCF as required in **Release 7** Stage 2 IMS specifications.

4 Objective

The IBCF is becoming available in 3G networks, but 3GPP SA5 IMS Charging specifications do not recognize nor keep charging records for the IBCF.

Add full functionality for IBCF into IMS Charging.

5 Service Aspects

The relevant charging information should be made available to the IBCF

6 MMI-Aspects

None

7 Charging Aspects

Add architecture, flow diagrams and A VPs/CDRs definitions for IBCF

8 Security Aspects

None

9 Impacts

Affects:	UICC apps	ME	AN	CN	Others
Yes				X	
No		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
N/A						
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#	Comments	
32.260		Add flows and AVP/CDR tables for IBCF		SA#39 Mar 2008	Match the assignments of other IMS nodes	
32.298		Add IBCF CDR field description		SA#39 Mar 2008	Match the assignments of other IMS nodes	

11 Work item rapporteur(s)

Maryse GARDELLA (Alcatel-Lucent)

12 Work item leadership

SA5

13 Supporting Companies

Alcatel-Lucent, AT&T, Nortel, Ericsson, Amdocs, Huawei, Nokia Siemens -Networks, T-Mobile

14 Classification of the WI (if known)

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

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

Charging Management small Enhancements (CH8) (Unique_ID 350016)

WLAN Offline Charging UID_380046 - Stopped at SA#42

Technical Specification Group Services and System Aspects
Meeting #41, 15 - 18 September 2008,
Kobe, Japan

TSGS#41(08)0463

Source: SA WG5
Title: Introduce Online Charging from SMS-SC's into the scope of the SMS Charging Specifications
Document for: Approval
Agenda Item: 13

3GPP TSG-SA5 (Telecom Management)

S5-081202

Work Item Description

Title:

Introduce Online Charging from SMS-SC (Short Message Service - Service Centres) into the scope of the SMS Charging Specifications UID_410045

Acronym: CH8

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

1 3GPP Work Area

	Radio Access
X	Core Network
	Services

2 Linked work items

- SA2 – Support of SMS over IP networks (Unique_ID 32081)
- CT4 – Routing of MT-SMS via the HPLMN (Unique_ID 340016)

3 Justification

The current charging specifications cover online charging from SMS Routers and IP-SM-GW's but only offline charging from SMS-SC's (c.q. from associated Gateway MSC's / Interworking MSCs). Adding online charging from SMS-SC's would bring the following advantages:

- For operators and charging system vendors: a consistent interface specification for online charging across SMS Routers, IP-SM-GWs and SMS-SC's
- For operators: reduced cost for SMS online charging adaptations when they decide to follow a multi SMS-SC vendor and/or router policy for example. (Currently more than 6 flavours of vendor specific extensions to Diameter specifications are in use for online charging of SMS.)
- For SMS-SC and charging system vendors: less protocols to implement and maintain for online charging of SMS.

4 Objective

Add online charging from SMS-SC's to the SA5 charging specifications 3GPP TS 32.274 and 3 GPP TS 32.299.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

Charging aspects of SMS-SC

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 (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
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#	Comments	
32.274		SMS charging		SA#42 Dec 2008		
32.299		Diameter charging applications		SA#42 Dec 2008		

- 11 **Work item rapporteur(s)**
Gebler, Erik - Acision [erik.gebler (at) acision.com]
- 12 **Work item leadership**
SA5
- 13 **Supporting Companies**
Acision, Amdocs, Comverse, NSN, Openet Telecom, Vodafone
- 14 **Classification of the WI (if known)**

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

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

Charging Management small Enhancements (CH8) (UID_350016)

Technical Specification Group Services and System Aspects
Meeting #35, Lemesos, CY, 12 - 15 March 2007

SP-070174

Title: Study on Charging Aspects of 3GPP System Evolution
Source: Nokia, Siemens Networks
Document for: Approval
Agenda Item: 12.27

Work Item Description

Title:

Study on Charging Aspects of 3GPP System Evolution UID_350004

Acronym: FSSA Echarg

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

1 3GPP Work Area

	Radio Access
X	Core Network
X	Services

2 Linked work items

3GPP System Architecture Evolution, ID 32085 (SP-040928)

3 Justification

The Evolved 3GPP System (a.k.a. SAE/LTE) needs reliable and efficient charging solutions. As the Evolved 3GPP System is an evolution of UMTS, also the charging solutions for the Evolved 3GPP System should evolve from UMTS.

A re-use of the existing UMTS charging standard solutions will have the following benefits:

- It is proven in operation;
- It will minimise both the standardisation and product development efforts (i.e. the cost and time);
- It provides a base, on which more functionality can be developed;
- It will shorten the time to market for Evolved 3GPP systems;
- It will facilitate a seamless coexistence with UMTS charging systems.

Functionality shall be supported by clear use cases or other documented justification.

4 Objective

The objectives of this study item are

- to study the re-use of UMTS charging for the Evolved 3GPP System to recommend on which parts should be reused without any change and which parts should be changed and which existing parts should not be reused at all;
- to study and give recommendations on the charging principles for the Evolved 3GPP System;
- to study and give recommendations on the detailed stage 2 charging architecture for the Evolved 3GPP System;
- to study and give recommendations on the stage 3 charging solutions for the Evolved 3GPP System;
- to study and give recommendations on the work item and specification structure for charging in the Evolved 3GPP System.

5 Service Aspects

None

6 MMI-Aspects

None anticipated

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					
Don't know	X	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
32.820	Telecommunication management; Study on charging aspects of 3GPP System Evolution	SA5		SA#37 Sep 2007	SA#38 Dec 2007	
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#	Comments	

- 11 **Work item rapporteur(s)**
Gerald Görmer (Siemens Networks)
- 12 **Work item leadership**
SA5
- 13 **Supporting Companies**
Alcatel-Lucent, Ericsson, Huawei, Nortel, Nokia, Siemens Networks, T-Mobile
- 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)

- 14a The WI is a Feature: List of building blocks under this feature (list of Work Items identified as building blocks)
- 14b The WI is a Building Block: parent Feature
- 14c The WI is a Work Task: parent Building Block (one Work Item identified as a building block)

5 Feature: 3G Long Term Evolution - Evolved Packet System RAN part UID_20068

5.1 BB: E-UTRAN Data Definitions UID_390001

Technical Specification Group Services and System Aspects
Meeting #37, 17 - 20 September 2007, Riga, LATVIA

TSGS#37(07)0617

Source: SA5 (Telecom Management)
Title: WID on Subscriber and Equipment Trace for eUTRAN and EPC (OAM8) - OAM&P Rel 8
Document for: Approval
Agenda Item: 10.22 (OAM8) - OAM&P Rel 8

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#54, 25 - 29 June 2007, Orlando, FL USA

S5-071346

Work Item Description

Title

Subscriber and Equipment Trace for eUTRAN and EPC UID_370001

Acronym: E-UTRAN-OAM

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

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

- LTE
- SAE

3 Justification

The use cases for the existing Subscriber and Equipment trace are valid also for eUTRAN and EPC. Therefore shall the existing Subscriber and Equipment Trace function and the Trace IRP be upgraded to include eUTRAN and EPC.

4 Objective

Include the eUTRAN and EPC nodes and interfaces in the Subscriber and Equipment Trace function and the Trace IRP.

Also the new requirements from TR 32.816 (Study on Management of LTE and SAE) are to be included.

