Review of the
Work Plan at Plenaries #25

This version includes updates from TSG #25

Content

- **Review of non-Release related activities**
- **Review of on-going features**
  - **Features completed by September 2004**
  - **Features to be completed by December 2004**
  - **Features to be completed after December 2004**
- **Conclusion**

In *Black*: Name of the task
In Red: important statement
In Green: open points to be solved
"FCD" = Foreseen Completion Date

Notes

- **Clarifications on the use of the word "complete" in these slide and in the Work Plan:**
  - **"complete", when used alone, refers to "100% complete"**
  - **When applied to a Feature/WI, it means that there are no known technical open issues for the item.**
  - **When applied to a TS/TR, it has the same meaning: no known technical open issues left.**
    - **A TS/TR brought for approval is from 80 % up to 100 % complete (in accordance to the 3GPP rules).**
    - **As long as it is not 100 % complete, it is not reported as "complete" in these slides.**
    - **A TS/TR can be indicated as "complete" even if (unexpected) corrections are proposed later on**

- **The dependencies on external fora (e.g. IETF, OMA) are not all explicitly listed in these slides**

Non-Release related activities

Testing, Pre-Rel-6 and Feasibility Studies

UE testing

- **T1 Release 99 Test Cases (TC): Quick progress continuing: 270 CRs at T#25 (97 TTCN, 173 Prose)**
    - **T1 progress on GCF packages TCs:**
        - **RF:**   **Package 1: 8 approved TCs out of 8 (100%),**
                              Package 2: 18 approved TCs out of 20 (90 %)
                              Package 3: 8 approved TCs out of 10 (80%)
                              Package 4: 8 approved TCs out of 5 (80%)
        - **SIG (TTCN):**   **Package 1: 93 approved TCs out of 99 (94 %)**
                              Package 2: 81 approved TCs out of 95 (86 %),
                              Package 3: 76 approved TCs out of 97 (80 %)
                              Package 4: 22 approved TCs out of 96 (23 %)
    - Target remains 100% completion after T1#25 in Nov 04

- **Other Releases: Work progressing on**
    - **testing of LCRTDD (Rel-4): 101 TC drafted so far**
    - **Testing of HSDPA: 22 new test cases introduced covering state transition**
    - **Testing A-GPS Rel 6 Minimum Performance Requirements (but core spec not stable)**

GERAN Testing

UE/MS Testing

- *MCC task 272 created recently for this task:*
  - *GERAN-3/GERAN steer the task 272*
  - *An expert from the task 160 transferred to task 272*
  - *MCC leads task 272 and coordinates with task 160*

- *Not started yet (Rel-5): GERAN MS Conformance test for :*
  - *GERAN interface evolution FCD by November 2004 (was June)*
  - *Enhanced Power Control (*)*
  - *8-PSK Half Rate (*)*
  - *AMR Wide Band (*)*

  Alignment between the different test regimes for GERAN capable MS : test cases to be added to TS 51.010 80% FCD by Nov. 2004 (it was Apr. 2004)

BTS Testing

Not started yet (Rel-5): GERAN BTS Conformance test for :
  - GERAN interface evolution FCD by November 2004 (was June)
       - Enhanced Power Control (*)
       - LCS (Closed without progress at GERAN#19)

(*) FCD not before November 2004 (it was originally November 2003)

GERAN Rel-6 Testing activities

- **Support of the Multimedia Broadcast Multicast Service (MBMS) in GERAN (MS): started, FCD November 2004 (it was June 2004)**

- **GERAN Conformance tests for the Flexible Layer One (MS/BTS) : under evaluation, FCD November 2004 (it was Jan. 2004)**

- **Addition of frequency bands to GSM (TAPS) – Conformance tests :**
 not started, FCD *not before November 2004* (it was Nov. 03, then Feb. 04)

- ***GERAN MS testing for Multiple TBF in A/Gb mode* : FCD *November 2004 (it was January 2004)***

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

- **GERAN MS Conformance test for Advanced Receiver Performance: 10%, *FCD February 2005* (it was November 2004)**

- **Reduction of PS service interruption in Dual Transfer Mode / MS/BTS Conformance testing : START in *June 2004,* under evaluation, *FCD* November 2004**

Pre-Rel-6 Activities

- **No more additions on pre-Rel-6, work ongoing on corrections**

TSG RAN Feasibility Studies

–**Analysis of higher chip rates for UTRAN TDD evolution (R1)**
  – **TR 25.895 in version 2.0.0 submitted in RAN#25.**
  – **Feasibility Study completed, a corresponding new Feature is approved**

–**Radiolink performance enhancements (R1):**
  – **RAN1 agreed two CRs to TS 25.899 to complete the analysis of the gains of the ACK/NACK enhancement. The study is closed, a new WI based on the conclusion is approved**

–**Uplink Enhancements for UTRA TDD (R1)**
  – **Discussion on HARQ, Power Control, and the TPs were agreed. Latest TR 25.804 (v0.3.0)**
  – **Estimated completion level is 65%, Completion date: RAN #26 (12/04)**

–**Evolution of the UTRAN Architecture (R3)**
  – **Study on hold until MBMS is completed in WG3**

FS on (U)SIM Security Reuse by Peripheral Device on Local Interface

- **Draft TR 33.817: Feasibility Study on (U)SIM Security Reuse by Peripheral Devices on Local Interfaces was approved at SA#23.**

- **CRs to existing specifications are under discussion in SA3 and by telephone conference calls to be considered for agreement at SA3#35 (October 2004).**

Study on Privacy Capability

- **Input from OMA Requirements addressed**
- **Requirements study performed in TR 22.949 approved at SP-23. No new requirements have been established, i.e. all the information which needs to be protected is already protected.**
- **Work ongoing in external groups (e.g. OMA).**
- **No other work needed at this time.**

BARS

In full: Bandwidth and Resource savings and Speech Quality enhancements

- **Stage 2 TR 23.977 approved at SA#24.**
- **This is a Feasibility Study and is not relevant for deciding the completion date of Release 6**
- **No major work required as this is a FS.**
- **Some recommendations are already in place**
- **CRs on Harmonisation of AMR Configurations approved at SA#25 (c/o SA4)**

FS on IMS with real time services deployments

Created during SA#24 to include the two following BBs:

