# 3GPP TR 30.817 V7.0.0 (2008-03)

**3rd Generation Partnership Project;
Technical Specification Group Services and System Aspects;
Telecommunication management;
Project scheduling and open issues for SA5
(Release 7)**

**GLOBAL SYSTEM FOR
MOBILE COMMUNICATIONS**

Keywords

Telecom management, OAM&P, Charging

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***3GPP***

# Contents

# 1 Scope

The purpose of this document is to contain the updated Work Item Descriptions (WIDs) and capture status of all SA5 work items of the current 3GPP Release in order for the group to get an overview of current ongoing work.

This TR is used as a mean to provide input to the complete 3GPP work plan that is handled by MCC.

Status list of Work items can be found at the end of the present document.

List of SA5 Release 7 specifications can be found at the end of the present document.

The SA5 Release 7 work has been started in September 2005 and finished in June 2007.

# 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 Operations, Administration, Maintenance & Provisioning - OAM&P

**Feature: Operations, Administration, Maintenance & Provisioning (OAM7)  Unique_ID: 35041**

BB: Network Infrastructure Management (OAM7-NIM)  Unique_ID: 35042

**Technical Specification Group Services and System Aspects**   *TSGS#28(05)0302*
Meeting #28, Quebec, CANADA, 06-08 June 2005

| | |
|---|---|
| **Source:** | **SA5 (Telecom Management)** |
| **Title:** | **WID WT Enhance NRM to accommodate NGN (IMS as basis of the Next Generation Network)** |
| **Document for:** | **Approval** |
| **Agenda Item:** | **7.5.3** |

3GPP TSG-SA5 (Telecom Management)   S5-050280
Meeting #42, Montreal, CANADA, 09 - 13 May 2005

<u>Work Item Description</u>

Title:
WT Enhance NRM to accommodate NGN (IMS as basis of the Next Generation Network)  Unique_ID: 35044
Acronym: OAM7-NIM

## 1 3GPP Work Area

| | |
|---|---|
| X | Radio Access |
| X | Core Network |
| | Services |

## 2 Linked work items

OAM&P (Operations, Administration, Maintenance & Provisioning)  (Feature: OAM7)

| WI | Unique_ID |
|---|---|
| OAM7 | 35041 |

Network Infrastructure Management (BB: OAM7-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

## 3 Justification

The IMS has been adopted as the basis of the Next Generation Network (NGN).
It is proposed to enhance the 3GPP NRM in TS 32.63x Configuration Management (CM); Core Network Resources Integration Reference Point (IRP) - to accommodate any additional requirements identified.

## 4 Objective

In liaison with other groups (e.g. ETSI TISPAN, TeleManagement Forum (TMF), ITU-T SG4, Multiservice Switching Forum (MSF) to enhance the Core Network Resource Model to support the requirements of NGN Release 1 and Voice over IP (VoIP).

## 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 | Prime rsp. WG | 2ndary rsp. WG(s) | Presented for information at plenary# | Approved at plenary# | Comments |
| 32.731 | | SA5 | | SA #33 Sep 2006 | SA#34 Dec 2006 | IP Multimedia Subsystem (IMS) Network Resource Model (NRM) IRP Requirements |
| 32.732 | | SA5 | | SA #33 Sep 2006 | SA#34 Dec 2006 | IP Multimedia Subsystem (IMS) Network Resource Model (NRM) IRP Information Service (IS) |
| 32.733 | | SA5 | | SA #33 Sep 2006 | SA#34 Dec 2006 | IP Multimedia Subsystem (IMS) Network Resource Model (NRM) IRP Common Object Request Broker Architecture (CORBA) Solution Set (SS) |
| 32.735 | | SA5 | | SA #33 Sep 2006 | SA#34 Dec 2006 | IP Multimedia Subsystem (IMS) Network Resource Model (NRM) IRP Bulk CM eXtensible Markup Language (XML) file format definition |

| Affected existing specifications | | | | |
|---|---|---|---|---|
| Spec No. | CR | Subject | Approved at plenary# | Comments |
| 32.632 | | Enhance NRM to accommodate NGN | SA#36 Jun 2007 | Configuration Management (CM); Core Network Resources IRP: Network Resource Model (NRM) |
| 32.633 | | Enhance NRM to accommodate NGN | SA#36 Jun 2007 | CM; Core network resources IRP: CORBA SS |
| 32.635 | | Enhance NRM to accommodate NGN | SA#36 Jun 2007 | CM; Core network resources IRP: XML file format definition |

## 11 Work item rapporteur(s)

Thomas TOVINGER (thomas.tovinger@ericsson.com)

## 12 Work item leadership

SA5

## 13 Supporting Companies

BT, Lucent, Motorola, Nortel, Ericsson, Nokia, Orange

## 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)

Network Infrastructure Management (BB: OAM7-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

**Technical Specification Group Services and System Aspects**  *TSGS#28(05)0304*
Meeting #28, Quebec, CANADA, 06-08 June 2005

| | |
|---|---|
| **Source:** | **SA5 (Telecom Management)** |
| **Title:** | **WID WT Co-operative Element Management interface (CO-OP)** |
| **Document for:** | **Approval** |
| **Agenda Item:** | **7.5.3** |

3GPP TSG-SA5 (Telecom Management)  S5-050282
Meeting #42, Montreal, CANADA, 9 - 13 May 2005

<u>Work Item Description</u>

Title:
WT Co-operative Element Management interface (CO-OP)  Unique_ID: 35046
Acronym: OAM7-NIM

## 1  3GPP Work Area

| | |
|---|---|
| X | Radio Access |
| X | Core Network |
| | Services |

## 2  Linked work items

OAM&P (Operations, Administration, Maintenance & Provisioning)  (Feature: OAM7)

| WI | Unique_ID |
|---|---|
| OAM7 | 35041 |

Network Infrastructure Management (BB: OAM7-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

## 3  Justification

Networks are often multi-vendor, whereas Operations Support Systems (OSSs) are single vendor.
Traditional architectures allow multi-vendor capabilities to be provided through integration to a vendor-independent Network Management System (NMS), by means of northbound interfaces (i.e. the existing 3GPP IRPs).

The aim of this work item is to enable the NMS (and the human operator) to monitor and configure border aspects between Element Management Systems (EMSs) / IRP Agents (within a vendor's domain and across vendors domains). This will be achieved through sharing of information, responsibility and management knowledge between EMSs over a horizontal peer-to-peer (p2p) interface.

## 4  Objective

Sharing of information, responsibility and management knowledge between EMSs over a horizontal peer-to-peer (p2p) interface (reusing and/or enhancing existing 3GPP IRPs) is the objective of this work item.

Examples of shared responsibility and management knowledge between EMSs that this Work item will address:

- Read domain topology data
- Subscribe to state changes
- Receive events/alarms
- Requests functions
- Common Key Performance Indicators (KPIs)

## 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 rsp. WG | 2ndary rsp. WG(s) | Presented for information at plenary# | Approved at plenary# | Comments |
| TR 32.806 | Telecommunication management; Application guide for peer-to-peer (p2p) Integration Reference Points (IRPs) | SA5 | none | SA#30 Dec 2005 | SA#32 Jun 2006 | |
| TR 32.814 | Telecommunication management; UTRAN and GERAN Key Performance Indicators (KPI) | SA5 | none | SA#34 Dec 2006 | SA#35 Mar 2007 | |

| Affected existing specifications | | | | |
|---|---|---|---|---|
| Spec No. | CR | Subject | Approved at plenary# | Comments |
| 32.101 | CR#0031 | EM to EM Interface<br>Add the Domain Manager and its Peer-to-Peer Interface (Itf-P2P) to the Telecom Management Architecture | SA#33 Sep2006 | |

## 11 Work item rapporteur(s)
Michael.Truss@motorola.com

## 12 Work item leadership
SA5

## 13 Supporting Companies
Motorola, Ericsson, Nokia, NEC, Siemens, Lucent, Nortel, Huawei, Alcatel, ZTE

## 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)

Network Infrastructure Management (BB: OAM7-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

**Technical Specification Group Services and System Aspects** *TSGS#28(05)0305*
Meeting #28, Quebec, CANADA, 06-08 June 2005

| | |
|---|---|
| **Source:** | **SA5 (Telecom Management)** |
| **Title:** | **WID WT Network Management (NM) Itf-N performance criteria** |
| **Document for:** | **Approval** |
| **Agenda Item:** | **7.5.3** |

3GPP TSG-SA5 (Telecom Management) S5-050283
Meeting #42, Montreal, CANADA, 09 - 13 May 2005

<u>Work Item Description</u>

Title:
WT Network Management (NM) Itf-N performance criteria  Unique_ID: 35047
Acronym: OAM7-NIM

**1    3GPP Work Area**

| | |
|---|---|
| X | Radio Access |
| X | Core Network |
| | Services |

**2    Linked work items**

OAM&P (Operations, Administration, Maintenance & Provisioning)  (Feature: OAM7)

| **WI** | **Unique_ID** |
|---|---|
| OAM7 | 35041 |

Network Infrastructure Management (BB: OAM7-NIM)

| **WI** | **Unique_ID** |
|---|---|
| OAM7-NIM | 35042 |

**3    Justification**

Performance is a key point to ensure the quality of a product. This is also the case for the UMTS network management
Itf-N. The current SA5 specifications define the function requirements and solution for UMTS network management
Itf-N. But to ensure the all-around quality of the Itf-N, a series of reasonable performance criteria is needed.
Performance criteria points out the potential risk from the kinds of aspects for UMTS network management Itf-N.
It should be scientific and able to accurately reflect the performance bottle-neck points of the Itf-N.
It's necessary to have a Work Task which focus on the definition of performance criteria to evaluate the performance of
Itf-N.  These performance criteria will be considered by vendors when implement their products, especially when
design the internal architecture of the IRP Agent which may influence the performance of Itf-N.
These performance criteria will also be useful for operators as a guide to evaluate Itf-N products.

**4    Objective**

Define Itf-N performance criteria. The value definition of itf-N performance criteria is out of the scope
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** | | | | | |
| **No** | X | 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 |
| TR 32.811 | Telecommunication management; Itf-N performance criteria requirements | SA5 | | SA#34 Dec 2006 | SA#36 Jun 2007 | |
| Affected existing specifications | | | | | | |
| Spec No. | CR | | Subject | | Approved at plenary# | Comments |
| | | | | | | |

### 11 Work item rapporteur(s)

China Mobile (liyewen@chinamobile.com)

### 12 Work item leadership

SA5

### 13 Supporting Companies

China Mobile, Huawei, ZTE, CATT, Nortel, Nokia

### 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

Network Infrastructure Management (BB: OAM7-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

**Technical Specification Group Services and System Aspects** *TSGS#28(05)0306*
Meeting #28, Quebec, CANADA, 06-08 June 2005

| Source: | SA5 (Telecom Management) |
| --- | --- |
| Title: | WID WT Delta synchronization between IRP Manager and IRP Agent |
| Document for: | Approval |
| Agenda Item: | 7.5.3 |

3GPP TSG-SA5 (Telecom Management)                                                                                    S5-050284
Meeting #42, Montreal, CANADA, 09 - 13 May 2005

Work Item Description

Title:

WT Delta synchronization between IRP Manager and IRP Agent  Unique_ID: 35048
Acronym: OAM7-NIM

## 1      3GPP Work Area

| X | Radio Access | |
| --- | --- | --- |
| X | Core Network | |
|   | Services | |

## 2      Linked work items

OAM&P (Operations, Administration, Maintenance & Provisioning)  (Feature: OAM7)

| WI | Unique_ID |
| --- | --- |
| OAM7 | 35041 |

Network Infrastructure Management (BB: OAM7-NIM)

| WI | Unique_ID |
| --- | --- |
| OAM7-NIM | 35042 |

## 3      Justification

If the connection between the IRPManager and the IRPAgent was lost, then currently the only way for the IRPManager to synchronize again after re-establishment of the connection is to synchronize the complete data.
This can be a huge amount of data, both and individually for Configuration Management (CM) and Fault Management (FM) data, even if only very little data actually has changed in the meantime. This puts an unnecessary load on both the IRPManager and the IRPAgent and can take a long time – even if there was only a short interruptions of the connection.

Other cases where synchronization is needed are e.g.:
- IRPAgent does not send notifications;
- IRPManager does not evaluate notifications;
- loss of notifications on IRPManager side because of system problems;
- inability to generate notifications on IRPAgent side because of system problems.

A mechanism allowing to synchronize only the changed, i.e. new/modified/deleted data, will be beneficial.

## 4      Objective
a)      Identify data which requires synchronization of only changed data
b)      Define requirements for synchronization of only changed data
c)      Define methods to allow synchronization of only changed data, both for CM and FM
d)      Define methods to allow synchronization of only changed data other than CM and FM data

## 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)

The result of this work might be a usage guide (TR).

Information produced within this work may eventually become consolidated into particular IRP specifications (TSs).

| New specifications | | | | | | |
|---|---|---|---|---|---|---|
| Spec No. | Title | Prime rsp. WG | 2ndary rsp. WG(s) | Presented for information at plenary# | Approved at plenary# | Comments |
| 32.391 | | SA5 | | SA#34 Dec 2006 | SA#35 Mar 2007 | |
| 32.392 | | SA5 | | SA#34 Dec 2006 | SA#35 Mar 2007 | |
| 32.393 | | SA5 | | SA#35 Mar 2007 | SA#36 Jun 2007 | |
| 32.395 | | SA5 | | SA#36 Jun 2007 | SA#36 Jun 2007 | |
| **Affected existing specifications** | | | | | | |
| Spec No. | CR | Subject | | Approved at plenary# | Comments | |
| | | | | | | |

## 11 Work item rapporteur(s)

Clemens SUERBAUM, Siemens (clemens.suerbaum@siemens.com)

## 12 Work item leadership

SA5

## 13 Supporting Companies

Siemens, Huawei, ZTE, Motorola, Alcatel, China Mobile

## 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)

Network Infrastructure Management (BB: OAM7-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

| | |
|---|---|
| **Source:** | **SA5 (Telecom Management)** |
| **Title:** | **Updated WID on WT Subscription Management (SuM) IRP Solution Sets (OAM7-NIM)** |
| **Document for:** | **Approval** |
| **Agenda Item:** | **10.40   (OAM7) - OAM&P Rel 7** |

Work Item Description

Title:
WT Subscription Management (SuM) IRP Solution Sets  Unique_ID: 35049
Acronym: OAM7-NIM

Standardization of **SuM operations** will significantly enhance the ability of 3GPP based networks to provision and administer complex services in the areas of:

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

## 1   3GPP Work Area

| | |
|---|---|
| | Radio Access |
| | Core Network |
| X | Services |

## 2   Linked work items

OAM&P (Operations, Administration, Maintenance & Provisioning)  (Feature: OAM7)

| WI | Unique_ID |
|---|---|
| OAM7 | 35041 |

- SA5: Subscription Management (SuM)
  - o SA5: SuM Services Operations Management (Requirements, Architecture and Data)

## 3   Justification

To enable service providers to administer the subscription data defined in the Network Resource Model (NRM) an adequate Interface IRP fulfilling the SuM operations requirements has to be specified.
Rel-6 SuM work concluded existing IRPs shall be reused to fulfil the SuM operations requirements.
The Solution Sets used for these existing IRPs were found not to be adequate for SuM and SOAP has been agreed to be the suitable technology for SuM.
Enhancements in the SuM NRM Information Service will result in adjustment of the existing SuM NRM IRP XML definition.

