Review of the Work Plan at Plenaries #19

This version includes the updates from TSG #19

Content

- **Review of testing activities**
- **Review of pre-Rel-6 work still on-going (other than corrections)**
- **Review of on-going features (Rel-6/Rel-7)**
- **Conclusion**

In *Black*: Name of the task

In Red: important statement

Testing activities

UE testing R99 (1/2)

- **100% of prose test cases updated to Dec 02 core specifications.**

- **13 new TTCN test cases presented for approval at this meeting**

UE testing R99 (2/2)

- **Ongoing activities (% complete, foreseen completion date):**
  - *Extensions to R99 Test cases (SIG, covers the completion of FDD prose and TTCN)* **(70%, Dec 03 for prose; 50%, Mar 04 for TTCN)**
  - *Maintenance of the R99 test specification and test cases (SIG)* **(90% ongoing for prose; 40% ongoing for TTCN)**
  - *Creation of the Release 99 TCs for TDD, prose and TTCN (SIG)* **(50%, 12 months delayed July 04 for prose; 0%, 12 months delayed Dec 04 for TTCN)**

UE Testing Rel-4 (1/2)

- **Not started yet:**
  - *Testing of RAB support for RoHC (6 months delayed Sep 03 for prose; 9 months delayed Dec 03 for TTCN)*

- **For approval:**
  - *General changes to TS34.121 for Rel-4 (March 04)*

UE Testing Rel-4 (2/2)

- **Ongoing activities (% complete, foreseen completion date):**
  - *LCR_TDD, Testing Layer 2 and 3 protocol aspects (SIG)* **(60%, July 03 for prose; 0% Dec 03 for TTCN)**
  - *Testing of Extended RoHC* *(15% Sept 03 for prose; 0% Dec 03 for TTCN)*

7

UE Testing Release Independent

- **Testing UMTS 1800/1900:**
  - **Prose and TTCN** **completed**

- **Optimisation of Test Time, RF Aspects (FDD and TDD)**
  - **70% completed, 6 months delayed Sep 03**

UE Testing Rel-5 (1/2)

- **Not started yet :**

  - **Testing of support for IMS *(6 months delayed Sep 03 for prose, 6 months delayed March 04 for TTCN)***

- **For approval:**

  - **General changes to TS 34.121 and TS 34.122 for Rel-5 *(March 04)***

UE Testing Rel-5 (2/2)

WI under study and seeking supporting companies (no change since TSG T#14)

- Improvements of Radio Interface

  - Testing improvement of inter-frequency and inter-system measurement

  - Testing Hybrid ARQ II/III

  - Testing Terminal Power saving features

  - Testing DSCH power control improvement in soft handover

  Note: Concerning the three last items, RAN#19 clarified that nothing was done for Rel-5, so nothing has to be tested. More generally, all the Rel-4 and 5 features for which test cases have to be defined need to be clarified.

- RAN Improvements

  - Testing Radio access bearer support enhancements – except ROHC (ROHC belongs to Rel-4)

- Emergency call enhancements

  - Stage 3 for emergency calls and packet emergency calls in general (Core requirement and testing moved to Rel6)

10

GERAN Testing

UE Testing

- **MS Conformance Testing of Dual Transfer Mode (R99): COMPLETED**

- **MS conformance test for Intra BSC NACC (Rel-4): 50%**

- **Not started yet (Rel-5) :**
  - *GERAN MS Conformance test for GERAN interface evolution*
  - *GERAN MS Conformance test for Enhanced Power Control*
  - *GERAN MS Conformance test for 8-PSK Half Rate*
  - *GERAN MS Conformance test for AMR Wide Band*
  - *GERAN MS Conformance test for LCS (work plan 60%)*
  - *GERAN MS testing for Multiple TBF in A/Gb mode*

BTS testing (not started yet, for Rel-5)

- **Enhanced Power Control, LCS, GERAN interface evolution**

Review of pre-Rel-6 work still on-going (other than corrections)

High Speed Downlink Packet Access

- FDD:
  - Complete: Node B and UE Fixed Reference Channel –Single antenna
  - Requirements & tests in progress: UE Variable Reference Channel, FRC with diversity, CQI definition, HS-SCCH performance.
  - Most should be finished by June 2003. Proposal at RAN WG4 to postpone to Rel-6 the Requirements that are not agreed by June.
- TDD:
  - 3.84 Mcps TDD complete
  - 1.28 Mcps TDD: FRC complete, VRC in progress
- Release 5 HSDPA-RF to be closed in June 2003 (TSG #20). Same handling as for FDD (i.e. postpone to Rel-6 what is not completed by June)

13

Extended Transparent Packet Switched Streaming Services

STILL On-going :

TR 26.937 version 1.4.0 "RTP Usage Model" Release 5 (not ready, yet). It is hoped that this will be completed by June 2003.