- **FS on IMS services using CS bearers**
  - **Original version presented by SA2**
  - **FS in TR 23.899 to be presented for information and approval in March 2005 (was December 2004).**
  - **Impact on Stage 2 and on Stage 3 not yet evaluated accurately, so no foreseen completion date.**

- **FS on adding media to CS calls and IMS sessions (CSICS: CS calls and IMS combinational service, "XIX")**
  - **Original version presented by SA1**
  - **Estimated completion date is December for the FS**

Review of on-going features

Features (partly) completed by September 2004

(completed items proposed to belong to Rel-6)

Done (Fully or viable part) *SP-040703*

RAN WI completed before TSG #25

- **Rel-6 improvements of Radio Interface**
  - **FDD Base Station Classification**
  - **Improved receiver performance requirements for FDD UE**
  - **Frequency bands: UMTS 850, UMTS 800, UMTS 1.7/2.1GHz.**
- **UE Positioning**
  - **Open interface between the SMLC and the SNR within the UTRAN to support Rel-4 positioning methods**
- **Rel-6 RAN improvements**
  - **Beamforming Enhancements**
  - **RRM optimization for Iur and Iub; Improved access to UE measurement data for CRNC to support TDD RRM**
  - **Network Assisted Cell Change from UTRAN to GERAN – Network Side Aspects**
- **Feasibility Studies**
  - **Low Output powers for FDD BSs**
  - **Uplink Enhancements for Dedicated Transport Channels**

Rel-6 Improvements of Radio Interface

- **Improvement of inter-frequency and inter-system measurement (R1).**
  - **Closed at RAN#25(09/04). No agreement on the gain of the proposed techniques. A SI may be opened at next RAN to focus on one of the proposals.**

Rel-6 RAN improvements

- **Remote Control of electrical antenna tilting (R3)**
  - **agreements were found for the remaining open issues**
  - **TR 25.802 and 4 new TSs 25.46x which specify the Iuant Interface will be presented to TSG RAN#25 for approval-**
  - **WI is completed (no more new technical inputs expected).**
  - **CRs can be expected for the next RAN3 meeting to finish the work**
  - **SA5 part also completed (TR 32.804 and 3 Rel-6 CR 32.642/3/5 approved at SA#25)**

IMS Phase 2 (1/3)

Different independent items:

- **Stages 1 & 2 completed (in resp. 22.228 and 23.228) for:**
  - **IMS Local services: moved to Rel-7.**
  - **Interworking between IMS and CS networks**
    - **Stage 3 in TS 29.163 approved at CN#21. Work completed.**
  - **interworking with non-IMS IP networks,**
    - **CN1 Stage 3 (SIP/SDP issues, as e.g. preconditions) completed now**
    - **CN3 aspects SIP/SDP issues are completed.**
    - **CN3 IP v4/v6 Interworking aspects: TS 29.162 presented for information at CN#25 (planned for approval at CN#26), but important CRs expected up to December (was September)**
  - **Mn interface (IM-MGW to MGCF) enhancements**
    - **Stage 3 in TS 29.332 (CN4) sent for approval at CN#25**
    - **Stage 3 in TS 29.163 (CN3): Completed in March 2004**
  - **Mp (MRFC - MRFP) interface protocol definitions : Moved to Rel 7. See corresponding slide.**

Done (Fully or viable part) *SP-040703*

IMS Phase 2 (2/3)

Stages 1 and 2 completed for (contd):

– **Lawful Interception in the 3GPP Rel-6 architecture**
  - **Completed now**
– **IMS Group Management:**
  - **Stage 2 completed**
  - **Stage 3 (CN1) is 80 % complete, FCD is December 2004 (was September)**

Other Items:

– **IP v4-based IMS: TR 23.981 was approved at SA#24 (June 2004). this is a TR with recommendations, which does not require associated stage 3 work. There should not be any stage 3 work necessary. It has been decided at SA#24 that a Rel-5 version of TR 23.981 should be creatred.**
– **Enhancements to Cx and Sh interfaces:**
  - **New specification to coordinate Diameter-based interfaces (3GPP TS 29.230) is approved in CN#24.**
– **Additional SIP Capabilities support (CN1)**
  - **This covers various minor enhancements to SIP, and the main work involves taking new RFCs for SIP as they are approved by IETF, and stating how 3GPP supports those extensions. 3GPP work complete.**

IMS Phase 2 (3/3)

- IMS Conferencing
  - **Stage 2 completed, Stage 3 85% complete, TS 24.147 is taken to this plenary for approval. FCD is December.**
- IMS Messaging
  - **Stage 2 completed, Stage 3 is 52% complete (was 50% last time…), target is December 2004 when TS 24.247 will be sent for approval.**
  - **Task allocated to T2 on Deferred Messaging Type of IMS Messaging (by adding SIP addressing in MMS) but very little progress due to no input. Interest to be checked at SA2. If no supporting companies, to be deleted at next TSG.**
- IMS Management
  - **IMS Network Resource Model (NRM) included via CR in SA5's Core NRM (TS 32.63x).**

- **Other related 3GPP aspects:**
  - **Gq (PDF – P-CSCF) interface: see slide on QoS**
  - **See also slide on Performance characterization of default codecs for PS conversational multimedia applications (SA4)**
  - **For IMS charging, strong dependency on IETF Diameter (see Charging slide)**
- **Dependencies:**
  - **Stage 3 of IMS Phase 2 is closely dependent to the progress made by IETF**

Done (Fully or viable part) *SP-040703*

Interoperability and commonality between IMS using different IP connectivity networks (IMSCOOP)

- 3GPP work **completed**
- 3GPP part of the work on "Commonality" and "Interoperability" closed in December 2003.
- Work expected to be done at **3GPP2** for "Interoperability". No 3GPP dependency on this work.