## 4   Objective

- Add new SOAP SSs to TS 32.101 Telecommunication management; Principles and high level requirements
- Update of TS 32.175 on SuM NRM IRP XML definition and alignment with the SOAP SS used for the Interface IRP;
- For existing IRPs to create new TSs on SuM Interface IRP SOAP SSs:

  32.307 Notification IRP SOAP SS
  32.317 Generic IRP Management SOAP SS
  32.607 Basic CM IRP SOAP SS
  32.665 Kernel CM IRP XML definitions
  32.667 Kernel CM IRP SOAP SS

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

**9 Impacts**

| Affects: | UICC apps | ME | AN | CN | Others |
|---|---|---|---|---|---|
| Yes | | | | X | |
| 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 |
| 32.307 | Notification IRP SOAP SS | SA5 | | SA#31 13 - 15 Mar 2006 | SA#34 Dec 2006 | Rapporteur: Ericsson |
| 32.317 | Generic IRP Management SOAP SS | SA5 | | SA#33 Sep 2006 | SA#34 Dec 2006 | Rapporteur: Ericsson |
| 32.607 | Basic CM IRP SOAP SS | SA5 | | SA#30 Dec 2005 | SA#34 Dec 2006 | Rapporteur: Ericsson |
| 32.667 | Kernel CM IRP SOAP SS | SA5 | | SA#31 13 - 15 Mar 2006 | SA#34 Dec 2006 | Rapporteur: Ericsson |
| 32.665 | Kernel CM IRP XML definitions | SA5 | | | SA#34 Dec 2006 | Rapporteur: Huawei |
| Affected existing specifications | | | | | | |
| Spec No. | CR | | Subject | Approved at plenary# | | Comments |
| 32.101 | | | Add new SOAP SSs | SA#34 Dec 2006 | | Telecommunication management; Principles and high level requirements |

**11 Work item rapporteur(s)**
Thomas Tovinger (thomas.tovinger@ericsson.com)
**12 Work item leadership**
SA5
**13 Supporting Companies**
Ericsson, T-Mobile, Nokia, Nortel, Siemens, TeliaSonera, Vodafone, Orange, Motorola, Huawei

**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

OAM&P (Operations, Administration, Maintenance & Provisioning)  (Feature: OAM7)

| WI | Unique_ID |
|---|---|
| OAM7 | 35041 |

- SA5: Subscription Management (SuM)

**Technical Specification Group Services and System Aspects** *TSGS#28(05)0308*
Meeting #28, Quebec, CANADA, 06-08 June 2005

| | |
|---|---|
| **Source:** | **SA5 (Telecom Management)** |
| **Title:** | **WID WT Integration Reference Point (IRP) Security Management** |
| **Document for:** | **Approval** |
| **Agenda Item:** | **7.5.3** |

3GPP TSG-SA5 (Telecom Management) S5-050286
Meeting #42, Montreal, CANADA, 09 - 13 May 2005

<u>Work Item Description</u>

Title:
WT Integration Reference Point (IRP) Security Management   Unique_ID: 35050
Acronym: OAM7-NIM

## 1 3GPP Work Area

| X | Radio Access |
|---|---|
| X | Core Network |
| | Services |

## 2 Linked work items

OAM&P (Operations, Administration, Maintenance & Provisioning) (Feature: OAM7)

| WI | Unique_ID |
|---|---|
| OAM7 | 35041 |

Network Infrastructure Management (BB: OAM7-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

Performance Management (BB: OAM7-PM)

| WI | Unique_ID |
|---|---|
| OAM7-PM | 35043 |

## 3 Justification

The 3G Mobile Network is a system that is sensitive to fraud behaviour and contains highly sensitive data that is fundamental to the correct operation of the Mobile Network.
In the context of managing a 3G Mobile Network, the management will exchange sensitive data between the management system and the mobile network.
This proposal builds upon and enhances the Release 6 security work undertaken to date for security management.

## 4 Objective

The objective of this work item is to enhance the 3GPP Rel-6 security (32.371 Security Concept and Requirements) to further ensure secure access and data protection throughout the OAM network.  The following security features, in addition to those specified in 3GPP Rel-6, should be considered:

- Application Layer Authentication
  A capability that allows the IRPAgent to securely determine if the IRP Manager is the user it claims to be.
- Application Layer Authorization
  A capability that allows the IRPAgent to securely determine if the authenticated IRP Manager has the right to manage part or all of the managed network.
- Application Repudiation
- A capability that allows IRPAgent to securely log operations requested.
- Security Aspect
- A Security Aspect section is to be added in each existing IRP respectively.

## 5 Service Aspects

None
**6       MMI-Aspects**
None
**7       Charging Aspects**
None
**8       Security Aspects**
           This work item description is security specific.


**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 |
| 32.372 | IRP Security Management – Information Service | SA5 | | SA#32 Jun 2006 | SA#35 Mar 2007 | |
| 32.373 | IRP Security Management – CORBA Solution Set | SA5 | | SA#33 Sep 2006 | SA#35 Mar 2007 | |
| 32.375 | Security Services for IRP: File integrity solution | SA5 | | SA#32 Jun 2006 | SA#34 Dec 2006 | |
| Affected existing specifications | | | | | | |
| Spec No. | CR | Subject | | Approved at plenary# | | Comments |


11       Work item rapporteur(s)
           LI Yang, Huawei (afi@huawei.com)
**12       Work item leadership**
           SA5
**13       Supporting Companies**
           Huawei, China Mobile, Ericsson, Nokia, Siemens, Motorola, Nortel, Lucent, ZTE, CATT, Alcatel


**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)


Network Infrastructure Management (BB: OAM7-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |


Performance Management (BB: OAM7-PM)

| WI | Unique_ID |
|---|---|
| OAM7-PM | 35043 |

**Technical Specification Group Services and System Aspects** *TSGS#28(05)0310*
Meeting #28, Quebec, CANADA, 06-08 June 2005

| | |
|---|---|
| **Source:** | **SA5 (Telecom Management)** |
| **Title:** | **WID WT Partial suspension of Itf-N during maintenance/testing** |
| **Document for:** | **Approval** |
| **Agenda Item:** | **7.5.3** |

3GPP TSG-SA5 (Telecom Management) S5-050288
Meeting #42, Montreal, CANADA, 09 - 13 May 2005

<u>Work Item Description</u>

Title:
WT Partial suspension of Itf-N during maintenance/testing  Unique_ID: 35052
Acronym: OAM7-NIM

## 1     3GPP Work Area

| | |
|---|---|
| X | Radio Access |
| X | Core Network |
| | Services |

## 2     Linked work items

OAM&P (Operations, Administration, Maintenance & Provisioning)  (Feature: OAM7)

| **WI** | **Unique_ID** |
|---|---|
| OAM7 | 35041 |

Network Infrastructure Management (BB: OAM7-NIM)

| **WI** | **Unique_ID** |
|---|---|
| OAM7-NIM | 35042 |

WT Delta synchronization between IRP Manager and IRP Agent

| **WI** | **Unique_ID** |
|---|---|
| OAM7-NIM | tbd |

## 3     Justification

In certain scenarios floods of unwanted notifications including alarms will be sent to the IRP manager by network object instances. Thereby the interface and the management systems bear unnecessary load. Even worse: The operator's awareness is drawn away from really urgent events.

Example for such scenarios:
- A failed network element is replaced and tested after installation.
- The configuration of a network region is expanded by additional network elements and the new configuration is scrutinized by tests in the real network.
- The configuration of a network region is changed significantly and the new configuration is scrutinized by tests in the real network, e.g. NE re-homing.

In these scenarios it can also be important that no commands via the Itf-N interfere with actions from the local craft interface (e.g. people working close to antennas would like to have complete control when the radiation is switched on).

Conclusion: A mechanism allowing to suspend Itf-N (i.e. to send no notifications of the involved network elements and/or to disallow Itf-N management operations) for a period of time will be beneficial.

It should also be studied if/which notifications/operations should be exempted from the suspension.
Multi-manager issues need to be addressed. Interworking with data synchronisation mechanisms needs investigation.

## 4     Objective

e)   Define requirements, considering multi-manager aspects and data synchronisation, for mechanisms suspending Itf-N notifications and/or operations for a scope of managed object instances

f)  Define mechanisms to suspend Itf-N notifications and/or operations for a scope of managed object instances

**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 32.381 | Partial Suspension of Itf-N IRP: Requirements | SA5 | | SA#32 Jun 2006 | SA#35 Mar 2007 | |
| TS 32.382 | Partial Suspension of Itf-N IRP: Information Service | SA5 | | SA#32 Jun 2006 | SA#35 Mar 2007 | |
| TS 32.383 | Partial Suspension of Itf-N IRP: CORBA SS | SA5 | | SA#35 Mar 2007 | SA#35 Mar 2007 | |
| TS 32.385 | Partial Suspension of Itf-N IRP: XML definition | SA5 | | SA#36 Jun 2007 | SA#36 Jun 2007 | |
| Affected existing specifications | | | | | | |
| Spec No. | CR | Subject | | Approved at plenary# | Comments | |
| | | | | | | |

**11      Work item rapporteur(s)**
Clemens SUERBAUM, Siemens (clemens.suerbaum@siemens.com)
**12      Work item leadership**
SA5
**13      Supporting Companies**
Siemens, Alcatel, Vodafone, CATT, Orange, CMCC

**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)

Network Infrastructure Management (BB: OAM7-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

**Technical Specification Group Services and System Aspects** *TSGS#29(05)0630*
Meeting #29, Tallinn, ESTONIA, 26-28 September 2005

| | |
|---|---|
| Source: | SA5 (Telecom Management) |
| Title: | WID WT Backward and Forward Compatibility of IRP systems (OAM7-NIM-BFC) |
| Document for: | Approval |
| Agenda Item: | 11.27 |

**3GPP TSG-SA5 (Telecom Management)** **S5-056447**
**Meeting #42bis, Sophia Antipolis, FRANCE, 27 Jun - 1 Jul 2005**

Work Item Description

Title:
WT Backward and Forward Compatibility of IRP systems  Unique_ID: 35064

Acronym: OAM7-NIM

This work item standardizes the rules that IRP authors can use to evolve existing IRP specifications such that implementations of the new IRP specifications can result in systems that are backward compatible to systems that have implemented the existing specification.

## 1    3GPP Work Area

| | |
|---|---|
| X | Radio Access |
| X | Core Network |
| | Services |

## 2    Linked work items

- Network Infrastructure Management (BB: OAM7-NIM)

| Acronym | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

## 3    Justification

Given that

- 3GPP is publishing the Interface, NRM and Data Definition IRP specifications rapidly, i.e.,  multiple versions per release period; and will continue to do so in the future, and
- Vendors are making products that support Vendor Specific Extension (VSE) that are based on 3GPP IRP specifications; and
- Operators are planning to use 3GPP IRP to manage large multi-vendor networks; and
- Operators may want to use a managing system that is compliant to vendor-A VSE (that is based on 3GPP IRP specifications) to manage multi-vendor managed systems that may not be supporting vendor-A VSE but are supporting vendor-B VSE (that is based on 3GPP IRP specifications); and
- It requires less coordination and less service disruption if managing systems and managed systems upgrades, in a large network, be done in a gradual basis (e.g., upgrade western region's Alarm IRP Agents first, then upgrade the eastern region's Alarm IRP Agents, then central Alarm IRP Managers in 3 stages); and
- It is inconceivable that, in a large multi-vendor network, all IRPManagers (may be from various vendors) and IRPAgents (may be from various vendors as well) must use the same 3GPP specification release at all time;

There is a need for 3GPP to specify rules such that, if and when used by IRP standard authors to develop a new release, the implementations supporting the resultant new release can interoperate with implementations supporting the "older" release.

Such rules are called backward compatibility rules.  The prime focus or target of this WID is to standardize these rules.

There is also a need for 3GPP to specify rules such that when used by IRP standard authors to specify a standard of a release, the implementation supporting the resultant release can have a better chance of interoperating with implementations supporting future release.  Such rules are called forward compatibility rules.  Forward compatibility is harder to achieve than backward compatibility, since, in the backward case, the 'old' system behaviour is known whereas a forward compatible system needs to cope gracefully with unknown future features.

The standardization of these forward compatibility rules is the secondary focus or target of this WID.

There are industrial best practices for defining systems that are backward and/or forward compatible.  We intend to draw on those experiences.

The work on backward compatibility rules has been performed in Release 6 under the SA5 Work Task "Backward Compatibility". The Technical Report 32.805 captures the result of that work.

This WID is tasked to:
- Define the rules for Backward Compatibility (primary focus of this WID)
- Define the Requirements and rules for Forward Compatibility (secondary focus of this WID).

## 4 Objective

To define rules for writing Information Service and appropriate Solution Sets for implementations of systems satisfying the Requirements documented in reference [1].

To study and define the requirements for forward compatibility. To define rules for writing Information Service and appropriate Solution Sets for implementation of systems satisfying that Forward Compatibility requirements.

Note that the intention of having the rules is to give guidelines on what needs to be done to have compatible specifications. The intention is not to have new functionality rejected because it is not forward or backward compatible, nor that a fault correction has to be forward or backward compatible at any cost. SA5 have to agree, on case by case, if a compatible correction is beneficial/needed or not.

## 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 32.154 | Backward and Forward Compatibility (BFC); Concept and definitions | SA5 | | SA#35 Mar 2007 | SA#36 Jun 2007 | |

| Affected existing specifications | | | | | |
|---|---|---|---|---|---|
| Spec No. | CR | Subject | | Approved at plenary# | Comments |
| | | | | | |

## 11 Work item rapporteur(s)
Ericsson (Robert PETERSEN)

## 12 Work item leadership
SA5

## 13 Supporting Companies
Ericsson, Vodafone, Lucent, Nokia, TeliaSonera.

## 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

Network Infrastructure Management (BB: OAM7-NIM)

| Acronym | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

**Technical Specification Group Services and System Aspects** *TSGS#30(05)0731*
Meeting #30, 05 - 07 December 2005, St. Julian, Malta

| | |
|---|---|
| Source: | SA5 (Telecom Management) |
| Title: | WID WT Repeater NRM Definition |
| Document for: | Approval |
| Agenda Item: | 10.35 (OAMP7) - OAM&P Rel-7 |

**3GPP TSG-SA5 (Telecom Management)** S5-059146
**Meeting #44, Shenzhen, CHINA, 7 - 11 Nov, 2005**

**Work Item Description**

Title:
WT Repeater Network Resource Model (NRM) Definition  Unique_ID: 35071

Acronym: OAM7-NIM

**1  3GPP Work Area**

| | |
|---|---|
| X | Radio Access |
| X | Core Network |
| | Services |

**2  Linked work items**

Network Infrastructure Management (BB: OAM7-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

- 

**3  Justification**

Repeater is the equipment which can be used in UTRAN network to improve the network coverage. Most of time, repeater vendor implements repeater OMC to manage the repeaters and carry necessary OAM&P functions defined in TMN. From the TMN view point, the repeater OMC is a kind of element management system which should be managed by Network Management System (NMS) through itf-N. Currently, existing 3GPP 32.xxx series specification lack of repeater related NRM specifications which is necessary by NMS. The tower mounted amplifier/booster (TMA/B) is not in the scope of this WID.
This WT is addressing the need and solutions for Repeater NRM definition in UMTS.

**4  Objective**

- Specify Requirements
- Specify Information Services (IS)
- Specify CORBA Solution Set (SS)
- Specify CMIP Solution Set (SS)

CRs to existing specifications or new TSs will be produced as appropriate.

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

## 9 Impacts

| Affects: | USIM | ME | AN | CN | Others |
|---|---|---|---|---|---|
| **Yes** | | | X | 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 | 1st resp. WG | 2nd resp. WG(s) | Presented for Information | Presented for Approval | Comments |
| TS 32.721 | | SA5 | | SA #33 Sep 2006 | SA#34 Dec 2006 | Configuration Management (CM); Repeater network resources IRP: Requirements |
| TS 32.722 | | SA5 | | SA #33 Sep 2006 | SA#34 Dec 2006 | Configuration Management (CM); Repeater network resources IRP: Information Service (IS) |
| TS 32.723 | | SA5 | | SA #33 Sep 2006 | SA#34 Dec 2006 | Configuration Management (CM); Repeater network resources IRP: Common Object Request Broker Architecture (CORBA) Solution Set (SS) |
| TS 32.725 | | SA5 | | SA #33 Sep 2006 | SA#34 Dec 2006 | Configuration Management (CM); Repeater network resources IRP: Bulk CM eXtensible Markup Language (XML) file format definition |

| Affected existing specifications | | | |
|---|---|---|---|
| Spec No. | CR | Subject | CR Approved | Comments |
| | | | | |

## 11 Work item raporteurs

Li Yewen (liyewen@chinamobile.com), Liangshuanchun@bcdi.com.cn

## 12 Work item leadership

SA5

## 13 Supporting Companies

China Mobile, CATT, Huawei, ZTE

## 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**

Network Infrastructure Management (BB: OAM-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

**Technical Specification Group Services and System Aspects**  *TSGS#30(05)0733*
Meeting #30, 05 - 07 December 2005, St. Julian, Malta

| | |
|---|---|
| Source: | SA5 (Telecom Management) |
| Title: | WID WT UTRAN radio channel power monitoring |
| Document for: | Approval |
| Agenda Item: | 10.35 (OAMP7) - OAM&P Rel-7 |

**3GPP TSG-SA5 (Telecom Management)**  **S5-059115**
**Meeting #44, Shenzhen, CHINA, 7 – 11 November 2005**

## Work Item Description

Title:
WT UTRAN radio channel power monitoring  Unique_ID: 35072

Acronym: OAM7-NIM

## 1    3GPP Work Area

| X | Radio Access |
|---|---|
| | Core Network |
| | Services |

## 2    Linked work items

Network Infrastructure Management (BB: OAM7-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

- 

## 3          Justification

**Requirements**

Power is a very important and limited resource in the WCDMA UTRAN network. High or low power value of each kind of channel has different impact on the network. So effective Monitoring of the radio channel power is very helpful for operators' daily OA&M work and network estimation.
In UTRAN, there are 3 different levels of radio channels, i.e. logical channel, transport channel and physical channel. The power can be assigned on transport channel or physical channel. Operators require grasping the configured and dynamic value of those channels' power. For those which are not related to power control, operator only needs to grasp the configured value of channel power. While for the others, it is necessary to measure the dynamic value of channel power.