GERAN Rel-5

GERAN Incomplete Work Items for Release 5

- **Multiple TBF A/Gb mode** **50% ready**

MMS Rel-4

- **Storage of MMS info on the (U)SIM – clarified at TSG-SA#18 and CR is provided to TSG-T#19. Has been closed in March 2003.**

Messaging Enhancements: MMS Rel-5

- **MMS (Multimedia Messaging Service) enhancements**

  3GPP part completed at TSG-T#16 but

  - **Still Open item: MM1 (interface MMS User Agent and MMS Server/Relay) stage 3, under development in OMA.**

Review of on-going features

Will belong to Rel-6 or to Rel-7

List of on-going Features (1/3)

Unique ID	Feature
2	Evolutions of the transport in the UTRAN
4	Evolutions of the transport in the CN
1216	Improvements of Radio Interface
9	RAN improvements
1652	Emergency call enhancements
2527	Emergency calls without UICC/SIM in netw. with IMS
32023	Location Services enhancements 2
1800	Rel-6 UICC/USIM enhancements and interworking
1571	Security enhancements
32021	IMS Phase 2
32015	Radio optimisation impacts on PS domain architecture
11032	Interop & Comlity for IMSs using difft "IPconvity Networks"
1365	Support of Push Services
42009	Multimedia Messaging (MMS) enhancements

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List of on-going Features (2/3)

Unique ID	Feature
42005	Rel-6 MExE enhancements
2062	Subscription Management
2499	Support of Presence Capability
2544	Multimedia Broadcast and Multicast Service
31006	Speech Recognition and Speech Enabled Services
31008	Generic User Profile
31010	Digital Rights Management
31012	WLAN-UMTS Interworking
31015	Priority Service
31018	Network Sharing
32016	QoS Improvements
33002	Support for subscriber certificates
15010	Rel-6 OSA enhancements
32033	Handling of early UEs

List of on-going Features (3/3)

Unique ID	Feature
34300	Perf charact of def codecs for PS conv multimedia appli
31029	Study of Feature Interactions Requirements
31030	Study on Privacy Capability
35010	Rel-6 OAM&P
35016	Charging Management
34021	Enhanced Tandem Free Operation - not yet approved
34022	Packet Switched Streaming Services Rel-6
TBD	CAMEL
34023	AMR-WB extension for high audio quality
50056	Enhanced A/Gb feasibility study
50063	Flexible Layer One for GERAN
50041	Uplink TDOA feasibility study
50401	Addition of frequency bands to GSM
50130	Seamless support of streaming services in A/Gb mode
51101	Single Antenna Receiver Interference Cancellation (SAIC)
50500	Support of Conv Services in A/Gb mode via the PS domain

Evolutions of the transport in UTRAN

- Not much activity in the previous months, but this feature should be kept in the Work Plan as work is to be done in the field of interworking between IP and ATM.

Evolutions of the transport in CN

- **CN#19 has decided to delete this Feature**
- **It previously contained "Preferred framing protocol for bearer independent CS architecture", but no more support in CN4**
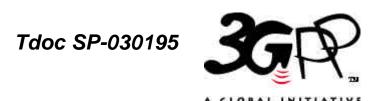
Rel-6 Improvements of Radio Interface

– **Improvement of inter-frequency and inter-system measurement (R1). In progress. Proposed Completion Date is September 2003**

– **Multiple Input Multiple Output antennas (MIMO) (R1):On progress. Joint discussion with 3GPP2 is going on regularly. Completion date June 2003 but work involving other WGs is also needed afterwards. Estimated progress is 30%.**

– **Improving Receiver Performance Requirements for the FDD UE (R4). Current completion date is September 2003, but if no further work is presented at next RAN4, the completion date will be moved to June 2003.**

– **FDD BS classification (R4): Completed.**

– **UMTS 850. Work started. (R4) 10% progress, Completion date March 2004. Other frequency bands as UMTS 800 approved at RAN#19, coordination of work will be necessary between these different frequency bands**

– **Terminal power saving feature (R2): Generic work item. Closed at RAN#19 with empty content (no work done at all).**

23

Rel-6 Improvements of Radio Interface.
Feasibility Studies

– Radio link performance enhancements (R1): In progress. Completion date September 2003

– Improvement of inter-frequency and inter-system measurements for 1.28 Mcps TDD (R1) Work in progress. Completion date delayed from March to September 2003

– Fast Cell Selection (FCS) for HS-DSCH (R1) Closed at RAN#19 (no work).

– Deployment of UTRA in additional spectrum arrangements (R4). Work almost finished, 3 additional months required to complete the TR. Proposed finish date: June 2003

– UTRA Wide Band Distribution Systems (R4) Work on going, new simulations presented. Completion date delayed from March to September 2003.

Rel-6 Improvements of Radio Interface.
Feasibility Studies

- **Analysis of higher chip rates for UTRAN TDD evolution (R1) In progress. TR25.895 v1.0.0 is presented for information to TSG-RAN . Proposed to change the completion date from June 2003 to December 2003**

- **Uplink Enhancements for Dedicated Transport Channels (R1) Work in progress. Traffic models to be used were agreed in principle. Proposed to change the completion date from June 2003 to December 2003**

- **OFDM analysis for UTRAN evolution (R1) Work on progress. Proposed to change the completion date from June 2003 to December 2003**

RAN improvements – Rel-6

- **Beamforming Enhancements (R1) On progress. Completion date June 2003.**

- **RAB support enhancement (R2): Generic Building Block. New item identified in this BB: Iu enhancements for IMS support in the RAN. The WI proposed to refine the requirements provided by SA2 from a RAN perspective and evaluate possible enhancements for Rel-6 allowing further optimisation of the handling of IMS RABs by RAN RNC. Completion date September 2003.**

- **Improvement of RRM across RNS and RNS/BSS (R3):**
  - **TR 25.891 v0.3.0 was approved and work is ongoing. Discussions in RAN3 REL-6 ad hoc in Jan. 2003, but several contributions were not treated at RAN3 #34 due to lack of time.**
  - **Level of completion: 35%, completion date moved from June to December 2003**