Push Services

- **Stage 1: Stable, in TS 22.174**
- **Stage 2: TR 23.976 approved at SA#23.**
- **The mechanisms to support Push are already in place, so no more work is needed.**
- **Work Complete except for some specific stage 3 issues to be covered by CRs.**

Done (Fully or viable part) *SP-040703*

Speech Recognition and Speech Enabled Services

- **Stage 1:TR 22.977 and TS 22.243 on SES approved at SA #17.**
- **Stage 2: TR 23.877 approved at SA#23.**
- **SA4 on Codec Work to Support Speech Recognition Framework for Automated Voice Services. Enhanced DSR is recommended for SES, use of AMR and AMR-WB is also possible (with reduced performance). TS 26.243 presented for approval at SA#24, with relevant CRs to TS 26.235 and TS 26.236. Completed, except for a TR containing the selection performance evaluations (not critical, TBC by DECEMBER 04).**
- **A WID was asked to be produced for CS Support of Speech Recognition, but this has not been done so far**
- **A new codec is defined, but the negotiation mechanisms are already in place so no additional work is needed from CN1.**
- **OMA's dependency on Multimodal support to be completed by June 2005.**

Done (Fully or viable part) *SP-040703*

Digital Rights Management (DRM)

3GPP Work Completed

- 3GPP Stage 1 in TS 22.242, stable, but OMA defines its own Stage 1. TS 22.242 technical text is to be replaced by a reference to OMA's Stage 1.

- For Stages 2 and 3, it has been decided to refer to OMA work - LSs exchanged with SA4 on status of the PSS and 3GP file format specifications

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

- OMA's work (Stages 2 and 3) completed last May

Done (Fully or viable part) *SP-040703*

WLAN/UMTS interworking (1/2)

Note: these slides refer to Scenarios 1 to 3

- **Stage 1: Work is stable; Fine tuning in progress. Latest clarifications on:**
  - **WLAN PLMN Selection**
  - **Use of the SSID List at WLAN PLMN Selection**
  - **Interworking between PLMN and WLANs clause 5.1.7.1**
  - **Relationship between different levels of WLAN interworking**
  - **WLAN identities lists for I-WLAN selection**
- **Stage 2 in TS 23.234, approved at SA#23**
- **Stage 3 detailed in next slide**
- **Other aspects:**
  - **SA1 clarified the WLAN PLMN selection requirements based on SA2 LS. T3 have added the user controlled and the operator controlled PLMN selector lists to USIM.**
  - **WLAN Interworking Security TS 33.234 was presented to TSG SA#23 and approved. CRs at SA#24. Almost complete.**
  - **SA5 WLAN charging (32.252) approval 6 months after 23.234 is stable (03/2005)**
  - **See new WID on support of SMS and MMS over IP networks (including WLAN) proposed by SA2**

Done (Fully or viable part) *SP-040703*

WLAN/UMTS interworking (2/2)

For scenarios 2 and 3:

– **CN1: work in progress, TS 24.234 brought to this plenary for approval.**
– **TS 29.234 presented for approval in CN#25. Work almost completed.**

For scenario 2:

– **CN4 aspects: WID updated; new requirements (reference points) from SA2 added.**

For scenario 3:

– **CN1 completion is 60 % aiming for December 2004 (was September).**
– **CN3 responsible for Wi interface. TS 29.161 on Wi interface to be presented to CN#25, completed now.**
– **New interfaces (e.g. Wg and Wp) and some SA2 additions have been now analysed by CN, All interfaces are now covered, so the question on defining the necessary interfaces in Rel-6 is no more relevant.**

CN1 Open issues:

– **On all scenarios: Alternative NAI, PLMN selection restructuring.**
– **On scenario 3: subsequent tunnel setup, timers, errors, PDG redir.**

Priority Service

- **FS completed: TR 22.950 approved at SA#16. CRs provided on existing specs.**
- **TR 22.952 on Priority service implementation guide approved at SA#22 ; Fine tuning in progress.**
- **No Stage 2 and no stage 3 needed. The intent of this "Guide" is to describe how existing 3GPP specifications support the high-level requirements identified for Priority Service in TR 22.950.**
- **Work complete**
- **Work on BB on Priority for Multimedia has started in SA1, to be officially done for December, more likely to be completed by June 2005 (to be part of Release 7)**

Done (Fully or viable part) *SP-040703*

QoS Improvements

This Feature consists in:

- **Dynamic Policy Control Enhancements for End-to-End QoS**
  - **The following work is based on the Feasibility Study in TR 23.917**

  - **Stage 2: Considered Stable. The FS and its associated TR 23.917 are discontinued. On Gq (PDF – P-CSCF) interface : actual Stage 2 work covered by CRs on 23.207, approved at SA#24.**
  - **Stage 3 (CN3): Draft TS 29.209 for "Policy control over Gq interface". To be completed now, September 2004. Some outstanding issues to be resolved by December 2004.**

Performance characterization of default codecs for PS conversational multimedia applications

- **Status: 100% completed.**
  - **Phase 1 of testing completed and approved at SA#22**
  - **Phase 2 of testing including two more tests with more MM codecs and Global Analysis of all results completed at SA#23**
  - **Approval of the testing work done at SA#23**
  - **TR 26.935 v. 2.0.0 approved at SA#24**

Done (Fully or viable part) *SP-040703*

UICC/USIM enhancements and interworking for Rel-6

USIM toolkit enhancements completed (corrections being performed)

– **TR 31.919 "2G/3G Java Card™ API based applet interworking"** approved at T#23.

– **TS 31.130 v 2.0.0 (U)SIM API for Java Card™ approved at T#23.**

- USSD message transfer to USIM. WID approved at T#23. Technical work in progress. Completion planned for December 2004

- Test specification for (U)SIM API for Java Card ™ WID approved at T#23. Technical work in progress.

