

TSGS#25(04)0541

Meeting #25 Palm Springs, CA, USA, 13 - 16 September 2004



TSG-SA WG5 (Telecom Management) Status Report

Reported by

Michael TRUSS
TSG-SA WG5 Chair

Agenda Item: 7.5.1

Document for: Information

A GLOBAL INITIATIVE

3GPP SA5 Officers



OAM&P (Operations, Administration, Maintenance & Provisioning)

- **Chair**

Michael TRUSS (Motorola Ltd/ ETSI) – since 04/2002

- **Vice Chairs**

Dr Li Yewen (China Mobile/CCSA) – since 07/2003

Christian TOCHE (Nortel Networks/ ETSI) – since 04/2002

- **MCC Support: Adrian ZOICAS (MCC) – since 01/2000**

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SA5's Sub-WG Structure

SWGA

- Reqs & Architecture
- Subscription Mgmt
- Subscriber & UE Trace

SWGB

Charging
Management

SWGC

OAM&P
Interface Definition

SWGD

OAM&P
Data Definition

SWG Officials - see next slides

SA5's Sub-WG structure (1/4)



SWG4 Telecom management Architecture, High-level requirements, Subscription management, Subscriber & UE Trace management

- **István ABA (T-Mobile Austria) – Chair**
- **Tommy BERGGREN (TeliaSonera) – Vice Chair**
- **Kari RÖNKÄ (Nokia) – Vice Chair**

Liaison: ITU-T SG4 (Architecture / Conformance), T2 & CN4 (GUP/Subscription Management), TMF (MMC, Mobile Management Team, MTEM), CN1/4 , RAN 2/3, GERAN (Trace).

SA5's Sub-WG structure (2/4)



SWGB Charging Management

- **Karl-Heinz NENNER (T-Mobile) – Chair**
- **Gerald GÖRMER (Siemens) – Vice Chair**

Liaison:

**GSM Association (BARG, IREG, SERG),
OMA M-Commerce & Charging (MCC),
IETF-AAA (Diameter, Credit-Control),
T2 (MMS Charging),**

SA5's Sub-WG structure (3/4)



SWG OAM&P Interface Definition

- Thomas TOVINGER (Ericsson) – Chair
- Joerg SCHMIDT (Motorola) – Vice Chair

Liaison:

ITU-T SG 4 (CORBA, tML/XML, IS Methodology, UML),
T1M1 (CORBA, tML),
3GPP2 (Delta Specification to 3GPP SA5 OAM&P TSs).

SWG D OAM&P Data Definition

- **Christian TOCHE (Nortel Networks)** – **Chair**
- **Ulf HUBINETTE (Ericsson)** – **Vice Chair**
- **Olaf POLLAKOWSKI (Siemens)** – **Vice Chair**

Liaison:

**TMF (Wireless Service Measurement Team),
RAN3 (Remote Electrical Tilting (RET) Antenna),
3GPP2 (XML Reconciliation, NRMs, Performance measurements)**

Meetings held

SA5 #38bis

Sophia Antipolis, FRANCE, 28 Jun–2 Jul 2004, hosted by ETSI

- **Attended by 44 delegates**
- **Report in S5-040500**

SA5 #39

Montreal, CANADA, 16-20 August 2004, hosted by NAF

- **Attended by 47 delegates**
- **Draft report in S5-040513**

Inter-Organizational Co-operation with:

ITU-T SG4 & T1M1 on CORBA framework, IS Methodology, UML and XML/tML standardization

- **Discussions in progress on IRP IS Template & UML Repertoire:**
 - ITU-T SG4 are using 3GPP **32.150/1/2** material in M.3020 status document.

3GPP2 TSG-S on Management standards

- **3GPP2 TSG-S is referencing SA5's TSs in its specification S.S0028-B "OAM&P for cdma2000 (3GPP2 R5 Delta Specification)", which also documents some exception areas as well as providing specifications for cdma2000 Network Resource Models.**

IETF AAA Working Group

- **On Diameter Credit Control application for 3GPP Online Charging.**

OMA Mobile Commerce & Charging (MCC) Working Group

- **On Re-use of 3GPP Charging Architecture and Specifications**

TMF on 3G-mobile Management standards

- **ongoing with Wireless Service Measurement Team on BB OAM-PM.**

SA5 Telecom Management Rel-6 Status overview



**Feature: SM
Subscription
Management**
(SP-020448)

90%
Target **12/04** (was 09/04)

