TSG-SA WG5
(Telecom Management)
Status Report

Reported by

Albert H. Yuhan
TSG-SA WG5 Chair

SA5 Documents provided to this Plenary

NUMBER	TITLE
SP-010630	**Status report from SA WG5 to SA#14**
SP-010631	**2 Rel-5 BB-level WI Descriptions for** Charging Management and Performance Management under OAM&P Feature
SP-010632	**R99 CR32.015 Charging (S5-010644)**
SP-010633	**R99 CR32.015, Rel-4 CR32.215 Charging (S5-010643, S5-010642), (S5-010741, S5-010742)**
SP-010634	**Rel-4 CR32.215 Charging (S5-010743)**
SP-010635	**R99 CR32.106-4, R99 CR 32.111-4 (S5-000763, S5-000764)**
SP-010636	**R99 CR32.106-7 (S5-010767)**
SP-010637	**R99 CR 32.111-3 (S5-010765)**
SP-010638	**R99 CR32.104, Rel-4 CR32.401 (S5-010745, S5-010746)**
SP-010639	**Rel-4 CR32.111-2 (S5-010674, S5-010675)**
SP-010640	**Rel-4 CR32.111-4 (S5-010677, S5-010775)**
SP-010641	**Rel-4 CR 32.300 (S5-010663)**
SP-010642	**Rel-4 CR 32.302 (S5-000774)**
SP-010643	**Rel-4 CR 32.604 (S5-010664)**
SP-010644	**Rel-4 CR 32.613 (S5-010668, S5-010669)**
SP-010645	**Rel-4 CR 32.615 (S5-010766)**
SP-010646	**Rel-4 CR 32.623 , Rel-4 CR 32.643, Rel-4 CR 32.653 (S5-010761, S5-010779, S5-010762)**
SP-010647	**Rel-4 CR 32.623 (S5-010768)**
SP-010648	**Rel-4 CR 32.624 (S5-010778)**
SP-010649	**Rel-4 CR 32.632 (S5-010672)**
SP-010650	**Rel-4 CR 32.652 (S5-010652)**
SP-010651	**Rel-4 CR 32.653 (S5-010671)**
SP-010652	**Rel-5 draft TR 32.802 v100 in co-operation with T2** on "User Equipment Management (UEM) feasibility study"
SP-010653	**Rel-5 CR 32.304, Rel-5 CR 32.302 (S5-010772, S5-010773)**
SP-010654	**reserved for SA5**

3GPP SA5 Officers

- **Chair** – since 03/99, re-elected 02/2001

  Albert H. YUHAN (VoiceStream Wireless/ T1)

- **Vice Chair** – since 06/99, re-elected 02/2001

  Michael TRUSS (Motorola Ltd/ ETSI)

- **Three (3) SWGs**

  - SWG_A: Telecom Management Architecture and Requirements

    Michael TRUSS (Motorola Ltd/ ETSI) – Chair since 09/2001

  - SWG_B: Telecom Management Data Definition

    Karl-Heinz NENNER (T-Mobil/ ETSI) – Chair since 09/2001

  - SWG_C: Telecom Management Solutions

    Thomas TOVINGER (Ericsson/ ETSI) – Chair since 09/2001

    Joerg SCHMIDT (Motorola/ T1) – Vice Chair since 09/2001

    Frédéric BONNEAU (Nortel/ ETSI) – Vice Chair since 10/2001

- **MCC Support** – since 01/2000

  Adrian ZOICAS (MCC)

SWG structure

SWG   Area of Responsibility

SWG_A Telecom Management - Architecture and Requirements

WI(spec): Architecture (32.101), Principles & Requirements (32.102), UTRAN-OAM (32.800),
Subscription Management (SM) (32.140),
User Equipment Management Feasibility Study (UEM) (32.802)

Liaison: T2 (MExE, UEM, SyncML), CN5 (OSA Management)
TMF (MMC, MTEM), ITU-T SG4 (Architecture / Conformance)

SWG_B Telecom Management - Data Definition

WI(spec): Charging (32.200-series),
Performance Management (PM) (measurements, concepts, definition and requirements (32.400-/52.400-series)
Subscriber and UE tracing (32.108)

Liaison: ITU-T SG4 (IMT2000 Management), GSM Association (BARG, IREG, SERG)
T2 (MMS charging), CN5 (OSA Charging), IETF-AAA (Diameter)

