Review of the Work Plan at Plenaries #26

This version does not include updates from TSG #26

Content

- **Review of non-Release related activities**
  - **Testing**
  - **Pre Release 6**
  - **Feasibility Studies**
- **Review of on-going features**
  - **Features completed up to September 2004 (as reminder)**
  - **Features completed between September and December 2004**
  - **Features still not completed but asked to be part of Release 6**
  - **Release 7 Features**
- **Conclusion**

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UE testing

- **T1 Release 99 Test Cases (TC):**
    - **RF :** **Almost complete (more than 95 % done for FDD)**
    - **SIG (TTCN):** **Package 1: 94 approved TCs out of 99 (94 %)**
      Package 2: 87 approved TCs out of 95 (89 %),
      Package 3: 82 approved TCs out of 97 (88 %)
      Package 4: 77 approved TCs out of 96 (80 %)

  – Global target of at least 80% per package reached.
  – LS sent to GCF on a proposed way to handle problematic TCs.
  – LCRTDD work making good progress (200 TCs coded out of 400)
  – Work about to start or already started for new prioritised FDD GCF test cases in the following Work Items:
    - WI-012 = Remaining Release 99 issues
    - WI-013 = enhancements due to Releases 4 and 5 (excluding HSDPA, covered elsewhere)
    - WI-014 = HSDPA
    - WI-015 = A-GPS Rel 6 Minimum Performance Requirements

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 under evaluation (was June 2004)*
  - *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 Jan. 2005 (shifted twice from June 2004)

BTS Testing

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

(*) FCD under evaluation (it was originally November 2003)

GERAN Rel-6 Testing activities

- **Support of the MBMS in GERAN (MS): started, FCD January 2005 (shifted twice from June 2004 June 2004)**

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

- **Addition of frequency bands to GSM (TAPS) – Conformance tests : not started, FCD *not before January 2005* (shifted twice from June 2004)**

- **GERAN MS testing for Multiple TBF in A/Gb mode : under evaluation (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: 20%, *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**

GERAN Rel-7 Testing

- **Generic Access to the A/Gb Interface FCD June 2005**

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Pre Release 6 Activities

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

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RAN Feasibility Studies

– **Uplink Enhancements for UTRA TDD (R1)**

  – **Latest version of TR25.804 : v.1.0.0**

  – **Completion Level : 70%, Target completion date : RAN#26(12/04)**

– **Evolution of the UTRAN Architecture (R3)**

  – **Study on hold until MBMS is completed in WG3**

Completed FS:

– **Low Output powers for FDD BSs**

– **Uplink Enhancements for Dedicated Transport Channels**

– **Analysis of higher chip rates for UTRAN TDD evolution**

– **Radio link performance enhancements**

GERAN Feasibility Studies

All studies are **completed:**

- **Enhanced A/Gb**

- **Uplink TDOA**

  – **Uplink TDOA location determination for GSM, CS domain (completed except potential LMU performance specs).**

  – **Uplink TDOA location determination for GPRS, PS domain**

- **Downlink Advanced Receiver Performance (DARP)**

- **Reduction of PS service interruption in Dual Transfer Mode**

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, so completed from a 3GPP perspective.**

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. New WIDs to specify the phase 1 is available from both SA1 and SA2.**
  - **SA2 FS in TR 23.899 presented now for information, with partial conclusions. Approval foreseen in March 2005.**
  - **Stages 2 and 3 work 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")**
  - **TR 22.979 presented for information (and possible approval)**
  - **New WI for Combinational Services to implement recommendations**

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 providing Operator Guidelines to fix issues related to UMTS_AMR and AMR Harmonization presented to SA#26 (c/o SA4). These CRs use other WI acronyms, so BARS is still a FS.**

A GLOBAL INITIATIVE

MExE Enhancements Rel-6

- **Work completed since TSG T#19.**

- **It contains:**
  - **MExE Rel-6 Improvements and Investigations**
  - **MExE Run-Time Independent Framework Feasibility Study (TR 22.857)**