RAN improvements - Feasibility Studies

- **Evolution of the UTRAN Architecture (R3):**
  - TR 25.897 was approved as v0.2.0 and includes some requirements.
  - Discussions in RAN3 REL-6 ad hoc in Jan. 2003, but several contributions were not treated at RAN3 #34 due to lack of time.
  - Level of completion: 5%, Completion date changed from June to September 2003

- **Improved access to UE measurement data for CRNC to support TDD RRM (R3):**
  - TR 25.801 v0.2.0 was approved at RAN3 #34 including skeleton TR with introduction and some contributions about requirements and benefits.
  - Several contributions on benefits and methods of implementation were submitted at RAN3 #34 meeting but not treated due to lack of time.
  - Level of completion: 15%
  - Completion date unchanged: RAN #20 June 2003

27

Emergency call enhancements

New WID from SA2 to cover both

> **Emergency call enhancements for IP & PS based calls with (U)SIM**

and

> **Emergency calls from UEs without UICC/(U)SIM in Networks containing an IMS**

(They were two separate features before).

- No specific requirement for IMS aspects so far (to be included in 22.228 if any). Requirements for CS domain in 22.101.

- SA2 work completion "brand new" target is September 2003 (was April 2003, and before was January 2002)

Updated WID from CN1 (N1-030271 (NP-030059) to cover work in CN for

> **Emergency call enhancements for IP & PS based calls-Stage 3**
> Completion date December 2003.

For TSG#20 CN1 plans to provide a new WID for CN for 'Emergency calls from UEs without UICC/(U)SIM in Networks containing an IMS'

LCS enhancements 2 (1/3)

- **WID revised by SA2 in S2-030584, to cover four improvements for Rel-6:**
    - **Standardization of the Le interface,**
    - **Enhanced support for anonymity and user privacy**
    - **Location Services support for IMS public identities**
    - **"New area" event for location service triggering reports (was before "New events for triggered location reports")**
- **Other LCS enhancements covered by separate WIDs:**
    - **Enhanced inter-GMLC interface,**
    - **Support of the Presence Service Architecture,**
    - **FS on applicability of GALILEO for LCS**

LCS enhancements 2 (2/3)

For all items in previous slide:

- **Stage 1: WID approved at SA#18, completed**

- **Stage 2 progressing, planned to be finished by September 2003**

- **Stage 3 not started, to be done by CN1 for most aspects and by external bodies for inter-GMLC interface. No RAN nor GERAN impacts foreseen for these aspects. Planned to be finished by March 2004.**

LCS enhancements 2 (3/3)

- **RAN aspects (called "UE positioning"):**
  - **Study Item on Enhancements to OTDOA Positioning using advanced blanking methods**: (R2): Good progress in RAN1#30 on the issue of Simulation Parameters and methodology. Completion date June 2003
  - **Open SMLC-SRNC Interface within the UTRAN to support Rel4 positioning** (R2): Approval of related CRs in RAN WG3, now position calculations that incorporate the following Rel-4 positioning methods are possible via Iupc:
    - Assisted GPS (already possible via Iupc since Rel-5)
    - Cell-ID based positioning (including Round Trip Time)
    - Observed Time Difference of Arrival
  - Some open issues remain, to be solved before next RAN. Almost completed. Completion date moved from March to June 2003

- **GERAN aspects:**
  - **Uplink TDOA location determination for GSM/GPRS:**
    - Addition of U-TDOA in the CS domain: to be completed by June 2003
    - Addition of U-TDOA in the PS domain: to be completed by November 2003

31

UICC/USIM enhancements and interworking for Rel-6

USIM toolkit enhancements

– **C SIM API: 'C'-language binding for (U)SIM API for Release 6. Approved at T#17.**

– **Test specification for 'C'-language binding for (U)SIM API. New specification presented for information at T#17. Approved at TSG T#19.**

UICC enhancements

– **Common UICC enhancement are specified by ETSI Project Smart Card Platform (including 3rd form factor and UICC next generation).**

32

Security Enhancements Rel-6

- *Network domain security*
    - NDS/IP (33.210): Approved SA#18. "F" CRs to SA#19
    - NDS/AP: WID presented to SA#19. Completion for 03/2004
    - GERAN A/Gb mode security enhancements :
        - Progress and LS to GERAN from S3#27. Completion for 09/2003
    - G-MILENAGE Algorithm: completed at SA#18.
    - Proposal for backup Auth and Conf Alg UEA2/UIA2: Funding request and work plan to SA#19

- Enhanced home environment control of security:
    - Deleted (can be revived if inputs received at CN4)
- Reminder: Security signalling flows for the Ze interface was deleted (under *Rel-6 MAP application layer security,* can be revived if inputs received at CN4)

IMS Phase 2 (1/2)

- *Different independent items (WID approved at SA#17):*
  Stages 1 and 2 completed (in resp. 22.228 and 23.228) for:
  - IMS Local services.
    - Stage 3: nothing started
  - Mm interface (CSCF to external IP multimedia network)
    - Stage 3 (TR 29.962) completed by CN3 at CN#19, to be reviewed by CN1 and SA2
  - Interworking between IMS and CS networks (and Mg interface (BGCF to MGCF - interworking with CS))
    - Stage 3 in TS 29.163 to be completed in September 2003 by CN3.
  - Mn interface (IM-MGW to MGCF) enhancements
    - Target for Stage 3 in TS 29.332 (CN4): December 2003
  - Mp (MRFC - MRFP) interface protocol definitions
    - Target for Stage 3 in TS 29.333 (CN4): December 2003

IMS Phase 2 (2/2)

Stages 1 and 2 completed for (contd):