90% (in SA5)
Target **12/04** for all BBs not only Trace

**BB: OAM-AR Principles,
high level Requirements
and Architecture** (SP-020446)

**BB: OAM-Trace
Trace** (SP-020332)
Management

**Feature: OAM&P
Operations,
Administration,
Maintenance &
Provisioning**
(SP-020445)

**BB: OAM-NIM
Network** (SP-020754)
**Infrastructure
Management**

**BB: OAM-PM
Performance
Management**
(SP-020499)

90% (in SA5)
Target **12/04** (was 09/04)

**Feature: CH
Charging
Management**
(SP-030047)

**BB: CH-BC
Charging
Management
for Bearer
Level** (SP-030048)

**BB: CH-IC
Charging
Management
for IMS**
(SP-030049)

**BB: CH-SC
Charging
Management
for Service
domain** (SP-030050)

Status of Rel-6 Feature:



Subscription Management (SuM)

TSG Approval target moved to **12/2004** (was 09/2004)

SA Approved

- 32.140 SuM Requirements
- 32.141 SuM Architecture
- 32.171 SuM Network Resources Model (NRM) IRP Requirements

for SA#25 Approval:

- **32.172-200** SuM NRM IRP Information Service (IS)
- **32.803-200** Process Guide; Use Cases in UML

Target SA#26 Approval **12/2004** for:

- 32.173 SuM NRM IRP CORBA Solution Set – **baseline draft available**
- SA5 is actively investigating the possibility of using GUP to produce an additional Solution Set for SuM in Rel-6. This now creates the potential for an additional SuM SS to CORBA for Rel-6. The exact naming of such an SS has yet to be agreed.

Status of Rel-6 Feature: Charging Management (CH)

TSG Approval target moved to 12/2004 (was 09/2004)

SA Approved:

- **32.250** Circuit Switched (CS) domain charging
- **32.297** Charging Data Record (CDR) file format and transfer

for SA#25 Approval:

- **32.240-200** Charging architecture and principles
- **32.251-200** Packet Switched (PS) domain charging
- **32.270-200** Multimedia Messaging Service (MMS) charging
- **32.295-200** Charging Data Record (CDR) transfer
- **32.299-200** Diameter charging applications

for SA#25 Information for the 2nd time:

- **32.296-180** Online Charging System (OCS): Applications and interfaces

Status of Rel-6 Charging Management (CH)



incomplete drafts – justification for delay

Completion date 12/2004:

- **32.260 IP Multimedia Subsystem (IMS) charging**
 - Open items: Align with 32.299 and with the general layout of the “middle tier” charging TSs.
- **32.271 Location Services (LCS) charging**
 - Draft v1.5.0 available but could not be completed due to lack of time.
 - Remaining work: Add Rel-6 enhancements as they are developed and Complete the online charging part.
- **32.296 Online Charging System (OCS) Applications and interfaces**
 - Further work needed for Stage 3, Stage 2 message flows for the (optional) method ServiceUsageRequest and Class "B" rating function.
- **32.298 Charging Data Record (CDR) parameter description**
 - Specifies all CDR parameters (definitions and abstract syntax) for all “middle tier” charging TSs. Hence, it can be stable only after the middle tier TSs are finished which is, generally, achieved by now.

At risk/ Completion date uncertain:

- **32.252 Wireless Local Area Network (WLAN) charging**
 - Uncertainty on the status of WLAN work in SA2.
 - Major work still needed in SA5 to close issues identified earlier (in both SA2 and SA5).
 - If the current 23.234 is considered final by SA2 wrt Charging, then completion **latest 03/05** should be possible.
- **32.272 Push-to-talk over Cellular (PoC) charging**
 - This may not be a 3GPP TS (could be OMA). Discussions ongoing with OMA/3GPP2.
 - Joint Session with OMA and 3GPP2 scheduled for meeting SA5#39bis in Orlando (09/04).

Status of Rel-6 Feature



OAM&P (1/5): OAM-AR/OAM-Trace

- TSG Approval target moved to **12/2004 (was 09/2004)**

BB: Principles, high level Requirements & Architecture (completed 06/04)

BB: Subscriber and Equipment Trace Management (OAM-Trace)

- TSG Approval target for overall Trace functionality remains **12/04**
- Further info awaited from **CN1&4 and RAN3**.