- Work is needed in RAN3, CT1, CT4

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	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
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject	Approved at plenary#	Comments		
32.421		Introduction of EPC and eUTRAN	SA#40 Jun 2008	Stage 1: Trace concepts and requirements		
32.422		Introduction of EPC and eUTRAN	SA#42 Sep 2008	Stage 2: Trace control and configuration management		
32.423		Introduction of EPC and eUTRAN	SA#43 Dec 2008	Stage 3: Trace data definition and management		
32.441		Introduction of EPC and eUTRAN	SA#40 Jun 2008	Stage 1: Trace Management IRP Requirements		
32.442		Introduction of EPC and eUTRAN	SA#42 Sep 2008	Stage 2: Trace Management IRP Information Service		
32.443		Introduction of EPC and eUTRAN	SA#43 Dec 2008	Stage 3: Trace Management IRP CORBA Solution Set		
32.445		Introduction of EPC and eUTRAN	SA#43 Dec 2008	Stage 3: Trace Management IRP XML file format definition		

- 11 **Work item rapporteur(s)**
Robert PETERSEN, Ericsson (robert.petersen@ericsson.com)
- 12 **Work item leadership**
SA5
 - Work is needed in RAN3, CT1, CT4.
- 13 **Supporting Companies**
Ericsson, NSN, Huawei, Nortel, China Mobile, Vodafone, T-Mobile
- 14 **Classification of the WI (if known)**

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

14c The WI is a Work Task: parent Building Block
(one Work Item identified as a building block)

OAM&P 8 (OAM8) Unique_ID: 340063

Technical Specification Group Services and System Aspects
Meeting #38, 03 - 06 December 2007, Cancun, MEXICO

TSGS#38(07)0738

Source: SA5 (Telecom Management)
Title: New WID on E-UTRAN NRM IRP
Document for: Approval
Agenda Item: 10.21 (SAES) - 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects)

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#56, 22 - 26 Oct 2007, Guangzhou, CHINA

S5-071965

Work Item Description

Title

E-UTRAN Network Resource Model (NRM) Integration Reference Point (IRP)
UID_380036

Acronym: E-UTRAN-OAM

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

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

UID_20068 3G Long Term Evolution - Evolved Packet System RAN part (LTE)
UID_340036 Study of Management for LTE and SAE (draft TR 32.816) under OAM8-Studies
UID_340063 OAM&P 8 (Operations, Administration, Maintenance & Provisioning) - OAM8

3 Justification

The E-UTRAN system is defined by 3GPP with different Network Elements from the UTRAN.
The Network Resource Model (NRM) of the UTRAN is not applicable to E-UTRAN.

The E-UTRAN system needs to be managed. 3GPP network management paradigm necessitates the standardization of the representations of various managed resources. The standardization of the E-UTRAN system managed resources is captured in the so-called E-UTRAN Network Resource Model (NRM).

The E-UTRAN architecture and capabilities evolve from those defined for UMTS. The management of E-UTRAN system should also evolve from that for managing UMTS. In particular, the NRM for E-UTRAN should align and resemble those specified for UTRAN network resources.

The alignment of E-UTRAN NRM with UTRAN NRM leads to the following benefits:

- The system architecture of E-UTRAN evolves from UTRAN and the existing UTRAN NRM is proven in operation. Therefore, the alignment will result in a specification that has a higher chance of being bug-free when compared to a "brand new" designed specification.
- It will minimise both the standardization and product development efforts and maintenance efforts (i.e. the cost and time for development including testing and reduction of training cost when the management paradigms for E-UTRAN and UTRAN remained similar);
- It will shorten the time to market for E-UTRAN system;
- It will facilitate a seamless coexistence with UMTS management systems.

4 Objective

Define E-UTRAN NRM using the same principles as for the UTRAN NRM. The definition will be captured in a new NRM IRP called E-UTRAN NRM IRP.

The defined NRM should have identical characteristics as those defined for other NRMs such as UTRAN/GSM NRM(s).

For example: the DN of its instances uses the same name convention as all instances whose IOCs are defined in various NRM IRPs.

For example: Its IOCs will integrate, in identical manner as other NRM such as those defined in UMTS/GSM NRM IRP, with the IOCs defined in Generic NRM IRP.

For example: operations and notifications defined in various Interface IRPs that work with existing instances of various NRM IRPs must work, without change, with the new instances of E-UTRAN.

Similar to existing 3GPP NRM IRPs such as UTRAN NRM IRP, the proposed new E-UTRAN NRM IRP focuses only on the representation of the network resources in question.

This NRM IRP does not deal with the applications or usage of the IOCs.

5 Service Aspects

Not known.

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

Not known

9 Impacts

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

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

New specifications [If Study Item, two TS series are anticipated]						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.761	E-UTRAN Network Resource Model (NRM) IRP; Requirements	SA5		SA#42	SA#42	
32.762	E-UTRAN NRM IRP; Information Service	SA5		SA#42	SA#43	
32.763	E-UTRAN NRM IRP; CORBA Solution Set	SA5		SA#43	SA#43	
32.765	E-UTRAN NRM IRP; XML file format definition	SA5		SA#43	SA#43	
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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12 Work item leadership

SA5

13 Supporting Companies

Ericsson, Huawei, Motorola, Nokia Siemens Networks, China Mobile, Nortel, T-Mobile, Telefonica, Vodafone, ZTE

14 Classification of the WI (if known)

	Study Item (no further information required)
	Feature (go to 14a)

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

- 14c The WI is a Work Task: parent Building Block
BB: E-UTRAN Data Definitions UID_390001

Source: SA5 (Telecom Management)
 Title: New WID on E-UTRAN Performance measurements
 Document for: Approval
 Agenda Item: 10.34 (SAES) - 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects)

Work Item Description

Title

Performance measurements for E-UTRAN UID_390002

Acronym: E-UTRAN-OAM

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

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

UID_340063 OAM&P 8 (Operations, Administration, Maintenance & Provisioning) - OAM8
UID_340065 Performance Management 8

UID_340036 Study of Management for LTE and SAE (draft TR 32.816) under OAM8-Studies

UID_20068 3G Long Term Evolution - Evolved Packet System RAN part (LTE)
UID_3900xy E-UTRAN Data Definitions

3 Justification

The E-UTRAN system is defined by 3GPP with different Network Elements from the UTRAN, and the interfaces between Network elements and signalling over the interfaces are also different from the UTRAN. The performance measurements of the UTRAN are not applicable to E-UTRAN.

The E-UTRAN system needs to be managed. Performance measurements are the basic data for performance management, and also the supporting data for the SON (self organizing networks) functionalities.

Each of the E-UTRAN performance measurements shall be motivated by the use case or requirement for performance management or SON purpose. For performance management, 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.

The E-UTRAN architecture and capabilities evolve from those defined for UMTS. The management of E-UTRAN system should also evolve from that for managing UMTS. In particular, the PM IRP will be reused for E-UTRAN performance management, so the 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 define the performance measurements needed to be transferred over Itf-N for E-UTRAN to support the performance management or SON purpose, it should be noted that:

- 4) 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.
- 5) 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.
- 6) 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; For supporting SON purpose in E-UTRAN, 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, which are agreed by relevant work items in 3GPP SA5.

The defined performance measurements should have identical characteristics as those defined for other network domains such as UTRAN, CN, IMS, etc.

For example: The performance measurement definition should follow the same concept and requirements addressed in 3GPP TS 32.401.

For example: The performance measurement definition should follow the same definition and template addressed in 3GPP TS 32.404.