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RAN WI completed before TSG #26

- **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**
  - **A-GPS minimum performance specification**
- **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**
  - **Remote Control of electrical antenna tilting**

IMS Phase 2 (1/3)

Different completed independent items (1/3):

- **Interworking between IMS and CS networks (Stage 3 in TS 29.163)**

- **interworking with non-IMS IP networks, including SIP/SDP issues, as e.g. preconditions. Remaining item:**
    - **CN3 IP v4/v6 Interworking aspects: TS 29.162 approved at CN#26, CN1 also involved (CN1 work also completed in TS 24.229)**

- **Mn interface (IM-MGW to MGCF) enhancements (Stage 3 in TS 29.332 for CN4 and in TS 29.163 for CN3 aspects)**

- **Lawful Interception**

- **IMS Group Management complete (covered by Presence, IMS Messaging and IMS Conferencing)**

IMS Phase 2 (2/3)

Different completed independent items (2/3):

- **IP v4-based IMS**
  - TR 23.981 (Rel-6 version approved at SA#24) contains recommendations which does not require associated stage 3 work. A Rel-5 version of TR 23.981 has also been created, according to SA#24 decision.

- **Enhancements to Cx and Sh interfaces**
  - TS 29.230 (approved at CN#24) coordinates Diameter-based interfaces.

- **Additional SIP Capabilities support (CN1)**
  - This covers various minor enhancements to SIP. The main work involves taking new RFCs for SIP as they are approved by IETF, and stating how 3GPP supports those extensions.

- **IMS Conferencing**
  - Stage 3 90% complete (TS 24.147 approved in CN3#25). Remaining item: CN decision on IETF dependencies in Rel-6 (LS sent to CN). FCD pending on CN#26 decision.

IMS Phase 2 (3/3)

Different completed independent items (3/3):

- ## IMS Messaging
  - Stage 3 is 85% complete. TS 24.247 sent to CN#26 for approval. Remaining item 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 TSG #26, or supporting companies requested to produce WID in SA2.

- ## IMS Management
  - IMS Network Resource Model (NRM) included via CR in SA5's Core NRM (TS 32.63x).
  - 3GPP IMS Management objects is a new BB under the feature IMS2. CN1 WI IMS is updated to include the new specification TS 24.167 "3GPP IMS Management object; stage3; Release 6" which is brought to CN#26 for information. SA5 should be informed about progress of this work.

- ## IMS Charging
  - It contains TS 32.299 (Diameter charging applications, already SA approved) and TS 32.260 for SA#26 Approval. Some alignments needed with SIP (to be conduced by CN1)

IMSCOOP

Full name: "Interoperability and commonality between IMS using different IP connectivity networks"

– **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.**

A GLOBAL INITIATIVE

Speech Recognition and Speech Enabled Services

3GPP Work completed.

- **Stage 1 in TR 22.977 and TS 22.243**
- **Stage 2 in TR 23.877**
- **Stage 3 (SA4) in TS 26.243, with CRs to TS 26.235 and 26.236.**
  - **Stage 3 work was to study Codec aspects to support Speech Recognition Framework for Automated Voice Services.**
  - **The conclusion is that Enhanced DSR is recommended for SES. The use of AMR and AMR-WB is also possible with reduced performance.**
  - **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.**
  - ***Since September*: two new TS/TRs presented to SA#26:**
    - **TR 26.943 on Recognition Performance Evaluations of Codecs for Speech Enabled Services, containing the selection performance evaluations**
    - **TS 26.177 on Speech Enabled Services; DSR Extended Advanced Front-end Test Sequences**
- **OMA's dependency on Multimodal support to be completed by June 2005.**

Digital Rights Management (DRM)

Work Completed

- **3GPP Stage 1: *New since Sept:* TS 22.242 technical content is replaced by a reference to OMA's Stage 1 at SA#26.**

- **Stages 2 and 3 covered by OMA work. LSs exchanged with SA4 on status of the PSS and 3GP file format specifications**