## 3.2          Principle of radio channel power monitoring

The transport channels and physical channels have mapping relations. The following is mapping of transport channels onto physical channels.

| Transport Channels | Physical Channels |
|---|---|

DCH ——————— Dedicated Physical Data Channel (DPDCH)

Dedicated Physical Control Channel (DPCCH)

RACH——————— Physical Random Access Channel (PRACH)

CPCH ——————— Physical Common Packet Channel (PCPCH)

Common Pilot Channel (CPICH)

BCH ——————— Primary Common Control Physical Channel (P-CCPCH)

FACH——————— Secondary Common Control Physical Channel (S-CCPCH)

PCH ————————

Synchronisation Channel (SCH)

DSCH ——————— Physical Downlink Shared Channel (PDSCH)

Acquisition Indicator Channel (AICH)

Access Preamble Acquisition Indicator Channel (AP-AICH)

Paging Indicator Channel (PICH)

CPCH Status Indicator Channel (CSICH)

Collision-Detection/Channel-Assignment Indicator

Channel (CD/CA-ICH)

25.211

From the figure above, the mapping from transport channel to physical channel is mostly one to one. So, in most cases, we just need to monitor the physical channels.

It is proposed to monitor the power of the following channels:

- Transport channel: FACH、PCH
- Uplink physical channel: DPCH (DPDCH/DPCCH)、PRACH
- Downlink physical channel: DPCH (DPDCH/DPCCH)、CPICH、P-CCPCH、S-CCPCH、SCH、AICH、PICH

In the above channel list, DPCH、PRACH、PDSCH are involved in power control. So, we should record the maximum and mean value of power level for those channels as performance measurements. For other channels, only the configured value will be retrieved.

The following channel power parameters are already present in TS 32.642:
- primaryCpichPower(1)
- maximumTransmissionPower(2)
- bchPower(3)
- primaryCcpchPower(4)
- dlpchPower(5)
- schPower(6)

The following parameters should be added:
- fachPower (7)
- dpchPower(8)
- prachPower (9)
- sccpchPower(10)
- pdschPower(11)
- pichPower(12)
- aichPower(13)

(8)、(9)、(11) are channels which are involved in power control.

## 4 Objective

Add (7) (10) (12) (13) to TS 32.642

Add (8) (9) (11) to TS 32.405

Update UTRAN Network Resource Model (NRM) Requirements (if needed)

Update UTRAN Network Resource Model (NRM)

Update UTRAN NRM CORBA Solution Set (SS)

Update UTRAN NRM CMIP Solution Set (SS)

Update UTRAN NRM XML format definition

Add UTRAN channel Measurements

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

**9               Impacts**

| Affects: | USIM | ME | AN | CN | Others |
|---|---|---|---|---|---|
| **Yes** | | | X | | |
| **No** | X | X | | × | X |
| **Don't know** | | | | | |

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

| New specifications | | | | | | |
|---|---|---|---|---|---|---|
| Spec No. | Title | 1st resp. WG | 2nd resp. WG(s) | Presented for Information | Presented for Approval | Comments |
| | | | | | | |

| Affected existing specifications | | | | |
|---|---|---|---|---|
| Spec No. | CR | Subject | CR Approved | Comments |
| 32.641 | | | SA#34 Dec 2006 | UTRAN network resources Integration Reference Point (IRP): Requirements |
| 32.642 | | | SA#34 Dec 2006 | UTRAN network resources IRP: Network Resource Model (NRM) |
| 32.643 | | | SA#34 Dec 2006 | UTRAN network resources IRP: CORBA Solution Set |
| 32.645 | | | SA#34 Dec 2006 | UTRAN network resources IRP: Bulk CM XML file format definition |
| 32.405 | | | SA#34 Dec 2006 | Performance Measurements - UMTS and combined UMTS/GSM |

**11        Work item rapporteurs**
        Lan Wang ( wanglan1@bj.chinamobile.com)
**12        Work item leadership**
        SA5
**13        Supporting Companies**
        China Mobile, CATT, Huawei, ZTE

**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**

        Network Infrastructure Management (BB: OAM-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

**Technical Specification Group Services and System Aspects** *TSGS#34(06)0754*
Meeting #34, 04 – 07 December 2006, Budapest, HUNGARY

| | |
|---|---|
| Source: | SA5 (Telecom Management) |
| Title: | WID Notification XML Schema |
| Document for: | Approval |
| Agenda Item: | 11.7 Any other Rel-8 Documents |

**3GPP TSG-SA5 (Telecom Management)** S5-061672
**Meeting #50, Fairfax, USA, 30 Oct - 03 Nov 2006**

## Work Item Description

Title:

WT Notification XML Schema  Unique_ID: 340009

Define Notification XML Schema for TestIRP, NotificationLogIRP, FTIRP, EPIRP, PMIRP, BulkCMIRP, KernelCMIRP

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

### 1    3GPP Work Area

| X | Radio Access |
|---|---|
| X | Core Network |
| X | Services |

### 2    Linked work items

OAM&P (Operations, Administration, Maintenance & Provisioning)  (Feature: OAM7)

| WI | Unique_ID |
|---|---|
| OAM7 | 35041 |

Network Infrastructure Management (BB: OAM7-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

- Notification Log IRP

### 3    Justification

Notification Log IRP is defined to be a general Notification Logging mechanism which can hold notifications related to different functional areas in the network.

It is stated in 32.331 (Notification Log IRP requirement) that:

> Any Notification Log must, at any one point in time, be capable of holding fault management alarms, configuration management events, performance management events, and event log management events. A log is capable of capturing all semantics carried in a notification.

Based on Notification Log IRP requirements specifications, it is necessary to define XML Schema for Itf-N Notifications.

### 4    Objective

In Release-6, XML Schema of AlarmIRP Notifications has been defined.

It is necessary to define XML Schema for other Itf-N Notifications, i.e. those notifications defined in:

| | |
|---|---|
| BulkCMIRP | (32.61x) |
| EPIRP | (32.36x) |
| FTIRP | (32.34x) |
| KernelCMIRP | (32.66x) |
| NotificationLogIRP | (32.33x) |

PMIRP                  (32.41x)
TestIRP                 (32.32x)

**5         Service Aspects**
         None
**6         MMI-Aspects**
         *NA*
**7         Charging Aspects**
         *NA*
**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 |
| 32.325 | Test management IRP: XML definition | SA5 | | SA#35 Mar 2007 | SA#35 Mar 2007 | |
| 32.345 | File Transfer (FT) IRP: XML definition | SA5 | | SA#35 Mar 2007 | SA#35 Mar 2007 | |
| 32.365 | Entry Point (EP) IRP: XML definition | SA5 | | SA#35 Mar 2007 | SA#35 Mar 2007 | |
| 32.415 | Performance Management (PM) IRP: XML definition | SA5 | | SA#35 Mar 2007 | SA#35 Mar 2007 | |
| Affected existing specifications [None in the case of Study Items] | | | | | | |
| Spec No. | CR | Subject | | | Approved at plenary# | Comments |
| 32.335 | | Add Notification XML schema for NotificationLogIRP | | | SA #36 June 2007 | |
| 32.615 | | Add Notification XML schema for BulkCMIRP | | | SA #36 June 2007 | |
| 32.665 | | Add Notification XML schema for KernelCMIRP | | | SA #36 June 2007 | |

**11         Work item rapporteur(s)**
         Yangli (Huawei)
**12         Work item leadership**
         SA5 (SWGC)
**13         Supporting Companies**
         Huawei, ChinaMobile, Motorola, Nokia, Nortel, Lucent, 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

         Network Infrastructure Management (BB: OAM7-NIM)

| WI | Unique_ID |
|---|---|
| OAM7-NIM | 35042 |

## BB: Performance Management (OAM7-PM) Unique_ID: 35043

| | |
|---|---|
| **Source:** | **SA5 (Telecom Management)** |
| **Title:** | **WID WT Performance measurements definition for CN CS** |
| **Document for:** | **Approval** |
| **Agenda Item:** | **7.5.3** |

Work Item Description

Title:

WT Performance measurements definition for CN CS Unique_ID: 35057

Acronym: OAM7-PM

### 1 3GPP Work Area

| | | |
|---|---|---|
| | Radio Access | |
| X | Core Network | |
| | Services | |

### 2 Linked work items

OAM&P (Operations, Administration, Maintenance & Provisioning) (Feature: OAM7)

| WI | Unique_ID |
|---|---|
| OAM7 | 35041 |

Performance Management (BB: OAM7-PM)

| WI | Unique_ID |
|---|---|
| OAM7-PM | 35043 |

### 3 Justification

Performance measurement data is important for operator to analyze network performance. Currently, Rel-6 and earlier versions of 32.403 define the necessary performance measurements. (The latest) TS 32403-650 covers measurements data related to RNC, SGSN, GGSN and MMS. The performance measurement data related to CN, especially CN CS (IP-based) are absent. If operators directly deploy previous 3GPP Releases CN CS, no 3GPP defined performance measurements can be used.

This WT proposes to define for previous 3GPP Releases CN CS (IP-based) performance measurements data definition. This WT should also address how to define measurements that may apply to previously released equipments e.g. allow to possibly define different trigger for different 3GPP release CN CS measurements.

### 4 Objective

Define performance measurements, which apply to previous 3GPP Releases CN CS (IP-based).

### 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 | Prime rsp. WG | 2ndary rsp. WG(s) | Presented for information at plenary# | Approved at plenary# | Comments |
| 32.407 | Performance Management (PM); Performance measurements Core Network (CN) CS domain | SA5 | | SA#33 Sep 2006 | SA#35 Mar 2007 | |
| 32.408 | Performance Management (PM); Performance measurements Teleservice | SA5 | | n/a | SA#31 Mar 2006 | born from 32.403 split |
| **Affected existing specifications** | | | | | | |
| Spec No. | CR | | | Subject | Approved at plenary# | Comments |
| | | | | | | |

## 11 Work item rapporteur(s)

LI Yewen (liyewen@chinamobile.com)

## 12 Work item leadership

SA5

## 13 Supporting Companies

China Mobile, CATT, Huawei, ZTE, Nortel, Motorola, Vodafone

## 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)

Performance Management (BB: OAM7-PM)

| WI | Unique_ID |
|---|---|
| OAM7-PM | 35043 |

| | |
|---|---|
| **Source:** | **SA5 (Telecom Management)** |
| **Title:** | **WID WT Enhancement UTRAN performance measurements definition** |
| **Document for:** | **Approval** |
| **Agenda Item:** | **7.5.3** |

Work Item Description

Title:

WT Enhancement UTRAN performance measurements definition  Unique_ID: <mark>35058</mark>

<mark>Acronym: OAM7-PM</mark>

## 1 3GPP Work Area

| | |
|---|---|
| X | Radio Access |
| | Core Network |
| | Services |

## 2 Linked work items

OAM&P (Operations, Administration, Maintenance & Provisioning)  (Feature: OAM7)

| WI | Unique_ID |
|---|---|
| OAM7 | 35041 |

Performance Management (BB: OAM7-PM)

| WI | Unique_ID |
|---|---|
| OAM7-PM | 35043 |

## 3 Justification

Performance measurement data is important for operator to analyze network performance. Currently, Rel-6 and earlier versions of 32.403 define the necessary performance measurement data. (The latest) TS 32.403-650 covers measurements data related to RNC, SGSN, GGSN and MMS. For the CN PS, operators can use performance measurement data related to UTRAN defined in 32.403-650.

This WT proposes to enhance UTRAN performance measurements.

## 4 Objective

Define more performance measurements, which apply to UTRAN of UMTS.

For the UTRAN part, the Release 6 3GPP TS 32.403 include measurement definitions for RNC RAB management, signalling connection, RRC connection, RLC connection, soft handover, radio link addition, hard handover, relocation, circuit switched inter-RAT handover, and Iu connection release.

For a good monitoring of the UTRAN, it is necessary to add new performance measurements and some examples are listed below:

- Inter-frequency and intra-frequency hard handovers for use in network optimization (currently only intra-cell, intra-NodeB, inter-NodeB, intra-RNC and inter-RNC hard handovers measurements)
- Inter-system HO measurements (UMTS->GSM, GSM->UMTS, UMTS->GPRS, GPRS-> UMTS) to show the CS and PS domain hard handover stability and reliability
- RAB drop rate per service type to analyze quality of service
- IuCS, IuPS, Iur and Iub interface throughput measurements needed to reflect the interface load
- RNC resource usage measurements to reflect the equipment load
- Cell soft handover scale radio link measurements for network planning and optimization

- Cell paging measurements to reflect the paging channel resource usage

- RAB establishment measurements per cell to analyze service quality

- Cell frequency usage measurements to analyze service quality

- Cell code resource usage for use in network planning and optimization

## 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 | Prime rsp. WG | 2ndary rsp. WG(s) | Presented for information at plenary# | Approved at plenary# | Comments |
| 32.405 | Performance Management (PM); Performance measurements UTRAN | SA5 | | n/a | SA#36 Jun 2007 | born from 32.403 split |

| Affected existing specifications | | | | |
|---|---|---|---|---|
| Spec No. | CR | Subject | Approved at plenary# | Comments |
| | | | | |

## 11 Work item rapporteur(s)
Li Yewen (liyewen@chinamobile.com)

## 12 Work item leadership
SA5

## 13 Supporting Companies
China Mobile, CATT, Huawei, ZTE

## 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)

Performance Management (BB: OAM7-PM)

| WI | Unique_ID |
|---|---|
| OAM7-PM | 35043 |

| Source: | **SA5 (Telecom Management)** |
|---|---|
| Title: | **WID WT Add TDD specific counters in Performance measurement** |
| Document for: | **Approval** |
| Agenda Item: | **7.5.3** |

Work Item Description

Title:

WT Add TDD specific counters in Performance measurement definitions  Unique_ID: 35059

Acronym: OAM7-PM

## 1 3GPP Work Area

| X | Radio Access |
|---|---|
|  | Core Network |
| X | Services |

## 2 Linked work items

OAM&P (Operations, Administration, Maintenance & Provisioning)  (Feature: OAM7)

| WI | Unique_ID |
|---|---|
| OAM7 | 35041 |

Performance Management (BB: OAM7-PM)

| WI | Unique_ID |
|---|---|
| OAM7-PM | 35043 |

## 3 Justification

In the latest Rel-6 TS32.403, all the counters are FDD specific or FDD/TDD specific.
Taking the different access technologies into account, there are some TDD specific counters which are not included in this TS.

It is therefore necessary to specify a comprehensive set of measurement types for the TDD network elements to deliver TDD network information across the UMTS system. From the TS consistence point of view this is also necessary.

As another benefit, the list of measurement types to be specified under this work item will also help the vendors and the TDD system operators or FDD/TDD combined system operators alike by providing guidance to decide what should be required from and implemented in, the 3G products.

## 4 Objective

To make the necessary additions to the standard measurement set for TDD system and combined FDD/TDD system.

## 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 |
| 32.405 | Performance Management (PM); Performance measurements UTRAN | SA5 | | n/a | SA#34 Dec 2006 | born from 32.403 split |
| Affected existing specifications | | | | | | |
| Spec No. | CR | | Subject | | Approved at plenary# | Comments |
| | | | | | | |

## 11 Work item rapporteur(s)

WANG Xuelong, CATT (wangxuelong@datangmobile.cn)

## 12 Work item leadership

SA5

## 13 Supporting Companies

CATT, China Mobile, ZTE, Huawei, Nortel, Siemens, Orange

## 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)

Performance Management (BB: OAM7-PM)

| WI | Unique_ID |
|---|---|
| OAM7-PM | 35043 |

**Technical Specification Group Services and System Aspects** *TSGS#28(05)0318*
Meeting #28, Quebec, CANADA, 06-08 June 2005

| Source: | **SA5 (Telecom Management)** |
|---|---|
| Title: | **WID WT ATM bearer network Performance measurements** |
| Document for: | **Approval** |
| Agenda Item: | **7.5.3** |

3GPP TSG-SA5 (Telecom Management) S5-050296
Meeting #42, Montreal, CANADA, 09 - 13 May 2005

Work Item Description

Title:

WT ATM bearer network Performance measurements  Unique_ID: 35060

Acronym: OAM7-PM

## 1    3GPP Work Area

| X | Radio Access |
|---|---|
| X | Core Network |
|   | Services |

## 2    Linked work items

OAM&P (Operations, Administration, Maintenance & Provisioning)  (Feature: OAM7)

| WI | Unique_ID |
|---|---|
| OAM7 | 35041 |

Performance Management (BB: OAM7-PM)

| WI | Unique_ID |
|---|---|
| OAM7-PM | 35043 |

## 3    Justification

Performance measurements are very important in analysing, optimising and forecasting the UMTS system performance. In 32.403, there are 14 performance measurement families related to the RNC, which are focus on the Radio network layer. The performance measurement definitions of bearer network are absent, which may help to evaluate the transport network layer(TNL) performance, and give more detail to analyse RNC performance.

Before the Release 5 (e.g. R99,R4), the TNL in UTRAN is based on ATM. In Release 5, the TNL based on IP is introduced[see 25.401], but the TNL based on ATM still also an optional technique. Therefore, It is necessary to study the ATM bearer network performance measurement definitions to analyse network performance more efficiently.