SA Approved:

- 32.421 Trace concepts and requirements

for SA#25 Approval:

- **32.422-200** Trace control and Configuration Management

for SA#25 Information:

- **32.423-100** Trace data definition and management
- **52.008-100** GSM subscriber and equipment trace

Completion date 12/04:

- 32.423, 52.008 Subscriber and Equipment Trace Management
 - Some further input required from CN1/4 and RAN3 but hopeful of completion 12/04

Status of Rel-6 Feature

OAM&P (2/5): OAM-PM



BB: Performance Management (target 12/2004 was 09/04)

SA Approved:

- 32.411/2/3 PM concepts and requirements/ Information Service / CORBA SS

for SA#25 Information:

- 32.432/5/6 Performance Measurement File Format Definition / XML/ ASN.1

List of Rel-5 TSs for automatic upgrade (no CR) at SA#25:

- 52.402 PM; GSM measurement definitions

incomplete drafts – justification for delay

Completion date 12/04:

- 32.432/5/6 Performance Measurement File Format Definition / XML/ ASN.1

Withdrawn from Release 6

- 32.431/3/4, Performance Measurement Collection IRP
 - Not achievable in Rel-6.
 - File format definitions will be available instead (32.432, 32.435, 32.436).

Status of Rel-6 Feature

OAM&P (3/5): OAM-NIM

BB: Network Infrastructure Management (target 12/04 was 09/04)

- Some 20 TSs for upgrade to Rel-6 via CR or automatically

for SA#25 Approval:

- **32.343-200** File Transfer IRP CORBA Solution Set
- **32.371-200** Security Management Concept and Requirements
- **32.711/2/3/5** Transport Network resources IRP Requirements/ NRM / CORBA / XML
- **32.741/2/3** Signalling Transport Network NRM IRP Requirements / IS / CORBA SS
- **32.804-200** RET Requirements (Technical Report)

for SA#25 Information:

- **32.335-100** Notification Log IRP XML Definitions

Status of Rel-6 Feature

OAM&P (4/5): OAM-NIM

SA5 Rel-6 BB: Network Infrastructure Management (cont'd)

List of Rel-5 TSs for automatic upgrade (no CR) at SA#25:

- **32.322 Test management IRP: IS**
- **32.323 Test management IRP: CORBA SS**
- **32.324 Test management IRP: CMIP SS**
- **32.615 CM; Bulk CM IRP: XML**
- **32.621 CM; Generic network resources IRP; Requirements**
- **32.631 CM; Core network resources IRP: Requirements**
- **32.632 CM; Core Network Resources IRP: NRM**
- **32.634 CM; Core network resources IRP: CMIP solution set**
- **32.635 CM; Core network resources IRP: Bulk CM XML**
- **32.651 CM; GERAN network resources IRP: Requirements**

Status of Rel-6 Feature

OAM&P (5/5): OAM-NIM



SA5 Rel-6 BB: Network Infrastructure Management (cont'd)

incomplete drafts – justification for delay

Completion date 12/04:

- 32.332/3/4/5 Notification log IRP
 - 32.332 Information service sent for information (SA#23).
 - 32.333/4 Solution Set draft not yet available but hopeful of completion by 12/04.

Rel-6 CR expected in 12/04:

- 32.300 CM; Name convention for Managed Objects
- 32.632/3/4/5 CM; Core Network Resources IRP though requesting upgrade to Rel-6 now, CRs will follow in 12/04 to add IMS definitions

At risk/ Completion date uncertain:

- 32.681 Inventory Management IRP
 - Major work still required. 12/04 completion unlikely.
- 32.372/3/4 Security Management IRP
 - Major work still required. 12/04 completion questionable. However, Security Management Concepts and Requirements (32.371) submitted for SA#25 approval.

Decision on hold for Rel-6

- 32.682/3/4 Inventory Management IRP
- 32.692/695 Inventory Management network resources IRP

Withdrawn from Release 6

- 32.731/2/3/4/5 Core Network IMS Network Resource Model IRP
 - IMS Network Resource Model (NRM) included in existing Core NRM (32.63x) via CR.

