TSG-SA WG5 (Telecom Management) Status Report

Reported by

Michael TRUSS
TSG-SA WG5 Chair

SA5 Documents provided to this Plenary

NUMBER	TITLE
SP-020210	LS reply from SA WG5 on: "3GPP System – WLAN Interworking"
SP-020211	Reply LS from SA WG5 on "OAM&P standardization" from GSM NA
SP-020278	LS on Subscriber and Equipment Trace Impacts
SP-020281	Status report of SA5 to SA #16
SP-020282	Rel-4 CR 32.111-3 (Fault Management; Part 3: Alarm Integration Reference Point: CORBA SS) Addition of 'indeterminate' probable cause in IDL definition
SP-020283	2 Rel-4 & Rel-5 CRs 32.111-4 (Fault Management; Alarm Integration Reference Point; Part 4 CMIP SS)
SP-020284	3 Rel-5 CRs 32.111-4 (Fault Management: Alarm Integration Reference Point: Part 4 CMIP Solution Set)
SP-020285	6 Rel-4 & Rel-5 CRs 32.200. 32.205. 32.215 and 32.235
SP-020286	4 Rel-4 & Rel-5 CRs 32.200 and 32.215
SP-020287	5 Rel-5 CRs 32.200 (Charging principles)
SP-020288	2 Rel-4 & Rel-5 CRs 32.215 (PS charging): Correcting definition of traffic data volume CDR field & Specify usage of the LRSN to avoid loss of billing data
SP-020289	4 Rel-5 CRs 32.215 (PS charging)
SP-020290	2 Rel-5 CRs 32.304 (Configuration Management: Notification Integration Reference Point: CMIP SS)
SP-020291	4 Rel-5 CR 32.403 (Performance measurements - UMTS and combined UMTS/GSM)
SP-020292	2 R99 & Rel-4 CRs 12.04 & 52.402 (Performance measurements - GSM): Correction of erroneous definitions of SGSN measurements
SP-020293	2 R99 & Rel-4 CRs 12.04 & 52.402 (Performance measurements - GSM): Remove irrelevant definitions for SGSN measurements related to Ciphering Mode
SP-020294	Rel-4 CR 32.603 (Basic configuration management IRP: CORBA SS): Correcting IDL definitions of notification structured event Name Value pair names
SP-020295	Rel-5 CR 32.611 (3G configuration management: Bulk CM IRP requirements): Adding Bulk CM IRP requirements for Rel-5
SP-020296	3 Rel-4 CRs 32.612, 32.613 & 32.614 (Bulk configuration management IRP: Information service, CORBA SS & CMIP SS)
SP-020297	Rel-4 CR 32.613 (Bulk configuration management IRP CORBA SS) : Add missing CORBA exceptions and descriptions of CORBA exception usage
SP-020298	Rel-5 CR 32.615 : New structure of specifications for definition of Bulk CM IRP XML file formats & 4 new v100 draft TSs 32.625/635/645/655 - for Information
SP-020299	Rel-4 CR 32.622 (Generic network resources IRP: NRM) : Remove R99-inherited restriction of self-containment for MOC SubNetwork
SP-020300	2 Rel-4 CRs 32.624 (Generic network resources: IRP CMIP Solution Set)
SP-020301	Rel-5 CR 32.631 (Core network resources IRP: requirements) : Adding CN Management requirements over Interface-N for Rel-5
SP-020302	2 Rel-4 CRs 32.632 & 32.633 (Core Network Resources IRP: NRM & CORBA SS)
SP-020303	Rel-4 CR 32.642 (UTRAN network resources IRP: NRM) : Corrections of reference in figure 6.2 and of attribute descriptions in UtranRelation
SP-020304	2 Rel-4 CRs 32.642 & 32.652 (UTRAN & GERAN network resources IRP: NRM) : Correction of supported IRP in system context
SP-020305	2 Rel-4 CRs 32.652 (GERAN network resources IRP: NRM) : Correction of supported IRP in system context
SP-020327	Rel-5 draft TS 32.225 v150 (Charging data description for the IP Multimedia Subsystem) - for the 2nd time for Information
SP-020328	4 new Rel-5 draft v100 TSs 32.321/2/3/4 (Test management IRP: Requirements/ IS/ CORBA SS/ CMIP SS)
SP-020329	2 new Rel-5 draft v100 TSs 32.671 & 32.672 (3G Configuration Management; State Management IRP: Requirements & Information service)
SP-020330	Rel-6 draft TS 32.421 v100 (Subscriber and Equipment Trace: Trace Concepts and Requirements)
SP-020331	Rel-5 draft TR 32.802 v200 (User Equipment Management UEM feasibility study), in co-operation with T2
SP-020332	Rel-6 BB-level Work Item Description on Trace Management