CAMEL

- **Rel-6 CAMEL 4 Stage 2 (TS 23.078) and Stage 3 (TS 29.078) completed, being corrected**

- **WID "CAMEL prepay interworking with SCUDIF (Service Change UDI Fallback)" (SCCAMEL) was approved in CN#22. Related CRs are approved by CN2 and fowarded to CN#23 for approval. The work on Rel-6 WI SCCAMEL is completed.**

- **Rel-7 Stage 1 created (TS 22.078), Stages 2 and 3 not started**

- **Note that all CAMEL issues are handled in CN4 (CN#24 officially closed CN2)**

Security Enhancements Rel-6

- **Network domain security**
  - **NDS/IP: TS 33.210 under Change control. Complete**
  - **NDS/AF TS 33.310 (Application Framework). Complete**
- **Key Management of group keys for Voice Group Call Services: CR to update Annex F of TS 43.020 agreed in SA3#34 for approval.**

  - **GERAN A/Gb mode security enhancements :**
    - **SA3 proposal to withdraw support of A5/2 accepted by SA#24, related specification work ongoing in GERAN.**
  - **TS 55.226 (A5/4 – GEA4 Specification) was presented to TSG SA#23 for information. This is a Rel-6 specification, but other specifications would need to be updated in order for this to be implemented. No comments since presentation to SA#23. 90% Complete. To be moved to Rel-7**

  - **G-MILENAGE Algorithm: completed at SA#18.**

Generic Authentication Architecture (GAA)

- **Stages 1 and 2 defined by SA3:**
  - **TR 33.919 GAA System Description to be presented to SA#25 for approval.**
  - **TS 33.220 GAA Generic Bootstrapping Architecture. Approved at SA#23. SA3 still working on some issues which might impact T3.**
  - **TS 33.221GAA Support for Subscriber Certificates. Approved at SA#23.**
    - **S3 has decided to refer to the Wireless Identity Module (WIM) as the element in the UICC which is in charge of storing these certificates. The WIM is handled by OMA, not by 3GPP. Therefore no work is needed within T3. OMA dependencies completed.**
  - **TS 33.141 GAA/HTTPS. Approved at SA#24.**
- **Stage 3 defined by CN4 and CN1:**
  - **At CN1: TS 24.109 for approval to this CN plenary. 85%, Dec 2004**
  - **At CN4: TS 29.109 approved in CN#25. Work completed.**
- **SA1 and SA2 work completed.**

Done (Fully or viable part) *SP-040703*

MExE Enhancements Rel-6

- ## *WID MExE Rel-6 Improvements and Investigations*
  - **Completed at TSG-T#19.**

- ## *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.

Comment from TSG T#19: no real new service offered by this feature.

Done (Fully or viable part) *SP-040703*

GERAN Rel-6 1/2

Features:

- **Addition of frequency bands to GSM : COMPLETED**
- **Multiple TBF in A/Gb mode : COMPLETED**
- **Seamless support of streaming services in A/Gb mode: COMPLETED**
- **Flexible Layer One for GERAN: COMPLETED**
- **Single Antenna Receiver Interference Cancellation (SAIC): COMPLETED**
- **Support of Conversational Services in A/Gb mode via the PS domain: TR ready, FCD November 2004 (it was August)**
- **Alignment between the test-regimes for GERAN capable MS : 80% ready, FCD November 2004 (it was April)**
- **Uplink TDOA location determination for GSM/GPRS: WI deleted and replaced at GERAN#17 (see next slide)**

GERAN Rel-6 2/2

Feasibility studies:

- **Enhanced A/Gb feasibility study COMPLETED**
- **Uplink TDOA feasibility study COMPLETED**
    - **Uplink TDOA location determination for GSM, CS domain: COMPLETED, except potential LMU performance specs.**
    - **Uplink TDOA location determination for GPRS, PS domain: 95% ready, FCD November 2004**
    - **Downlink Advanced Receiver Performance (ARP): 10% to 75% ready, FCD November 2004 (it was June 2004)**
    - **Reduction of PS service interruption in Dual Transfer Mode: Study of use cases and requirements ready, Performance Study of Current Procedures ready, FCD November 2004 (it was June 2004)**

Features planned to be completed by December 2004

(might belong to Rel-6 or 7)

FDD Uplink Enhancements (EDCH)

- **Physical Layer (R1) :**

  - Agreement on TTI and physical channel structure, and discussed about the signalling support for HAR principle and scheduling principle. 30% of the work completed.

- **Layer 2 and 3 Protocol Aspects(R2):**

  - . Progress on TTI length values and TFC selection (e.g. priorities) decisions, Hybrid ARQ (retransmissions, processes), scheduling grants. Level of completion: 40 %.

  - Open issues: details of the TFC selection and Hybrid ARQ

  - Stage 2 TS 25.309 is updated and proposed for approval.

- **Iur Iub Aspects (R3):**

  - Work was started in the last RAN3 meeting. The completion level is estimated 5%

  - A WG internal document (TR R3.015) was agreed to collect all RAN3 agreements

- **RF and Performance (R4):**

  - First set of proposals for requirements & tests, for BS & UE, presented.

  - Agreement on the Cubic Metric as the tool to determine the impact of multicode transmission on UE Power Amplifiers

- **Foreseen completion date is December 2004 except for the performance requirements to be completed after**

Rel-6 RAN improvements

RAB support enhancement (R2)

- **Work focused how to optimize the RABs for IMS voice over IP**
  - **RTCP flow multiplexed on the same PDP context as that of RTP flow but carried over separate Radio Bearers" will not be pursued in RAN2. SA2 and SA4 were informed about this decision.**
  - **Usage of secondary Scrambling code for Voice over IMS under discussion (RAN1/RAN2).**
- **Level of completion: 80%. Estimated Completion date: RAN#26**
- **Work on ROCH expected for next RAN2**

- **Optimisation of downlink channelisation code utilisation for FDD (R1)**
  - **Some contributions were submitted in each WG (RAN1/2/3), but they were not discussed due to lack of time.**
  - **Target completion date: RAN#26(12/04)**

- **Optimisation of downlink channelisation code utilisation for TDD: Rel-7, see corresponding slide**

Charging Management

TSG Approval target moved to Dec 2004 (was Sep 2004)

Already SA Approved:
- **32.250 / 32.297**

SA#25 approved:
- **32.240 / 32.251 / 32.270 / 32.295 / 32.299**

for SA#25 information for the 2nd time:
- **32.296 OCS Applications and interfaces**

Completion date Dec 2004:

- **32.260   IMS charging**
- **32.271   Location Services (LCS) charging**
- **32.296   Online Charging System (OCS) Applications and interfaces**
- **32.298   Charging Data Record (CDR) parameter description**

At risk/ Completion date uncertain:

- **32.252   Wireless Local Area Network (WLAN) charging (FCD March 05)**
- **32.272   Push-to-talk over Cellular charging (Co-ordinate with OMA)**

Multimedia Broadcast/Multicast Service (1/3)

- **Stage 1 completed and stable in TS 22.146.**

- **Overall Stage 2 (SA2) in TS 23.246 approved at SA#21, important CRs provided, now 100% completed.**

- **CN1 work is 90% completed. Completion date is moved from September to December 2004. The work was started in TR 29.846, converted to CRs on existing TSs starting at CN#25.**

- **CN3 has selected Diameter for Gmb interface. Diameter is the current working assumption. CN3 consider this WI as 85% complete, aim to finish in December 2004 (was September)**

- **CN4 work complete, covered by CRs on TS 29.060 (GTP).**

- **MBMS Security:**
  - **SA3 Security Work: TS 33.246 to be presented to SA#25 for approval. 90% complete.**
  - **Joint meeting SA3 / SA4 on MBMS Security held in August 2004**
  - **Decision to allow use of both Terminal and UICC-based solutions.**

Multimedia Broadcast/Multicast Service (2/3)

Support of MBMS in GERAN : 60% completed, FCD Nov. 2004 (it was June 2004).