SA5 Meetings 2004 (8 SA5 meetings/year)



Meeting	Date	Location	Host	Note
SA5#36bis	12-16 Jan 2004	Vancouver, CANADA	NAF	No MCC support
SA5#37	23-27 Feb 2004	Malaga, SPAIN	EF3	
TSG#23	10-17 Mar 2004	Phoenix, USA	NAF	
SA5#37bis	29 March – 02 April 2004	Sophia Antipolis, FRANCE	ETSI	No MCC support guaranteed
SA5#38	10-14 May 2004	Beijing, CHINA	Datang Mobile	
TSG#24	02-09 Jun 2004	KOREA	TTA	
SA5#38bis	28 June – 02 Jul 2004	Sophia Antipolis, FRANCE	ETSI	No MCC support guaranteed
SA5#39	16-20 Aug 2004	Montreal, CANADA	NAF	
TSG#25	08-15 Sep 2004	Palm Springs, USA	NAF	
SA5#39bis SWGA,C,D	27 Sep – 01 Oct 2004	Sophia Antipolis, FRANCE	ETSI	No MCC support guaranteed
SA5#39bis (SWGB)	27 Sep – 01 Oct 2004	Orlando, FL, USA (co-located with OMA MCC; Mobile Commerce & Charging group)	Delegate funded	No MCC support
SA5#40	15-19 Nov 2004	Sanya, CHINA	China Mobile	
TSG#26	08-15 Dec 2004	Athens, GREECE	EF3	

SA5 Meetings 2005 (target 6 SA5 meetings/year)



Meeting	Date	Location	Host	Note
3GPP2	10-14 Jan 2005	Vancouver, Canada		
SA5#41	24-28 Jan 2005	Europe	EF3 ??	Co-location possibility with GERAN #23 (US)
TSG#27	09-17 Mar 2005			
SA5#41bis	14-18 Mar 2005	Sophia Antipolis ??	ETSI ??	Co-location possibility with 3GPP2 Clash with SA#27
SA5#42	09-13 May 2005	NA	NAF ??	Co-location possibility with 3GPP RAN Groups (Europe)
TSG#28	01-09 Jun 2005			
SA5#42bis	27 June – 01 Jul 2005	Sophia Antipolis ??	ETSI ??	
SA5#43 Option 1	22-26 Aug 2005	China ??	??	Co-location possibility with OMA
SA5#43 Option 2	29 Aug -02 Sep 2005	China ??	??	Co-location possibility with 3GPP RAN Groups (Europe)
TSG#29	21-29 Sep 2005			
SA5#44	07-11 Nov 2005	NA or Europe ??	EF3 or NAF ??	Co-location possibility with 3GPP RAN Groups (Asia) or 3GPP CN Groups (Europe)
TSG#30	30 Nov-08 Dec 2005			

Acknowledgements

Mr John MUDGE (Vodafone) for his work on User Equipment Management (UEM), Control of RET antennas and RAN3 liaison



Miss Lanlan RUI (China Mobile) for her work on Performance, Fault and Configuration Management



Mrs Veronica AYERS (HuaWei) for her work on Security Management



Abbreviations commonly used in SA5



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AVP	Attribute Value Pair	TOM	Telecom Operations Map (TMF)
BS	Billing System		
CDR	Charging Data Record	DN	Distinguished Name
CM	Configuration Management		
CMIP	Common Management Information Protocol		
CMISE	Common Management Information Service		
COPS	Common Open Policy Service		
CORBA	Common Object Request Broker Architecture		
FM	Fault Management		
GDMO	Guidelines for the Definition of Managed Objects		
IDL	Interface Definition Language		
IMS	IP Multimedia Subsystem	IOC	Information Object Class
IRP	Integration Reference Point	IS	Information Service
ITF-N	Interface-N (Network-NM Interface)	MOC	Managed Object Class
NRM	Network Resource Model		
OAM&P	Operations, Administration, Maintenance & Provisioning		
O(S)S	Operations Support System		
PDP	Policy Decision Point		
PM	Performance Management		
SNMP	Simple Network Management Protocol (IETF)		
SuM	Subscription Management	UML	Unified Modelling Language
SS	Solution Set	XML	eXtensible Mark-up Language
TM	Telecom Management		
TMF	TeleManagement Forum		
TMN	Telecommunications Management Network (ITU-T)		

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***Documents and issues for
discussion, information
and approval***

SA5 Documents provided to this Plenary (1/4)