– **Lawful Interception in the 3GPP Rel-6 architecture**

  • **WID to be approved at SA#19. Technical work just started, completion date is December 2003**

CN#19 view is that Stage 3 will be completed by December 2003 but this is closely dependent to the progress made by IETF (Note that September 2003 is still in the Work Plan because SA2's updates were received too late for being reviewed by the CN WGs)

Stage 2 to be completed by June and stage 3 to be completed by September for the following items:

– **IMS Group Management**

– **IMS Conferencing**

– **IMS Messaging**

– **Additional SIP Capabilities support not covered by Rel-5**

– **Review additional SIP Capabilities against IMS**

Other IMS work

Problems with the following items:

– *Identity Portability in IMS:*

- *No input received in SA1. So stages 2 and 3 not started either.*
- *deleted at SA#19*

– *PSS alignment to IMS.*

- *No work started (neither at SA2 nor at SA4).*
- *It will be checked at forthcoming SA2 and SA4 meetings if contributions are produced, otherwise deletion will be proposed in the future.*

Study of subscriber and operators relationship in IMS and related ISIM requirements for Rel 6

- **CRs agreed at SA1 but rejected at SA#18. Instead WID created at SA#18, resulting in 22.800 to be presented for information at SA#19. No foreseen completion date anticipated at this time.**

Radio optimisation impacts on PS domain architecture

– **Only SA2 involved so far.**

– **TR planned to be completed by September, but little progress.**

– **Concrete impacts on the system still not clear.**

Interoperability and commonality between IMS using different IP connectivity networks

– **Stage 2 progressing, to be completed by June 2003 (was March 2003).**

– **Stage 3 started, but actual split of the TS (between bearer dependent and independent aspects) not started. Foreseen to be completed by September 2003.**

Push Services

- **Stage 1: Stable, in TS 22.174**

- **Stage 2: WID approved at SA#18, planned to be completed by December 2003 (was September)**

- **Stage 3 not started and hard to be evaluated as there is no Stage 2. If 3 to 6 months are needed after Stage 2 is stable, this will lead to March or June 2004.**

MMS (Multimedia Messaging Service) Enhancements

- **Enhancements of the following and other areas are under consideration:**
  - **MM1, MM4 reference points enhancements**
  - **interworking and transcoding enhancements**
  - **terminal capability negotiation enhancements**
  - **alternative User Agent capabilities**
  - **detailed description of User Profile mechanisms (CR from S1 at SA #18)**
  - **security and privacy enhancements**
  - **enhanced charging methods (CR from S1 at SA #18)**
  - **enhancements of the interworking with VAS applications (CR from S1 at SA #18)**
  - **enhancements for streaming**

- **Work has started on some topics, detailed scope for Rel-6 still to be defined. Completion date will depend on the scope (probably not before Dec 2003). Work performed in cooperation with OMA.**

MExE Enhancements Rel-6

- ## *WID MExE Rel-6 Improvements and Investigations*
  - **Completed at TSG-T#19.** (there was still no input at TSG-T#19, so the work item has been closed)

- ## *WID MExE Run-Time Independent Framework Feasibility Study*
  - **Completed at TSG-T#18.**
    TR 22.857 Runtime Independent Framework Feasibility Study approved at TSG-T#18.

Subscription Management

SA5 Rel-6 Feature: Subscription Management (SM)   45%

- **32.140 (stage 1) Subscription Management Requirements - submitted to SA#19 for Approval (SP-03041).**
- **32.141 (stage 2/3) Subscription Management Architecture - submitted to SA#19 for Information (SP-03042).**
- **32.14x Subscription Management Data Model and Protocols - TSG Approval target remains 09/2003 (will be evaluated based on 32.141 architecture TS).**

- **32.141 (SM stage 2/3) is closely related to CN4 Stage 2/3 GUP activities.**
- **Proposal for joint contributions to SA5 and CN4 to address areas of common interest.**
- **Exact nature and extent of co-operation with CN4 still being evaluated.**
- **SA5/T2 SWG2 Joint Meeting planned in April.**
- **SA#19:There is no T3 Implication as Rel-6 SM concerns purely the CN side.**

42

Presence

- **Stage 1 approved at SA#13 in TS 22.141.**

- **Stage 2: 23.141 approved at SA#17**

- **Stage 3: Work progressing normally in CN1 (55%). Evaluation of completion date is TSG#20 (June).**

- **Work ongoing in SA3. Active contribution on Presence Security issues. Draft TS started at S3#27. Foreseen to be completed by December 2003.**

Multimedia Broadcast/Multicast Service (1/2)

- **Stage 1 completed (in TS 22.146)**

- **Overall Stage 2 (SA2) to be completed by September 2003**

- **Stage 3 in the CN is planned for December 2003 according to the updated WID in NP-030060 (N1-030275).**

- **Stages 2 and 3 in the RAN:**

  - **a two-days MBMS AdHoc meeting took place mid-January between RAN2 and RAN3. Agreements on (captured in the RAN stage-2 TS 25.346):**

    - ? **MBMS MAC Architecture.**
    - ? **UE RRC states for MBMS**

  - **RAN2#34 had a session on MBMS. Several Agreements and progress on the counting issue.**

  - **Planed to be finished by September 2003 for Stage 2 in RAN. Stage 3 will then be defined by December 2003.**

Multimedia Broadcast/Multicast Service (2/2)

- **Stage 3 in GERAN : just started, estimated completion date not before June 2003. Note that this date was set before SA2's latest estimate on Stage 2 completion and is now partly inconsistent with foreseen completion date of Stage 2 (September).**