3GPP SA5 Officers

- **Chair – New**

  Michael TRUSS (Motorola Ltd/ ETSI) – elected 04/02 for remaining 1 year

- **Vice Chair – New both**

  Thomas RICHTER (Cingular Wireless LLC/ T1) – elected 04/02

  Christian TOCHE (Nortel Networks/ ETSI) – elected 04/02 for remain. 1 year

- **Four (4) SWGs**

  SWGA: Telecom Management - Architecture and Requirements

  Michael TRUSS (Motorola Ltd/ ETSI) – Chair since 09/01
  Tommy BERGGREN (Telia/ ETSI) – Vice Chair since 01/02

  SWGB: Charging Management – Restructured (PM & Trace spin-off)

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

  SWGC: Telecom Network Infrastructure Management

  Thomas TOVINGER (Ericsson/ ETSI) – Chair since 09/01
  Joerg SCHMIDT (Motorola/ T1) – Vice Chair since 09/01
  Frédéric BONNEAU (Nortel Networks/ ETSI) – Vice Chair since 10/01

  SWGD: Performance Management and Trace Management – New

  Christian TOCHE (Nortel Networks/ ETSI) – Chair since 04/02

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

Chair: Michael TRUSS (Motorola Ltd/ ETSI)

Vice Chair: Thomas RICHTER (Cingular Wireless/T1

Vice Chair: Christian TOCHE (Nortel Networks/ETSI)

SWG structure

SWG   Area of Responsibility

SWGA   Telecom Management - Architecture and Requirements

WI(spec): **Architecture (32.101), Principles & Requirements (32.102),
Subscription Management (SM) (32.140), User Equipment Management (UEM) (32.802).**

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

SWGB   Charging Management

WI(spec): **Charging (32.200-series),**

**Liaison: GSM Association (BARG Charging Principles Working Party, IREG, SERG),
3G.IP (IP/Charging requirements for IMS), T2 (MMS Charging), CN5 (OSA Charging),
IETF-AAA (Diameter), IPDR (Charging).**

SWGC   Telecom Network Infrastructure Management   (TM Solutions)

WI(spec): **Configuration (32.106/32.600-series), & Fault Management (32.111/32.300-series),
Integration Reference Points (IRPs) to support products of SA5's SWGA/B/D.**

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

SWGD   Performance Management and Trace Management

WI(spec): **Performance Management (PM) (measurements, concepts, definition and requirements
(32.400-/52.400-series), Subscriber and UE Tracing (32.400-series, 52.008).**

Liaison: **ITU-T SG4 (IMT2000 Management), TMF (Wireless Service Management Team).**