SP-040541	Rep	Status report of SA5 to SA #25
SP-040542	CR	Rel-6 CR 32.421 Removal of GERAN from Rel-6 32.42x series of Trace specifications
SP-040543	TS	Rel-6 TS 32.422-200 Subscriber and equipment trace; Trace control and Configuration Management (CM) – for Approval
SP-040544	TS	Rel-6 TS 32.423-100 Subscriber and equipment trace; Trace data definition and management - for Information
SP-040545	TS	Rel-6 TS 52.008-100 GSM subscriber and equipment trace - for Information
SP-040546	TS	Rel-6 TS 32.172-200 Subscription Management (SuM) resources IRP; Network Resources Model (NRM) - for Approval
SP-040547	TR	Rel-6 TR 32.803-200 "Telecommunication management; Process Guide; Use Cases in Unified Modelling Language (UML)" - for Approval
SP-040548	CR	2 Rel-5 CR 32.205/215 Include UTRAN positioning data parameter – Align with 29.002 CR 710
SP-040549	CR	Rel-6 CR 32.205 Add missing charging principles for CAMEL CPH – Align with CN2's 23.078
SP-040550	TS	Rel-6 TS 32.240-200 Telecommunication management; Charging Management; Charging Architecture and Principles – for Approval
SP-040551	TS	Rel-6 TS 32.296-181 Charging management; Online Charging System (OCS): Applications and interfaces - for Information for the 2nd time
SP-040552	TS	Rel-6 TS 32.251-200 (Telecommunication management; Charging Management; Packet Switched (PS) domain charging – for Approval
SP-040553	TS	Rel-6 TS 32.295-100 Telecommunication management; Charging Management; Charging Data Record (CDR) transfer – for Approval
SP-040554	TS	Rel-6 TS 32.299-200 Telecommunication management; Charging management; Diameter charging applications - for Approval
SP-040555	TS	Rel-6 TS 32.270-200 Telecommunication management; Charging management; Multimedia Messaging Service (MMS) Charging – for Approval
SP-040556	CR	2 Rel-6 CR 32.412 Performance Management IRP Information Service
SP-040557	CR	2 Rel-6 CR 32.412/3 Threshold alarm trigger - Align with TS 32.411
SP-040558	CR	2 Rel-6 CR 32.412/3 Add Measurement Job Overload Management function
SP-040559	CR	Rel-6 CR 32.150 Add Style Guide for CORBA SS IDL

SA5 Documents provided to this Plenary (2/4)



SP-040560	CR	Rel-6 CR 32.111-2 (Alarm IRP IS) Add more definition of MonitoredEntity IOC to clarify the scope of it and rule for alarm mapping
SP-040561	CR	2 Rel-5/6 CR 32.111-4 Align with the IS 32.111-2 the possibility to apply filters to notification parameters
SP-040562	CR	Rel-6 CR 32.303 Update 32.303 using IDL Style Guide
SP-040563	TS	Rel-6 TS 32.343-200 File Transfer (FT) Integration Reference Point (IRP): CORBA Solution Set - for Approval
SP-040564	TS	Rel-6 TS 32.335-100 Notification log Integration Reference Point (IRP): XML definitions - for Information
SP-040565	TS	Rel-6 TS 32.371-200 Security Management Concept and Requirements - for Approval
SP-040566	CR	2 Rel-5/6 CR 32.603 Removal of unused/duplicate definition of types MOReference and MOReferenceSet
SP-040567	CR	7 Rel-5/6 CR 32.603/23/33/53/63 Removal/corrections of Rules for NRM extensions - Align with 32.622 (Generic NRM IS)
SP-040568	CR	4 Rel-5/6 CR 32.663 Configuration Management (CM); Kernel CM IRP CORBA SS
SP-040569	CR	2 Rel-6 CR 32.673/663 for state change events
SP-040570	CR	Rel-6 CR 32.664 Add State Management support to Kernel CM IRP CMIP SS
SP-040571	CR	Rel-6 CR 32.611 Bulk CM IRP Enhancements for Security
SP-040572	CR	4 R99 CR 32.104, Rel-4/5/6 CR 32.401 Correction of measObjInstId & measType length limitations
SP-040573	CR	2 Rel-6 CR 32.401 Performance Management (PM); Concept and requirements
SP-040574	CR	6 Rel-6 CR 32.403 Performance Management (PM); Performance measurements - UMTS and combined UMTS/GSM
SP-040575	CR	3 Rel-4/5/6 CR 32.403 Correction of "Mobility Management" GPRS attach measurement definitions
SP-040576	CR	2 Rel-5/6 CR 32.403 Correction of measurement about "Failed PDP context activation procedures initiated by Network"
SP-040577	CR	3 Rel-4/5/6 CR 32.403 Measurement Name Length Constraints
SP-040578	TS	Rel-6 TS 32.432-100 Performance measurement: File format definition - for Information
SP-040579	TS	Rel-6 TS 32.435-100 Performance measurement: eXtensible Markup Language (XML) file format definition - for Information