- **MBMS in SA4 (Investigation if specific Codec(s) is(are) needed for MBMS): just started**

- **Work ongoing in SA3. Draft MBMS Security updated at S3#27 (50% complete)**

45

Speech Recognition and Speech Enabled Services

Work ongoing with some confusion

- **Stage 1:TR 22.977 and TS 22.243 on SES already approved at SA #17**

- **Stage 2 : Work not started.**

- **Stage 3: Work not started. Awaiting for Stage 2.**

- **WID SA4 on Codec Work to Support Speech Recognition Framework for Automated Voice Services approved at SA #18. Design Constraints defined at last SA4 meeting (Berlin, 24-28 February) Completion in SA4 expected September 2003**

Generic User Profile

Work ongoing

- **Stage 1: 22.242 planned to be presented for approval at SA#19**

- **Stage 2: TS progressing well, to be presented for information at SA #19 (March) and for approval in September 2003**

- **WID identifying T2 related work approved at T#18. TS 23.241 (GUP, Stage 2, Data Description Framework) and TS 24.241 (GUP, Stage 3, Access; Common Objects) both to be completed by December 2003.**

- **Stage 3: CN4 have agreed in principle to undertake this work in 29.240, but no technical work started (as stage 2 is not ready). 6 months expected after stage 2, i.e. March 2004.**

Digital Rights Management

- **3GPP Stage 1 in TS 22.242, stable**

- **For Stages 2 and 3, it has been decided to refer to OMA work**

- **OMA defines its own Stage 1**

- **Note that the information on progress made by OMA and the consistency between 3GPP's and OMA's Stages 1 will be ensured by the companies attending both fora.**

WLAN/UMTS interworking

- **Stage 1: Completed. 22.934 was a feasibility study concluding that no specific TS is needed but CRs have been produced against existing specs (22.101, 22.934, 22.115).**

- **Stage 2: TS on WLAN interworking Architecture Definition (TS 23.234) to be completed by June 2003 (delayed 3 months: was SA#19). Scenarios for which Stage 2 is not going to be complete by June should be moved out of the document, e.g. scenarios 4 and onwards not for Rel-6.**

- **Draft Security TS updated at S3#27 (50% complete). Still many issues.**

- **Stage 3 not started, will be led by CN4 (CN1 also involved): WID to be approved at CN#19, 6 months anticipated,i.e. 12/03.**

- **T3 might also be involved (wait for Stage 2 to be stable)**

49

Priority Service

- **FS completed: TR 22.950 approved at SA#16. CRs provided on existing specs.**

- **No other work started in other WGs. SA1 will clarify before SA#20 if some work is needed by other WGs.**

- **No clear view on the completion date**

Network Sharing

Work on-going.

- **FS in TR 22.951 approved at SA #18.**

- **Stage 1: covered by CRs on existing specs (22.011, 22.101, 22.115 and 22.129).**

- **Stage 2 WID to be presented at SA#19, work planned to be finished by September 2003.**

- **Stage 3 not started and hard to be evaluated as there is no Stage 2. If 3 to 6 months are needed after Stage 2 is stable, this will lead to Dec 2003 or Mar 2004**

QoS Improvements

- **This Feature consists in:**
  - **a Feasibility Study on Dynamic Policy Control Enhancements for End-to-End Quality of Service (QoS)**
    - **Stage 2: WID revised at SA#17 to clarify that a FS is initially proposed, in TR 23.917 (intended completion date is SA#20). Technical work ongoing at SA2.**
    - **Stage 3 (CN3): Awaiting clarifications from SA2. If 3 to 6 months are needed after Stage 2 is stable, this will lead to September to December 2003.**
  - **WID approved at SA#18 on Policy-based control of DiffServ.**
    - **Work just starting at SA2, progressing normally.**
    - **SA1 has started working on this issue.**

Support for Subscriber Certificates

Progressing in SA3: Draft TS Table of Contents for "Bootstrapping and Support for Subscriber Certificates" and contributions to progress work at S3#27 (10% complete)

Stages 1, 2 and 3 defined by SA3. Draft TS to be presented for information at SA#21.

- **TR in progress (Active contribution at SA3#25 and SA3#26). To be presented for information**

SA1 and SA2 work done, T3 work not started

53

OSA Improvements (1/2)

Rel-6 Feature OSA enhancements   15%

- Request to delay TSG Approval from **09/2003** to **12/2003** (synch with Parlay 5.0).
- LS (NP-030016/N5-030072): CN5 asks SA1 to analyse the status of OSA Rel-6 requirements, re-visit the issue of company support for those for which CN5 is receiving no contributions, and consider removing those with no support from the OSA stage 1 specification. To be clarified before TSG#20.
- CN5 work on Rel-6 Stage 3 according to SA1 OSA Requirements:
  - Generic network interface function
  - Management / User data security management
  - Retrieval of Visited Network capabilities
  - Access to IP Session information
  - Multi Media Messaging function
  - Enhanced user privacy in LCS
  - Policy management extensions
  - Presence and Availability Management (from the PRESNC WI)
  - Information Services
  - Information Transfer
  - New   OSA interfaces at different levels of abstractions (Parlay X, Web services)
  - New   Introduction of migration support mechanism
  - New   User Profile
  - New   Network functions for end-user/application interaction support
  - New   Framework Function for Federation

Legend

ongoing
pending input from other WGs
no contributions received

54

OSA Improvements (2/2)

CN5 performed a Gap Analysis on Presence (Rel-5 29.198-14 vs. Rel-6 22.141)

- Contributions expected at next meetings to fill the gaps.
- Mapping to SIP of OSA PAM specs is pending. CN5 is monitoring CN1 Presence stage 1 work on which this depends.