Introduction of MBMS in RAN:
- **RAN1 and RAN2:**
  - **Agreement on the description of the MICH.**
  - **Progress on MBMS change information and MBMS neighbour cell information.**
  - **Progress on Frequency Layer Convergence and MBMS.**
  - **Joint session between RAN2 and SA4 to clarify the repair functionality, service announcement and other issues.**
- **RAN3**
  - **Progress on UE linking via Iur. Stage 3 CR editing has started.**
- **RAN4**
  - **Interaction of R99 measurement requirements and MBMS under study.**
- **Open issues: Soft combining mandatory, UE capability, delivery method of the scheduling information, soft combining, performance issues**

- **Level of completion: 80%, Completion date: RAN#26, December 2004.**

- **New WI approved at RAN#25 for UE performance requirements for MBMS, see slide on RAN new WIs.**

Multimedia Broadcast/Multicast Service (3/3)

- **MBMS User Services**

Now a BB under MBMS. Previously known as feature "Teleservices using MBMS"

- **Stage 1 approved in TS 22.246 at SA#22**

- **SA2 not really involved in the User Service definition**

- **SA4 work: 60% completed**
  - **TS 26.346 "Multimedia Broadcast/Multicast Service; Protocols and Codecs" presented for information at SA#25**
  - **FCD December 2004 (asked to be part of Release 6)**

- **No work needed to be done by CN1 (no change needed on the WID, WID in line with this statement).**

A GLOBAL INITIATIVE

OAM&P (1/2)
Operation, Administration, Maintenance and Provisioning

Four independent BBs (1/2):

- **Principles, high level Requirements & Architecture (completed June 04)**
- **Network Infrastructure Management (target Dec 04 was Sep 04)**
    - **20 TSs for upgrade to Rel-6 via CR or automatically**
    - **11 TSs for SA#25 approval (listed in SA5 report)**
    - **9 TSs to be ready by December (either new TSs or CRs) on Notification log IRP, Name convention for Managed Objects and CN Resources IRP**
    - **Completion date uncertain for TS on Inventory and Security Management IRP**
    - **Withdrawn from Rel-6: Core Network IMS Network Resource Model IRP**
- **Performance Management (target Dec 2004 was Sep 04)**
    - **SA Approved: 32.411/2/3 on Trace concepts and requirements/ Information Service / CORBA SS**
    - **To be completed by December: 32.432/5/6 Performance Measurement File Format Definition / XML/ ASN.1**
    - **Withdrawn from Release 6: 32.431/3/4, Performance Measurement Collection IRP**

OAM&P (2/2)
Operation, Administration, Maintenance and Provisioning

- **Four independent BBs (2/2):**
  - **Subscriber and Equipment Trace Management**
    - SA5 approval target for overall Trace functionality remains **Dec 04** (further info awaited from CN1&4 and RAN3.)
    - SA Approved: 32.421 Trace concepts and requirements
    - SA#25 approved: 32.422-200 Trace control and Configuration Management
    - For SA#25 Information: 32.423-100 (Trace data definition and management) and 52.008-100 (GSM subscriber and equipment trace)
    - Completion date 12/04: 32.423, 52.008 Subscriber and Equipment Trace Management

    - CN Trace WID brought to CN#25 for approval (involves CN1 and CN4). CN1 does not see any way to complete the 24.229 task for (IMS/SIP) trace without IETF dependency. IETF draft has not started yet, so the completion of the WI is delayed. CN1 part of work is targeted now for **June 2005** (CN#28). SA5 and CN4 part to be completed by **December**. Trace **has to be split in two parts:** the non-SIP-based Trace is for Rel-6, the SIP-based Trace is for Rel-7. WIDs to be provided accordingly.

IP Flow Based Bearer Charging

- SA2 TS 23.125 was approved at SA#23 and some cat B CRs and F CRs are presented for approval by SA#25. Now considered as stable.
- SA5 analysed SA2's TS 23.125. For GPRS it was added IP flow charging to the existing charging functionality in SA5 specs. Completed at SA#25.
- Diameter chosen as protocol solutions for IP flow charging.
- Gx and Rx interfaces being defined by CN3, work to be completed still by December.

MMS (Multimedia Messaging Service) Enhancements (1/2)

- **Stage 1 completed.**
- **Stages 2 and 3 handled by T2 (except MM1 stage 3 handled by OMA)**
  - **Application ID in MMS agreed**
  - **Several enhancement to MM1 and MM7 agreed**
  - **Further improvement on the handling of partial addressing failures agreed**
  - **Further work ongoing in the following areas:**
    - **Replace/ Cancel MM (MM1,MM7)**
    - **Delete Deferred MM (MM1)**
    - **IMS Messaging – completion at risk if no input**
- **Completion date shifted to December 2004 (was June then September)**
- **SA4 responsible for codec and media types. Work done ~90 %, FCD December 2004 (was September), asked to be part of Release 6.**
  - **Adoption of SVG Tiny 1.2 postponed until SA4#33 in November 04.**
  - **H.264/AVC approved at SA#25 as "recommended" decoder for MMS (and PSS)**
  - **See separate slides for audio/video codecs.**
- **SA5 MMS Charging (TS 32.270): approved at SA#25**
- **CN5 OSA MMS SCF (TS 29.198-15): approved at CN#25**

MMS (Multimedia Messaging Service) Enhancements (2/2)