Inter-Organizational

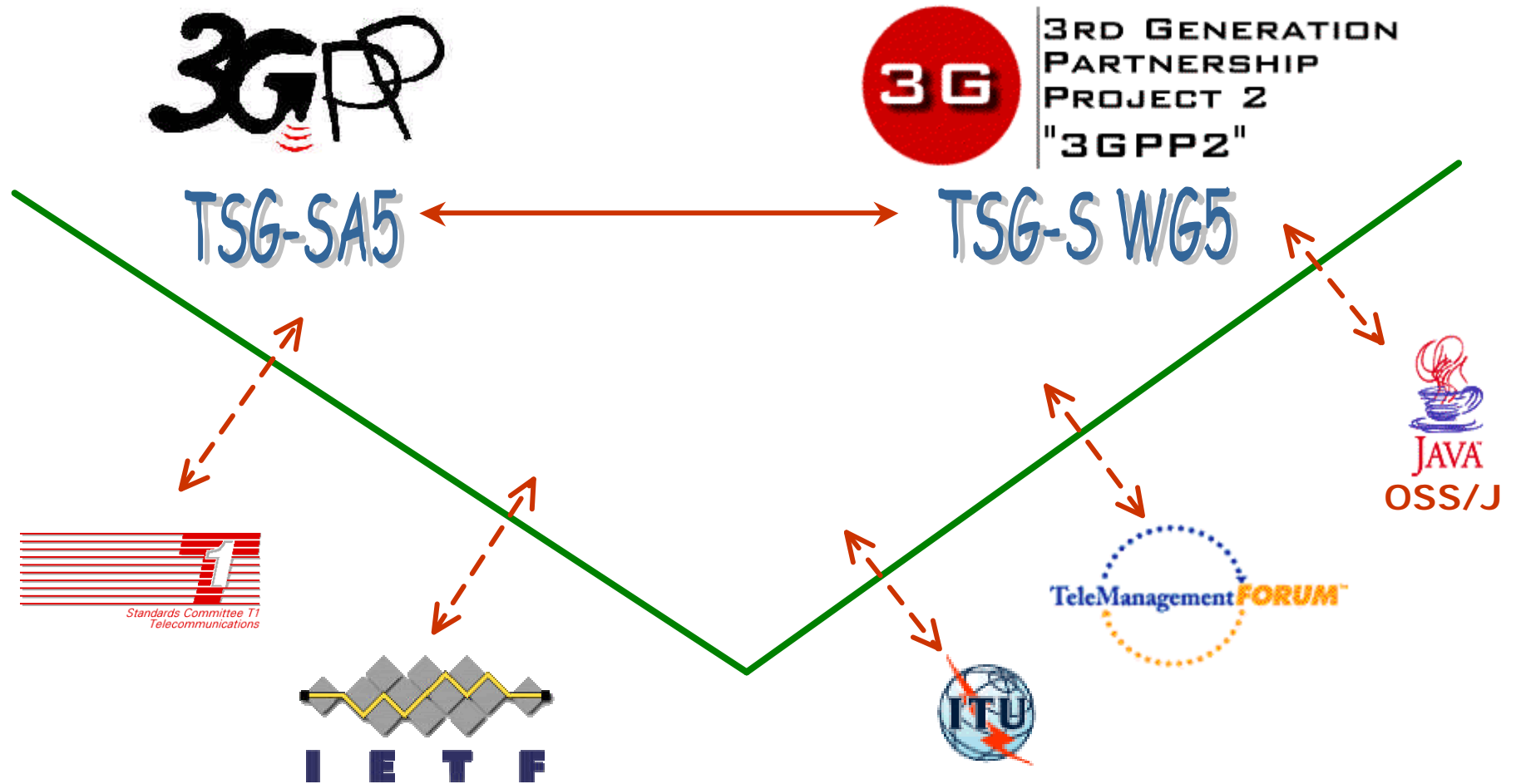## Co-operation with:

3GPP2 TSG-S on Management standards

- **3GPP2 TSG-S is referencing SA5's TSs in its specification S.S0028 "OAM&P for cdma2000 (3GPP Delta Specification)", which also documents some exception areas (e.g. network resource model for cdma2000)**

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

- **Further co-operation is under investigation**

TMF on 3G-mobile Management standards

3GPP and 3GPP2 Relationship

3GPP and 3GPP2 Relationship

3GPP TSG-SA5 ←→ **Alignment !** ←→ 3G 3RD GENERATION PARTNERSHIP PROJECT 2 "3GPP2" TSG-S WG5

- **3GPP defines standard North-Bound Interfaces (Bis)**
- **3GPP2 re-uses 3GPP's NBI specifications**
- *One set of NBI standards for all 2G, 2.5G and 3G wireless technologies!*

3GPP SA5 Roadmap

Mar 2000	June 2001	Sep 2002	Dec 2003 ?
RELEASE 4	**RELEASE 5**	**RELEASE 6**	

Requirements & Architecture

RELEASE 4
- Management High-level Requirements & Architecture
- FM & CM Concept & Requirements
- PM Concept & Requirements