CN5 Co-ordination with 3GPP2

- 3GPP2 approved [3GPP2 OSA Rel-5] = [3GPP OSA Rel-5] +[Delta document].
- Delta document explains how to use the OSA specifications in 3GPP2 TSG-N & states that the only change to be made would be to remove mention of CAMEL/CAP as this region of the world uses CDMA2000
- 3GPP2 delegates are now an integral part of the OSA Joint WG.

SA1 Rel-6 OSA Requirements Clarifications from CN5-perspective

- Most issues are solved now, some pending responses from SA2 (see CR 061 against SA1's 22.127 in SP-020659).

OSA aspects of MMS VASP (MM7) interface Co-ordination between CN5, T2 and SA5

- T2 suggests considering related work in OMA (T2 LS in N5-030014/T2-020949).
- T2 understands that this needs SA1 and SA decision.
- CN5 awaits this decision.

55

Handling of Early UEs

Full name: Provision of UE Specific Behaviour Information to Network Entities

– **General aspects:**

- •No activity on Stage 1. No Stage 1 needed (this feature just enables to have a normal behavior of the system)
- •In SA2: Stage 2 is progressing actively in TS 23.195, to be completed by June 2003

– **RAN aspects:**

- •RAN #18agreed on the "Early Hooks on the Air Interface" solution and approved the CRs defining the containers for the SBI (Specific Behaviour Information) IEs (Information Element), to be used when the need arises.
- •Iu based solution:

RAN adhoc on early UE handling took place 29th - 30th January 2003. High-level agreement reached for the transfer of the UESBI from the CN to the RAN. No agreement reached on the contents of the UESBI.

Technically endorsed CRs for the Specification UESBI transfer over Iu during 3GPP TSG RAN3 Meeting #34 17th-23th February 2003. RAN need to decide which release the UESBI should be applied to.

- •RAN work anticipated to be completed by September 2003

– **Impact on CN is minor**

– **SA#19: The Release to which this feature will belong not decided yet**

56

Performance evaluation of multimedia codecs for PS conversational services

- ## Status:

  - *Budget defined up to 160 kEURO (+ 34 kEURO contingency left from AMR-WB exercise)*

  - *Conversational testing methodology selected*

  - *Input on packet loss / delay model/values still needed*

  - *UMTS simulator progressed towards final definition*

  - *Up to 4 potential testing laboratories identified*

  - *Technical Annexes to formal contracts (i.e. Test plans & experimental designs) towards final definition*

  Completion expected September 2003

Privacy Capability

- **Work started in SA1, no output**

- **No other work started**

Feature Interaction

Some work just started at S1.

OAM&P *(Operation, Administration, Maintenance and Provisioning)*

- **SA5 Rel-6 Feature: OAM&P** **30%**
- **Request to SA to accept delaying TSG Approval target: 09/03 to 03/04.**

BB: Principles, high level Requirements and Architecture   20%

- QoS Management aligned with SA2/CN4; further updates based on IETF under investigation.
- Work on-going on Management of Service Specific Entities, Network Sharing, UEM, SuM
- No progress or support for linkage to OSA.

BB: Performance Management (32.41x, 52.402)   20%

- New dates were proposed for the delivery of PM IRP TSs (3 to 6 months delay)
- New objective to split the 32.401Annexes into 3 separate TSs for the file format definitions
- Revised WID to SA#20 (06/2003).

BB: User Equipment Management   10%

- **OMA replied to SA5 LS & sent "OMA draft Requirements specification for Device Management" (02/2003)**
- **SA5 (with T2,SA1,SA3,T3) will make GAP analysis (OMA vs 32.802/32.150). Revised WID to SA#20 (06/2003).**
- **32.150 (SA5) UEM Requirements. & Architecture; Stage 1/2 - not ready for SA#19 for Information.**
- **Not started 27.150 (T2) UEM protocol spec; Stage 3. Insufficient support for T2/T WID.**

BB: Network Infrastructure Management   15%

BB: Trace Management (32.42x, 52.008)   55%

- Joint RAN2-RAN3-SA5 SWGD ad-hoc meeting held (02/2003). Follow-up needed.
- Pending SA5 LSs reply to CN4, CN1; should include detailed Trace requirements.

Charging Management

SA5 Feature Charging Management (CH)   5%

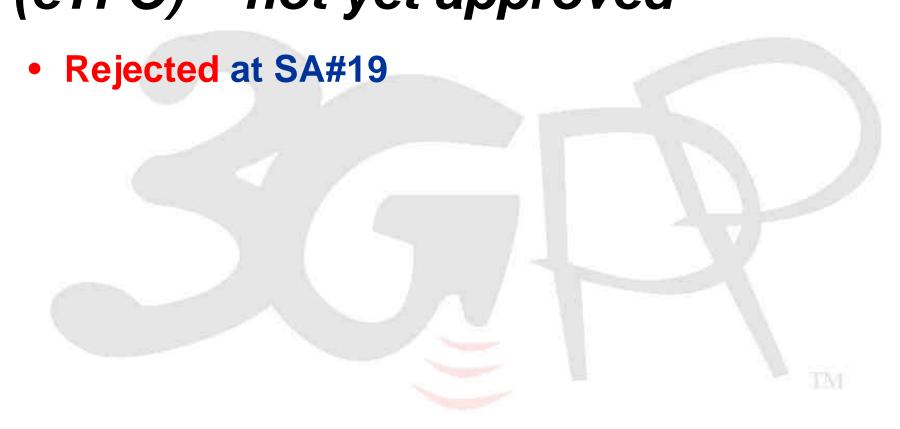## Proposed NEW structure and content of the Rel-6 Charging TSs

SA5 agreed the proposal to discontinue the existing Rel-5 TSs (32.200, 32.205, 32.215, 32.225, 32.235) and replace them in Rel-6 by a new TS-family.