SWG_C Telecom Management - Solutions

WI(spec): Configuration Management (CM) (R99 32.106, 32.600-series)
Fault Management (FM) (32.111, 32.300-series)
Performance Management (PM) - IRP portion (32.400-series)
IRPs to support products of SWG_A and SWG_B

Liaison: ITU-T SG 4 (CORBA, tML/XML), T1M1 (CORBA, TML), 3GPP2

Meetings

- **SA5 #23**
  - **15 - 19 Oct 2001 in Sundsvall, SWEDEN hosted by Telia Attended by 43 delegates**
  - **Full report in S5-010700**

- **SA5 #24**
  - **26 - 30 Nov 2001 in Cancun, MEXICO hosted by 3GPP NA Friends Attended by 44 delegates**
  - **Draft report in S5-010798**

- **Joint sessions during SA5#24 in Cancun**
  - **SA2/SA5 on IMS Charging Architecture (23.815, 32.225)**
  - **T2/SA5 on UEM (32.802), SuM (32.140), GUP (22/3.240/1, 29.240)**
  - **T2/SA5 on MMS Charging (32.200/235 – Service related charging)**
  - **CN5/SA5 on OSA Charging (29.198-12, 32.200-series)**
  - **CN5/SA5 on OSA Management (29.198) , SuM (32.140)**

5

Activity Highlights

- **Release 5**

Feature: Charging and OAM&P
  - 50% complete (32.000-/52.000-series)
  - **TSG approval target shifted from 03/2002 to 06/2002**

Feature: Subscription Management (SM)
  - 60% complete (32.140)
  - TSG approval target shifted from 12/2001 to 03/2002

Feature: User Equipment Management (UEM) *- Feasibility Study*
  - 75% complete (32.802)
  - TR 32.802 v1.0.0 submitted to T/SA#14 (12/2001) - for Information
  - TSG approval target remains 03/2002

- **Intra-3GPP co-ordination/communication** (S1/2, N1/4, N5, T2)

- **Interaction with external bodies** (ITU-T SG4, T1M1, TMF MMC)

Inter-Organizational

Co-ordination with:

SA1/2, T2, CN5, CN4 on Subscription Management (SuM)

- continuing with GUP (SA1/T2), VHE (SA1), HSS Interface (CN4), OSA Management (CN5), UE Management (SA5)

T2 on User Equipment Management (UEM) – Feasibility study

- Joint session held in Cancun (11/2001)
- SA5's TR 32.802 v1.0.0 submitted to T/SA#14 (12/2001) - for Information
- continuing with GUP (T2), Subscription Management (SA5)

SA2 on "Charging Implications of IMS architecture" (23.815)

- Joint session held in Cancun (11/2001)
- SA2's TR 23.815 for Information to SA#14 (No on-line charging in Rel-5)
- SA5 starting Stage 1-3 Charging specs (Only off-line charging in Rel-5)

7

Inter-Organizational (cont.)

Co-ordination with:

CN5 on OSA Management & OSA Charging

- Two Joint sessions held in Cancun (11/2001)
- CN5 presented OSA Framework Management aspects & OSA Charging capabilities
- SA5 presented Subscription Management and its relationship with OSA
- Full co-ordination may not be possible in the Rel-5 timeframe

T2 on MMS charging

- Joint session held in Cancun (11/2001)
- SA5 clarified that
  - prepaid charging is not in the scope of SA5's Rel-5 and that
  - SA5 has no expertise for prepaid architecture.
- SA5 recommended T2
  - to contact CN2 (CAMEL) for the definition of a MMS prepaid architecture.
- Discussions are needed in T2 to find the way to proceed with prepaid.

8

Inter-Organizational *(cont.)*

Co-operation with:

ITU-T SG4 & T1M1 on CORBA framework and XML/TML standardization

- Further co-operation is under investigation (Feasibility Study in Rel-5)

TMF MMC on 3G-mobile Management standards

- SA5 will continue to monitor TMF MMC (Mobile Marketing Centre)
- Joint meeting planned at SA5#26 in Miami/ FL (02/2002)

Technical, Work Planning

Feature: Charging and OAM&P (Rel-5)

- 50% complete

- 5% for Approval at SA#14

- 100% Approval target shifted from 03/02 to 06/02 (TSG#16)

- Contains Four (4) SA5 Building Blocks:

  1. Principles, high-level requirements and architecture (OAM-AR)
     0% for Approval at TSG#14 (Rel-5, 55% complete)

  2. Charging Management (OAM-CH)
     0% for Approval at TSG#14 (Rel-5, 45% complete)

  3. Performance Management (OAM-PM)
     0% for Approval at TSG#14 (Rel-5, 50% complete)

  4. Network Infrastructure Management (OAM-NIM)
     (combined Configuration-, Fault- and Performance-Management (IRP part))
     10% for Approval at TSG#14 (Rel-5, 50% complete)

SA approval is requested for

- 2 Rel-5 BB-level WI Descriptions for **Charging Management** and **Performance Management** under OAM&P Feature (SP-010631)

10

Technical, Work Planning (cont.)