## 4    Objective

The work should focus on ATM bearer network performance measurement definitions related to the RNC, which may include the protocols of TNL (SCCP, ALCAP, SSCOP, MTP3B e.g.). But the work would not be restricted to UTRAN, and the study result should be added in Release 7. Include 3GPP Rel-7 support of ATM bearer network Performance Measurement Counters either by reference to existing measurements from other standards bodies (ITU-T, ATM Forum) or by encouraging companies to initiate an effort in those standards bodies to include the counters that we would identify in this WT on behalf of their individual companies.

## 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)

No impact on 32.404, 32.405, 32.406, 32.407

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

| Affected existing specifications | | | | |
|---|---|---|---|---|
| Spec No. | CR | Subject | Approved at plenary# | Comments |
| | | | | |

# 11 Work item rapporteur(s)
Huang Shuqiang (huangsq@zte.com.cn)
# 12 Work item leadership
SA5
# 13 Supporting Companies
ZTE, China Mobile, Huawei, CATT,
# 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)

Performance Management (BB: OAM7-PM)

| WI | Unique_ID |
|---|---|
| OAM7-PM | 35043 |

| | |
|---|---|
| Source: | SA5 (Telecom Management) |
| Title: | WID WT Performance measurements definition for IMS (OAM7-PM-IMS) |
| Document for: | Approval |
| Agenda Item: | 11.27 |

**3GPP TSG-SA5 (Telecom Management)** **S5-058825**
**Meeting #43, Bordeaux, France, 28 Aug – 2 Sep 2005**

Work Item Description

Title:
WT Performance measurements definition for IMS  Unique_ID: 35069

Acronym: OAM7-PM

## 1    3GPP Work Area

| | |
|---|---|
| | Radio Access |
| X | Core Network |
| | Services |

## 2    Linked work items

Performance Management (BB: OAM7-PM)

| Acronym | Unique_ID |
|---|---|
| OAM7-PM | 35043 |

## 3    Justification

Performance measurement data is important for operator to analyze network performance. Currently, Rel-6 and earlier version of 32.403 define performance measurements related to 3G network. The latest Rel-6 32.403 covers measurements data related to RNC, SGSN, GGSN and MMS. The performance measurement data related to IMS are absent. If operator deploy IMS, no 3GPP defined performance measurements can be used.

This WT proposes to define for IMS performance measurements data definition.

## 4    Objective

Define performance measurements, which apply to IMS.

## 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 | Prime rsp. WG | 2ndary rsp. WG(s) | Presented for information at plenary# | Approved at plenary# | Comments |
| 32.404 | Performance Management (PM); Performance measurements - Definitions and template | SA5 | | n/a | SA#31 Mar 2006 | born from 32.403 split |
| 32.409 | Performance Management (PM); Performance measurements IP Multimedia Subsystem (IMS) | SA5 | | SA#35 Mar 2007 | SA#36 Jun 2007 | |
| Affected existing specification | | | | | | |
| Spec No. | CR | | Subject | | Approved at plenary# | Comments |

## 11 Work item rappoteur(s)

Yu Chengzhi (yuchengzhi@chinamobile.com)

## 12 Work item leadership

SA5

## 13 Supporting Companies

China Mobile, CATT, Ericsson, Lucent, Motorola, Nokia, ZTE Siemens, 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

Performance Management (BB: OAM7-PM)

| Acronym | Unique_ID |
|---|---|
| OAM7-PM | 35043 |

**Technical Specification Group Services and System Aspects**      **TSGS#32(06)0397**
Meeting #32, 5 - 8 June 2006, Warsaw, POLAND

| | |
|---|---|
| Source: | SA5 (Telecom Management) |
| Title: | Updated WID WT HSDPA performance measurements |
| Document for: | Approval |
| Agenda Item: | 10.38 |

**3GPP TSG-SA5 (Telecom Management)**      **S5-068409**
**Meeting #47, Sophia Antipolis, FRANCE, 8 - 12 May, 2006**

**<u>Work Item Description</u>**

Title:

WT HSDPA performance measurements  Unique_ID: 35073

Acronym: OAM7-PM

**1    3GPP Work Area**

| | |
|---|---|
| X | Radio Access |
| X | Core Network |
| | Services |

**2    Linked work items**

Performance Management (BB: OAM7-PM)

| WI | Unique_ID |
|---|---|
| OAM7-PM | 35043 |

- 

**3    Justification**

In WCDMA 3GPP release 5, a new transport channel is introduced, the high-speed downlink shared channel (HS-DSCH), which provides enhanced support for interactive, background, and to some extent, streaming radio access bearer (RAB) services in the downlink. HS-DSCH transmission facilitates several new features. But to support them with minimum impact on the existing radio interface protocol architecture, a new MAC sub-layer, MAC-hs, has been introduced for HS-DSCH transmission. So that the UTRAN performance measurements from 3GPP TS 32.403 cannot satisfy the requirement of HSDPA performance measurements, therefore the HSDPA O&M requirements should be specified.
This WT is addressing the need and solutions for HSDPA with both FDD and TDD mode performance measurements..

**4    Objective**

- Specify HSDPA with both FDD and TDD mode performance measurements

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

**9    Impacts**

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

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

| Spec No. | Title | 1st resp. WG | 2nd resp. WG(s) | Presented for Information | Presented for Approval | Comments |
|---|---|---|---|---|---|---|
| | **New specifications** | | | | | |
| 32.405 | Performance Management (PM); Performance measurements Universal Terrestrial Radio Access Network (UTRAN) | SA5 | | n/a | SA#31 Mar 2006 | born from 32.403 split |

| Spec No. | CR | Subject | CR Approved | Comments |
|---|---|---|---|---|
| | **Affected existing specifications** | | | |
| | | | | |

**11 Work item raporteurs**

Li Yewen (liyewen@chinamobile.com), Liangshuanchun@bcdi.com.cn

**12 Work item leadership**

SA5

**13 Supporting Companies**

China Mobile, Siemens, CATT, Ericsson, ZTE, Huawei, Motorola, Nortel, Nokia

**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**

Performance Management (BB: OAM7-PM)

| WI | Unique_ID |
|---|---|
| OAM7-PM | 35043 |

**Technical Specification Group Services and System Aspects** *TSGS#29(05)0628*
Meeting #29, Tallinn, ESTONIA, 26-28 September 2005

| | |
|---|---|
| Source: | SA5 (Telecom Management) |
| Title: | WID BB update Trace Management (OAM7-Trace) |
| Document for: | Approval |
| Agenda Item: | 11.27 |

3GPP TSG-SA5 (Telecom Management) S5-058849
Meeting #43, Bordeaux, FRANCE, 29 Aug - 2 Sep 2005

<u>Work Item Description</u>

Title:

BB Trace Management  Unique_ID: 35039

Acronym: OAM7-Trace

**1    3GPP Work Area**

| X | Radio Access |
|---|---|
| X | Core Network |
| X | Services |

**2    Linked work items**

OAM&P (Operations, Administration, Maintenance & Provisioning)  (Feature: OAM7)

| Acronym | Unique_ID |
|---|---|
| OAM7 | 35041 |

**Work Task:**
The CN WID "Trace Management, stage3, IMS" (NP-050061.zip) - Acronym: OAM7-Trace-SIP, contains the CN Work Tasks.

"OMA Service Provider Environment Requirements", Open Mobile Alliance™, OMA-RD-OSPE-V1_0-20050523-D, URL:http://www.openmobilealliance.org/

**3    Justification**

Subscriber and Equipment Trace provide very detailed information at call level on one or more specific mobile(s).
This data is an additional source of information to Performance Measurements and allows going further in monitoring and optimisation operations.
Contrary to Performance Measurements, which are a permanent source of information, Trace is activated on user demand for a limited period of time for specific analysis purposes.
Trace plays a major role in activities such as determination of the root cause of a malfunctioning mobile, advanced troubleshooting, optimisation of resource usage and quality, RF coverage control and capacity improvement, dropped call analysis, Core Network and UTRAN end-to-end 3G procedure validation.

**4    Objective**

The general objective of this work item is to produce the specifications for Subscriber and Equipment Trace in 3GPP Release 7 according to the responsibilities of SA5 pertaining to high-level concepts and requirements of trace, to Subscriber and UE activity trace data definition and management, to trace data collection control and configuration management, and to bulk interfaces for trace data transfer from the network to the network manager.

In particular, the objectives of this work item is to add:

- End-to-end tracing for IMS: Stage 1 by OMA, Stage 2/3 SA5, CT1/3/4 (david.sanders@vodafone.com)

- IRP for Subscriber and Equipment Trace Management (Gyula.Bodog@nokia.com)
- Trace record content for UTRAN TDD (Wang Xuelong, CATT , wangxuelong@datangmobile.cn).

## 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 |
| Don't know | X | | | | |

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

| New specifications | | | | | | |
|---|---|---|---|---|---|---|
| Spec | Title | Prime WG | 2ndary WG(s) | Presented for information at plenary# | Approved at plenary# | Comments |
| | | | | | SA#34 Dec 2006 | see WT WIDs |
| **Affected existing specifications** | | | | | | |
| Spec | CR | Subject | Approved at plenary# | Comments | | |
| | | | SA#34 Dec 2006 | see WT WIDs | | |

## 11 Work item rapporteur(s)
Gyula.Bodog@nokia.com

## 12 Work item leadership
SA5 (having primary responsibility)

CT1, CT4, RAN3 (having secondary responsibility) on trace activation/deactivation
CT1, CT3, CT4 (having secondary responsibility) on End-to-end tracing for IMS

## 13 Supporting Companies
Nortel, Nokia, Orange, Vodafone, CATT, Siemens, TeliaSonera, Ericsson, Lucent, Motorola, China Mobile, ZTE

## 14 Classification of the WI (if known)

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

14b The WI is a **Building Block** : parent **Feature**
(one Work Item identified as a feature)

OAM&P (Operations, Administration, Maintenance & Provisioning) (Feature: OAM7)

| Acronym | Unique_ID |
|---------|-----------|
| OAM7 | 35041 |

**Technical Specification Group Services and System Aspects** *TSGS#29(05)0627*
Meeting #29, Tallinn, ESTONIA, 26-28 September 2005

| | |
|---|---|
| Source: | SA5 (Telecom Management) |
| Title: | WID WT End-to-end Service Level tracing for IMS (OAM7-Trace-IMS) |
| Document for: | Approval |
| Agenda Item: | 11.27 |

3GPP TSG-SA5 (Telecom Management) S5-058848
Meeting #43, Bordeaux, FRANCE, 29 Aug - 2 Sep 2005

<u>Work Item Description</u>

Title:
WT End-to-end Service Level tracing for IMS  Unique_ID: 35040


Acronym:  OAM7-Trace

**1  3GPP Work Area**

| | |
|---|---|
| X | Radio Access |
| X | Core Network |
| X | Services |

**2  Linked work items**

　　a)  Trace Management  (SA5 BB: OAM7-Trace)
　　b)  Trace Management, SIP Enhancements for Trace – (CT1 WT : OAM7-Trace-SIP)

| | WI | Unique_ID |
|---|---|---|
| **a)** | OAM7-Trace | 35039 |
| **b)** | OAM7-Trace-SIP | 11046 |

**3  Justification**

The Open Mobile Alliance™ (URL:http://www.openmobilealliance.org/) have developed a set of technology agnostic service level tracing requirements, which are now approved [see OMA-RD-OSPE-V1_0-20050614-C.pdf].

The intentions of Service Level Tracing are to improve and simplify end-to-end service diagnostics and to enhance the Mobile Operator's ability to manage their complex services. Service Level Tracing is aimed at end-to-end service-level diagnostics, rather than per node tracing. By definition, Service Level Tracing is the ability to capture and log all relevant information at each component within a service chain, associated with a specific service that is initiated either by an end user or a component [see OMA-RD-OSPE-V1_0-20050614-C.pdf].

Considering the importance of IMS, 3GPP SA5 SWGD, in coordination with 3GPP CT1, CT3, CT4, will start developing the appropriate specifications for end-to-end service tracing for IMS, and wherever possible to reuse existing 3GPP speciation and their capabilities to fulfil the OMA OSPE service level tracing requirements.

OMA OSPE service level tracing requirements specific to OMA enablers utilising IMS [see OMA-IMSinOMA-V1_0-20050204-C.zip] will be addressed within OMA.

**4  Objective**

The objectives of this work item are:

　　a)  For 3GPP TSG SA5 to review the OMA requirements for Service Level Tracing and develop their Stage 1, Stage 2 and Stage 3 specifications for Trace as appropriate.

　　b)  For 3GPP TSG SA5, as primary group responsible for Trace in 3GPP, to co-ordinate with 3GPP TSG CT1, CT3, and CT4 in order for those working groups to develop the specifications under their control that are impacted.

**5  Service Aspects**

*Refer to "OMA Service Provider Requirements" OMA-RD-OSPE-V1_0-20050614-C, The Open Mobile Alliance™ (URL:http://www.openmobilealliance.org/)*

## 6 MMI-Aspects
*None*

## 7 Charging Aspects
*Refer to "OMA Service Provider Requirements" OMA-RD-OSPE-V1_0-20050614-C, The Open Mobile Alliance™ (URL:http://www.openmobilealliance.org/)*

## 8 Security Aspects
*Refer to "OMA Service Provider Requirements" OMA-RD-OSPE-V1_0-20050614-C, The Open Mobile Alliance™ (URL:http://www.openmobilealliance.org/)*

## 9 Impacts

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

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

| New specifications | | | | | | | |
|---|---|---|---|---|---|---|---|
| Spec | Title | Prime WG | 2ndary WG(s) | Presented for information at plenary# | | Approved at plenary# | Comments |
| | | | | | | | |
| Affected existing specifications | | | | | | | |
| Spec | CR | Subject | Approved at plenary# | Comments | | | |
| 32.421 | | | SA#34 Dec 2006 | Trace Concepts and Requirements | | | |
| 32.422 | | | SA#34 Dec 2006 | Trace Control and Configuration Management | | | |
| 32.423 | | | SA#34 Dec 2006 | Trace Data Definition and Management | | | |
| 32.101 | | | SA#34 Dec 2006 | Telecommunication management; Principles and high level requirements | | | |
| CTx TSs | | | | to be identified in linked CT WG WIDs | | | |

## 11 Work item rapporteur(s)
David.Sanders@Vodafone.com

## 12 Work item leadership

OMA (Stage 1)

SA5 Stage 2/3 (having primary responsibility in 3GPP)
CT1, CT3, CT4 Stage 2/3 (having secondary responsibility in 3GPP)

## 13 Supporting Companies
Vodafone, CATT, China Mobile, Ericsson, Lucent, Nokia, Nortel, Siemens, Orange, Motorola, ZTE.

## 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)

Trace Management  (BB: OAM7-Trace)

| WI | Unique_ID |
|---|---|
| OAM7-Trace | 35039 |

**Technical Specification Group Services and System Aspects** *TSGS#29(05)0629*
**Meeting #29, Tallinn, ESTONIA, 26-28 September 2005**

| | |
|---|---|
| Source: | SA5 (Telecom Management) |
| Title: | WID WT IRP for Subscriber and Equipment Trace Management (OAM7-Trace-IRP) |
| Document for: | Approval |
| Agenda Item: | 11.27 |

**3GPP TSG-SA5 (Telecom Management)** **S5-056575**
**Meeting #43, Bordeaux, FRANCE, 29 Aug - 2 Sep 2005**

Work Item Description

Title:
WT IRP for Subscriber and Equipment Trace Management    Unique_ID: 35063
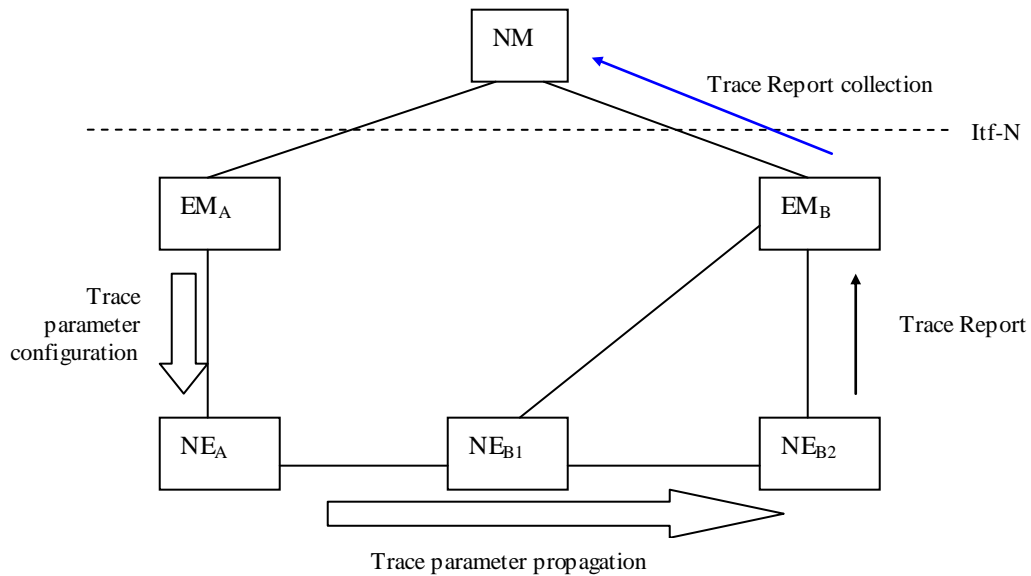
Acronym: OAM7-Trace

## 1    3GPP Work Area

| | |
|---|---|
| X | Radio Access |
| X | Core Network |
| | Services |

## 2    Linked work items

| WI | Unique_ID |
|---|---|
| OAM7-Trace | 35039 |

## 3    Justification

Example of a Signalling Based Activation case:



EMA and EMB could own to the same vendors or different vendors. For multi operator case the Trace Session activation may go across operator boundaries, but to get the trace records from other operator is subject to an agreement between the operators and is not subject to this WI.