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 (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
32.425	Performance Management (PM); Performance measurements, E-UTRAN	SA5		SA#43	SA#43	
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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Xuelong Wang (xuelong.wang@huawei.com)

12 Work item leadership

SA5

13 Supporting Companies

Motorola, Huawei, Vodafone, Nortel, ZTE, T-Mobile, Nokia Siemens Networks, CMCC,
Telecom Italia, Orange, Ericsson, Telefonica

14 Classification of the WI (if known)

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

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

UID_390001 E-UTRAN Data Definitions

Technical Specification Group Services and System Aspects
Meeting #39, 10 - 13 March 2008, Puerto Vallarta, Mexico

TSGS#39(08)0063

Source: SA5 (Telecom Management)
Title: New WID Key Performance Indicators (KPIs) for E-UTRAN
Document for: Approval
Agenda Item: 10.34 (SAES) - 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects)

Work Item Description

Title:

Key Performance Indicators (KPIs) for E-UTRAN UID_390003

Acronym: E-UTRAN-OAM

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

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

UID_340063 OAM&P 8 (Operations, Administration, Maintenance & Provisioning) - OAM8
UID_340065 Performance Management 8

UID_340036 Study of Management for LTE and SAE (draft TR 32.816) under OAM8-Studies

UID_20068 3G Long Term Evolution - Evolved Packet System RAN part (LTE)
UID_3900xy E-UTRAN Data Definitions

3 Justification

Performance management is important for operators to manage their radio networks. For the competitiveness of E-UTRAN as a technology it is essential that performance management provides the operator an indication of the E-UTRAN Network Elements performance. End-user perception of service availability and quality should be taken into account.

4 Objective

For evaluation of E-UTRAN Network Element (NE) performance, a set of Key Performance Indicators (KPIs) should be defined according to TR 32.816 and the following guidelines:

- KPIs shall show the performance of a E-UTRAN NE, not how the implementation in the NE works
- KPIs shall be of value to the operator in terms of improving network performance, thereby enabling enhanced end-user perception.
- KPIs shall be based on well described use cases
- KPIs shall be based on information available on standardized interfaces
- KPIs shall either be standardized using a formula, or on a high level using a textual description

The following are examples of E-UTRAN KPI categories relevant for standardization:

- Accessibility: See the definition in ITU-T E.800.
- Retainability: See the definition in ITU-T E.800.
- Integrity: See the definition in ITU-T E.800. The Integrity KPI category contains the connection quality related KPIs.

- Mobility: This KPI category contains the Handover related KPIs.
- Utilization: This category should contain KPIs related to what extent available E-UTRAN resources are utilized.
- Availability. This KPI category should contain KPIs that indicate the availability of the RAN towards UEs for access.

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 (to be updated at each plenary)

New specifications [If Study Item, one TR is anticipated]						
Spec No.	Title	Prime resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TS 32.451	KPIs for E-UTRAN, Requirements	SA5		SA#42 Dec 2008	SA#43	
TS 32.450	KPIs for E-UTRAN	SA5		SA#42 Dec 2008	SA#43	
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#		Comments

11 Work item rapporteur(s)

Ulf HÜBINETTE (Ericsson)

12 Work item leadership

SA5

13 Supporting Companies

Ericsson, China Mobile, Nokia Siemens Networks, Telefonica, Vodafone, Telecom Italia, T-Mobile, Nortel

14 Classification of the WI (if known)

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

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

(one Work Item identified as a building block)

UID_390001 E-UTRAN Data Definitions

3GPP TSG SA Plenary Meeting #40
Prague, Czech Republic, 2 - 5 June 2008

SP-080275

Source: SA5 (Telecom Management)
Title: Revised BB-level WID on Self-Organizing Networks (SON)
Document for: Approval
Agenda Item: 10.35

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#59, 21 - 25 April 2008, Chengdu, CHINA

S5-080812

revision of S5-080541

Source: T-Mobile, Vodafone, Telefonica, Telecom Italia, etc.
Title: Revised BB-level WID on Self-Organizing Networks (SON)
Document for: Approval
Agenda Item: 6.0

Work Item Description

Title

Self-Organizing Networks (SON) UID **390004**

Acronym: **LTE-SON-OAM**

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

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

UID 20068 3G Long Term Evolution - Evolved Packet System RAN part (LTE)
UID 380036 E-UTRAN Network Resource Model IRP (E-UTRAN-OAM)
UID 390002 Performance measurements for E-UTRAN
UID_390003 Key Performance Indicators (KPIs) for E-UTRAN

UID 320005 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects) (SAES)
UID 380037 EPC Network Resource Model (NRM) Integration Reference Point (IRP)
UID 390011 Performance measurements for EPC

3 Justification

Main drivers for Self-Organizing Networks are:

- a) The number and structure of network parameters have become large and complex
- b) Quick evolution of wireless networks has led to parallel operation of 2G, 3G, EPC infrastructures
- c) The rapidly expanding number of Base Stations needs to be configured and managed with the least possible human interaction

Self-Organizing Networks are part of 3GPP Rel-8

- a) The work ongoing in TSG RAN needs OAM support.
- b) SON use cases are part of the SA5 TR 32.816 (Study on management of E-UTRAN and EPC).

SA#38 approved an implementation WID for E-UTRAN NRM (UID 380036) not covering application-specific operations.

Co-ordinated work on **ALL** aspects of SON is needed, including management requirements resulting from ongoing work in TSG RAN working groups.

A higher level work item is needed for SON-related requirements and results within SA5.

4 Objective

- a) Collect and summarise SON requirements for OAM
- b) Provide infrastructure for SON, in the OAM system
 - Enabling SON operations
 - Provide SON capabilities (each of which can either be distributed or centralised) within the OAM infrastructure, including their management
 - Access to SON relevant eNodeB attributes
 - Identification of SON relevant eNodeB and UE Measurements
 - Access to and transfer of SON relevant eNodeB and UE measurements
 - Transfer of SON relevant eNodeB alarms
- c) Support of the following SON functions:
 - Self-configuration
 - Self-Optimisation and self-healing
 - Neighbour Relation handling (intra-E-UTRAN, 2G, 3G)
- d) Define necessary Interface IRPs

5 Service Aspects

Not known.

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, two TS series are anticipated]						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TS 32.500	Telecommunication management; Self Organising Networks (SON): Concepts & Requirements	SA5		SA#42Sep 2008	SA#42 Dec 2008	
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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12 Work item leadership

SA5

13 Supporting Companies

T-Mobile, Vodafone, Telefonica, Telecom Italia, Huawei, China Mobile, Ericsson, Motorola, Nokia Siemens Networks, Nortel, Orange, TeliaSonera, ZTE

14 Classification of the WI (if known)

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

14b The WI is a Building Block: parent Feature

UID 20068 3G Long Term Evolution - Evolved Packet System RAN part (LTE)

UID 320005 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects)

Technical Specification Group Services and System Aspects
 Meeting #39, 10 - 13 March 2008, Puerto Vallarta, Mexico

TSGS#39(08)0065

Source: SA5 (Telecom Management)
 Title: New WT-level WID on Self-Configuration of eNodeBs
 Document for: Approval
 Agenda Item: 10.34 (SAES) - 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects)

Work Item Description

Title

Self-Establishment of eNBs, including automated Software Management
 UID_390005

Acronym: LTE_SON-OAM

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

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

- UID_20068 3G Long Term Evolution - Evolved Packet System RAN part (LTE)**
- UID_3900xy Management of Self-Organizing Networks (SON)**
- UID_380036 UTRAN Network Resource Model IRP (E-UTRAN-OAM)**
- UID_380037 PC Network Resource Model IRP (EPC-OAM)**

- 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

In the context of LTE it is necessary to automate the introduction of new eNBs into the network as much as possible. This Work Item addresses this need by providing the framework for the required standardization activities.