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

WLAN/UMTS interworking (1/2)

For Scenarios 1 to 3:

- **Work complete except for open issues listed below**

- **Stage 1 in TS 22.234 and Stage 2 in TS 23.234 stable**

- **Stage 3:**

  - **CN1 aspects in TS 24.234.**

    - **Open issues:**

      - **alternative NAI (SA2, CN4, CN1) and related mechanism.**
      - **PDG re-direction removed from Stage 3**

  - **CN3 aspects in TS 29.161 on Wi interface**

  - **CN4 aspects in TS 29.234** (see comment on alternative

WLAN/UMTS interworking (2/2)

Other aspects on Scenarios 1 to 3:

– **Security aspects in SA3's TS 33.234**

– **Charging aspects in SA5's TS 32.252 WLAN. Target remains June 2005**

– **See SA2's new WID on support of SMS and MMS over IP networks (including WLAN). Guidance is requested from SA on possible overlap in WIDs**

– **See also T3 WID on USIM enhancements for WLAN/UMTS interworking**

Priority Service

Completed items:

- **FS in TR 22.950 (CRs provided on existing specs).**
- **TR 22.952 on Priority service implementation guide.**
- **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.**
- **Viable part completed**

Open items:

- ***New since Sept:* TR 22.953 on Multimedia Priority Service Feasibility Study started in SA1, to be officially done for December, more likely to be completed by June 2005. Splitting of Priority Service might have to be done.**

QoS Improvements

QoS Release 6 Improvements consist in Dynamic Policy Control Enhancements for End-to-End QoS.

Work completed.

- **No Stage 1**
- **Stage 2:**
  - **The FS and its associated TR 23.917 are discontinued.**
  - **On Gq (PDF – P-CSCF) interface: Stage 2 covered by CRs on 23.207.**
- **Stage 3 in TS 29.209 (CN3) for "Policy control over Gq interface".**

Performance characterization of default codecs for PS conversational multimedia applications

- **Status: 100% completed since SA#24**

  – **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 approved at SA#24**

UICC/USIM enhancements and interworking for Rel-6

Enhancements completed:

• **2G/3G Java Card™ API based applet interworking: completed in TR 31.919**

Enhancements with completion shifted to March 2005:

• **USIM enhancements for WLAN Interworking (The only remaining open point is to make a consistency check of TS 31.102, so no problem to complete it by March).**

• **USSD message transfer to USIM (confirmed to be completed by March).**

Test aspects:

• **Test specification for (U)SIM API for Java Card ™ : technical work in progress.**

• **Test specification for the security mechanisms for the (U)SIM application toolkit completed: TS 31.048 Test Specification for 23.048 for approval at T#26.**

• **USIM application toolkit Conformance Test Specification for Mobile Equipments: Work ongoing. TS 31.124 presented for information at T#26.**

CAMEL

Release 6 CAMEL 4 aspects completed:

- **Stage 2 in TS 23.078 and Stage 3 in TS 29.078**
- **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.**

Release 7 just started:

- **Stage 1 created in TS 22.078**
- **Stages 2 and 3 not started**

Note that all CAMEL issues are handled in CN4 (CN2 closed)

Security Enhancements Rel-6

Work completed. It contains:

- **Network domain security**
  - – **NDS/IP in TS 33.210**
  - – **NDS/AF (Application Framework) in TS 33.310**
- **Key Management of group keys for VGCS (Voice Group Call Services)**
- **GERAN A/Gb mode security enhancements :**
  - – **CRs agreed to withdraw support of A5/2 agreed**
- **G-MILENAGE Algorithm**
- **BACKUP Algorithm work: Agreed funding. SA3's WID presented at SA#26**

Generic Authentication Architecture (GAA)

Work overall complete.