Feature: Subscription Management (Rel-5)

- 60% complete (32.140)
- 0% for Approval at SA#14
- 100% Approval target shifted from 12/01 to 03/02 (TSG#15)

- Co-ordination ongoing with other 3GPP WGs on e.g.:
  - GUP (SA1/T2), VHE (SA1), HSS Interface (CN4), OSA Management (CN5), UE Management (SA5)

Technical, *Work Planning (cont.)*

Feature: UE Management - Feasibility Study (Rel-5)

- **75%** complete (32.802)
- TR 32.802 v1.0.0 submitted for Information to T/SA#14 (12/2001)
- 100% Approval target remains 03/2002 (TSG#15)

Co-ordination ongoing with other groups e.g.:

- Joint SA5-T2 leadership of the WI progressed in Cancun (11/2001)
- GUP, MExE (T2), Subscription Management (SA5)
- TMF's MTEM (Mobile Terminal Equipment Management) : Joint meeting planned at SA5#26 in Miami/ FL (02/2002)
- Aware of work in SyncML Device Management (DM)

SA is invited to note

- Rel-5 draft TR 32.802 v100 in co-operation with T2 on "User Equipment Management (UEM) feasibility study" (SP-010652)

12

Technical, *Change Requests*

SA approval is requested for

1   R99 CR32.015 Charging (SP-010632)

4   R99 CR32.015, Rel-4 CR32.215 Charging (SP-010633)

1   Rel-4 CR32.215 Charging (SP-010634)

2   R99 CR32.106-4, R99 CR 32.111-4 (SP-010635)

1   R99 CR32.106-7 (SP-010636)

1   R99 CR 32.111-3 (SP-010637)

2   R99 CR32.104, Rel-4 CR32.401 (SP-010638)

2   Rel-4 CR32.111-2 (SP-010639)

2   Rel-4 CR32.111-4 (SP-010640)

1   Rel-4 CR 32.300 (SP-010641)

1   Rel-4 CR 32.302 (SP-010642)

Technical, *Change Requests (cont'd)*

SA approval is requested for

1   Rel-4 CR 32.604 (SP-010643)

2   Rel-4 CR 32.613 (SP-010644)

1   Rel-4 CR 32.615 (SP-010645)

3   Rel-4 CR 32.623 , Rel-4 CR 32.643, Rel-4 CR 32.653 (SP-010646)

1   Rel-4 CR 32.623 (SP-010647)

1   Rel-4 CR 32.624 (SP-010648)

1   Rel-4 CR 32.632 (SP-010649)

1   Rel-4 CR 32.652 (SP-010650)

1   Rel-4 CR 32.653 (SP-010651)

2   Rel-5 CR 32.304, Rel-5 CR 32.302 (SP-010653)

Future SA5 Meetings

Meeting	Date	Location	Host
SA5#25	14-18 Jan 2002	Sophia Antipolis, France	ETSI
SA5#26	25 Feb - 1 Mar 2002	Miami, FL / USA (T1M1/TMF)	NA Friends
TSG#15	5-14 Mar 2002	TBD, Korea	TTA
SA5#27	2-5 Apr 2002	Cork, Ireland	Motorola
SA5#28	20-24 May 2002	Sophia Antipolis, France	ETSI
TSG#16	4-13 Jun 2002	Marco Island, FL, USA	Motorola
SA5#29	24-28 Jun 2002	Beijing, CHINA	Nortel
SA5#30	19-23 Aug 2002	TBD	TBD
TSG#17	3-12 Sep 2002	Biarritz, France	Alcatel
SA5#31	7-11 Oct 2002	Phoenix, AZ, USA	NA Friends
SA5#32	18-22 Nov 2002	TBD	TBD
TSG#18	3-12 Dec 2002	New Orleans, USA	NA Friends