4 Objective

The objective of this Work Item is to standardize the functions required for an automated establishment of new eNBs into the network. This Work Item does not refer to HNB.
 This process comprises among others self-configuration. Self-configuration includes e.g. an automated establishment of IP connectivity between the eNB and the Element Manager, an automated download of software and an automated download of radio and transport configuration data.
 Automated software management – usable for self-configuration and during normal network operation - shall be covered by this work item.
 The self-configuration process may also include an automatic setup of X2 and S1 interfaces.
 Appropriate security mechanisms should be provided as well.
 Newly established eNBs might also perform self-test and send out reports about the results.

The technical work should follow the procedure described by the following bullet points

- a) Define a management reference model supporting this use case
- b) Define appropriate requirements
- c) Define appropriate elements for NRM IRPs
- d) Define appropriate Interface IRPs for the interaction patterns on open interfaces

- e) Define appropriate security mechanisms
- f) Define reports of self-test results
- g) Define mechanisms for automated software management which can be re-used for self-establishment or used independently of it:
 - Define appropriate requirements (IRP) for automated Software Management
 - Define Interface IRPs Specifications (IS) related to automated Software Management
 - Define Solution Set (SS) for automated Software Management over CORBA and SOAP

The capabilities that may be addressed in this workitem are (but not necessarily limited to):

- Enable automatic Software Management
- Managing of Automated Software Download
- Managing of Automated Installation of Software
- Managing of Automated Activation of Software
- Managing of Fallback of Software

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

A new eNB probably needs be authenticated and authorized.

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 (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TS 32.501	Self-Configuration of Network Elements Concepts and IRP Requirements	SA5		SA#42	SA#42 Dec 2008	This TS shall describe the overall concepts for the self-establishment of eNBs and IRP requirements.
TS 32.502	Self- Configuration of Network Elements IRP Information Service (IS)	SA5		SA#42	SA#42 Dec 2008	This TS shall define the functionalities, procedures, protocols, protocol extensions etc. needed to support the requirements defined in 32.5010 but not realized via Itf-N
TS 32.503	Self- Configuration of Network Elements IRP, Solution Set (SS) CORBA	SA5		SA#42	SA#42 Dec 2008	This TS shall define the information elements which are needed to support the requirements defined in 32.501, but are not transported via Itf-N.
TS 32.531	Software Management Concepts and IRP Requirements	SA5		SA#42 (Dec 2008)	SA#42 (Dec 2008)	This TS shall describe the overall concepts for Software Management and IRP requirements. This work item will provide material on automated Software Management.
TS 32.532	Software Management IRP Information Service (IS)	SA5		SA#42 (Dec 2008)	SA#42 (Dec 2008)	This TS shall define the functionalities, procedures, interfaces needed to support the IRP requirements defined in 32.xx1. This work item will provide material on automated Software Management.
TS 32.533	Software Management IRP Solution Set (SS) - CORBA	SA5		SA#42 (Dec 2008)	SA#42 (Dec 2008)	This TS shall describe and define the interfaces over CORBA. This work item will provide material on automated Software Management.

NOTE: This work item shall produce IRP definitions. Whether these will be put into a Self-Establishing IRP or into a SON OAM IRP will be decided later.

Affected existing specifications

Spec No.	CR	Subject	Approved at plenary#	Comments

11 Work item rapporteur(s)

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12 Work item leadership

SA5

13 Supporting Companies

Nokia Siemens Networks, Ericsson, Huawei, T-Mobile, Vodafone, Nortel, Motorola, ZTE, Telefonica, Telecom Italia, China Mobile, Motorola, Orange, TeliaSonera

14 Classification of the WI (if known)

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

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

UID_390004 Management of Self-Organizing Networks (SON)

Technical Specification Group Services and System Aspects
 Meeting #39, 10 - 13 March 2008, Puerto Vallarta, Mexico

TSGS#39(08)0066

Source: SA5 (Telecom Management)
 Title: New WT-level WID on SON Automatic Neighbour Relation (ANR) Management
 Document for: Approval
 Agenda Item: 10.34 (SAES) - 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects)

Work Item Description

Title

SON Automatic Neighbour Relations (ANR) List Management
UID_390006

Acronym: LTE_SON-OAM

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

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

UID_20068 3G Long Term Evolution - Evolved Packet System RAN part (LTE)
 UID_3900xy Management of Self-Organizing Networks (SON)
 UID_380036 UTRAN Network Resource Model IRP (E-UTRAN-OAM)

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

In the context of LTE, it is necessary to automate, as much as possible, the discovery of neighbour relations. The goal of such automation is to reduce the reliance on traditional configuration methodology (e.g. manual configuration, configuration by planning tools in the case of GSM) given the growing complexity and scale of the new generation of mobile network where LTE plays a dominant role. This automation is part and partial of the Self Organization Network capability. The capability providing such a capability providing such automation, the Automatic Neighbour Relation (ANR) function, which is including the relations to LTE cells on other eUTRAN frequencies and 2G and 3G cells.

4 Objective

The objectives are to identify and define functions that collectively, support the automation of neighbour relations discovery and, to identify the actors of this automation and to define necessary open interfaces among various identified functions and actors.

This automation is not considered as a replacement of the "traditional configuration methods". This automation and the "traditional configuration methods" must work cooperatively together in a way that network operator remains in control of the degree (amount) of automation and degree (amount) of "traditional configuration methods" involved.

To satisfy the objectives, the following is envisioned:

- Define use cases.
- Identify actors and define various functional blocks that collectively support the subject automation.

- Identify interfaces where standard is required.
- Define necessary security mechanisms

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

Capabilities to secure ANR function shall be defined.
 Network operators have sole responsibility to decide if such capability is needed or not.
 3GPP should/could not make such decision.

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
32.511	SON ANR Management Requirements	SA5		SA#42	SA#42	
NOTE: This work item shall produce IRP definitions. Whether these will be put into an ANR IRP or into a SON OAM IRP will be decided later.						
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject			Approved at plenary#	Comments
32.761		Configuration Management (CM); E-UTRAN NRM IRP; Requirements			SA#42, 12/2008	
32.762		CM; E-UTRAN NRM IRP; Information Service			SA#43, 03/2009	
32.763		CM; E-UTRAN NRM IRP; CORBA Solution Set			SA#43, 03/2009	
32.765		CM; E-UTRAN NRM IRP; XML file format definition			SA#43, 03/2009	

11 Work item rapporteur(s)

Edwin TSE (Ericsson)

12 Work item leadership

SA5

13 Supporting Companies

Ericsson, Huawei, T-Mobile, China Mobile, Motorola, Nokia Siemens Networks, Nortel, Orange, Telefonica, TeliaSonera, Vodafone, ZTE

14 Classification of the WI (if known)

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

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

UID_390004 Management of Self-Organizing Networks (SON)

SON Self-Optimization & Self-Healing handling UID_390007 - Moved to Rel-9

6 Feature: 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects) UID_320005

6.1 BB: EPC Data Definitions UID_390010

Technical Specification Group Services and System Aspects
Meeting #38, 03 - 06 December 2007, Cancun, MEXICO

TSGS#38(07)0737

Source: SA5 (Telecom Management)
Title: New WID on EPC NRM IRP
Document for: Approval
Agenda Item: 10.21 (SAES) - 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects)

**3GPP TSG-SA5 (Telecom Management)
Meeting SA5#56, 22 - 26 Oct 2007, Guangzhou, CHINA**

S5-071964

Work Item Description

Title

**EPC Network Resource Model (NRM) Integration Reference Point (IRP)
UID_380037**

Acronym: EPC-OAM

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

1 3GPP Work Area

	Radio Access
X	Core Network
	Services

2 Linked work items

UID_320005 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects)
UID_340036 Study of Management for LTE and SAE (draft TR 32.816) under OAM8-Studies
UID_340063 OAM&P 8 (Operations, Administration, Maintenance & Provisioning) - OAM8

3 Justification

The Evolved Packet Core (EPC) is defined by 3GPP with different Network Elements from the UTMS Core Network. The Network Resource Model (NRM) of the UTMS Core Network is not applicable to EPC.