- **GAA System Description in TR 33.919**
- **GAA Generic Bootstrapping Architecture in TS 33.220**
- **GAA Support for Subscriber Certificates in TS 33.221**
  - **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. As the WIM is handled by OMA, no work is needed within T3. OMA dependencies completed.**
- **GAA/HTTPS in TS 33.141**
- **CN1's Stage 3 in TS 24.109, for approval to this CN plenary.**
- **CN4's Stage 3 in TS 29.109**

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

Work completed: TR 33.817 approved at SA#23.

- **The title includes "FS" but it seams that actual CRs were provided under this Feature. To be clarified if this is only a study or if it impacts TSs.**

- **CRs to existing specifications to accommodate some impacts of the study have been agreed by SA3**

GERAN Rel-6

Completed features:

- Addition of frequency bands to GSM
- Multiple TBF in A/Gb mode
- Seamless support of streaming services in A/Gb mode
- Flexible Layer One for GERAN
- Single Antenna Receiver Interference Cancellation (SAIC)

Test-related activities:

- Alignment between the test-regimes for GERAN capable MS : 80% ready, FCD January 2005 (it was April 2004)

Other activities:

- Uplink TDOA location determination for GSM/GPRS: WI deleted and replaced at GERAN#17 (see next slide)
- Support of Conversational Services in A/Gb mode via the PS domain: TR ready, FCD November 2005 (for Release 7)

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FDD Uplink Enhancements (EDCH)

- **Physical Layer (R1) :**
  - CRs for TS25.201, 211, 212, 213, 214, 215 were agreed.
  - Completion Level : 80 %

- **Stage 2/ Layer 2 and 3 Protocol Aspects(R2):**
  - Several Stage 2 corrections. The Stage 3 CRs are available.
  - RAN1/RAN2 Stage 2 decisions to be taken at the RAN Plenary (on e.g. scheduling grants).

- **Iur Iub Aspects (R3):**
  - One CR per affected RAN3 specification (6 TSs) was agreed for the introduction of EDCH.
  - Basic agreements found for: Iub/Iur measurement reporting, the relations between Iub/Iur E-DCH frame protocol and the TTI over radio.
  - Open issues: how to distinguish UL interference (or RoT) due to E-DCH traffic from the total UL interference and the completion of the work on Iub/Iur congestion control.

- **RF and Performance (R4):**
  - Work on progress. Contributions on simulation assumptions, possible list of requirements, impacts on UE power.

- **Foreseen completion date is December 2004 except for the performance**
  requirements to be completed in June 2005.

Multimedia Broadcast/Multicast Service (1/3)

Work overall complete

- **Stage 1 in TS 22.146**
- **Stage 2 in TS 23.246**
- **Stage 3:**
  - CN1 work is now 100% completed (was 90% in Sept).
  - CN3 has selected Diameter for Gmb interface. Diameter is the current working assumption. CN3 work just completed.
  - CN4 covered by CRs on TS 29.060 (GTP).
- **Security aspects in TS 33.246**
  - 95% complete. Some IETF dependencies and editors notes remaining. Realistic completion March 2005.
- **Charging aspects in TS 32.273**
  - Rel-6 SA5 WID for SA#26 approval. SA5 work start Jan 2005
  - approval target for the TS is June 2005

Multimedia Broadcast/Multicast Service (2/3)

Support of MBMS in GERAN : **85% completed**, FCD **Jan. 2005** (it was June 2004).

Introduction of MBMS in RAN:

Physical & upper layers, access network interfaces (RAN2, RAN1, RAN3)

– No support for mixture of simultaneous soft and selective combining (RAN1)

– UE capability including mandatory support of soft combining (RAN1)

– CRs for Stage-3 specifications presented to RAN #26 (TS25.211, 213, 214) (RAN1)

– Decisions on service priorisations (RAN2).

– Information exchange procedure finalised in Iur (RAN3).

– Various corrections on TR 25.346 (Stage 2). Stage 3 CRs available.