- **Two new WIDs (BBs) approved at TSG-T#22**
  - **Handling of private addressing schemes in MMS**
    - **Status: Stage 2 including new interface MM10 (MMS R/S – MSCF) agreed, planned completion date (completion of Stage 3) shifted to December 2004**
  - **FS Multiple MMS Relay/Server Architecture**
    - **Status: Draft TR and draft CRs presented to T2. General consensus that MM4 is suitable for multiple R/S within an MMSE but further analysis is required. Planned completion date shifted to December 2004. Work item will be deleted at T#26 if no further input.**

Subscription Management (SuM)

TSG Approval target moved to Dec 2004 (was Sep 2004)

SA Approved

- **32.140 SuM Requirements**
- **32.141 SuM Architecture**
- **32.171 SuM Network Resources Model (NRM) IRP Requirements**
- **32.803 Process Guide; Use Cases in UML**

Rejected at SA#25:
- **32.172 SuM NRM IRP Information Service (IS) (approved at SA#25)**

Target SA#26 Approval Dec 2004 for:

- **32.173 SuM NRM IRP CORBA Solution Set – baseline draft available**

Network Sharing

- FS in TR 22.951 approved at SA #18.
- Stage 1: Complete, covered by CRs.
- Stage 2: Complete. TR 23.851 approved in March 2004. TS 23.251 approved at SA#24.
- Stage 3 started. 90% completed, completion date moved to December 2004 (slip since March). An revised WID from CN1 is for approval in CN#25.
- RAN part:
  - Good progress related to PLMN-Id, e.g. decisions on re-routing function and indication of selected PLMN-Id, broadcast of multiple PLMNs and indication of selected PLMN.
  - Open issues: What PLMN identity information is to be provided in CN INFORMATION INFO message and in INITIAL DIRECT TRANFER message. RANAP reject causes.
  - Estimated level of completion: 85%. Completion date: December, was September.
- No standardised OAM&P for this feature in Rel-6

OSA Improvements

FCD moved to Dec 04 (was 09/04) because of CN5 new Stage 2 responsibility

No dependencies BUT overlaps with OMA (29.199 Parlay X Web Services). LS submitted by CN5 to SA, Cc CN.

- **Stage 1: CN5 draft CRs for SA1 22.127 for "Requirements removal" on User Data Management (OSA-GUP support), IP session function, User-Application Authentication.**

- **Stage 2: CN5 takes over from SA2 (subject to CN#25 endorsement) responsibility for 23.127.**
  - **3 CRs at CN#25**
  - **TS 23.127 covers both OSA&VHE and VHE is not anymore part of Rel6. The latest version of TS 23.127 will be used to create the new OSA-only TS 23.198, for submission to CN#26. The VHE TS was downgraded into a TR in pre-Rel6 releases.**
  - **final Rel6 OSA Stage 2 to be submitted to CN#26, as agreed by CN#24.**

- **Stage 3:   Target met for CN approval 09/2004 - work completed (WID in NP-040351)**
  - **Approved at CN#25:**
    - **Multi-Media Messaging SCF – TS 29.198-15**
    - **Parlay X Web services under WT "OSA interfaces at high-level of abstraction" – 14 TSs 29.199-x**
    - **High Availability at OSA API level – CRs submitted**
      - **WT for TR on "Presence APIs and Mapping to SIP" from CN1 WID "Support of Presence Capability" should be deleted from the WID. Reason: NO resources.**

Packet Switched Streaming Rel-6 (1/2)

- **Stage 1 completed in TS 22.233. New set of enhancements on PSS approved at SA#18.**
- **SA4 has restructured the whole set of main specifications for PSS Rel-6 (TS 26.244, TS 26.245 and TS 26.246, CRs to TS 26.234, all approved)**
- **Adoption of SVG Tiny 1.2 postponed until SA4#33 in November 04**

Completion in SA4 expected by December 2004 (it was March); Status: 90 % completed (part of Release 6).

Codecs selection for PSS and MMS:

PSS, MMS, PS Conversational, CS Multimedia (3G-324M) video codec:

H.264/AVC approved at SA#25 as "recommended" decoder for MMS, PSS, PSC and 3G-324M.

Status: technical work almost completed, signaling to be checked by December 2004 (part of Release 6). SA4 tasked to possibly define the encoder.

PSS/MMS Audio codec: see next slide

Packet Switched Streaming Rel-6 (2/2)
Audio Codec (for PSS and MMS)

Competition for Lower and Higher Bit Rate Audio Codec approved at SA#19

- **Design Constraints and Performance Requirements completed**
- **Subjective tests and Global Analysis completed**
- **Approval of the selection tests (for ETSI to pay Host/Testing and Global Analysis Laboratories) completed**

- **PSS Audio Codecs: Set of Specs on Extended AMR-WB (AMR-WB+) and Enhanced aacPlus completed (except fixed-point version)**
- **MMS Audio Codecs: set of specs for both Extended AMR-WB (AMR-WB+) and Enhanced aacPlus approved at SA#25**
- **Verification, characterisation tests to be completed**
- **TR on performance related to content/bit rate, not critical, to be completed after SA#26**
- **Fixed-point codec versions and conformance issues (e.g. test sequences) to be completed**

FCD December 2004 (asked to be part of Release 6)

AMR-WB+

- In full: AMR-WB extension for high audio quality
- Status: **95% completed,** SA4 proposal on finalization of the AMR-WB+ work item approved at SA#25. FCD **December 2004** to complete the characterization work (asked to be part of Release 6)

Codec Enhancements for PS Conversational Multimedia Applications

- SA4 Status: **80% completed**
- FCD **December 2004** (asked to be part of Release 6)

3G-324M Improvements (CS)

- SA4 Status: **80% completed**
- FCD **December 2004** (asked to be part of Release 6)