- Trace is activated from $EM_A$ with a Trace Reference managed by it self
- $EM_B$ receives a Trace Report not requested
- NM receives a Trace Report not requested at any time from any NE

Trace management IRP would allow

⇨ Activation/Deactivation/Interrogation of a Trace Session from the NM with one unique Trace Reference

⇨ Trace report to be notified to NM with the known Trace Reference

Trace management IRP applies to both Signalling Based Activation and Management Based Activation.
Without the Trace management IRP there is no standardized centralized way for managing the trace.

## 4 Objective

The objective of this Work Item is to define:
- Requirements for the Trace Management IRP and
- Interface IRP (Information Service and Solution Set)

## 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 rsp. WG | 2ndary rsp. WG(s) | Presented for information at plenary# | Approved at plenary# | Comments |
| 32.441 | Subscriber and equipment trace; Trace Management IRP Requirements | SA5 | | SA#32 Jun 2006 | SA#35 Mar 2007 | |
| 32.442 | Subscriber and equipment trace; Trace Management IRP Information Service | SA5 | | SA#36 Jun 2007 | SA#36 Jun 2007 | |
| 32.443 | Subscriber and equipment trace; Trace Management IRP CORBA Solution Set | SA5 | | SA#36 Jun 2007 | SA#36 Jun 2007 | |
| 32.445 | Subscriber and equipment trace; Trace Management IRP XML file format definition | SA5 | | SA#36 Jun 2007 | SA#36 Jun 2007 | |
| Affected existing specifications | | | | | | |
| Spec No. | CR | | Subject | Approved at plenary# | Comments | |
| 32.421 | | | | SA#34 Dec 2006 | | |
| 32.422 | | | | SA#34 Dec 2006 | | |
| 32.423 | | | | SA#34 Dec 2006 | | |

## 11 Work item rapporteur(s)
Gyula.Bodog@nokia.com

## 12 Work item leadership
SA5

## 13 Supporting Companies
Nortel, Nokia, Lucent, Huawei, Ericsson

## 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
Trace Management (BB: OAM7-Trace)

| WI | Unique_ID |
|---|---|
| OAM7-Trace | 35039 |

**Feature: OAM&P (OAM7-Studies)  Unique_ID: 35075**

**BB: Network Infrastructure Management  Unique_ID: 35076**

**Technical Specification Group Services and System Aspects**                *TSGS#29(05)0610*
Meeting #29, Tallinn, ESTONIA, 26-28 September 2005

| Source: | SA5 (Telecom Management) |
|---|---|
| Title: | WID WT Study of IRP Solution Sets in SOAP/HTTP (OAM7-NIM-SOAP) |
| Document for: | Approval |
| Agenda Item: | 8.13 |

**3GPP TSG-SA5 (Telecom Management)**                                          **S5-050430**
**Meeting #43, Bordeaux, FRANCE, 29 Aug - 2 Sep 2005**

Work Item Description

Title:

WT Study of SOAP/HTTP Integration Reference Point (IRP) Solution Sets  Unique_ID: 35066

## 1    3GPP Work Area

| X | Radio Access |
|---|---|
| X | Core Network |
|   | Services |

## 2    Linked work items

Feature: OAM&P (OAM7-Studies)  Unique_ID: 35075
BB: Network Infrastructure Management  Unique_ID: 35076

## 3    Justification

### IRP        Integration Reference Point

IRPs need to be extended with the introduction of SOAP/HTTP Solution Sets in order to respond to the growing market and industry demand for such lightweight solutions over the Itf-N.

## 4    Objective

Study the need to specify a new Solution Set for all Interface, Network Resource Model and Data Definition IRPs based on SOAP/HTTP technology, as additional choice to CORBA and CMIP Solution Sets.

Following survey work need to be considered:
(1) Use Case: Why do we need a new interface protocol. Use cases have to be provided.
(2) Standardizing Status: A survey of the protocol history and future development should be reported. Future proof ness / permanence of the new solution set is also needed.
(3) Protocol Supporting Status: How many software vendors (ISV) (e.g. IONA, IBM…) support that interface protocol. How many existing protocol products exist in the market.
(4) Interface Product Performance Test: A test report is necessary to show the performance.
(5) Economic Status: The normal existing product price should be investigated

## 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 WG | 2ndary WG(s) | Presented for info. at plenary# | Approved at plenary# | Comments |
| TR 32.809 | Study of SOAP/HTTP IRP Solution Sets | | | SA#32 5 - 7 Jun 2006 | SA#34 Dec 2006 | |

**11**　　　　**Work item rapporteur(s)**
　　　　　　　Jean Duguay [jduguay@nortel.com]]
**12**　　　　**Work item leadership**
　　　　　　　SA5
**13**　　　　**Supporting Companies**
　　　　　　　Nortel, China Mobile, Ericsson, Huawei, Motorola, Nokia, Siemens, TeliaSonera, ZTE.

**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

Feature: OAM&P (OAM7-Studies) Unique_ID: 35075
BB: Network Infrastructure Management Unique_ID: 35076

**Technical Specification Group Services and System Aspects** *TSGS#29(05)0609*
Meeting #29, Tallinn, ESTONIA, 26-28 September 2005

| | |
|---|---|
| Source: | SA5 (Telecom Management) |
| Title: | WID WT Study of Itf-N Implementation Conformance Statement template (OAM7-NIM-ICS) |
| Document for: | Approval |
| Agenda Item: | 8.13 |

**3GPP TSG-SA5 (Telecom Management)** **S5-056576**
**Meeting #43, Bordeaux, France, 28 Aug.- 2 Sep 2005**

Work Item Description

Title:
WT Study of Interface-N Implementation Conformance Statement (ICS) template  Unique_ID: 35067

**1     3GPP Work Area**

| | |
|---|---|
| X | Radio Access |
| X | Core Network |
| | Services |

**2     Linked work items**

Feature: OAM&P (OAM7-Studies)  Unique_ID: 35075
BB: Network Infrastructure Management  Unique_ID: 35076

**3     Justification**

**Itf-N  Interface-N (Network-NM Interface)**

3GPP publish xxxIRPs specifications for 3G network OAM&P.  Vendors have implemented products compliance to different version 3GPP specifications. However, no 3GPP public Implementation Conformance Statement (ICS) specification is available when operator test vendor's Itf-N product.

This WT is proposed to define 3GPP public Implementation Conformance Statement specification template.
Due to the huge workload to define all the xxxIRPs ICS specifications (including interface xxxIRPs, NRMIRPs, measurements etc.), this study WT will produce ICS template and chose special version xxxIRPs as an ICS example.

**4     Objective**

To study of Network Management (NM) Itf-N Implementation Conformance Statement (ICS) template.

Based on the outcome of this study the following specifications could be produced:

- Telecommunication management; Itf-N testing; Implementation conformance testing template (32.16x).

**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)

| Spec No. | Title | Prime rsp. WG | 2ndary rsp. WG(s) | Presented for information at plenary# | Approved at plenary# | Comments |
|---|---|---|---|---|---|---|
| **New specifications** | | | | | | |
| 32.812 | Study of Itf-N Implementation Conformance Statement (ICS) template | SA5 | | SA#34 Dec 2006 | SA#35 Mar 2007 | |

## 11 Work item rapporteur(s)
China Mobile (liyewen@chinamobile.com)

## 12 Work item leadership
SA5

## 13 Supporting Companies
China Mobile, CATT, Huawei, Motorola, Nokia, Siemens, ZTE

## 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

Feature: OAM&P (OAM7-Studies)  Unique_ID: 35075
BB: Network Infrastructure Management  Unique_ID: 35076

**Technical Specification Group Services and System Aspects** *TSGS#29(05)0611*
Meeting #29, Tallinn, ESTONIA, 26-28 September 2005

| | |
|---|---|
| Source: | SA5 (Telecom Management) |
| Title: | WID WT Study of Integration Reference Point (IRP) Information Model (OAM7-NIM-IM) |
| Document for: | Approval |
| Agenda Item: | 8.13 |

**3GPP TSG-SA5 (Telecom Management)** S5-058857
**Meeting #43, Bordeaux, FRANCE, 29 Aug - 2 Sep 2005**

Work Item Description

Title:
WT Study of Integration Reference Point (IRP) Information Model  Unique_ID: 35068

## 1    3GPP Work Area

| | |
|---|---|
| X | Radio Access |
| X | Core Network |
| | Services |

## 2    Linked work items

Feature: OAM&P (OAM7-Studies)  Unique_ID: 35075
BB: Network Infrastructure Management  Unique_ID: 35076

## 3    Justification

Currently there is no standard interface specified for how the NMC may access details of NEM Information Model. Currently this type of information is just specified in Configuration Management (CM) Integration Reference Point (IRP) Network Resource Models (NRMs) TS specification for standard NRMs. Details of vendor specific extensions are not included. The same applies to PM NRMs

Typically an NMC will be required to interface to several NEMs from different vendors, each of which may support variants and vendor specific extensions to the standard NRMs for CM and PM. To simplify NM operations, it would be advantageous if a standard interface is specified for an NEM to be able to access an NEM's Information Model (IM) realization.

See supporting white paper contribution S5-050258 for further background, supporting arguments and potential scope.

The study will involve the following activities:

Study of Requirements
Study of Use Cases
Study of Business Case - Benefits

## 4    Objective

For R7 and within the scope of WID, the object is to just initially complete a feasibility study for potential specifying an Information Model IRP to enable an IRPManager to be able to read an IRPAgent's Vendor Specific information model view over Itf-N.

It is envisaged the information model will provide the type of information currently specified in IRP and NRMs IS level specifications, e.g. NRM IOCs, containment, naming, attributes, attribute valid values, RO/RW access support, notifications supported etc.

The scope of the information model should cover 3GPP generic and vendor specific objects/data.

The Info Model IRP service needs to be able to cover all IRP views.

Completing the feasibility study and generating a Technical Report to document the findings and recommendation is current defined limit of this WID. After this work has been or completed and a conclusion reached, depending on the findings, then further work may be initiated further progress the specification of an IM IRP with associated TS being completed.

## 5    Service Aspects
None
## 6    MMI-Aspects

None
## 7 Charging Aspects
None
## 8 Security Aspects
None

## 9 Impacts

| Affects: | USIM | ME | AN | CN | Others |
|----------|------|-----|-----|-----|--------|
| **Yes** | | | X | 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 | 1st resp. WG | 2nd resp. WG(s) | Presented for Information | Presented for Approval | Comments |
| TR 32.810 | Information Model IRP Feasibility Study | SA5 | | SA#34 Dec 2006 | SA#35 Mar 2007 | |

## 11 Work item rapporteurs
Trevor PIRT (Motorola)
## 12 Work item leadership
SA5
## 13 Supporting Companies
Motorola, Nortel, Lucent, Vodafone China Mobile

## 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)

Feature: OAM&P (OAM7-Studies)  Unique_ID: 35075
BB: Network Infrastructure Management  Unique_ID: 35076

# 4 Charging Management

WT Charging aspects of FBI for PacketCable  Unique_ID: <mark>7032</mark>

<mark>Acronym: FBI-PCBL-CH</mark>

**Technical Specification Group Services and System Aspects** **TSGS#31(06)0145**
**Meeting #31, 13 - 16 March 2006, Sanya, China**

| | |
|---|---|
| **Source:** | **SA WG2** |
| **Title:** | **Revised WID: "System enhancements for fixed broadband access to IMS".** |
| **Document for:** | **Approval** |
| **Agenda Item:** | **10.17** |

_____
## Work Item Description

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

**1    3GPP Work Area**

| | |
|---|---|
| | Radio Access |
| X | Core Network |
| X | Services |

**2    Linked work items**

- QoS Improvements (32016)
- FS on Dynamic Policy control enhancements for end-to-end QoS (32017)
- WLAN - UMTS Interworking (32018)
- QoS Improvements
  - Gq interface specification for Dynamic Policy control enhancements (13016)
- Interworking aspects and migration scenarios for IPv4 based IMS Implementations (32062)
- Interoperability and Commonality between IMS using different "IP-connectivity Networks" (32061)
- IP flow based bearer level charging (32030)

**3    Justification**

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

During the joint 3GPP/TISPAN workshop it was agreed that ETSI/TISPAN will define NGN session control using IMS as a platform. This will embed IMS as the framework for advanced multimedia services for many types of operators. It is expected that some enhancements of the 3GPP specifications will be needed for IMS to enable external organizations to reuse IMS as a platform for session control for systems with fixed broadband access.

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

<mark>During the SA#30 it was then agreed to incorporate changes on fixed broadband access to IMS stemming from PacketCable2.0 requirements also within this work item. Work to address PacketCable 2.0 requirements will not delay or impact TISPAN related work.</mark>

**4    Objective**

The objective of this work item is to provide possible IMS architectural enhancements necessary in the 3GPP system to support fixed broadband access to IMS, (e.g. as stated in ETSI TISPAN release 1 and PacketCable 2.0). Where there are impacts to the IMS core, 3GPP intends to develop specifications or changes to specifications necessary to enable reuse of IMS as a platform for session control in systems with fixed broadband access. Any enhancements shall not break the integrity of the 3GPP system.

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

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

## 5 Service Aspects

For service requirements related to fixed broadband access to IMS, see ETSI TR 01016: TISPAN_NGN[1]; Release 1: Release Definition.

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

SA1 and CN will be involved to ensure consistent stage 1, 2, 3 specifications and to ensure there are no conflicting requirements.

## 6 MMI-Aspects
No MMI aspects are expected in the context of this WI.

## 7 Charging Aspects
For the charging aspects of fixed broadband access, see ETSI TR 01016: TISPAN_NGN[2]; Release 1: Release Definition.
Offline charging aspects related to fixed broadband access, including cable access, are within the scope of this work item.

## 8 Security Aspects
For the security aspects of fixed broadband access, see ETSI TR 01016: TISPAN_NGN[3]; Release 1: Release Definition.

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

## 9 Impacts

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

---

[1] Service requirements from other SDO's will also be considered when available

[2] Charging requirements from other SDO's will also be considered when available

[3] Security requirements from other SDO's will also be considered when available

## 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 |
| | | | | | | SA2 should consider if a TR capturing the impact on IMS for fixed broadband access is required. |
| **Affected existing specifications** | | | | | | |
| Spec No. | CR | Subject | | | Approved at plenary# | Comments |
| 23.228 | | Changes to fulfil requirements for fixed broadband access to IMS | | | SA#27 | |
| | | Other specs may be identified as work progresses, e.g. 23.141 for presence | | | | 06/05, in line with TISPAN Rel 1 time frame |
| 22.228 | | New requirements deemed useful to the 3GPP system as described in section 5 | | | | |
| 32.240 | | Add charging requirements to address fixed broadband access correlation with IMS | | | SA#32 Jun 2006 | |
| 32.260 | | Changes to address fixed broadband access charging data and trigger conditions | | | SA#32 Jun 2006 | |
| 32.299 | | Extensions to DIAMETER AVPs to address fixed broadband access charging data requirements | | | SA#33 Sep 2006 | |
| 32.298 | | Description of the fixed broadband access charging data parameters | | | SA#33 Sep 2006 | |

Note that TISPAN work has been completed.

## 11 Work item rapporteurs
Steve Tsang-Kwong-U, Orange
Bernie McKibben, CableLabs for work related to PacketCable 2.0 requirements.

## 12 Work item leadership
SA2

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

## 14 Classification of the WI (if known)

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

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

Stage 3: Protocol impact from providing IMS services via fixed broadband (NP-040438).

WT Charging aspects of PCC  Unique_ID: <mark>7033</mark>

<mark>Acronym: PCC-CH</mark>

**Technical Specification Group Services and System Aspects** *TSGS#31(06)0217*
**Meeting #31, 13 - 16 March 2006, Sanya, China**

| | |
|---|---|
| **Source:** | **SA WG2** |
| **Title:** | **Revised WID: "Evolution of policy control and flow based bearer level charging". Adds SA WG5 work as requested by SA WG5** |
| **Document for:** | **Approval** |
| **Agenda Item:** | **10.25** |

## Work Item Description

## Title: Evolution of policy control and flow based bearer level charging

**1  3GPP Work Area**

| | |
|---|---|
| | Radio Access |
| X | Core Network |
| | Services |

**2  Linked work items**

- Charging Management (SA5 Feature)
- Charging Management for Bearer level (SA5 BB)
- Dynamic Policy control enhancements for end-to-end QoS (SA2 BB)

**3  Justification**

Recent 3GPP Releases have developed, in separate Work Items, the necessary architecture for an enhanced bearer charging functionality, also known as flow based charging, and the service-based local policy control.
Both functionalities generated a number of new reference points and their corresponding Technical Specifications. In SA2 the main exponents are TS 23.207 and TS 23.125.