The Evolved Packet Core (EPC) system needs to be managed. 3GPP network management paradigm necessitates the standardization of the representations of various managed resources. The standardization of the EPC system managed resources is captured in the so-called EPC Network Resource Model (NRM).

The EPC architecture and capabilities evolve from those defined for UTMS Core Network. The management of the EPC system should also evolve from that for managing the UTMS Core Network. In particular, the NRM for EPC should align and resemble those specified for the Core managed network resources.

The alignment of EPC NRM with Core NRM will have the following benefits:

- The system architecture of EPC evolves from Core network and the existing Core network NRM is proven in operation. Therefore, the alignment will result in a specification that has a higher chance of being bug free when compared to a "brand new" designed specification.

- It will minimise both the standardisation and product development efforts and maintenance efforts (i.e. the cost and time for development including testing and reduction of training cost when the management paradigms for EPC and Core network remained similar);
- It will shorten the time to market for EPC systems;
- It will facilitate a seamless coexistence with Core network management systems.

4 Objective

Define EPC NRM using the same principles as for the UMTS Core network NRM. The definition will be captured in a new NRM IRP called EPC NRM IRP. The defined NRM should have identical characteristics as those defined for other NRMs such as UMTS Core network NRM.

For example: the DN of its instances uses the same name convention as all instances whose IOCs are defined in various NRM IRPs.

For example: Its IOCs will integrate, in identical manner as other NRM such as those defined in UMTS/GSM NRM IRP, with the IOCs defined in Generic NRM IRP.

For example: operations and notifications defined in various Interface IRPs that work with existing instances of various NRM IRPs must work, without change, with the new instances of EPC.

Similar to existing 3GPP NRM IRPs such as UTRAN and Core Network NRM IRP, the proposed new EPC NRM IRP focuses only on the representation of the network resources in question.

This NRM IRP does not deal with the applications or usage of the IOCs.

The objective of this work item is to define the NRM for EPC, e.g.: MME, HSS, Serving GW, PDN GW

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	
No	X	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#	Comm ents
32.751	EPC Network Resource Model (NRM) IRP; Requirements	SA5		SA#42	SA#42	
32.752	EPC NRM IRP; Information Service	SA5		SA#42	SA#43	
32.753	EPC NRM IRP CORBA Solution Set	SA5		SA#43	SA#43	
32.755	EPC NRM IRP XML file format description	SA5		SA#43	SA#43	
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#	Comments	

11 Work item rapporteur(s)

Xuelong WANG, Huawei (xuelong.wang@huawei.com)

12 Work item leadership

SA5

13 Supporting Companies

Huawei, Ericsson, Motorola, Nokia Siemens Networks, China Mobile, Nortel, T-Mobile, Telefonica, Vodafone, ZTE

14 Classification of the WI (if known)

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

UID_14c The WI is a Work Task: parent Building Block

UID_390010 EPC Data Definitions

Source: SA5 (Telecom Management)
 Title: New WID on EPC Performance measurements
 Document for: Approval
 Agenda Item: 10.34 (SAES) - 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects)

Work Item Description

Title

Performance measurements for EPC UID_390011

Acronym: EPC-OAM

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

1 3GPP Work Area

	Radio Access
X	Core Network
	Services

2 Linked work items

UID_320005 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects)
 3900xy EPC Data Definitions

UID_340063 OAM&P 8 (Operations, Administration, Maintenance & Provisioning) - OAM8
 UID_340065 Performance Management 8

3 Justification

The Evolved Packet Core (EPC) network is defined by 3GPP, some new Network Elements have been introduced, such as MME, UPE, Serving gateway, Packet Data Network (PDN) gateway etc. for example the non-roaming architecture and roaming architecture are as following: (See in 3GPP TS 23.401)

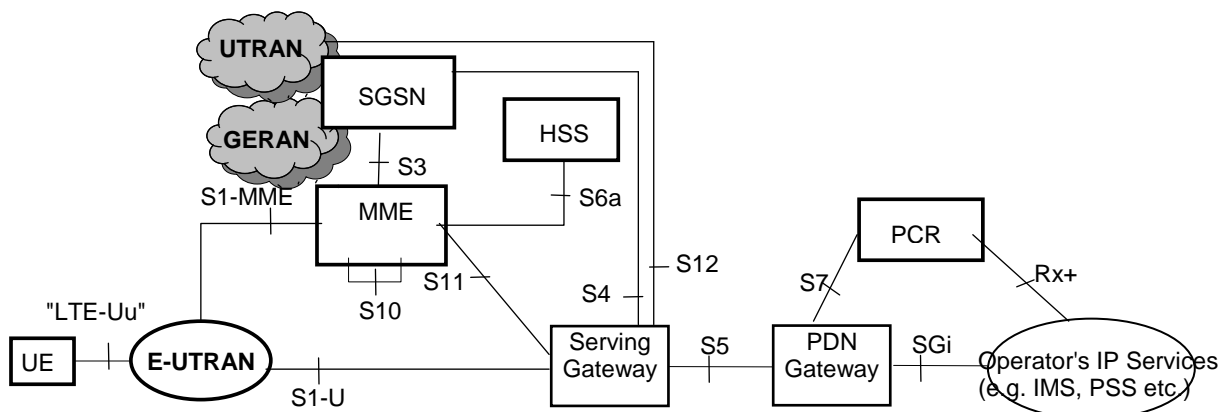


Figure 4.2.1-1: Non-roaming architecture for 3GPP accesses (from 3GPP TS23.401V800)