Presence

- **Stages 1 and 2 approved in resp. TS 22.141 and TS 23.141**
- **Work in SA4 Codec and Formats: Proposed to be deleted at previous plenary if no progress was made. Result: progress made (from 10 to 20 %). The completion date for 'Media Codecs and Formats for IMS Messaging and Presence' depends on contributions and remains a bit uncertain (SA#26 at the very earliest, but SA#26 still could be possible).**
- **CN1 work to be completed by December 2004 (slip since December 2003): Currently 91% completed- was 90 % last time. TS 24.141 approved at CN#24.**
- **CN3 is responsible for the Pk interface for the support of Presence. Work expected to be complete by December 2004. No input received so far, supporting companies asked to contribute.**
- **OSA Stage 3 "Presence APIs and Mapping to SIP"**
  - **TS-part completed under Feature "OSA Improvements"**
  - **TR-part: no resource in CN5, WT to be deleted from CN1's Presence WID.**

Done (Fully or viable part) *SP-040703*

LCS enhancements 2 (1/2)

It consists of the following independent LCS-related improvements:

– **Improvement on Le interface**

– **Enhanced support for anonymity and user privacy**

– **Enhanced inter-GMLC interface**

– **Location Services support for IMS public identities**

– **New area event for location service triggering reports**

- **Stage 1 completed by SA1 at SA#20.**

- **Stage 2: all work completed by CRs on 23.271**

- **Stage 3: OMA does most of the Stage 3. OMA to finish their work by December 2004. No CN1 work is expected, WID to be clarified accordingly. CN4 refers to OMA specs in particular for Le, Lr and Lpp interfaces.**

- **No RAN nor GERAN impacts foreseen for these aspects.**

- **TS 32.271 on LCS charging to be approved in December (was September).**

- **See also UTDOA in GERAN**

LCS enhancements 2 (2/2)

RAN and GERAN aspects ("UE Positioning")

- **A-GPS minimum performance specification (R4):**
  - **4 conference call organized since last TSG RAN to handle this WI.**
  - **This work method has proven very productive, agreement was reached on all the pending issues.**
  - **Performance requirements, test cases and test procedures have been agreed**
  - **TS25.171, Requirements for support of A-GPS (FDD) is presented to RAN#25 for APPROVAL**
  - **Open issues: Detailed test specification (T1 RF)**
  - **The WI is completed**

- **U-TDOA positioning method in RAN**
  - **The proposal was presented in all RAN WGs. RAN1 & RAN2 jointly decided that the Study phase was not necessary (because this would not require modifications to the UE or Node B physical layer) and that a Work Item should be started directly. RAN#25 approved the new WI, see slide on RAN new WIs**

- **U-TDOA positioning method in GERAN**
  - **GERAN aspects 95 % complete**

Rel-6/7 RAN improvements

RAB support enhancement (R2)

− **Optimisation of channelisation code utilisation for TDD (R1)**
  - **One document was submitted to RAN1 #38, but it was not discussed due to lack of time.**
  - **Target completion date: RAN#26(12/04) (might be late)**

Features to be completed after December 2004
(proposed to belong to Rel-7)

Rel-6 Improvements of Radio Interface

- **Improvements of receiver performance of HSDPA UE (R4)**
  - **Performance Requirements of Receive Diversity for HSDPA**
    - **On schedule. A first CR with new requirements for HSDPA UE categories 1 to presented at RAN#25, requirements for 10 codes UE (Categories 7 & 8) expected for completion in March 2005 (still proposed as a Rel-6 item).**
  - **A new Work Task has been approved: Improved performance requirements for HSDPA categories 7 and 8 (completion date June 2005)**

- **Asked to be considered as an exception in the Rel-6 calendar. -> "Exception status" to be considered at RAN and SA#26 according to the progress to be made in the meantime**

Multiple Input Multiple Output antennas (MIMO)

- **RAN1: Regarding "System Level Evaluation Methodology" and "Compatibility Assessment", the agreement was completed, and the text proposals have been included in the TR. TR 25.876 was updated to v 1.6.1.**

- **RAN2 : One document was submitted on possible MIMO signalling impact, but treated due to lack of time.**

- **RAN4 : One document was presented on the system level evaluation methodology.**

- **RAN3 : No activities.**

- **Estimated completion level is 60% at RAN1. Completion date for WG1: RAN #27(03/05), for WG2, 3 and 4: RAN #30(12/05)**

Generic User Profile

Work ongoing
- **Stage 1: TS 22.242 approved**
- **Stage 2: TS 23.240 approved**
- **TS 23.241 (GUP, Stage 2, Data Description Framework) approved in March 2004 (still to be aligned with 29.240) and TS 24.241 (GUP, Stage 3, Access; Common Objects) September 2004 (was December 03 then June).**
- **Stage 3: Outline of draft TS 29.240 approved at CN4#19**
  - **TS 29.240 about 45% ready. Will be sent for information at CN#26. Estimated finishing date CN#27 March 2005 (moved four times).**
  - **Dependencies on the Liberty Alliance Project**
- **GUP Security: it will be covered by CRs on existing specifications. Work on progress, in collaboration with Liberty Alliance, to be completed by September or December.**

3GPP Enablers for services like Push to Talk over Cellular (PoC)

- **No specific Stage 1 required. CRs to TS 22.228 might have to be produced (depends of results from SA2)**
- **Time schedule for SA2: June 2004 for information of TR 23.979, approval by December (but dependant on stable input from OMA). OMA's work to be completed by December.**
- **No Stage 3 identified so far (possible).**
- **SA5 cooperation on Charging with OMA MCC & PoC WGs (see Slide on Charging Management)**
- **SA4 mandated to produce the Speech Codecs for PoC. Work about to start. To be completed by December.**

IMS Phase 3 (to be created)

- Mp (MRFC - MRFP) interface protocol definitions
  - Target for Stage 3 in TS 29.333 (CN4): Moved to Rel-7. No contributions on this Topic till now. Mn-interface specification might be used as basis to develop 29.333 Work will not be finish before CN#28, June 2005 (moved from December).
- IMS Local services: moved to Rel-7.
  - Stage 3: still not started. FCD in CN1 is now June 2005. To be moved out of Release 6. Supporting companies have to create a new separate WID to have include in Release 7.

CS Video and Voice Service Improvements

- CRs presented at SA#23 for Stage 1
- Stage 2:
  - TR 23.801 was presented for information at SA#24
    - SA2 completion date set to December (was September)
    - SA2 consider the TR as a useful tool/place holder for the discussions on potential solution. More discussions might come on SCUDIF with ISUP etc, so SA2 want to keep the TR open. However, the TR is anticipated to be "abandoned" once agreements have been reached.
  - TR 23.903, " Redial Solution for Voice-Video Switching", Version 1.0.0 is presented for information at SA #25
- Stage 3: Potential impact on CN3 and GERAN (to be confirmed once Stage 2 is more stable).