SA5 Documents provided to this Plenary (3/4)



SP-040580	TS	Rel-6 TS 32.436-100 Performance measurement: Abstract Syntax Notation 1 (ASN.1) file format definition - for Information
SP-040581	CR	3 Rel-6 CR 32.623/33/53 Add Inheritance in CORBA IDL
SP-040582	CR	5 Rel-5 CR 32.622/32/33/34/35 Correction of modelling of Media GateWay (MGW)
SP-040583	CR	Rel-5 CR 32.635 Add missing elements in the Core Network XML file format definition
SP-040584	CR	2 Rel-6 CR 32.642/52 Add support for the state change notification in UTRAN/GERAN network resources IRP NRM
SP-040585	CR	3 Rel-4/5/6 CR 32.642 Align with the IRP IS template in 32.102/32.151 and IRP IS UML repertoire (32.152)
SP-040586	CR	2 Rel-5/6 CR 32.643 Align the CORBA SS with 32.642 Configuration Management (CM); UTRAN network resources IRP NRM
SP-040587	CR	3 Rel-6 CR 32.642/43/45 Add support for Remote control of Electrical Tilting (RET) antenna
SP-040588	CR	2 Rel-5/6 CR 32.673 Correction of the alarmStatus mapping – Align with 32.672 CM; State Management IRP Information Service
SP-040589	CR	2 Rel-5/6 CR 32.643 Add the operationalState to the UtranCell – Align the CORBA SS with 32.642 CM; UTRAN network resources IRP NRM
SP-040590	CR	Rel-6 CR 32.643 Correct the definitions in the "CellModeEnumType" and "TimeSlotStatusType"
SP-040591	CR	2 Rel-5 CR 32.634/44 Configuration Management (CM); Core/UTRAN network resources IRP CMIP Solution Sets
SP-040592	CR	2 Rel-5/6 CR 32645 Corrections of the XML code
SP-040593	CR	2 Rel-5/6 CR 32.653/4 Add the operationalState to the BtsSiteMgr – Align the CORBA/CMIP SSs with 32.652 CM; GERAN network resources IRP NRM
SP-040594	CR	Rel-6 CR 32.655 Correction of XML code
SP-040595	CR	3 Rel-6 CR 32.642/43/45 Include ATM in Configuration Management (CM); UTRAN network resources IRP

SA5 Documents provided to this Plenary (4/4)

SP-040596	TS	Rel-6 TS 32.711-200 Transport Network (TN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Requirements – for Approval
SP-040597	TS	Rel-6 TS 32.712-200 Transport Network (TN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS) – for SA Approval
SP-040598	TS	Rel-6 TS 32.713-100 Transport Network (TN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) – for SA Approval
SP-040599	TS	Rel-6 TS 32.715-100 Configuration Management (CM); Transport Network (TN) interface Network Resource Model (NRM) Integration Reference Point (IRP): eXtensible Markup Language (XML) file format definition – for SA Approval
SP-040600	TS	Rel-6 TS 32.741-200 Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Requirements - for Approval
SP-040601	TS	Rel-6 TS 32.742-200 Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS) - for Approval
SP-040602	TS	Rel-6 TS 32.743-100 Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP): CORBA Solution Set - for Approval
SP-040603	TR	Rel-6 TR 32.804-200 Remote control of Electrical Tilting (RET) antennas; Requirements - for Approval

BB: Subscriber and Equipment Trace Management (OAM-Trace)



SP-040542	<ul style="list-style-type: none">• Rel-6 CR 32.421 Removal of GERAN from Rel-6 32.42x series of Trace specifications
SP-040543	<ul style="list-style-type: none">• Rel-6 TS 32.422-200 Subscriber and equipment trace; Trace control and Configuration Management (CM) – for Approval
SP-040544	<ul style="list-style-type: none">• Rel-6 TS 32.423-100 Subscriber and equipment trace; Trace data definition and management - for Information
SP-040545	<ul style="list-style-type: none">• Rel-6 TS 52.008-100 GSM subscriber and equipment trace - for Information