Background material
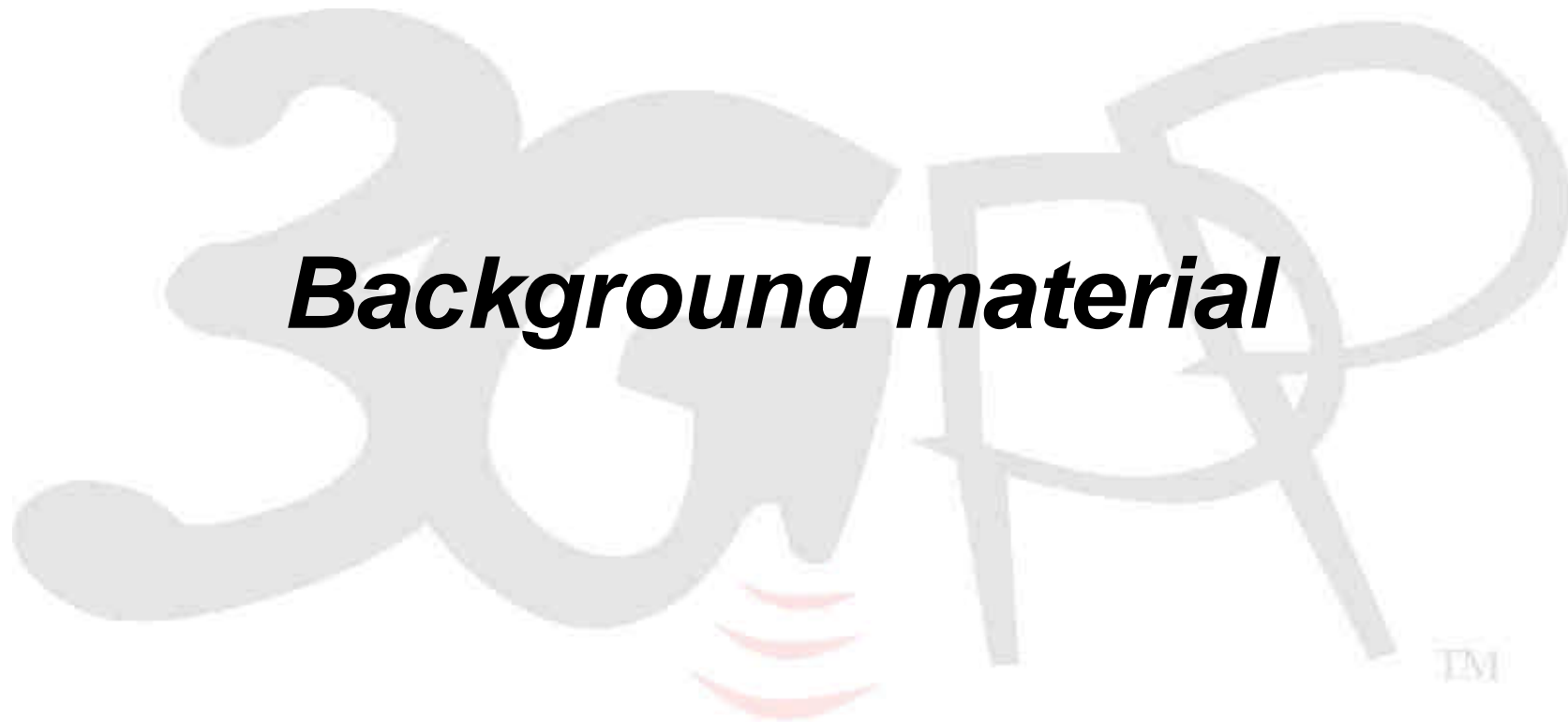
SA5 Change Requests provided to this Plenary