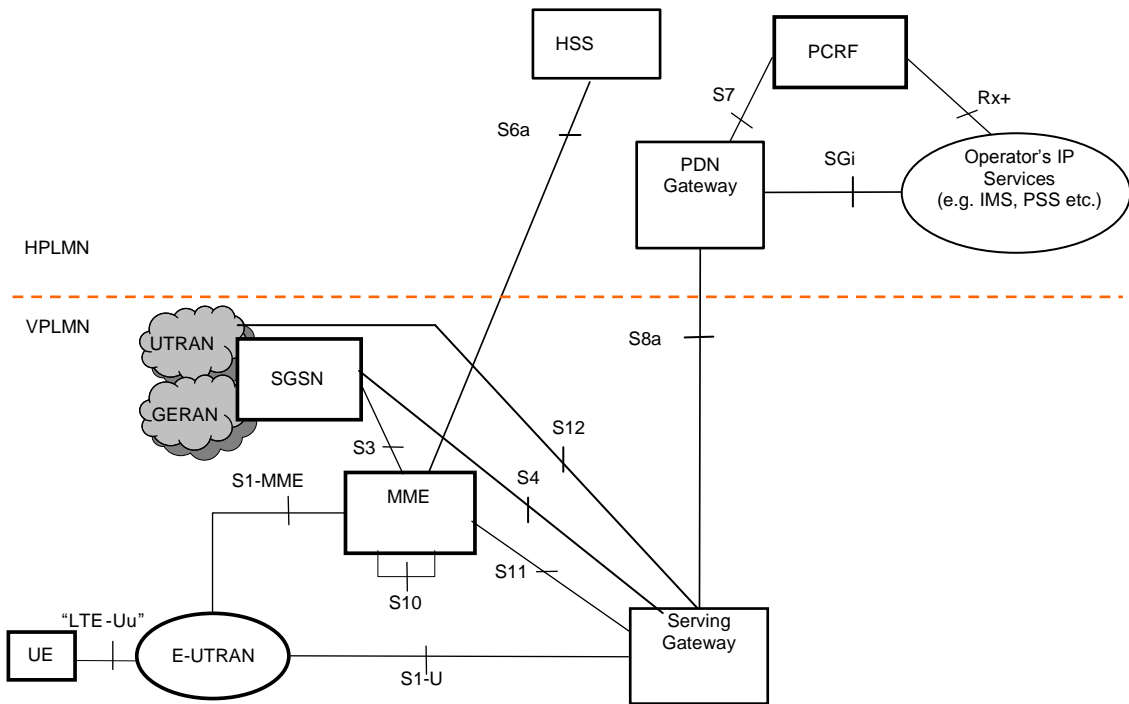


Figure 4.2.2-1: Roaming architecture for 3GPP accesses. Home routed traffic (from 3GPP TS23.401V800)

The new interfaces between Network Elements and signalling over the interfaces are also introduced and they are different from the pre-R8 core network.

Performance Management is one of basic management function for EPC, and performance measurements are the base for performance management, performance measurements defined in 32.406/7/8/9 can not meet the EPC management requirement. So that it is necessary to define new performance measurements for EPC.

The management of EPC should evolve from pre-Rel8 management architecture, and PM IRP (32.41y) will be reused, so the performance measurement definitions should reuse the template defined in 32.404.

4 Objective

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

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 (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
32.426	EPC Performance measurements	SA5		SA#42	SA#43	
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#		Comments

11 Work item rapporteur(s)Li Jian (lijian@chinamobile.com), Liang Shuangchun (liangshuangchun@cmdi.chinamobile.com)**12 Work item leadership**

SA5

13 Supporting Companies

China Mobile, Nortel, ZTE, Huawei

14 Classification of the WI (if known)

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

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

UID_390010 EPC Data Definitions

6.2 BB: EPC Charging

Technical Specification Group Services and System Aspects
 Meeting #38, 03 - 06 December 2007, Cancun, MEXICO

TSGS#38(07)0736

Source: SA5 (Telecom Management)
 Title: New WID on EPC Charging
 Document for: Approval
 Agenda Item: 10.21 (SAES) - 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects)

3GPP TSG-SA5 (Telecom Management)
 Meeting SA5#56, 22 - 26 October 2007, Guangzhou, CHINA

S5-072005

Work Item Description

Title

Evolved Packet Core (EPC) Charging UID_380038

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

1 3GPP Work Area

	Radio Access
X	Core Network
	Services

2 Linked work items

UID_320005 3GPP System Architecture Evolution Specification - Evolved Packet System(non RAN aspects)

3 Justification

The Evolved 3GPP System needs reliable and efficient charging solutions. As the Evolved 3GPP System is an evolution of UMTS, also the charging solutions for the Evolved 3GPP System should evolve from UMTS. Following the recommendations of the Study on Charging Aspects of 3GPP System Evolution a re-use of the existing UMTS charging standard solutions will have the following benefits:

- It is proven in operation;
- It will minimise both the standardisation and product development efforts (i.e. the cost and time);
- It provides a base, on which more functionality can be developed;
- It will shorten the time to market for Evolved 3GPP systems;
- It will facilitate a seamless coexistence with UMTS charging systems.
- It will also consider non-3GPP access;
- It will enable an easy migration for the Operator to the new solution.

4 Objective

This work item proposes to introduce Charging for the EPC Architecture by following the recommendations given in TR 32.820.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

This work item will cover Charging for EPC.

8 Security Aspects

Further investigation needed.

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 (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
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject			Approved at plenary#	Comments
32.240		Modify the Charging architecture model description for EPC			SA#40 Jun 2008	
32.296		Modify the Online Charging architecture to support EPC			SA#40 Jun 2008	
32.251		Modify the PS Charging architecture to support EPC			SA#41 Sep 2008	
32.252		Modify the WLAN Charging architecture to support EPC			SA#41 Sep 2008	
32.298		Modify or add parameters to CDR field descriptions for EPC			SA#42 Dec 2008	
32.299		Modification and/or additional AVPs for EPC			SA#42 Dec 2008	

11 Work item rapporteur(s)

Gerald GÖRMER (Nokia Siemens Networks)

12 Work item leadership

SA5

13 Supporting Companies

Alcatel-Lucent, Ericsson, Huawei, Nokia Siemens Networks, Nortel, Orange, T-Mobile, Vodafone

14 Classification of the WI (if known)

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

14b The WI is a Building Block: parent Feature

UID_320005 3GPP System Architecture Evolution Specification - Evolved Packet System (non RAN aspects)

7 Feature: IMS Multimedia Telephony and Supplementary Services UID_370059

7.1 BB: AoC support in IMS Charging

Technical Specification Group Services and System Aspects
Meeting #38, 03 - 06 December 2007, Cancun, MEXICO

TSGS#38(07)0739

Source: SA5 (Telecom Management)
Title: New WID on Advice of Charge (AoC) support in IMS Charging
Document for: Approval
Agenda Item: 10.26 (CH8) - Charging Management small Enhancements

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#56, 22 - 26 October 2007, Guangzhou, CHINA

S5-072012

Work Item Description

Title

Advice of Charge (AoC) support in IMS Charging UID_380042

The AoC service is standardized in 3GPP and available for CS and PS networks based on Charge Advice Information (CAI).

TISPAN introduced AoC based on Tariff Information according to ITU recommendations and ETSI specifications.

It is becoming available in 3G IMS networks. The usage of AoC in IMS based networks should be defined in 3GPP.

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

1 3GPP Work Area

	Radio Access
X	Core Network
	Services

2 Linked work items

- **UID_370059 IMS Multimedia Telephony and Supplementary Services (Acronym: IMS TSS)**

3 Justification

AoC is currently listed in the charging requirements for 3GPP in TS 22.115.

The high level description on AoC Information and Charging levels is in TS 22.086 and TS 23.086.

AoC is based on the Charge Advise Information (CAI) defined in TS 22.024.

The support of subscribed AoC in CAMEL for CS and PS networks is specified in TS 23.078.

The requirement for AoC support in TISPAN is handled in WID02037 and considers the SIP transfer of charging information in WID 3113.

The transport of tariff information, the evaluation and the advice to the mobile subscriber is not described in IMS.

4 Objective

This work item proposes to introduce AoC in 3GPP IMS Charging and is limited to support AoC information on the corresponding charging interfaces as well as in the OCS.
 A new specification will be created with definitions for AoC and description of AoC in IMS Charging. This description will contain the AoC Information for charging purposes.
 The determination for SIP transport of tariff information will follow the requirements from TS 22.273.
 The mechanism for the tariff change and the support of the tariff format will adhere on the existing 3GPP principles.
 Additions, e.g. for different use case or simplifications is For Further Study.

5 Service Aspects

The AoC service provision and information transfer should be made available as a SIP based IMS services. The transfer of tariff information is outside the scope of this WID but is For Further Study in other 3GPP groups.

6 MMI-Aspects

The presentation of the AoC information at the UE/ME is outside the scope of this WID and shall be considered in other 3GPP groups.