Both SBLP and FBC have interest in what bearer carries what services, creating duplicity in service information distribution and in bearer inspection in those architectures willing to implement both features.
SA2 have studied the technical aspects of merging these architectures in TR 23.803. This work item will create the necessary stage-2 specifications for an evolved and streamlined architecture that will allow the harmonization and merge of the policy control and the flow based charging architectures and functionalities.

**4  Objective**

The objective of this work item is to accomplish
1) Complete harmonization and merger of the policy control and flow based charging architecture and procedures;

2) Support for end-user subscription differentiation and general policy control aspects to the policy- and charging control;

3) Binding bearers to services.

4) Fulfilling the policy and charging control requirements for all different IP access networks.

**5  Service Aspects**
Yes. Service implications for bearer level charging and policy control.
**6  MMI-Aspects**
None
**7  Charging Aspects**

Yes. This Work Item has important implications in charging aspects.

## 8 Security Aspects

In case new interface(s) are defined as a result of the overall architectural analysis, security aspects of these interfaces will have to be addressed by SA3.

## 9 Impacts

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

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

| New specifications | | | | | | |
|---|---|---|---|---|---|---|
| Spec No. | Title | Prime rsp. WG | 2ndary rsp. WG(s) | Presented for information at plenary# | Approved at plenary# | Comments |
| 23.xxx | Policy Control and Flow-based Charging architecture | SA2 | | SA#32 (June/06) | SA#33 (Sep/06) | This TS replaces 23.125 from Release 7 and is based on TR 23.803 that was presented for information at plenary SA#28.This TS replaces the detailed SBLP aspects that are contained in 23.207 from Release 7 based on TR 23.803. |
| **Affected existing specifications** | | | | | | |
| Spec No. | CR | Subject | | | Approved at plenary# | Comments |
| 23.207 | | End-to-end Quality of Service (QoS) concept and architecture | | | SA#32 | This TS is maintained as a specification to describe the QoS architecture which will reference the new TS for PCC details. |
| 23.125 | | Overall high level functionality and architecture impacts of flow based charging; Stage 2 | | | SA#32 | This TS will be discontinued from Release 7 |
| 23.002 | | Network architecture | | | SA#32 | |
| 23.228 | | IP Multimedia Subsystem (IMS);Stage 2 | | | SA#32 | |
| 32.251 | | Potential impacts on FBC Charging | | | SA#36 Jun 2007 | SA5 PS domain charging |
| 32.252 | | Potential impacts on WLAN Charging | | | SA#36 Jun 2007 | SA5 WLAN domain charging |
| 32.299 | | Potential impact on Diameter Charging AVPs | | | SA#36 Jun 2007 | SA5 Diameter charging applications |
| 32.298 | | Potential impact on the CDR parameter description for PS and WLAN domain | | | SA#36 Jun 2007 | SA5 CDR parameter description |

## 11 Work item rapporteur(s)
Balazs Bertenyi (Nokia)
## 12 Work item leadership
SA2
## 13 Supporting Companies
Nortel, Nokia, Vodafone, Ericsson, Siemens, Telefónica
## 14 Classification of the WI (if known)

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

14b The WI is a Building Block: parent Feature
Evolution of Policy Control and Charging

WT Charging aspects of VCC  Unique_ID: <mark>35079</mark>

<mark>Acronym: VCC-CH</mark>

**Technical Specification Group Services and System Aspects**  **TSGS#31(06)0211**
**Meeting #31, 13 - 16 March 2006, Sanya, China**

| | |
|---|---|
| Source: | **SA WG2** |
| Title: | **Revised WID: "Voice call continuity between CS and IMS (incl. I-WLAN)". Adds SA WG5 work as requested by SA WG5** |
| Document for: | **Approval** |
| Agenda Item: | **10.16** |

**3GPP TSG SA WG2 Architecture — S2#51**  **S2-061230**

**13 - 17 February 2006**  **(rev of S2-061174)**

**Denver, Colorado, USA**

**Source: Orange**
**Title: Update of Voice Call Continuity between CS and IMS**
**Document for: Approval**
**Agenda Item:  10.1**
**Work Item / Release:  VCC / Rel7**

<u>**Work Item Description**</u>

**Title:  Voice call continuity between CS and IMS (incl. I-WLAN)**

**1  3GPP Work Area**

| | |
|---|---|
| | Radio Access |
| X | Core Network |
| X | Services |

**2  Linked work items**

- WLAN Interworking Technical Report (31020)
- WLAN Interworking Technical Specification Stage 1 (31035)
- 3GPP System Architecture Evolution (32085)
- WLAN – UMTS Interworking (32018)
- WLAN Interworking Security (32704)
- WLAN Interworking CN3 Aspect (13019)
- WLAN Interworking CN4 Aspect (14013)
- Combining CS Bearer with IMS (32066, 32067)
- Multimedia Telephony Capabilities for IMS Stage 1(31082)

**3  Justification**

Technical Specification 23.234 (3GPP system to Wireless Local Area Network (WLAN) interworking: System description) provides the possibility to offer VoIP over *WLAN interworking with home IMS*. The converged IMS architecture offers the possibility to support the most prevalent GSM service, voice calls, over WLAN when there is coverage. A seamless voice call between *CS Domain* and the *WLAN* could provide relief to the GSM/UMTS radio resources and increase service revenue. In addition, wireline operators with VoIP offerings should be able to use the 3GPP IMS architecture to offer converged services.

Seamless session continuity between WLAN and 3GPP access assumes the continuation of a WLAN IP service as a 3GPP IP service (i.e. via the PS domain). This current assumption is not realistic for real-time voice services; in particular those with GSM radio coverage. Ongoing work on WIDs 32066 and 32 067 do not consider the aspect of voice call continuity between CS domain and IMS. As such additional work is needed.

## 4 Objectives

This work item studies and intends to implement the necessary enhancements to 3GPP systems so that real-time voice call can be offered seamlessly between the *CS Domain* and the *WLAN interworking with IMS* architecture. This will be accomplished through the development of a Technical Report (feasibility study) that will lead to the development of a Technical Specification that defines this functionality as a standard 3GPP feature.

This work item studies and defines real-time voice call continuity when moving between the GSM/UMTS CS Domain and WLAN interworking with home IMS functionality. It also studies the framework in which the continuity takes place, e.g. the following aspects:

- Ability for the UE to detect and automatically select the appropriate Access Network (such as GSM/UMTS radio or IP Connectivity Access Network) based on operator policy for real-time voice service.
- Mechanism for selecting how to route the terminating voice calls to the UE: either through the GSM/UMTS CS Domain or through the WLAN interworking networks with IMS based on the user registration. Criteria for the routing decision as well as the routing mechanism itself should be covered.
- Voice call continuity when the user is moving between GSM/UMTS *CS Domain* and *WLAN interworking with home IMS*
- Support of calls to/from roaming subscribers accessing service from I-WLANs connected over the public internet.

Whilst the objectives above assume WLAN as the underlying access for IMS, the solution developed for CS-IMS voice call continuity shall be independent of the use of the underlying IP Connectivity Access Network. E.g. the solution shall be applicable to IMS over GPRS or fixed broadband access.

**This work item should reuse the existing features that have been developed for the GSM /UMTS whenever possible. In this study the CS call scenarios** should **include the** *traditional GSM/UMTS CS calls* **and** possibly **the newly developed** *Combining CS Bearer with IMS* **(32066) capability.**

## 5 Service aspects

To provide subscribers with seamless access to real-time wireless voice service while operating in the GSM/UMTS CS Domain and *a WLAN interworking with home IMS* deployment

## 6 MMI aspects

None

## 7 Charging Aspects

The billing/charging impacts should be studied. Specifically, the ability to generate the appropriate accounting parameters as subscribers move between WLAN networks and GSM/UMTS networks is necessary. The capability to separately charge for sessions in each access network needs to be provided.

## 8 Security Aspects

In general, the security in each domain will be covered by existing security specifications in those domains. In other words, CS security aspects will be covered by existing CS security specifications, I-WLAN security aspects by existing I-WLAN security specifications and IMS security aspects by existing IMS security specifications. The voice call continuity across these domains shall not compromise the security mechanisms of the individual domains.

## 9 Impacts

| Affects: | USIM | 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 | | | | | | |
|---|---|---|---|---|---|---|
| Spec No. | Title | Prime rsp. WG | 2ndary rsp. WG(s) | Presented for information at plenary# | Approved at plenary# | Comments |
| TR 23.806. | Voice call continuity between CS and IMS Study | SA2 | | SA#28 (06/05) | SA#29 | TR |
| TS 23.206 | Voice call continuity between CS and IMS | SA2 | | SA#32 | SA#33 | Note that it shall be decided whether a TS is necessary based on the conclusion of the TR |
| | | | | | | |

| Affected existing specifications | | | | |
|---|---|---|---|---|
| Spec No. | CR | Subject | Approved at plenary# | Comments |
| 22.101 | | | SA#30 | SA1 should review the assumed requirements and identify any stage 1 impacts |
| 23.228 | | | TBD | The conclusion of the TR will identify the affected existing Technical Specifications |
| 32.250 | | update the CS Charging functionality to integrate the charging requirements | SA#36 Jun 2007 | SA5 Circuit Switched (CS) domain charging |
| 32.260 | | update the IMS Charging functionality to integrate the charging requirements | SA#36 Jun 2007 | SA5 IMS charging |
| 32.299 | | update the Diameter charging application to include VCC specific AVPs | SA#36 Jun 2007 | SA5 Diameter charging applications |
| 32.298 | | update the IMS and CS CDRs description to include VCC specific charging information | SA#36 Jun 2007 | SA5 CDR parameter description |

## 11 Work item rapporteurs

Lucent (editor: Andy Bennett)

## 12 Work item leadership

SA2

## 13 Supporting Companies

Cingular Wireless, AT&T, Lucent, Nokia, Siemens, Ericsson, Motorola, Nortel, Huawei, Azaire Networks, Samsung, China Mobile, ZTE, NEC, TeliaSonera, LG Electronics, Orange, Telefonica, Telcordia

## 14 Classification of the WI (if known)

The work item is a feature, includes a feasibility study as well as Stage-2 and Stage 3 specifications.

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

14a    The WI is a Feature: List of building blocks under this feature
14b    The WI is a Building Block: parent Feature
14c    The WI is a Work Task: parent Building Block

WT Charging aspects of ServID  Unique_ID: <mark>7035</mark>

<mark>Acronym: ServID -CH</mark>

Technical Specification Group Services and System Aspects **TSGS#31(06)0216**

Meeting #31, 13 - 16 March 2006, Sanya, China

| | |
|---|---|
| **Source:** | **SA WG2** |
| **Title:** | **Revised WID: "Identification of Communication Services in IMS". Adds SA WG5 work as requested by SA WG5** |
| **Document for:** | **Approval** |
| **Agenda Item:** | **10.20** |

## Work Item Description

**Title:** **Identification of Communication Services in IMS**

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

### 1    3GPP Work Area

| | |
|---|---|
| | Radio Access |
| X | Core Network |
| X | Services |
| X | Terminal |

### 2    Linked work items

- System enhancements for fixed broadband access to IMS (FBI)
- 3GPP enablers for services like Push to talk (PoC)
- Evolution of policy control and charging (PCC)

### 3    Justification

3GPP has adopted the approach of creating a number of IMS enablers that can be used by a number of services.  The success of this has been demonstrated through the adoption of the IMS by other standardisation bodies (e.g. TISPAN, OMA, ….), some of which have finalised a service definition utilising the IMS.  A consequence of this approach is that neither the enabler being used, nor the requested media being used is sufficient to identify the particular communication service requested.

A means is required in order to identify the communication service requested for the following reasons:

- The network is required to identify the correct application server(s) to link into the SIP call path, if required.
- The media authorization policy may use a communication service identifier as input.
- It is desirable for the network to be able to authorize the use of a communication service
- Charging may use a communication service identifier as input.
- In a multi-UE scenario where a recipient has several UEs with different UE capabilities, it is useful to be able to route the SIP request to the UE(s) supporting a requested communication service.
- In order to enable the User Equipment to identify the correct application logic, while allowing for many services to be offered using the same enablers and media types.
- Often interworking requires knowledge of the services being interworked, as such interworking between an IMS based service and a non-IMS based service may benefit from the identification of the requested communication service.
- Allowing the network to authorise the use of the service for a particular user
- Communication service prioritisation in the case of network overload.
- To be an input into inter-operator interconnect service level agreements.

- Provide a scope for the IOP specifications related to a particular communication service

In addition to the above reasons, a communication service identifier also has the advantage or reducing the required co-ordination between standardisation bodies if the format and the encoding across these bodies was agreed and was the same.

The architectural and requirements technical procedures for a communication service identifier and the administrative procedures related to a communication service identifier require study.

As a note, OMA has employed the feature tag as communication service identifier.

Note: The introduction of a communication service identifier does not replace the public service identity (PSI), but indicates the particular communication service used.

## 4 Objective

The objective of this work item is to identify the architectural requirements and technical procedures as well as the administrative procedures for a communication service identifier. This includes at least the following aspects:

- A frame work description for the usage and applicability of the communication service identifier and its relationship with the PSI and other existing IMS mechanisms.
- Identifying the architectural requirements for a communication service identifier that enable the usage scenarios identified in the above justification section.
- Identifying requirements on compatibility and evolution of a communication service in relation to the communication service identifier. Describe the expected behaviour when the service identifier in the requesting SIP method doesn't match with any of the service identifiers included in the registration process from the called UEs
- Identify the methods for administrative procedures for a communication service identifier, including the requirements upon when a service identifier value is required to be allocated.

In addition alternative mechanisms to identify communication services can be studied within the TR.

It is assumed that a Building Block Work Item will exist for the stage-3 specification work.

The CRs to update the specifications in accordance with the conclusions of the study shall be performed

## 5 Service Aspects
A communication service identifier will be used to identify the requested communication service.
## 6 MMI-Aspects
*None identified*
## 7 Charging Aspects
A communication service identifier may be an input for charging.
## 8 Security Aspects
*None identified*

## 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 rsp. WG | 2ndary rsp. WG(s) | Presented for information at plenary# | Approved at plenary# | Comments |
| TR 23.816 | Feasibility Study for a Communication Service Identifier | SA2 | | SA#30 | SA#31 | TR required in order to mature text and procedures into something that is acceptable to the industry. |
| Affected existing specifications | | | | | | |
| Spec No. | CR | Subject | | | Approved at plenary# | Comments |
| 23.228 | 0542 | Include the text identified in the FS into TS 23.228 regarding the identification of IMS communication services | | | SA2#30 | |
| 23.228 | | Including findings agreed during SA2#50 | | | | |
| 23.203 | | Potential impacts to the policy control and charging architecture | | | | |
| 32.260 | | Potential impact on CDRs for IMS | | | SA#37 Sep 2007 | SA5 IMS charging |
| 32.299 | | Potential impact on Diameter Charging AVPs | | | SA#37 Sep 2007 | SA5 Diameter charging applications |
| 32.298 | | Potential impact on the CDR parameter description for IMS | | | SA#37 Sep 2007 | SA5 CDR parameter description |

Note: It is expected that a Stage 3 WID will be created to perform the required stage 3 work.

## 11 Work item raporteurs

Stephen Terrill, Ericsson

## 12 Work item leadership

3GPP SA2

## 13 Supporting Companies

Ericsson, Nokia, Cingular, Samsung , TeliaSonera, Orange, Telefonica

## 14 Classification of the WI (if known)

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

14a    The WI is a Feature: List of building blocks under this feature
(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
(one Work Item identified as a building block)

**Technical Specification Group Services and System Aspects**      *TSGS#32(06)0442*
**Meeting #32, 5 - 8 June 2006, Warsaw, POLAND**

| | |
|---|---|
| Source: | SA |
| Title: | WID Alternate Charged party for IMS |
| Document for: | Approval |
| Agenda Item: | 10.38 |

## Work Item Description

Title:

WT Alternate Charged Party (ACP) for IMS  Unique_ID: <mark>320008</mark>

Provide charging information for an alternate subscribing party other than calling within the domain of one service provider.

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

<mark>**Acronym:**    **CH7-IMS-ACP**</mark>

## 1    3GPP Work Area

| | |
|---|---|
| | Radio Access |
| X | Core Network |
| X | Services |

## 2    Linked work items
- Charging Management small Enhancements (CH7)

## 3    Justification

Provide a standardized optional way for IMS sessions to be charged to an alternate subscriber, or service within a serving network. Reuse of existing mechanisms should be taken into account, if any.

Example Use Cases:

1.  Charging Account Access Digits

    The subscriber dials a special access number approved and provided by the operator that charges an account (not a credit or calling card). The Charging Account is a sub-category under main billing number (e.g. there will be one bill for all calls from the service provider).
    For example, calls from an office can be made for different clients. Dialling different account numbers can then identify and charge expenses to clients accordingly based upon the bills received.