Reason: with the advent of new TSs for on-line and off-line charging in the bearer and service levels in Rel-6, e.g. WLAN, Push, Presence, LCS, Streaming, etc., the problem of overlap, referencing and duplication (which exists to a lesser extent in the Rel-5 TSs) would be severely aggravated, yielding a set of TSs that would be very difficult to read, understand and implement correctly if the new structure were not adopted.

Four revised WIDs presented at SA#19 (1 Feature & 3 BBs) in SP-030047/48/49/50.

Request to SA to accept delaying TSG Approval target: 09/2003 to 03/2004.

Enhanced Tandem Free Operation (eTFO) – not yet approved

- **Rejected at SA#19**

Packet Switched Streaming Rel-6

– **WID SA4 on new set of enhancements on Packet Switched Streaming approved at SA #18 : SA4 has agreed to restructure the whole set of main specifications for PSS Rel-6 (new TS 26.244 & TS 26.245)** **on-going**

– **No involvement of other WG anticipated**

– **See also "PSS alignment to IMS" in IMS slides**

SA4 work on PSS Rel-6 expected to be completed by **December 2003**

AMR-WB extension for high audio quality (AMR-WB+)

- **WID SA4 on AMR-WB extension for High Audio Quality was approved at SA #18. Text on enhancements of AMR-WB was asked to be reviewed by SA4; an Updated WID is presented for approval at SA #19 (SP-030083)**
  - **SA4 work on AMR-WB+ expected to be completed by September 2003**

CAMEL

- **Release 6 WID "Enhancement of dialled service for CAMEL" has been approved in TSG SA#18 and TS 22.078 v.6.0.0 containing Stage 1 was created.**

- **CN2 WID "Enhancement of dialled service for CAMEL" for stage 2 and stage 3 work is forwarded to CN#19 for approval.**

- **Dedicated meeting to take place in April. Stages 2 and 3 to be completed by September 2003.**

- **CAMEL support of concatenated SMS in Release 6 was discussed in CN2. No objections in CN2 for that feature, but CN2 recommendation is to get SA1 approval for the service requirement first. SA1 not yet actively involved.**

64

GERAN Rel-6 (1/3)

Status of GERAN Work Items for Release 6, except testing (NOT STARTED) :

- Enhanced A/Gb feasibility study: COMPLETED
- Uplink TDOA feasibility study COMPLETED
- Addition of frequency bands to GSM: COMPLETED
- Seamless support of streaming services in A/Gb mode: completion date expected June 2003
- Flexible Layer One for GERAN: completion date expected June 2003
- Single Antenna Receiver Interference Cancellation (SAIC) : 20% ready, completion date expected June 2003
- Support of Conversational Services in A/Gb mode via the PS domain : completion date of TR expected November 2003, Stage 2 completion date expected April 2004

GERAN Rel-6 (2/3) Testing activities
(all just started, or even not started yet)

Support of the Multimedia Broadcast Multicast Service (MBMS) in GERAN : 0%, completion expected June 2003

•**GERAN MS/BTS Conformance tests for the Flexible Layer One :** 0 %, completion expected June 2003

•**Seamless support of streaming services in A/Gb mode :** 0 %, completion expected December 2003

•**Addition of frequency bands to GSM – Conformance tests :** 0%, NOT STARTED

•**Support of Conversational Services in A/Gb mode via the PS domain :** 0%, NOT STARTED (WID to be approved)

66

GERAN Rel-6 (3/3): New WID

- **GP-030443 : Support of Conversational Services in A/Gb mode via the PS domain, + 6 BBs, i.e.**
- **GP-030444 Creation of a Technical Report**
- **GP-030445 Stage 2**
- **GP-030446 Radio Channel Support**
- **GP-030447 Definition of radio resource management functionality**
- **GP-030448 PS Handover**
- **GP-030449 Modifications to FLO**

Completion expected April 2004

New WIDs approved at RAN#19

- **DS-CDMA introduction in the 800 MHz band (only applicable in Japan), to be completed by September 2003**

- **UMTS 1.7/2.1 GHz (only applicable in Region 2), to be completed by December 2003**

- **Remote Control of Electrical Tilting Antenna, to be completed by December 2003**

- **Network Assisted Cell Change from UTRAN to GERAN, to be completed by September 2003**

- **Feasibility Study for Low Output Powers for general purpose FDD BSs (RAN WG4), to be completed by September 2003**

Conclusion

Completion dates

- **Next slides summarize the Foreseen Completion Dates (FCD) for each Feature**
- **The following rules apply:**
  - **All the months refer to 2003, except for March where it is always specified if 2003 or 2004 is meant ("Mar-03" or "Mar-04")**
  - **"June" is by default "June 2003" except for "June04" for Push**
  - **NA: Not applicable**
  - **?: not able to provide any estimate**
  - **"/" means "or" (unable to predict more accurately)**
  - **"+" means that the feature can be split in two independent features**

FCD of Features (1/3)