New FS of Enhanced Support of Video Telephony started in GERAN (GP-042221)

Work just starting

PS domain and IMS impacts for supporting IMS Emergency calls

- **Service requirements for CS domain in TS 22.101 and for IMS aspects in TS 22.228. Work completed. No outstanding issues for SA1**

- **SA2 work completion to be completed by March 2005. No contributions received.**

- **Stage 3 Completion date June 2005.**

- **Dependencies from IETF, T3. RAN3 might be involved on priority. No action identified so far for GERAN.**

- **Foreseen Completion Date moved many times.**

System enhancements for fixed broadband access to IMS

- **WID to be presented at SA#25 (to be checked)**

- **TS 23.228 is affected and will be approved by SA#27, so TS 24.229 will also be affected.**

- **Corresponding WID approved at CN#25**

Support of SMS and MMS over IP networks

- **WID to be presented at SA#25 (to be checked)**

- **Anticipated completion date is SA#27**

Enhancement of E2E QoS

- **The mechanisms described in the QoS related TS, especially TS23.207, are not enough to achieve fully end-to-end QoS guarantees in case of an interworking with different IP network domains or backbone networks. So the ways to interwork QoS policies and control between different IP network domains may be needed.**
- **Completion date: March 2005**
- **Progress: 25% completion at September 2004**

ACBOP

In full: 3GPP Access Class Barring and Overload Protection

- **No specific requirements needed**

- **Feasibility Study in TR 23.898 presented for information at SA#24, planned to be completed by March 2005 (was September).**

- **Other aspects include impacts on RAN and GERAN.**

LCS enhancements 3

WID proposed at SA#25 by MCC to collect all new LCS enhancements:

- **LCS for 3GPP Interworking WLAN (SA1): Stage 1 Completed**
- **Accuracy of information Indication of capability (SA1)**

GALILEO

- **Support for Global Navigation Satellite Systems in GERAN (GERAN): draft CRs presented, awaiting Stage 1**
- **FS on applicability of GALILEO for LCS (SA2). Work stopped at SA2 because of lack of contributions.**
- **Extension of A-GPS to include GALILEO and other satellite navigation systems (SA1): no work started**

Selective Disabling of UE Capabilities

- **Work commenced on Stage 1**
- **updated WI presented for approval.**
- **potential OMA dependency**

All-IP Network Feasibility Study

- **Work commenced on Stage 1 (22.978);**

Enhancements of VGCS in public networks

- **Voice Group Call Services (VGCS) work commenced with CRs to Stage 1 (42.068);**

- **VGCS in public networks for communication of public authority officials approved in GERAN (GP-041837)**

- **WID presented at CN#25 for corresponding CN1 and CN4 aspects**

Multi system mobile stations

- ## **Work commenced in SA1**
- ## **WI proposed for update**
  - ### **Name changed to *Behaviour of multi system terminals***

After December   *SP-040703*

Other WIs for approval at SA#25

- **SA3: Security for early IMS**
- **Note that the SA1 WID on "Enhancement of the USAT MMS presentation" is finally not proposed for approval**

Other WIs approved at GERAN#21

- **Generic Access to A/Gb interface FS COMPLETED**
- **Generic Access to A/Gb interface (GP-042247)**
- **GNSS to include GALILEO in GERAN (GP-042268)**
- **FS of Enhanced Support of Video Telephony started in GERAN (GP-042247)**

New WIs approved at RAN#25

"Improved performance requirements for HSDPA categories 7 & 8".

– New WT under "Improved Receiver Performance Requirements for HSDPA", WG4 leads, completion by June 2005

"Inclusion of Uplink TDOA UE positioning method in the UTRAN specifications"

– New BB under "UE positioning", WG2 leads, completion by June 2006

"HS-DPCCH ACK/NACK enhancement"

– New WT under "RAB Support enhancement", WG1 leads, completion by December 2004

"7.68 Mcps TDD Option"

– New Feature, completion by March 2006

"MBMS performance requirements"

– New WT under "Introduction of MBMS in RAN", WG4 leads, completion by June 2005

"UMTS 2600"

– Agreed in principle pending the official request from ECC PT1, WG4 leads, completion by June 2005

Reminder on deleted items

Reminder on deleted items

- **Preferred framing protocol for bearer independent CS architecture, part of "Evolutions of the transport in CN", deleted at CN#19**
- **Enhanced Tandem Free Operation (eTFO) never approved**
- **Identity Portability in IMS deleted at SA#19**
- **Enhanced home environment control of security deleted at SA#19**
- **Security signalling flows for the Ze interface deleted at TSG#18**
- **Radio optimisation impacts on PS domain architecture deleted at SA#21**
- **Improvements of RRM across RNS and RNS/BSS deleted at TSG #21 due to lack of progress**
- **SI on Enhancements of OTDOA positioning using Advanced Blanking Methods. Further work in the area to be done under UE positioning Enhancements (generic WI)**
- **Feature Interaction, deleted at SA#21**
- **Enhanced HE control of security**
- **Policy-based control of DiffServ**
- **GERAN: GPRS Extended Measurement Reporting, GPRS Idle Interference Measurements, Unsynchronized (blind) Cell Change Order towards a GSM cell**

Conclusion

Conclusion

- **Some Foreseen Completion Dates have slipped since the previous plenary, so now a significant number of current Features are anticipated to be completed in December (18 Features completed in September, 14 foreseen to be completed by December).**
- **The following scheme is proposed:**
  - **Features already completed belong to Release 6**
  - **Features planned to be completed by TSG # 26 (December 2004) are anticipated to belong to Release 6 but final decision to be taken at SA#26 based on actual progress**
  - **Features planned to be completed after TSG #26 will belong to Release 7 or higher (except the exceptions)**
- **For "splitable" Features, the scheme above applies to the stand-alone parts of the Features**
- **Exceptions identified so far (to be confirmed in December): MBMS, FDD Uplink Enhancements (EDCH), Improvements of receiver performance of HSDPA UE**

A GLOBAL INITIATIVE