Feature: Subscription Management (SuM)

SP-040546	<ul style="list-style-type: none">• Rel-6 TS 32.172-200 Subscription Management (SuM) resources IRP; Network Resources Model (NRM) - for Approval
SP-040547	<ul style="list-style-type: none">• Rel-6 TR 32.803-200 "Telecommunication management; Process Guide; Use Cases in Unified Modelling Language (UML)" - for Approval

Feature: Charging Management (CH) 1/2



SP-040548	<ul style="list-style-type: none">• 2 Rel-5 CR 32.205/215 Include UTRAN positioning data parameter – Align with 29.002 CR 710
SP-040549	<ul style="list-style-type: none">• Rel-6 CR 32.205 Add missing charging principles for CAMEL CPH – Align with CN2's 23.078
SP-040550	<ul style="list-style-type: none">• Rel-6 TS 32.240-200 Telecommunication management; Charging Management; Charging Architecture and Principles – for Approval
SP-040551	<ul style="list-style-type: none">• Rel-6 TS 32.296-181 Charging management; Online Charging System (OCS): Applications and interfaces - for Information for the 2nd time

Feature: Charging Management (CH) 2/2



SP-040552	<ul style="list-style-type: none">• Rel-6 TS 32.251-200 (Telecommunication management; Charging Management; Packet Switched (PS) domain charging – for Approval
SP-040553	<ul style="list-style-type: none">• Rel-6 TS 32.295-100 Telecommunication management; Charging Management; Charging Data Record (CDR) transfer – for Approval
SP-040554	<ul style="list-style-type: none">• Rel-6 TS 32.299-200 Telecommunication management; Charging management; Diameter charging applications - for Approval
SP-040555	<ul style="list-style-type: none">• Rel-6 TS 32.270-200 Telecommunication management; Charging management; Multimedia Messaging Service (MMS) Charging – for Approval

SP-040556

- 2 Rel-6 CR 32.412 Performance Management IRP Information Service

SP-040557

- 2 Rel-6 CR 32.412/3 Threshold alarm trigger - Align with TS 32.411

SP-040558

- 2 Rel-6 CR 32.412/3 Add Measurement Job Overload Management function

SP-040572	<ul style="list-style-type: none">• 4 R99 CR 32.104, Rel-4/5/6 CR 32.401 Correction of measObjInstId & measType length limitations
SP-040573	<ul style="list-style-type: none">• 2 Rel-6 CR 32.401 Performance Management (PM); Concept and requirements
SP-040574	<ul style="list-style-type: none">• 6 Rel-6 CR 32.403 Performance Management (PM); Performance measurements - UMTS and combined UMTS/GSM
SP-040575	<ul style="list-style-type: none">• 3 Rel-4/5/6 CR 32.403 Correction of "Mobility Management" GPRS attach measurement definitions
SP-040576	<ul style="list-style-type: none">• 2 Rel-5/6 CR 32.403 Correction of measurement about "Failed PDP context activation procedures initiated by Network"
SP-040577	<ul style="list-style-type: none">• 3 Rel-4/5/6 CR 32.403 Measurement Name Length Constraints

SP-040578	<ul style="list-style-type: none">• Rel-6 TS 32.432-100 Performance measurement: File format definition - for Information
SP-040579	<ul style="list-style-type: none">• Rel-6 TS 32.435-100 Performance measurement: eXtensible Markup Language (XML) file format definition - for Information
SP-040580	<ul style="list-style-type: none">• Rel-6 TS 32.436-100 Performance measurement: Abstract Syntax Notation 1 (ASN.1) file format definition - for Information

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SP-040559	<ul style="list-style-type: none">• Rel-6 CR 32.150 Add Style Guide for CORBA SS IDL
SP-040560	<ul style="list-style-type: none">• Rel-6 CR 32.111-2 (Alarm IRP IS) Add more definition of MonitoredEntity IOC to clarify the scope of it and rule for alarm mapping
SP-040561	<ul style="list-style-type: none">• 2 Rel-5/6 CR 32.111-4 Align with the IS 32.111-2 the possibility to apply filters to notification parameters
SP-040562	<ul style="list-style-type: none">• Rel-6 CR 32.303 Update 32.303 using IDL Style Guide