RELEASE 5
- User Equipment Management
- Q0S Management
- Subscription Management Overview
- Inventory Management

RELEASE 6
- User Equipment Management (E)
- Subscription Management
- PM IRP Concept & Requirements
- Call Trace IRP Concept & Requirements
- *WLAN Impacts(?)*
- *OSA/IMS Management(?)*

Interface Definitions

RELEASE 4
- Alarm IRP
- Notification IRP
- Basic CM IRP
- Bulk CM IRP
- Generic IRP
  - Generic NRM
  - Core NRM
  - UTRAN NRM
  - GERAN NRM
- PM File Format

RELEASE 5
- State Management IRP
- Test Management IRP
- Kernel CM IRP (Passive CM)
- Basic CM IRP (Active CM)
- Enhancements of Rel 4 IRP's
  - ✍ Alarm IRP
  - ✍ Notification IRP / Generic IRP
  - ✍ Bulk CM IRP
  - NRM Enhancements
    - o (see Rel 4 list)
- PM File Format (E)

RELEASE 6
- Inventory Management IRP
- PM IRP
- Generic File Transfer IRP
- Log Management IRP
- Call Trace IRP
- Release 5 IRP & NRM Enhancements
  - Subscription Management IRP
  - User Equipment Management IRP
- *Additional Solution Sets (e.g. Java)*
- *CMCC Alignment*
- *IRP Security Aspects*

Data Definitions

RELEASE 4
- PM Measurements

RELEASE 5
- PM Measurements (E)

RELEASE 6
- PM Measurements (E)
- Call Trace Records

Others

RELEASE 4
- CS & PS Charging
- UTRAN OAM

RELEASE 5
- Charging Architecture & Interfaces
- IMS Charging

RELEASE 6
- Charging (E)

Administrative /Organizational

Elections at SA5#27 in Cork/ IRELAND (04/02)

- **Michael TRUSS (SA5 Vice Chair), was elected SA5 Chair for the remaining 1 year**
- **Thomas RICHTER** (Cingular Wireless LLC/ T1) **), was elected SA5 Vice Chair for a two-years term**
- **Christian TOCHE** (Nortel Networks/ ETSI **), was elected SA5 Vice Chair for the remaining 1 year**

SWGB was split into two separate SWGs (04/02)

- **SWGB (Charging Management)**
- **SWGD (Performance & Trace Management)**

Ad-hoc meetings planned in order to completely deliver SA5's Rel-5 at SA#17 (09/02) – see meeting calendar last slide

SA5 #27   *Meetings held*

- 2 - 5 April 2002 in Cork, IRELAND hosted by Motorola Ltd Attended by 56 delegates
- Full report in S5-020300
- SA5#27 bis (CH) 8-10 April in Berlin,GERMANY (Siemens)
- SA5#27 quad (NIM) 14-17 May in Sophia Antipolis, FRANCE (ETSI)
- SA5#27 ter (CH) 15-17 May in Sophia Antipolis, FRANCE (ETSI)

SA5 #28

- 20 - 24 May 2002 in Sophia Antipolis, FRANCE hosted by ETSI Attended by 56 delegates
- Draft report in S5-020407

Joint sessions during SA5#27 in Cork, IRELAND

- with GUP ad-hoc on GUP Mgmt & Data Definition (follow-on 08/02)
- with T2 SWG2 on User Equipment Management (follow-on 08/02)
- SA5 general session on CMCC's 3G Network Management Interface specification (follow-on meeting in 06/02)
- SA5 general session on ITU XML/ASN.1

User Equipment Management Feature

- **Rel-5 is 100% completed after SA Approval now, at SA#16, of TR 32.802 v2.0.0 (UEM feasibility study), produced in co-operation with T2**

SA approval is requested for

SP-020331   **Rel-5 draft TR 32.802 v200 (User Equipment Management UEM feasibility study**