Unique ID	Feature	FCD
2	Evolutions of the transport in the UTRAN	NA
4	Evolutions of the transport in the CN	NA
1216	Improvements of Radio Interface	Sept+Mar 04
9	RAN improvements	June
1652	Emergency call enhancements	Dec
2527	Emergency calls without UICC/SIM in netw. with IMS	NA
32023	Location Services enhancements 2	June+Mar04
1800	Rel-6 UICC/USIM enhancements and interworking	Mar 03
1571	Security enhancements	Mar 04
32021	IMS Phase 2	Dec
32015	Radio optimisation impacts on PS domain architecture	Sep
11032	Interop & Comlity for IMSs using difft "IPconvity Networks"	Sep/Dec
1365	Support of Push Services	Mar/June04
42009	Multimedia Messaging (MMS) enhancements	Dec/Mar04

FCD of Features (2/3)

Unique ID	Feature	FCD
42005	**Rel-6 MExE enhancements**	*Mar 03*
2062	**Subscription Management**	*Sep*
2499	**Support of Presence Capability**	*Dec*
2544	**Multimedia Broadcast and Multicast Service**	*Dec*
31006	**Speech Recognition and Speech Enabled Services**	*Sep/Dec*
31008	**Generic User Profile**	*Mar 04*
31010	**Digital Rights Management**	*NA*
31012	**WLAN-UMTS Interworking**	*Dec*
31015	**Priority Service**	*?*
31018	**Network Sharing**	*Dec/Mar 04*
32016	**QoS Improvements**	*Sep/Dec*
33002	**Support for subscriber certificates**	*Dec/Mar 04*
15010	**Rel-6 OSA enhancements**	*Dec*
32033	**Handling of early UEs**	*Sep*

FCD of Features (3/3)

Unique ID	Feature	FCD
34300	Perf charact of def codecs for PS conv multimedia appli	Sep
31029	Study of Feature Interactions Requirements	?
31030	Study on Privacy Capability	?
35010	Rel-6 OAM&P	Mar 04
35016	Charging Management	Mar 04
34021	Enhanced Tandem Free Operation - not yet approved	NA
34022	Packet Switched Streaming Services Rel-6	Dec
TBD	CAMEL	Sep
34023	AMR-WB extension for high audio quality	Sep
50056	Enhanced A/Gb feasibility study	Mar 03
50063	Flexible Layer One for GERAN	June
50041	Uplink TDOA feasibility study	Mar 03
50401	Addition of frequency bands to GSM	Mar 03
50130	Seamless support of streaming services in A/Gb mode	June
51101	Single Antenna Receiver Interference Cancellation (SAIC)	June
50500	Support of Conv Services in A/Gb mode via the PS domain	Mar 04

Sorted by Completion Dates

- **Using the same codes, the following slides sort the features by Foreseen Completion Dates**

FCD of Features sorted by FCD (1/3)

Unique ID	Feature	FCD
1800	Rel-6 UICC/USIM enhancements and interworking	Mar 03
42005	Rel-6 MExE enhancements	Mar 03
50056	Enhanced A/Gb feasibility study	Mar 03
50041	Uplink TDOA feasibility study	Mar 03
50401	Addition of frequency bands to GSM	Mar 03
9	RAN improvements	June
50063	Flexible Layer One for GERAN	June
50130	Seamless support of streaming services in A/Gb mode	June
51101	Single Antenna Receiver Interference Cancellation (SAIC)	June
32015	Radio optimisation impacts on PS domain architecture	Sep
2062	Subscription Management	Sep
34300	Perf charact of def codecs for PS conv multimedia appli	Sep
TBD	CAMEL	Sep
34023	AMR-WB extension for high audio quality	Sep
32033	Handling of early UEs	Sep
1216	Improvements of Radio Interface	Sept+Mar 04
11032	Interop & Comlity for IMSs using difft "IPconvity Networks"	Sep/Dec
31006	Speech Recognition and Speech Enabled Services	Sep/Dec

FCD of Features sorted by FCD (2/3)

Unique ID	Feature	FCD
32016	QoS Improvements	Sep/Dec
2544	Multimedia Broadcast and Multicast Service	Dec
32021	IMS Phase 2	Dec
2499	Support of Presence Capability	Dec
31012	WLAN-UMTS Interworking	Dec
15010	Rel-6 OSA enhancements	Dec
34022	Packet Switched Streaming Services Rel-6	Dec
1652	Emergency call enhancements	Dec
31018	Network Sharing	Dec/Mar 04
33002	Support for subscriber certificates	Dec/Mar 04
42009	Multimedia Messaging (MMS) enhancements	Dec/Mar04
32023	Location Services enhancements 2	June+Mar04
31008	Generic User Profile	Mar 04
35010	Rel-6 OAM&P	Mar 04
35016	Charging Management	Mar 04
50500	Support of Conv Services in A/Gb mode via the PS domain	Mar 04
1571	Security enhancements	Mar 04
1365	Support of Push Services	Mar/June04

FCD of Features sorted by FCD (3/3)

Unique ID	Feature	FCD
31015	Priority Service	?
31030	Study on Privacy Capability	?
2	Evolutions of the transport in the UTRAN	NA
4	Evolutions of the transport in the CN	NA
2527	Emergency calls without UICC/SIM in netw. with IMS	NA
31010	Digital Rights Management	NA
31029	Study of Feature Interactions Requirements	?
34021	Enhanced Tandem Free Operation - not yet approved	NA

Conclusions from SA#19

- **It will be decided at next SA plenary whether Rel-6 freezing date is December 2003 or March 2004.**

- **The freezing of the technical content of Rel-6 (i.e. the complete list of Rel-6 Features) will also be defined at next SA plenary.**