2.  Assigned Charging Digits

    These are predetermined digits, either by caller's choice or by automatic selection, that get charged on any origination by a select subscriber. This could include not only a special charging number, but under circumstances determined by the operator, could include some called numbers or even the originating number if conditions warrant it.
    For example, when there are multiple subscribers under one account, (for family plan or several mobiles), the billing digits are same for all mobiles while the calling party number is different. A construction company can have 10 mobile and bills for all calls originated from all mobiles go to one billing digits (main calling party number). The choices for who gets billed is can be an operator variable.

3.  Alternate Charging Digits

    Alternate Billing Digits are the same as Billing Digits, but are secondary choices either for the subscriber, or by the operator given some set of conditions. One condition may be when the called number is outside the calling area of the operator then one number is used. Another condition is, when the call is inside then service area another number is used.

## 4    Objective

Provide an alternate charged party in the CDF. Currently the charging specifications do not support any other billing model than "Calling party pays". Potential reuse of existing charging mechanisms should be taken into account.

A gap analysis on the necessary improvements to these charging mechanisms shall be undertaken. The aim is to provide this functionality via a method that minimises the potential for fraud.

## 5 Service Aspects

A mechanism that guarantees the delivery of the charged party indication in a trusted manner needs to be available.

## 6 MMI-Aspects

NA

## 7 Charging Aspects

The function is based on the service aspects that define the service as charging a subscriber who is not the originating party, but has been identified as being responsible for the charges. Requires changes to charging specifications for offline charging functions.

Online charging is out of scope of this work item and will be covered in later releases.

## 8 Security Aspects

Suitable mechanism to avoid fraudulent behaviour (e.g. spoof and/or fake charging records) shall be adopted.

## 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 | | Add alternate party charging principles | SA#36 Jun 2007 | |
| 32.260 | | Add message flow description and CDR parameters for alternate party charging | SA#36 Jun 2007 | |
| 32.299 | | Add AVPs related to alternate party charging | SA#36 Jun 2007 | An extension of the IMS information AVP is needed |
| 32.298 | | Add CDR parameter description related alternate party charging number | SA#36 Jun 2007 | |

## 11 Work item rapporteur(s)

Nick Mazzarella (njmazzarella@lucent.com)

## 12 Work item leadership

SA5

## 13 Supporting Companies

Lucent, Cingular, Vodafone, Sprint, TeliaSonera, Amdocs

## 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) |

14a The WI is a Feature: List of building blocks under this feature
14b The WI is a Building Block: parent Feature
14c The WI is a Work Task: parent Building Block

CH7 Charging Management small Enhancements

## Technical Specification Group Services and System Aspects *TSGS#33(06)0545*

Meeting #33, Palm Springs, US, 25 - 28 Sep 2006

| Source: | SA5 (Telecom Management) |
|---|---|
| Title: | WID on SA5 Charging harmonization for NGN between 3GPP and ATIS-TMOC |
| Document for: | Approval |
| Agenda Item: | 10.39 |

3GPP TSG-SA5 (Telecom Management) S5-060671r1
Meeting #48, Kunming, CHINA, 3 - 7 Jul 2006

### Work Item Description

Title:

WT SA5 Charging harmonization for NGN between 3GPP and ATIS-TMOC  Unique_ID: 330011

Acronym: FBI2-TISP2-CH

Provide charging information for the Push-to-Talk service based on the OMA PoC Enabler Release 2.0.

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's System enhancements for fixed broadband access to IMS (UID 320074,FBI)
  - **SA2's TISPAN Rel 2 related aspects** (UID 7005, **FBI-TISP2**)

**3 Justification**

The standardization of the Next Generation Network (NGN) is addressed by a number of SDOs. (e.g. ETSI TISPAN, ITU-T and ATIS-TMOC).
3GPP recognizes that external standards organizations are in the process of defining NGN session control using IMS as a platform. This will embed IMS as the framework for advanced services for many types of operators.
ITU-T SG4 identified harmonization possibilities between ATIS TMOC and 3GPP for the NGN charging, and they were requested to make an effort to harmonize their standards.
In a joint session in January 2006, ATIS-TMOC and SA5-SWGB have envisaged a solution to ITU NGN.
By adding an optional solution set, 3GPP would be harmonized with ATIS-TMOC and would be in a better position to satisfy the request from ITU-T SG4.

**4 Objective**

To accomplish harmonization between 3GPP and ATIS with regard to the NGN charging architecture (i.e. this WID) incorporate an optional solution to the existing 3GPP solution, namely:

- ATIS-TMOC's protocol (IPDR/SP IPDR/F) is adopted as an alternative protocol on the Bx reference point.

**5 Service Aspects**
> None

**6 MMI-Aspects**
NA

**7 Charging Aspects**
> This WID touches charging aspects within 3GPP, in order to satisfy requirements from NGNMFG towards harmonisation between 3GPP and ATIS-TMOC.

**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 | |
| NA | | | | | | | |
| Affected existing specifications [None in the case of Study Items] | | | | | | | |
| Spec No. | CR | Subject | | | Approved at plenary# | Comments | |
| 32.297 | TBD | Addition of ATIS-TMOC protocol as alternative on Bx. | | | SA#33 Sep 2006 | | |

**11** **Work item rapporteur(s)**
Yishai Brown, Amdocs [yishai.brown@amdocs.com]
**12** **Work item leadership**
SA5
**13** **Supporting Companies**
Amdocs, Orange, Lucent Technologies, Ericsson, Huawei, Cingular

**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) |

14a The WI is a Feature: List of building blocks under this feature
14b The WI is a Building Block: parent Feature
14c The WI is a Work Task: parent Building Block

- 32074 SA2's System enhancements for fixed broadband access to IMS (UID 32074, FBI)
  - **SA2's TISPAN Rel 2 related aspects (UID 7005, FBI-TISP2)**

## Technical Specification Group Services and System Aspects *TSGS#33(06)0546*
Meeting #33, Palm Springs, US, 25 - 28 Sep 2006

| | |
|---|---|
| Source: | SA5 (Telecom Management) |
| Title: | WID to Align 3GPP Charging with OMA PoC Enabler Release 2.0 |
| Document for: | Approval |
| Agenda Item: | 10.39 |

3GPP TSG-SA5 (Telecom Management)                                                                                            S5-060707
Meeting #48, Kunming, CHINA, 3 - 7 Jul 2006

### Work Item Description

Title:

WT Align 3GPP Charging with OMA PoC Enabler Release 2.0  Unique_ID: 330004

Acronym: CH7-PoC

Provide charging information for the Push-to-Talk service based on the OMA PoC Enabler Release 2.0.

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

**1      3GPP Work Area**

| | |
|---|---|
| | Radio Access |
| X | Core Network |
| X | Services |

**2      Linked work items**

- SA5's  Charging Management small Enhancements (UID 320007, CH7)
- SA2's  Identification of Communication Services in IMS (UID 732097, ServID)

**3      Justification**

Based on the LS received from the OMA PoC WG, 3GPP should provide a PoC Charging solution for the enhancements of OMA PoC Release 2. OMA PoC WG defines the following documents to reflect any changes addressing the impacts of PoC version 2.0 on charging:

- The OMA PoC Requirements document reflects the high level features added for OMA PoC 2.0 and the associated requirements for charging support for those features. The document contains OMA PoC v2.0, OMA PoC v2.1 and OMA Post PoC v2.1 features.

- The OMA PoC – Architecture document reflects the OMA PoC architecture enhanced for OMA PoC v2.0.

- The OMA PoC System Description document reflects more detailed architecture aspects of OMA PoC v2.0. Regarding charging, it identifies detailed requirements and high level information elements. The charging description covers partly also the PoCv2.1 features (e.g. Dynamic PoC Groups, Moderated PoC Groups, Invitation Reservation, Condition Based PoC Session Barring, Enhanced Simultaneous PoC Sessions), which do not need to be considered.

**4      Objective**

The OMA Push to Talk over Cellular Candidate Version 2.0 includes several new chargeable features. These new features influence the 3GPP TS 32.272 defining charging for OMA PoC version 1.0, when OMA PoC version 1.0 is used with 3GPP IMS core network. The current Rel-6 version of TS 32.272 for PoC Charging will be used as the basis for these enhancements.

**5      Service Aspects**
            None
**6      MMI-Aspects**
            NA

## 7        Charging Aspects

The enhancements should be embedded in the already existing PoC Charging solution for Offline and Online Charging.

## 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 |
| NA | | | | | | |
| **Affected existing specifications** | | | | | | |
| [None in the case of Study Items] | | | | | | |
| Spec No. | CR | Subject | | Approved at plenary# | | Comments |
| 32.240 | TBD | Add new principles on chargeable features, if needed | | SA#36 Jun 2007 | | Charging architecture and principles |
| 32.272 | TBD | Add new message flow description and CDR parameters | | SA#36 Jun 2007 | | Push-to-talk over Cellular (PoC) charging |
| 32.299 | TBD | Add new AVPs (an extension of the PoC information AVP is needed) | | SA#36 Jun 2007 | | Diameter charging applications |
| 32.298 | TBD | Add new CDR parameter | | SA#36 Jun 2007 | | Charging Data Record (CDR) parameter description |

## 11        Work item rapporteur(s)

Gerald GÖRMER (gerald.goermer@siemens.com)

## 13        Work item leadership

SA5

## 13        Supporting Companies

Cingular, Ericsson, Huawei, Nokia, Orange, Siemens, 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) |

14a     The WI is a Feature: List of building blocks under this feature
14b     The WI is a Building Block: parent Feature
14c     The WI is a Work Task: parent Building Block

- SA5's  Charging Management small Enhancements (UID 320007, CH7)

# 5 Status list of Work items

This list reflects work items ongoing, completed, stopped or moved to Rel-8.

# 6      List of SA5 Release 7 specifications

| Type | Number | Title | Rapporteur |
|---|---|---|---|
| TR | 30.817 | Telecommunication management; Project scheduling and open issues for SA5, Release 7 | ZOICAS, Adrian |
| TS | 32.101 | Telecommunication management; Principles and high level requirements | TOCHE, Christian |
| TS | 32.102 | Telecommunication management; Architecture | BERGGREN, Tommy |
| TS | 32.111-1 | Telecommunication management; Fault Management; Part 1: 3G fault management requirements | TRUSS, Michael |
| TS | 32.111-2 | Telecommunication management; Fault Management; Part 2: Alarm Integration Reference Point (IRP): Information Service (IS) | TRUSS, Michael |
| TS | 32.111-3 | Telecommunication management; Fault Management; Part 3: Alarm Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | TSE, Edwin |
| TS | 32.111-5 | Telecommunication management; Fault Management; Part 5: Alarm Integration Reference Point (IRP): eXtensible Markup Language (XML) definitions | TRUSS, Michael |
| TS | 32.140 | Telecommunication management; Subscription Management (SuM) requirements | TOCHE, Christian |
| TS | 32.141 | Telecommunication management; Subscription Management (SuM) architecture | ABA, Istvan |
| TS | 32.150 | Telecommunication management; Integration Reference Point (IRP) Concept and definitions | TOCHE, Christian |
| TS | 32.151 | Telecommunication management; Integration Reference Point (IRP) Information Service (IS) template | TOVINGER, Thomas |
| TS | 32.152 | Telecommunication management; Integration Reference Point (IRP) Information Service (IS) Unified Modelling Language (UML) repertoire | POLLAKOWSKI, Olaf |
| TS | 32.154 | Telecommunication management; Backward and Forward Compatibility (BFC); Concept and definitions | PETERSEN, Robert |
| TS | 32.171 | Telecommunication management; Subscription Management (SuM) Network Resource Model (NRM) Integration Reference Point (IRP): Requirements | DAI, Peng |
| TS | 32.172 | Telecommunication management; Subscription Management (SuM) Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS) | DAI, Peng |
| TS | 32.175 | Telecommunication management; Subscription Management (SuM) Network Resource Model (NRM) Integration Reference Point (IRP): eXtensible Markup Language (XML) definition | ABA, Istvan |
| TS | 32.240 | Telecommunication management; Charging management; Charging architecture and principles | GOERMER, Gerald |
| TS | 32.250 | Telecommunication management; Charging management; Circuit Switched (CS) domain charging | GOERMER, Gerald |
| TS | 32.251 | Telecommunication management; Charging management; Packet Switched (PS) domain charging | GOERMER, Gerald |
| TS | 32.252 | Telecommunication management; Charging management; Wireless Local Area Network (WLAN) charging | ALEXANDER, Benni |
| TS | 32.260 | Telecommunication management; Charging management; IP Multimedia Subsystem (IMS) charging | ALEXANDER, Benni |
| TS | 32.270 | Telecommunication management; Charging management; Multimedia Messaging Service (MMS) charging | GOERMER, Gerald |
| TS | 32.271 | Telecommunication management; Charging management; Location Services (LCS) charging | BIBAS, Alain |
| TS | 32.272 | Telecommunication management; Charging management; Push-to-talk over Cellular (PoC) charging | GOERMER, Gerald |
| TS | 32.273 | Telecommunication management; Charging management; Multimedia Broadcast and Multicast Service (MBMS) charging | NEAL, Adrian |
| TS | 32.274 | Telecommunication management; Charging management; Short Message Service (SMS) charging | WONG, Gavin |
| TS | 32.295 | Telecommunication management; Charging management; Charging Data Record (CDR) transfer | GOERMER, Gerald |
| TS | 32.296 | Telecommunication management; Charging management; Online Charging System (OCS): Applications and interfaces | GOERMER, Gerald |
| TS | 32.297 | Telecommunication management; Charging management; Charging Data Record (CDR) file format and transfer | MAZZARELLA, Nick |
| TS | 32.298 | Telecommunication management; Charging management; Charging Data Record (CDR) parameter description | GOERMER, Gerald |
| TS | 32.299 | Telecommunication management; Charging management; Diameter charging applications | ALEXANDER, Benni |

| TS | 32.300 | Telecommunication management; Configuration Management (CM); Name convention for Managed Objects | TOVINGER, Thomas |
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| TS | 32.301 | Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP): Requirements | TRUSS, Michael |
| TS | 32.302 | Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP): Information Service (IS) | TSE, Edwin |
| TS | 32.303 | Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | POLLAKOWSKI, Olaf |
| TS | 32.305 | Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP): eXtensible Markup Language (XML) definition | POLLAKOWSKI, Olaf |
| TS | 32.307 | Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP): Simple Object Access Protocol (SOAP) Solution Set (SS) | DAI, Peng |
| TS | 32.311 | Telecommunication management; Generic Integration Reference Point (IRP) management; Requirements | TSE, Edwin |
| TS | 32.312 | Telecommunication management; Generic Integration Reference Point (IRP) management; Information Service (IS) | TSE, Edwin |
| TS | 32.313 | Telecommunication management; Generic Integration Reference Point (IRP) management; Common Object Request Broker Architecture (CORBA) Solution Set (SS) | TSE, Edwin |
| TS | 32.317 | Telecommunication management; Generic Integration Reference Point (IRP) management; Simple Object Access Protocol (SOAP) Solution Set (SS) | DAI, Peng |
| TS | 32.321 | Telecommunication management; Test management Integration Reference Point (IRP): Requirements | POLLAKOWSKI, Olaf |
| TS | 32.322 | Telecommunication management; Test management Integration Reference Point (IRP): Information Service (IS) | POLLAKOWSKI, Olaf |
| TS | 32.323 | Telecommunication management; Test management Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | TSE, Edwin |
| TS | 32.325 | Telecommunication management; Test management Integration Reference Point (IRP); eXtensible Markup Language (XML) definitions | YANG, Li |
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| TS | 32.332 | Telecommunication management; Notification Log (NL) Integration Reference Point (IRP): Information Service (IS) | TRUSS, Michael |
| TS | 32.333 | Telecommunication management; Notification Log (NL) Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | TSE, Edwin |
| TS | 32.335 | Telecommunication management; Notification Log (NL) Integration Reference Point (IRP): eXtensible Markup Language (XML) solution definitions | TRUSS, Michael |
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| TS | 32.342 | Telecommunication management; File Transfer (FT) Integration Reference Point (IRP): Information Service (IS) | LI, Yewen |
| TS | 32.343 | Telecommunication management; File Transfer (FT) Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | LI, Yewen |
| TS | 32.345 | Telecommunication management; File Transfer (FT) Integration Reference Point (IRP); eXtensible Markup Language (XML) definitions | YANG, Li |
| TS | 32.351 | Telecommunication management; Communication Surveillance (CS) Integration Reference Point (IRP): Requirements | LI, Yewen |
| TS | 32.352 | Telecommunication management; Communication Surveillance (CS) Integration Reference Point (IRP): Information Service (IS) | LI, Yewen |
| TS | 32.353 | Telecommunication management; Communication Surveillance (CS) Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | LI, Yewen |
| TS | 32.354 | Telecommunication management; Communication Surveillance (CS) Integration Reference Point (IRP): Common Management Information Protocol (CMIP) Solution Set (SS) | SUERBAUM, Clemens |
| TS | 32.361 | Telecommunication management; Entry Point (EP) Integration Reference Point (IRP): Requirements | LI, Yewen |
| TS | 32.362 | Telecommunication management; Entry Point (EP) Integration Reference Point (IRP): Information Service (IS) | LI, Yewen |
| TS | 32.363 | Telecommunication management; Entry Point (EP) Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | LI, Yewen |
| TS | 32.365 | Telecommunication management; Entry Point (EP) Integration Reference Point (IRP); eXtensible Markup Language (XML) definitions | YANG, Li |
| TS | 32.371 | Telecommunication management; Security Management concept and requirements | YANG, Li |
| TS | 32.372 | Telecommunication management; Security services for Integration Reference Point (IRP): Information Service (IS) | YANG, Li |
| TS | 32.373 | Telecommunication management; Security services for Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution | YANG, Li |
| TS | 32.375 | Telecommunication management; Security services for Integration Reference Point (IRP): File integrity solution | YANG, Li |