- **Rel-6 WID still needs to be defined & submitted in 09/02**

Subscription Management Feature

- **Moved from Rel-5 to Rel-6**

- **SM is closely linked to GUP which was also moved to Rel-6**

- **Stage 1 TS 32.140 submitted to SA#15 for Information is 95% complete**

- **Stages 2 and 3 are 10% complete.**

- **Problems:**
  - **No Rapporteur available for Rel-6 work**
  - **Changed participation in SA5 reduces the number of supporting organisations of this Work Item to only two (2)**

- **Rel-6 WID to be submitted in 09/02 if solution to the above problems found**

Trace Management Feature

- **Moved from Rel-5 to Rel-6**

SA approval is requested for

SP-020332   **Rel-6 BB-level Work Item Description on Trace Management**
- **WID submitted to SA#16 as Building Block instead of Feature as in Rel-5**

SA is invited to note

SP-020330   **Rel-6 draft TS 32.421 v100 (Subscriber and Equipment Trace: Trace Concepts and Requirements)**

SP-020278   **LS on Subscriber and Equipment Trace Impacts**

WT: **Trace Impacts on Network Signalling Interfaces (10% complete)**
- **LS sent to concerned WGs to inform SA5's requirements**
- **monitors progress of requests made to other 3GPP WGs**

32.422   **Trace Control and Configuration Management enhancement (40%)**

32.423   **Trace Data Definition and Management (30%)**

52.008   **GSM Subscriber and Equipment Trace – moved to Rel-6**

16

Charging and OAM&P Feature

- **Rel-5 85% complete: SA approval target delayed from 06/02 to 09/02**

- **Rel-6 WID to be submitted to SA#17 (09/02)**

Open issues on Charging and OAM&P Feature

- **32.225 v1.5.0 : IMS Charging:**
  - **In spite of huge progress and tremendous efforts, detailed review needed for: DIAMETER messages and AVPs, CDR parameter description and AVP/CDR parameter mapping, CDR formats: ASN.1/XML**

- **32.200 : Charging Principles:**
  - **Alignment of stage 2/3 for MMS Charging needed**
  - **Addition of LCS Charging (CS & PS) needed**

- **32.205 : CS Charging:**
  - **Addition of AMR WB parameters in CDR needed**
  - **Addition of support for MNP needed**

- **32.600/300/111-series : Network Infrastructure Management:**
  - **All Requirement, IS/NRM & SS specs need more time for completion**
  - **At risk Trouble ticketing, Notification Log IRP, Inventory Management IRP**

- **32.403 : Performance measurements**
  - **Addition of WSMT measurements needed**

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

- **completed at SA#15 (03/02)**

- **Rel-6 WID to be submitted to SA#17 (09/02)**

SA is invited to note

SP-020210   **LS reply from SA5 on: "3GPP – WLAN Interworking"**

SP-020211   **LS reply from SA5 on "OAM&P standardization" from GSM NA**

BB: Charging Management (OAM-CH)

- **85%** complete
- **Rel-6 WID to be submitted to SA#17 (09/02)**

SA approval is requested for

SP-020285	**6 Rel-4 & Rel-5 CRs 32.200, 32.205, 32.215 and 32.235**
SP-020286	**4 Rel-4 & Rel-5 CRs 32.200 and 32.215**
SP-020287	**5 Rel-5 CRs 32.200 (Charging principles)**
SP-020288	**2 Rel-4 & Rel-5 CRs 32.215 (PS charging)**
SP-020289	**4 Rel-5 CRs 32.215 (PS charging)**

SA is invited to note the major evolution of

SP-020327	**Rel-5 draft TS 32.225 v150 (Charging data description for the IP Multimedia Subsystem) - for the 2nd time for Information**

BB: Performance Management (OAM-PM)

- **95% complete**
- **Rel-6 WID to be submitted to SA#17 (09/02)**

SA approval is requested for

SP-020291   **4 Rel-5 CR 32.403 (Performance measurements – UMTS & combined UMTS/GSM)**

SP-020292   **2 R99 & Rel-4 CRs 12.04 & 52.402 (Performance measurements – GSM)**

SP-020293   **2 R99 & Rel-4 CRs 12.04 & 52.402**

BB: Network Infrastructure Management (OAM-NIM)