7 Charging Aspects

This is a Charging Work Item

8 Security Aspects

Further investigation needed

9 Impacts

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

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

New 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
32.280	Charging management; Advice of Charge (AoC) service	SA5		SA#42	SA#43	
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#		Comments
32.240		Modify the Charging architecture model description to include AoC		SA#43		
32.260		Modify the IMS Charging architecture to support the AoC information transfer		SA#43		
32.296		Modify the Online Charging description to include AoC		SA#43		
32.298		Add AoC parameters to CDR field descriptions		SA#43		
32.299		Add AVPs for AoC		SA#43		

11 Work item rapporteur(s)

Gerald GÖRMER (Nokia Siemens Networks)

12 Work item leadership

SA5

13 Supporting Companies

Nokia Siemens Networks, Alcatel-Lucent, Amdocs, Ericsson, Orange, Nortel, T-Mobile

14 Classification of the WI (if known)

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

14b The WI is a Building Block: parent Feature

[UID_370059 IMS Multimedia Telephony and Supplementary Services \(Acronym: IMS TSS\)](#)

7.2 BB: IMS Multimedia Telephony Service UID_370062

Technical Specification Group Services and System Aspects
 Meeting #38, 03 - 06 December 2007, Cancun, MEXICO

TSGS#38(07)0749

Source: SA5 (Telecom Management)
 Title: New WID on Multimedia Telephony Service and Supplementary Services (MMTel) Charging
 Document for: Approval
 Agenda Item: 10.26 (CH8) - Charging Management small Enhancements

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#56, 22 - 26 Oct 2007, Guangzhou, CHINA

S5-072014

Work Item Description

Title:
Multimedia Telephony Service and Supplementary Services (MMTel) Charging UID_380041

Supplementary services are a critical part of IMS. The current IMS charging specifications do not fully support supplementary services and associated charging records. This work proposal recommends adding MMTel charging

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

1 3GPP Work Area

	Radio Access
X	Core Network
	Services

2 Linked work items

Feature UID_370059 IMS Multimedia Telephony and Supplementary Services (Acronym: IMS TSS)

BB: UID_370062 IMS Multimedia Telephony Service (Acronym: IMS-MMTel)

3 Justification

The current 3GPP IMS charging documents do not fully cover MMTel supplementary services. The supplementary services are important to network operators since majority of voice calls involves supplementary services, such as call forwarding, call waiting, conference call, etc. Thus, supplementary service charging should be included in IMS session charging.

4 Objective

This work item proposes to introduce MMTel charging in 3GPP IMS. A new specification will be created with definitions for multimedia telephony service charging in IMS. Also this work item will enhance existing SA5 TS 32.298 and TS 32.299 by adding MMTel supplementary services AVPs from Telephone Application Server and corresponding charging fields in the charging data records.

NOTE : MMTel online charging was initially part of this Work Item. It is proposed to handle MMTel online charging in a separate Work Item.

5 Service Aspects
 None

- 6 **MMI-As pects**
None
- 7 **Charging As pects**
This is a charging Work Item
- 8 **Security As pects**
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 (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
32.275	MMTel Charging	SA5		SA#41 Sep 2008	SA#43 Mar 2009	
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#		Comments
32.298		Add MMTel ASN.1 structure		SA#43 Mar 2009		
		Update Section 5.2.3 subsystem level CDR definitions w ith supplementary service data type				
32.299		Add MMTel AVPs and descriptions		SA#43 Mar 2009		
		Define supplementary service AVPs, AVP codes, value types and flag rules. Provide detailed description for supplementary service AVPs				

- 11 **Work item rapporteur(s)**
GARDELLA, Maryse (Alcatel-Lucent)
- 12 **Work item leadership**
SA5
- 13 **Supporting Companies**
Alcatel-Lucent, Verizon Wireless, Nortel, Motorola
- 14 **Classification of the WI (if known)**

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

14c The WI is a Work Task: parent

Feature [UID_370059 IMS Multimedia Telephony and Supplementary Services \(Acronym: IMS TSS\)](#)

BB: [UID_370062 IMS Multimedia Telephony Service \(Acronym: IMS-MMTel\)](#)

8 Feature: UTRA HNB UID_390033

8.1 BB: 3G Home NodeB OAM&P (type 1 definition) (HNB-3G_OAM) UID_420037

Technical Specification Group Services and System Aspects
Meeting #42, 8 - 11 December 2008,
Athens, Greece

TSGS#42(08)0708

3GPP TSG-SA5 (Telecom Management)
Meeting SA5#62, 17~21 November 2008, Miami, USA

S5-082488

Source: Huawei Technologies, Nokia Siemens Network, Ericsson
Title: New WT-level WID on 3G Home NodeB OAM&P (Interface Type 1 Management)
Document for: Approval
Agenda Item: 6.2

Parent Building Block		
Unique ID	Title	TS
UID_380065	Home NodeB / eNodeB	HomeNB

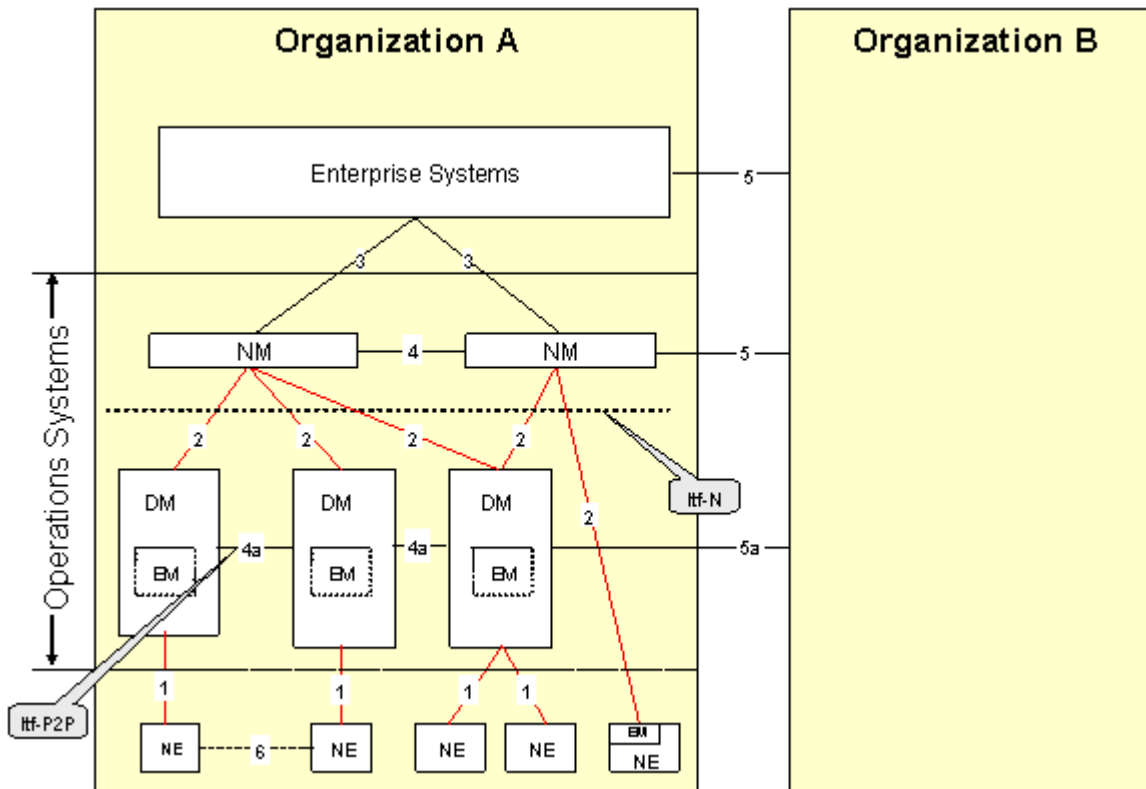
3 Justification

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

- The quantity of Home NodeB is likely to be large
- There may be many Home NodeB vendors
- Home NodeB may be purchased easily by end users in market
- The location of Home NodeB could be in a private residence which may not be accessible for frequent on-site maintenance

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



4 Objective

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

4.1 Management on Standard Interfaces type 1 for 3G Home NodeB:

- Investigate what management standardization work are needed for management of 3G Home NodeB over interface type 1.
- Define the standardization work mentioned above for 3G Home NodeB management over interface type 1.