Doc-1st-	Spec	CR	Phase	Subject	Cat	Vers	Vers	Doc-2nd	WI
SP-010632	32.015	03	R99	Precision of encoding rule for CDR item "Access Point	F	3.7.0	3.8.0	S5-010644	OAM-CH
SP-010633	32.015	03	R99	Correction of ASN.1 data items	F	3.7.0	3.8.0	S5-010741	OAM-CH
SP-010633	32.215	00	Rel-4	Specification of the "Data Record Format" and "Data	A	4.0.0	4.1.0	S5-010642	OAM-CH
SP-010633	32.215	00	Rel-4	Correction of ASN.1 data item QosInformation	A	4.0.0	4.1.0	S5-010742	OAM-CH
SP-010633	32.015	03	R99	Specification of the "Data Record Format" and "Data	F	3.7.0	3.8.0	S5-010643	OAM-CH
SP-010634	32.215	00	Rel-4	Correction of ASN.1 statements for backwards compatibility	F	4.0.0	4.1.0	S5-010743	OAM-CH
SP-010635	32.106-4	00	R99	Correction of undefined and conflicting ASN.1 definitions	F	3.1.0	3.2.0	S5-000763	OAM-CM
SP-010635	32.111-4	00	R99	Correction of undefined and conflicting ASN.1 definitions	F	3.1.1	3.2.0	S5-000764	OAM-FM
SP-010636	32.106-7	00	R99	Correction of improper module name in GDMO definition	F	3.2.0	3.3.0	S5-010767	OAM-CM
SP-010637	32.111-3	01	R99	Removal of Rel-4-specific functionality mistakenly introduced	F	3.5.0	3.6.0	S5-010765	OAM-FM
SP-010638	32.401	00	Rel-4	Correction of declaration in XML header	A	4.0.0	4.1.0	S5-010746	OAM-PM
SP-010638	32.104	01	R99	Correction of declaration in XML header	F	3.4.0	3.5.0	S5-010745	OAM-PM
SP-010639	32.111-2	01	Rel-4	Correction of notifyChangedAlarm example #2	F	4.1.0	4.2.0	S5-010674	OAM-FM
SP-010639	32.111-2	01	Rel-4	Update of notificationId missing in To-state of	F	4.1.0	4.2.0	S5-010675	OAM-FM
SP-010640	32.111-4	00	Rel-4	Change of qualifier for setComment and notifyComment	F	4.0.0	4.1.0	S5-000677	OAM-FM
SP-010640	32.111-4	00	Rel-4	Addition of missing parameter in notifyComments	F	4.0.0	4.1.0	S5-000775	OAM-FM
SP-010641	32.300	00	Rel-4	Alignement of Figure C.1 with text in Annex C	F	4.0.0	4.1.0	S5-000663	OAM-CM
SP-010642	32.302	00	Rel-4	Remove ambiguity of the return information for	F	4.0.0	4.1.0	S5-000774	OAM-CM
SP-010643	32.604	00	Rel-4	Alignment with ITU-T Rec. X.710 (CMISE) 1997	F	4.1.0	4.2.0	S5-010664	OAM-CM
SP-010644	32.613	00	Rel-4	Correction of a notification name and Addition of missing	F	4.0.0	4.1.0	S5-010668	OAM-CM
SP-010644	32.613	00	Rel-4	Corrections to the exceptions in the Bulk CM IRP CORBA	F	4.0.0	4.1.0	S5-010669	OAM-CM
SP-010645	32.615	00	Rel-4	Addition of MCC and MNC attributes to GSM cell related	F	4.0.0	4.1.0	S5-010766	OAM-CM
SP-010646	32.653	00	Rel-4	Change type "integer" to "long" in the GERAN Network	F	4.0.0	4.1.0	S5-010762	OAM-CM
SP-010646	32.623	00	Rel-4	Change type "integer" to "long" in the Generic Network	F	4.1.0	4.2.0	S5-010761	OAM-CM
SP-010646	32.643	00	Rel-4	Change type "integer" to "long" in the UTRAN Network	F	4.0.0	4.1.0	S5-010779	OAM-CM
SP-010647	32.623	00	Rel-4	Correction of Generic NRM CORBA Solution Set IDL	F	4.1.0	4.2.0	S5-010768	OAM-CM
SP-010648	32.624	00	Rel-4	Change to Read/Write the attribute "userDefinedState" in	F	4.1.0	4.2.0	S5-010778	OAM-CM
SP-010649	32.632	00	Rel-4	Removal of MOC FnrFunction from the diagrams	F	4.0.0	4.1.0	S5-010672	OAM-CM
SP-010650	32.652	00	Rel-4	Correction of references	F	4.1.0	4.2.0	S5-010652	OAM-CM
SP-010651	32.653	00	Rel-4	Addition of MCC and MNC in the object model	F	4.0.0	4.1.0	S5-010671	OAM-CM
SP-010653	32.302	00	Rel-5	Change from Mandatory to Conditional the qualifier of the	C	4.1.0	5.0.0	S5-010773	OAM-NIM
SP-010653	32.304	00	Rel-5	Maximise the reuse of ITU-T CMIP event report	C	4.1.0	5.0.0	S5-010772	OAM-NIM