- **70% complete**
- **Rel-6 WID to be submitted to SA#17 (09/02)**

SA approval is requested for

SP-020282	**Rel-4 CR 32.111-3 (Fault Management; Alarm IRP CORBA SS)**
SP-020283	**2 Rel-4 & Rel-5 CRs 32.111-4 (FM; Alarm IRP CMIP SS)**
SP-020284	**3 Rel-5 CRs 32.111-4 (FM; Alarm IRP CMIP SS)**
SP-020290	**2 Rel-5 CRs 32.304 (CM; Notification IRP CMIP SS)**
SP-020294	**Rel-4 CR 32.603 (Basic CN IRP: CORBA SS)**
SP-020295	**Rel-5 CR 32.611 (3G CM: Bulk CM IRP requirements)**
SP-020296	**3 Rel-4 CRs 32.612, 32.613 & 32.614 (Bulk CM IRP: Information service, CORBA SS & CMIP SS)**
SP-020297	**Rel-4 CR 32.613 (Bulk CM IRP CORBA SS)**
SP-020298	**Rel-5 CR 32.615 : New structure of specifications for definition of Bulk CM IRP XML file formats &**
	4 new v100 draft TSs 32.625/635/645/655 - for Information
SP-020299	**Rel-4 CR 32.622 (Generic network resources IRP: NRM)**

BB: Network Infrastructure Management (OAM-NIM) cont'd

SA approval is requested for

SP-020300   **2 Rel-4 CRs 32.624 (Generic network resources: IRP CMIP SS)**

SP-020301   **Rel-5 CR 32.631 (Core Network Resources IRP: requirements)**

SP-020302   **2 Rel-4 CRs 32.632 & 32.633 (Core NR IRP: NRM & CORBA SS)**

SP-020303   **Rel-4 CR 32.642 (UTRAN NR IRP: NRM)**

SP-020304   **2 Rel-4 CRs 32.642 & 32.652 (UTRAN & GERAN NR IRP: NRM)**

SP-020305   **2 Rel-4 CRs 32.652 (GERAN Network Resources IRP: NRM)**

SA is invited to note

SP-020328   **4 new Rel-5 draft v100 TSs 32.321/2/3/4 (Test management IRP; Requirements/ IS/ CORBA SS/ CMIP SS)**

SP-020329   **2 new Rel-5 draft v100 TSs 32.671 & 32.672 (3G CM; State Management IRP: Requirements & Information service)**

Future SA5 Meetings

Meeting	Date	Location	Host
SA5#28bis (CMCC)	20-21 Jun 2002	Beijing, CHINA	CMCC
SA5#29	24-28 Jun 2002	Beijing, CHINA	Nortel Networks
SA5#29bis (CH)	12-16 Aug 2002	Tampere, FINLAND	NOKIA
SA5#30	19-23 Aug 2002	Tampere, FINLAND	NOKIA
TSG#17	3 - 12 Sep 2002	Biarritz, FRANCE	Alcatel
SA5#31	7-11 Oct 2002	Atlanta, GA, USA	NA Friends
SA5#32	18-22 Nov 2002	Vienna, AUSTRIA	EF3
TSG#18	3 - 12 Dec 2002	New Orleans, USA	NA Friends
SA5#33 (non-plenary)	20-24 Jan 2003	Sophia Antipolis	ETSI
SA5#34 (Major)	24-28 Feb 2003	USA	NA Friends
TSG#19	11 - 21 Mar 2003	Jersey Island, UK	UK Friends
SA5#35 (Minor)	7 - 11 April 2003	Asia or Europe	TBD
SA5#36 (Major)	26-30 May 2003	Europe	EF3
TSG#20	10 - 19 Jun 2003	FINLAND	NOKIA
SA5#37(non–plenary)	14 – 18 Jul 2003	San Francisco, CA	3GPP2
SA5#38 (Major)	1-5 Sep 2003	Europe or Asia	TBD
TSG#21	16 - 25 Sep 2003		
SA5#39 (Minor)	6 - 10 Oct 2003	USA	NA Friends
SA5#40 (Major)	17-21 Nov 2003	Southern Europe	EF3
TSG#22	9 - 18 Dec 2003		