4.2 This WI shall include:

- Stage 1 Requirements specified in TS 32.XX1
 - Configuration Management (CM)
 - Fault Management
 - Performance Management
 - Security aspects of OAM
 - Note: Input for this TS is derived from TS25.467, TR32.821, SA5 contributions & Specification
- Stage 2 specified in TS 32.XX2
 - Architecture for HNB Management (derived from TS25.467, TR32.821, SA5 contributions & Specification) for CM, FM and PM
 - Object Classes for
 - Configuration Management (CM) for

- HNB Access Network
- Core Network (related to HNB)
- Transport Network (related to HNB)
 - Fault Management
 - Performance Management
- Stage 2 for contents definition for CM, FM, PM & Logging
- Note: Input for this TS is derived from TS25.467, TR32.821, bbf2008 851 00 (BBF contribution), SA5 contributions & Specification
- The HNB to ACS procedure flow document TS 32.xx3
 - OAM Procedural flows for HNB Discovery, registration, config updates
 - OAM Procedural flows for FM
 - OAM Procedural flows for PM
 - Note: Input for this TS is derived from TS25.467, TR32.821, SA5 contributions & Specification
- Stage 3 specified in TS 32.XX4
 - Data Format for CM, FM & PM (specified or referenced if required by stage-2)

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

9 Impacts

Affects:	UICC apps	ME	AN	CN	Others
Yes					
No	X	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 resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comment
32.581	Home NodeB OAM&P concepts and requirements (for interface type1)	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.582	Home NodeB OAM&P Stage2(for interface type1)	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.583	HNB to ACS procedure flow	SA5		SA#43 Mar 2009	SA#43 Mar 2009	
32.584	Home NodeB OAM&P Stage3(for interface type1)	SA5		SA#44 Mar 2009	SA#44 Mar 2009	
Affected existing specifications [None in the case of Study Items]						
Spec No.	CR	Subject		Approved at plenary#	Comments	

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
Samsung

14 Classification of the WI (if known)

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

14b The WI is a Building Block: parent

Feature [UID_390033 UTRA HNB](#) (Acronym: HNB)

Annex A:
List of SA5 Release 8 specifications

Type	Number	Title	rapporteur
TR	30.818	Project scheduling and open issues for SA5, Release 8	ZOICAS, Adrian
TS	32.121	Advanced alarming on lrf-N Integration Reference Point (IRP); Requirements	SUERBAUM, Clemens
TS	32.122	Advanced alarming on lrf-N Integration Reference Point (IRP); Information Service (IS)	SUERBAUM, Clemens
TS	32.123	Advanced alarming on lrf-N Integration Reference Point (IRP); Common Object Request Broker Architecture (CORBA) Solution Set (SS)	SUERBAUM, Clemens
TS	32.153	IRP technology specific template	TOVINGER, Thomas
TS	32.154	Backward and Forward Compatibility (BFC); Concept and definitions	TOVINGER, Thomas
TS	32.155	Requirements template	TOVINGER, Thomas
TS	32.274	Charging management; Short Message Service (SMS) charging	WONG, Gavin
TS	32.275	Charging management; MultiMedia Telephony (MMTel) charging	GARDELLA, Maryse
TS	32.280	Charging management; Advice of Charge (AoC) service	GORMER, Gerald
TS	32.410	Telecommunication management; Key Performance Indicators (KPI) for UMTS and GSM	LIANG, Shuangchun
TS	32.450	Key Performance Indicators (KPI) for E-UMTS: Definitions	HUBINETTE, Ulf
TS	32.451	Key Performance Indicators (KPI) for E-UMTS: Requirements	HUBINETTE, Ulf
TS	32.500	Self-Organizing Networks (SON); Concepts and requirements	GOMPAKIS, Panagiotis
TS	32.501	Self-Organizing Networks (SON); Self-establishment of eNodeBs; Concepts and requirements	SUERBAUM, Clemens
TS	32.502	Self-Organizing Networks (SON); Self-establishment of eNodeBs; Stage 2	SUERBAUM, Clemens
TS	32.511	Self-Organizing Networks (SON); Automatic Neighbour Relation (ANR) management; Concepts and requirements	TSE, Edwin
TS	32.521	Self-Organizing Networks (SON); Self-optimization and self-healing; Concepts and requirements	WANG, Xuelong
TS	32.531	Telecommunication management; Software management; Concepts and Integration Reference Point (IRP) Requirements	
TS	32.532	Telecommunication management; Software management Integration Reference Point (IRP); Information Service (IS)	
TS	32.533	Telecommunication management; Software management Integration Reference Point (IRP); Common Object Request Broker Architecture (CORBA) Solution Set (SS)	
TS	32.537	Telecommunication management; Software management Integration Reference Point (IRP); SOAP Solution Set (SS)	
TS	32.581	Home Node B (HNB) Operations, Administration, Maintenance and Provisioning (OAM&P); Concepts and requirements for Type 1 interface HNB to HNB Management System (HMS)	Zou Lan
TS	32.582	Home Node B (HNB) Operations, Administration, Maintenance and Provisioning (OAM&P); Information model for Type 1 interface HNB to HNB Management System (HMS)	SUDARSAN, Padma
TS	32.583	Telecommunications management; Home Node B (HNB) Operations, Administration, Maintenance and Provisioning (OAM&P); Procedure flows for Type 1 interface HNB to HNB Management System (HMS)	Malviya, Manish
TS	32.584	Home Node B (HNB) Operations, Administration, Maintenance and Provisioning (OAM&P); XML definitions for Type 1 interface HNB to HNB Management System (HMS)	ANDRIANOV, Anatoly
TS	32.751	EPC NRM IRP Requirements	LOU, Min
TS	32.752	EPC NRM IRP Information Service	WANG, Xuelong
TS	32.753	EPC NRM IRP CORBA Solution Set	LOU, Min
TS	32.755	EPC NRM IRP Bulk CM XML file format definition	WANG, Xuelong
TS	32.761	E-UTRAN NRM IRP Requirements	ELMDAHL, Per
TS	32.762	E-UTRAN NRM IRP Information Service	ELMDAHL, Per
TS	32.763	E-UTRAN NRM IRP CORBA Solution Set	ELMDAHL, Per
TS	32.765	E-UTRAN NRM IRP Bulk CM XML file format definition	ELMDAHL, Per
TR	32.808	Study of Common Profile Storage (CPS) Framework of User Data for network services and management	ABA, Istvan
TR	32.816	Study on management of Long Term Evolution (LTE) and System Architecture Evolution (SAE)	PETERSEN, Robert
TR	32.818	Study on 3GPP SA5 / MTOSI XML harmonization	DUGUAY, Jean
TR	32.819	Telecommunications management; Element management layer - Operation System Function (E-OSF) definition	YANG, Li
TR	32.820	Charging management; 3GPP System Architecture Evolution (SAE): Charging aspects	GORMER, Gerald

Annex B: Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2010-09	SA#49	SP-100524	--	--	Presentation to SA for Information and Approval	---	1.0.0
2010-10	--	--	--	--	Publication	1.0.0	8.0.0