| TS | 32.381 | Telecommunication management; Partial Suspension of Itf-N Integration Reference Point (IRP): Requirements | SUERBAUM, Clemens |
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| TS | 32.382 | Telecommunication management; Partial Suspension of Itf-N Integration Reference Point (IRP): Information Service (IS) | SUERBAUM, Clemens |
| TS | 32.383 | Telecommunication management; Security Services for Integration Reference Points (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | SUERBAUM, Clemens |
| TS | 32.385 | Telecommunication management; Partial Suspension of Itf-N Integration Reference Point (IRP): eXtensible Markup Language (XML) file format definition | SUERBAUM, Clemens |
| TS | 32.391 | Telecommunication management; Delta synchronization Integration Reference Point (IRP): Requirements | SUERBAUM, Clemens |
| TS | 32.392 | Telecommunication management; Delta synchronization Integration Reference Point (IRP): Information Service (IS) | SUERBAUM, Clemens |
| TS | 32.393 | Telecommunication management; Delta synchronization Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | SUERBAUM, Clemens |
| TS | 32.395 | Telecommunication management; Delta synchronization Integration Reference Point (IRP): eXtensible Markup Language (XML) file format definition | SUERBAUM, Clemens |
| TS | 32.401 | Telecommunication management; Performance Management (PM); Concept and requirements | HUBINETTE, Ulf |
| TS | 32.403 | Telecommunication management; Performance Management (PM); Performance measurements - UMTS and combined UMTS/GSM | TOCHE, Christian |
| TS | 32.404 | Telecommunication management; Performance Management (PM); Performance measurements - Definitions and template | LI, Yewen |
| TS | 32.405 | Telecommunication management; Performance Management (PM); Performance measurements Universal Terrestrial Radio Access Network (UTRAN) | WANG, Lan |
| TS | 32.406 | Telecommunication management; Performance Management (PM); Performance measurements Core Network (CN) Packet Switched (PS) domain | LI, Yewen |
| TS | 32.407 | Telecommunication management; Performance Management (PM); Performance measurements Core Network (CN) Circuit Switched (CS) domain | WANG, Lan |
| TS | 32.408 | Telecommunication management; Performance Management (PM); Performance measurements Teleservice | LI, Yewen |
| TS | 32.409 | Telecommunication management; Performance Management (PM); Performance measurements IP Multimedia Subsystem (IMS) | YU, Chengzhi |
| TS | 32.411 | Telecommunication management; Performance Management (PM) Integration Reference Point (IRP): Requirements | HUBINETTE, Ulf |
| TS | 32.412 | Telecommunication management; Performance Management (PM) Integration Reference Point (IRP): Information Service (IS) | LI, Yewen |
| TS | 32.413 | Telecommunication management; Performance Management (PM) Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | LI, Yewen |
| TS | 32.415 | Telecommunication management; Performance Management (PM) Integration Reference Point (IRP); eXtensible Markup Language (XML) definitions | YANG, Li |
| TS | 32.421 | Telecommunication management; Subscriber and equipment trace; Trace concepts and requirements | TOCHE, Christian |
| TS | 32.422 | Telecommunication management; Subscriber and equipment trace; Trace control and configuration management | TOCHE, Christian |
| TS | 32.423 | Telecommunication management; Subscriber and equipment trace; Trace data definition and management | TOCHE, Christian |
| TS | 32.432 | Telecommunication management; Performance measurement: File format definition | TOCHE, Christian |
| TS | 32.435 | Telecommunication management; Performance measurement: eXtensible Markup Language (XML) file format definition | TOCHE, Christian |
| TS | 32.436 | Telecommunication management; Performance measurement: Abstract Syntax Notation 1 (ASN.1) file format definition | TOCHE, Christian |
| TS | 32.441 | Telecommunication management; Trace Management Integration Reference Point (IRP): Requirements | BODOG, Gyula |
| TS | 32.442 | Telecommunication management; Trace Management Integration Reference Point (IRP): Information Service (IS) | BODOG, Gyula |
| TS | 32.443 | Telecommunication management; Trace Management Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | BODOG, Gyula |
| TS | 32.445 | Telecommunication management; Trace Management (Trace) Integration Reference Point (IRP): eXtensible Markup Language (XML) file format definition | BODOG, Gyula |
| TS | 32.600 | Telecommunication management; Configuration Management (CM); Concept and high-level requirements | TOVINGER, Thomas |
| TS | 32.601 | Telecommunication management; Configuration Management (CM); Basic CM Integration Reference Point (IRP); Requirements | PIRT, Trevor |

| TS | 32.602 | Telecommunication management; Configuration Management (CM); Basic CM Integration Reference Point (IRP): Information Service (IS) | TOVINGER, Thomas |
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| TS | 32.603 | Telecommunication management; Configuration Management (CM); Basic CM Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | TSE, Edwin |
| TS | 32.607 | Telecommunication management; Configuration Management (CM); Basic CM Integration Reference Point (IRP): Simple Object Access Protocol (SOAP) Solution Set (SS) | DAI, Peng |
| TS | 32.611 | Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP): Requirements | PIRT, Trevor |
| TS | 32.612 | Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP): Information Service (IS) | PIRT, Trevor |
| TS | 32.613 | Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | PIRT, Trevor |
| TS | 32.615 | Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP): eXtensible Markup Language (XML) file format definition | TOCHE, Christian |
| TS | 32.621 | Telecommunication management; Configuration Management (CM); Generic network resources Integration Reference Point (IRP); Requirements | PIRT, Trevor |
| TS | 32.622 | Telecommunication management; Configuration Management (CM); Generic network resources Integration Reference Point (IRP): Network Resource Model (NRM) | TOVINGER, Thomas |
| TS | 32.623 | Telecommunication management; Configuration Management (CM); Generic network resources Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | PIRT, Trevor |
| TS | 32.625 | Telecommunication management; Configuration Management (CM); Generic network resources Integration Reference Point (IRP): Bulk CM eXtensible Markup Language (XML) file format definition | TOCHE, Christian |
| TS | 32.631 | Telecommunication management; Configuration Management (CM); Core network resources Integration Reference Point (IRP): Requirements | PIRT, Trevor |
| TS | 32.632 | Telecommunication management; Configuration Management (CM); Core Network Resources Integration Reference Point (IRP): Network Resource Model (NRM) | TOCHE, Christian |
| TS | 32.633 | Telecommunication management; Configuration Management (CM); Core network resources Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | TOCHE, Christian |
| TS | 32.635 | Telecommunication management; Configuration Management (CM); Core network resources Integration Reference Point (IRP): Bulk CM eXtensible Markup Language (XML) file format definition | TOCHE, Christian |
| TS | 32.641 | Telecommunication management; Configuration Management (CM); UTRAN network resources Integration Reference Point (IRP); Requirements | PIRT, Trevor |
| TS | 32.642 | Telecommunication management; Configuration Management (CM); UTRAN network resources Integration Reference Point (IRP): Network Resource Model (NRM) | PETERSEN, Robert |
| TS | 32.643 | Telecommunication management; Configuration Management (CM); UTRAN network resources Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | PIRT, Trevor |
| TS | 32.645 | Telecommunication management; Configuration Management (CM); UTRAN network resources Integration Reference Point (IRP): Bulk CM eXtensible Markup Language (XML) file format definition | TOCHE, Christian |
| TS | 32.651 | Telecommunication management; Configuration Management (CM); GERAN network resources Integration Reference Point (IRP): Requirements | PIRT, Trevor |
| TS | 32.652 | Telecommunication management; Configuration Management (CM); GERAN network resources Integration Reference Point (IRP): Network Resource Model (NRM) | PETERSEN, Robert |
| TS | 32.653 | Telecommunication management; Configuration Management (CM); GERAN network resources Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | PIRT, Trevor |
| TS | 32.655 | Telecommunication management; Configuration Management (CM); GERAN network resources Integration Reference Point (IRP): Bulk CM eXtensible Markup Language (XML) file format definition | TOCHE, Christian |
| TS | 32.661 | Telecommunication management; Configuration Management (CM); Kernel CM; Requirements | TOVINGER, Thomas |
| TS | 32.662 | Telecommunication management; Configuration Management (CM); Kernel CM; Information service (IS) | TOVINGER, Thomas |
| TS | 32.663 | Telecommunication management; Configuration Management (CM); Kernel CM Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | TSE, Edwin |
| TS | 32.665 | Telecommunication management; Configuration Management (CM); Kernel CM Integration Reference Point (IRP): eXtensible Markup Language (XML) definitions | YANG, Li |
| TS | 32.667 | Telecommunication management; Configuration Management (CM); Kernel CM Integration Reference Point (IRP): Simple Object Access Protocol (SOAP) Solution Set (SS) | DAI, Peng |

| TS | 32.671 | Telecommunication management; Configuration Management (CM); State Management Integration Reference Point (IRP): Requirements | POLLAKOWSKI, Olaf |
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| TS | 32.672 | Telecommunication management; Configuration Management (CM); State Management Integration Reference Point (IRP): Information Service (IS) | POLLAKOWSKI, Olaf |
| TS | 32.673 | Telecommunication management; Configuration Management (CM); State Management Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | PIRT, Trevor |
| TS | 32.675 | Telecommunication management; Configuration Management (CM); State Management Integration Reference Point (IRP): Bulk CM eXtensible Markup Language (XML) file format definition | POLLAKOWSKI, Olaf |
| TS | 32.682 | Telecommunication management; Inventory Management (IM) Integration Reference Point (IRP); Information Service (IS) | TOCHE, Christian |
| TS | 32.683 | Telecommunication management; Inventory Management (IM) Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | TOCHE, Christian |
| TS | 32.690 | Telecommunication management; Inventory Management (IM): Requirements | TOCHE, Christian |
| TS | 32.691 | Telecommunication management; Inventory Management (IM) network resources Integration Reference Point (IRP): Requirements | TOCHE, Christian |
| TS | 32.692 | Telecommunication management; Inventory Management (IM) network resources Integration Reference Point (IRP): Network Resource Model (NRM) | TOCHE, Christian |
| TS | 32.695 | Telecommunication management; Inventory Management (IM) network resources Integration Reference Point (IRP): Bulk Configuration Management (CM) eXtensible Markup Language (XML) file format definition | TOCHE, Christian |
| TS | 32.711 | Telecommunication management; Configuration Management (CM); Transport Network (TN) Network Resource Model (NRM) Integration Reference Point (IRP): Requirements | TOCHE, Christian |
| TS | 32.712 | Telecommunication management; Configuration Management (CM); Transport Network (TN) Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS) | TOCHE, Christian |
| TS | 32.713 | Telecommunication management; Configuration Management (CM); Transport Network (TN) Network Resource Model (NRM) Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | TOCHE, Christian |
| TS | 32.715 | Telecommunication management; Configuration Management (CM) Transport Network (TN) Network Resource Model (NRM) Integration Reference Point (IRP): Bulk CM eXtensible Markup Language (XML) file format definition | TOCHE, Christian |
| TS | 32.721 | Telecommunication management; Configuration Management (CM); Repeater network resources Integration Reference Point (IRP): Requirements | LIANG, Shuangchun |
| TS | 32.722 | Telecommunication management; Configuration Management (CM); Repeater network resources Integration Reference Point (IRP): information Service (IS) | LIANG, Shuangchun |
| TS | 32.723 | Telecommunication management; Configuration Management (CM); Repeater network resources Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | LIANG, Shuangchun |
| TS | 32.725 | Telecommunication management; Configuration Management (CM); Repeater network resources Integration Reference Point (IRP): Bulk CM eXtensible Markup Language (XML) file format definition | LIANG, Shuangchun |
| TS | 32.731 | Telecommunication management; IP Multimedia Subsystem (IMS) Network Resource Model (NRM) Integration Reference Point (IRP): Requirements | TOCHE, Christian |
| TS | 32.732 | Telecommunication management; IP Multimedia Subsystem (IMS) Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS) | TOCHE, Christian |
| TS | 32.733 | Telecommunication management; IP Multimedia Subsystem (IMS) Network Resource Model (NRM) Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | TOCHE, Christian |
| TS | 32.735 | Telecommunication management; IP Multimedia Subsystem (IMS) Network Resource Model (NRM) Integration Reference Point (IRP): eXtensible Markup Language (XML) file format definition | TOCHE, Christian |
| TS | 32.741 | Telecommunication management; Configuration Management (CM); Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Requirements | LI, Yewen |
| TS | 32.742 | Telecommunication management; Configuration Management (CM); Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS) | LI, Yewen |
| TS | 32.743 | Telecommunication management; Configuration Management (CM); Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) | LI, Yewen |
| TS | 32.745 | Telecommunication management; Configuration Management (CM); Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Bulk CM eXtensible Markup Language (XML) file format definition | LI, Yewen |
| TR | 32.806 | Telecommunication management; Application guide for use of Integration Reference Points (IRPs) on peer-to-peer (p2p) interface | TRUSS, Michael |

| TR | 32.808 | Telecommunication management; Study of Common Profile Storage (CPS) Framework of User Data for network services and management | ABA, Istvan |
|----|--------|---|---|
| TR | 32.809 | Telecommunication management; Feasibility study of XML-based (SOAP/HTTP) IRP solution sets | DUGUAY, Jean |
| TR | 32.810 | Telecommunication management; Information model Integration Reference Point (IRP) Study | PIRT, Trevor |
| TR | 32.811 | Telecommunication management; Itf-N performance criteria: Requirements | LI, Yewen |
| TR | 32.812 | Telecommunication management; Itf-N Implementation Conformance Statement (ICS) template | LI, Yewen |
| TR | 32.814 | Telecommunication management; UTRAN and GERAN Key Performance Indicators (KPI) | TRUSS, Michael |
| TS | 52.008 | Telecommunication management; GSM subscriber and equipment trace | TOCHE, Christian |
| TS | 52.402 | Telecommunication management; Performance Management (PM); Performance measurements - GSM | TOCHE, Christian |

# Annex A:
# Change history

| Date | TSG # | TSG Doc. | CR | Rev | Subject/Comment | Old | New |
|------|-------|----------|-----|-----|-----------------|-----|-----|
| Nov 2005 | S5-44 | S5-050529 | -- | -- | Initial draft agreed by SA5#44 | -- | -- |
| Dec 2005 | SP-30 | SP-050734 | -- | -- | Submitted to SA#30 for Information | -- | 0.0.1 |
| Mar 2006 | SP-31 | SP-060073 | -- | -- | Converted to TR 32.807. Submitted to SA#31 for Information | 0.0.1 | 0.0.2 |
| Apr 2006 | S5-46 | S5-060119 | -- | -- | Submitted to SA5#46 for Updating | 0.0.2 | 0.0.3 |
| May 2006 | S5-47 | S5-060212 | -- | -- | Submitted to SA5#47 for Updating | 0.0.3 | 0.0.4 |
| May 2006 | S5-47 | S5-060212 | -- | -- | Post SA5#47 Updates | 0.0.4 | 0.0.5 |
| Jun 2006 | SP-32 | S5-060601 | -- | -- | Post SA#32 Updates | 0.0.5 | 0.0.6 |
| Jul 2006 | S5-48 | S5-060814 | -- | -- | Post SA5#48 Updates | 0.0.6 | 0.0.7 |
| Oct 2006 | SP-33 | S5-061308 | -- | -- | Post SA#33 Updates | 0.0.7 | 0.0.8 |
| Dec 2006 | SP-34 | -- | -- | -- | Post SA#34 Updates | 0.0.8 | 0.0.9 |
| Mar 2007 | SP-35 | S5-070413 | -- | -- | Post SA#35 Updates | 0.0.9 | 0.0.10 |
| Apr 2007 | S5-52 | S5-070532 | -- | -- | Pre S5#52 Updates | 0.0.10 | 0.0.11 |
| Jun 2007 | SA-32 | S5-071111 | -- | -- | Post SA#36 Updates (freezing of 3GPP Release 7) | 0.0.11 | 0.0.12 |
| Jul 2007 | S5-55 | S5-071429 | -- | -- | Post S5#54 Updates | 0.0.12 | 0.0.13 |
| Jun 2008 | SP-40 | SP-080273 | -- | -- | Submitted to SA#40 for Information + Approval | 1.0.0 | 7.0.0 |