Charging Management

GSM

12.05	Subscriber Related Call and Event Data	R98	7.0.1
12.15	GPRS Charging	R98	7.6.0

3GPP R99

32.005	Call and event data for the CS domain
32.015	Call and event data for the PS domain

3GPP Rel-4

32.200	**Charging Principles**
32.205	**Charging data description for the CS domain**
32.215	**Charging data description for the PS domain**
32.235	**Charging data description for application services**

3GPP Rel-5

32.200	Charging Principles
32.205	Charging data description for the CS domain
32.215	Charging data description for the PS domain
32.225	**Charging data description for the IMS domain**
32.235	Charging data description for application services

Fault Management

GSM

12.11	Fault management of the BSS	R97	6.3.0

3GPP R99

32.111-1	Fault Management requirements
32.111-2	FM; Part 2: Alarm IRP; IS
32.111-3	FM; Part 3: Alarm IRP; CORBA
32.111-4	FM; Part 4: Alarm IRP; CMIP SS

3GPP Rel-4

32.111-1	Fault Management
32.111-2	FM; Part 2: Alarm IRP; IS
32.111-3	FM; Part 3: Alarm IRP; CORBA
32.111-4	FM; Part 4: Alarm IRP; CMIP SS
32.311	Generic IRP management; Requirements
32.312	Generic IRP management; IS

3GPP Rel-5

Note: in Rel-5
FM + CM = NIM
Network Infrastructure
Management

32.111-1	Fault Management requirements
32.111-2	FM; Part 2: Alarm IRP; IS
32.111-3	FM; Part 3: Alarm IRP; CORBA
32.111-4	FM; Part 4: Alarm IRP; CMIP SS
32.311	Generic IRP management; Requirements
32.312	Generic IRP management; IS

Performance Management

GSM

12.04	Performance Management and Measurements for a GSM PLMN	R99	8.0.0

3GPP R99

32.104	Performance Management

3GPP Rel-4

32.401	**Performance Management; Concept and requirements**
52.402	**Performance measurements - GSM**
32.403	**Performance measurements - UMTS and combined UMTS/GSM**

3GPP Rel-5

32.401	Performance Management; Concept and requirements
52.402	Performance measurements - GSM
32.403	Performance measurements - UMTS and combined UMTS/GSM

Configuration Management

GSM	12.06	Network Configuration Management and Administration	Ph2	4.1.1

3GPP R99	32.106-1	Configuration Management; Concept and requirements
	32.106-2	CM; Part 2: Notification IRP IS
	32.106-3	CM; Part 3: Notification IRP; CORBA SS
	32.106-4	CM; Part 4: Notification IRP; CMIP SS
	32.106-5	CM; Part 5: Basic CM IRP information model (including NRM)
	32.106-6	CM; Part 6: Basic CM IRP CORBA SS
	32.106-7	CM; Part 7: Basic CM IRP CMIP SS
	32.106-8	CM; Part 8: Name convention for Managed Objects

3GPP Rel-4   **- see next slide**

TSGS#14(01)0630
Meeting #14, Kyoto, J[...]

Configuration Management

3GPP

Rel-4

&

Rel-5

32.600	Configuration Management; Concept and main requirements
32.601	Basic CM IRP: requirements
32.602	Basic CM IRP information model
32.603	Basic CM IRP: CORBA SS
32.604	Basic CM IRP CMIP SS
32.611	Bulk CM IRP requirements
32.612	Bulk CM IRP: IS
32.613	Bulk CM IRP: CORBA SS
32.614	Bulk CM IRP: CMIP SS
32.615	Bulk CM IRP: XML file format definition
32.621	Generic network resources IRP: requirements
32.622	Generic NR IRP: NRM
32.623	Generic NR IRP: CORBA SS
32.624	Generic NR: IRP CMIP SS
32.631	Core NR IRP: requirements
32.632	Core NR IRP: NRM
32.633	Core NR IRP: CORBA SS
32.634	Core NR IRP: CMIP SS
32.641	UTRAN NR IRP: requirements
32.642	UTRAN NR IRP: NRM
32.643	UTRAN NR IRP: CORBA SS
32.644	UTRAN NR IRP: CMIP SS
32.651	GERAN NR IRP: requirements
32.652	GERAN NR IRP: NRM
32.653	GERAN NR IRP: CORBA SS
32.654	GERAN NR IRP: CMIP SS