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SP-040563	<ul style="list-style-type: none">• Rel-6 TS 32.343-200 File Transfer (FT) Integration Reference Point (IRP): CORBA Solution Set - for Approval
SP-040564	<ul style="list-style-type: none">• Rel-6 TS 32.335-100 Notification log Integration Reference Point (IRP): XML definitions - for Information
SP-040565	<ul style="list-style-type: none">• Rel-6 TS 32.371-200 Security Management Concept and Requirements - for Approval
SP-040566	<ul style="list-style-type: none">• 2 Rel-5/6 CR 32.603 Removal of unused/duplicate definition of types MOReference and MOReferenceSet

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SP-040567	<ul style="list-style-type: none">• 7 Rel-5/6 CR 32.603/23/33/53/63 Removal/corrections of Rules for NRM extensions - Align with 32.622 (Generic NRM IS)
SP-040568	<ul style="list-style-type: none">• 4 Rel-5/6 CR 32.663 Configuration Management (CM); Kernel CM IRP CORBA SS
SP-040569	<ul style="list-style-type: none">• 2 Rel-6 CR 32.673/663 for state change events
SP-040570	<ul style="list-style-type: none">• Rel-6 CR 32.664 Add State Management support to Kernel CM IRP CMIP SS
SP-040571	<ul style="list-style-type: none">• Rel-6 CR 32.611 Bulk CM IRP Enhancements for Security

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SP-040581

- 3 Rel-6 CR 32.623/33/53 Add Inheritance in CORBA IDL

SP-040582

- 5 Rel-5 CR 32.622/32/33/34/35 Correction of modelling of Media GateWay (MGW)

SP-040583

- Rel-5 CR 32.635 Add missing elements in the Core Network XML file format definition

SP-040584

- 2 Rel-6 CR 32.642/52 Add support for the state change notification in UTRAN/GERAN network resources IRP NRM

SP-040585

- 3 Rel-4/5/6 CR 32.642 Align with the IRP IS template in 32.102/32.151 and IRP IS UML repertoire (32.152)

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SP-040586	2 Rel-5/6 CR 32.643 Align the CORBA SS with 32.642 Configuration Management (CM); UTRAN network resources IRP NRM
SP-040587	3 Rel-6 CR 32.642/43/45 Add support for Remote control of Electrical Tilting (RET) antenna
SP-040588	2 Rel-5/6 CR 32.673 Correction of the alarmStatus mapping – Align with 32.672 CM; State Management IRP Information Service
SP-040589	2 Rel-5/6 CR 32.643 Add the operationalState to the UtranCell – Align the CORBA SS with 32.642 CM; UTRAN network resources IRP NRM
SP-040590	Rel-6 CR 32.643 Correct the definitions in the "CellModeEnumType" and "TimeSlotStatusType"

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SP-040591	2 Rel-5 CR 32.634/44 Configuration Management (CM); Core/UTRAN network resources IRP CMIP Solution Sets
SP-040592	2 Rel-5/6 CR 32645 Corrections of the XML code
SP-040593	2 Rel-5/6 CR 32.653/4 Add the operationalState to the BtsSiteMgr – Align the CORBA/CMIP SSs with 32.652 CM; GERAN network resources IRP NRM
SP-040594	Rel-6 CR 32.655 Correction of XML code
SP-040595	3 Rel-6 CR 32.642/43/45 Include ATM in Configuration Management (CM); UTRAN network resources IRP

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SP-040596	Rel-6 TS 32.711-200 Transport Network (TN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Requirements – for Approval
SP-040597	Rel-6 TS 32.712-200 Transport Network (TN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS) – for SA Approval
SP-040598	Rel-6 TS 32.713-100 Transport Network (TN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) – for SA Approval
SP-040599	Rel-6 TS 32.715-100 Configuration Management (CM); Transport Network (TN) interface Network Resource Model (NRM) Integration Reference Point (IRP): eXtensible Markup Language (XML) file format definition – for SA Approval

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SP-040600

Rel-6 TS 32.741-200 Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Requirements - for Approval

SP-040601

Rel-6 TS 32.742-200 Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS) - for Approval

SP-040602

Rel-6 TS 32.743-100 Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP): CORBA Solution Set - for Approval

SP-040603

Rel-6 TR 32.804-200 Remote control of Electrical Tilting (RET) antennas; Requirements - for Approval

The End

See you next time !



The Key to Success: Team Building & Continuity and...



...early Recruitment of young Talents