– Said to be **100% complete**

UE Performance Requirements for MBMS (RAN4)

– Work started. Contributions on the structure of the requirements, simulation assumptions and feasibility of the inter-freq/inter-RAT measurements when receiving MBMS

– The stability of RAN1/RAN2 specifications is not enough to further progress the work

– For this reason it is proposed to move the completion date inRAN WG4 from June

MMS Enhancements (1/2)

In full: Multimedia Messaging Service Enhancements

Work overall complete

- **Stage 1 completed**
- **Stages 2 and 3 in TS 23.140:**
  - **completed at TSG#26. Work done by T2, except MM1 stage 3 (handled by OMA)**
- **Codec and media types aspects (SA4):**
  - **Work 95% completed (was 90% in September). Open points: some remaining audio codec specs are not yet completed (fixed-point C-code TS, conformance TS, characterisation TR)**
  - **Adoption of SVG Tiny 1.2 and Support for EXIF for approval at SA#26.**
  - **H.264/AVC approved at SA#25 as "recommended" decoder for MMS (and PSS)**
  - **See also separate slides for audio/video codecs.**
- **Charging aspects in TS 32.270 (SA5)**
- **OSA MMS SCF in TS 29.198-15 (CN5)**

MMS Enhancements (2/2)

Other comments:
- **Several new features agreed at last T2:**
  - **Replacing and Cancelling MMs in Recipient Terminal**
  - **Delete Deferred MM**
  - **Several enhancement to MM1, MM4 and MM7 agreed**
- **IMS Messaging not completed (See IMS slide)**
- **Handling of private addressing schemes in MMS:**
  - **complete at T#26 (introduction of interface MM10 between MMS R/S and MSCF)**
- **FS Multiple MMS Relay/Server Architecture: deleted at T#26. It needs a new WID to be in Release 7.**

Network Sharing

Work overall complete

- 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: CN1's CR to 24.008 are completed (was 90% in Sept).

- RAN part:

  – CRs available in RAN2 for e.g. the use of several PLMN identities, however a lot of discussions on the definition of a "selected PLMN". This may impact CN1, SA1 and GERAN.

  – Conditionally to the agreement of the CRs from RAN2 and RAN3, the level of completion is 100%.

- No standardised OAM&P for this feature in Rel-6

Codec Enhancements for PS Conversational Multimedia Applications

- **Completed** **(was 80% in Sept)**

3G-324M Improvements (CS)

- **Completed** **(was 80% in Sept)**

LCS enhancements 2

Work completed.
- **Stage 1: completed at SA#20.**
- **Stage 2: 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.**
- **Charging aspects: TS 32.271 (SA5) for approval at SA#26**
- **GERAN aspects:**
  - **U-TDOA positioning method in GERAN: Completed (was 95%), except for potential LMU performance specs for CS.**

Other comments:
- **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**
- **See also UTDOA in GERAN**

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

Work completed

- No specific Stage 1 required. CRs to TS 22.228 might have to be produced (depends of results from SA2)
- Stage 2: TR 23.979 is presented approval by December 04 (but dependant on stable input from OMA). OMA's work to be completed by December.
- Charging: ongoing co-operation with OMA MCC & PoC to produce TS 32.272 (SA5) by June 2005
- Speech Codec aspects: SA4 found that AMR and AMR-WB are applicable. PoC codec definition included in IMS codec TSs 26.235 and 26.236.
- No other Stage 3 identified.
- Proposed to be re-introduced in Release 6 as 3GPP aspects are now completed (except charging and testing).

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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 March 2005 to complete the remaining work (fixed-point C-code TS, conformance TS, characterisation TR) (was December)

After December

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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**
- **SA4 work: 75% completed, audio/video codec definition under way**
  - **Enhanced aacPlus and AMR-WB+ agreed to be included - both either as mandatory or recommended, no consensus on mandatory/recommended at SA4#33, vote requested at SA4#34 if otherwise not agreed**
  - **TS 26.346 "Multimedia Broadcast/Multicast Service; Protocols and Codecs" presented again for information (V. 1.5.0 at SA#26)**
  - **FCD March 2005 (was December)**
- **No other work (e.g. Stage 2 nor other Stage 3) identified.**

Rel-6 RAN improvements

RAB support enhancement (R2)

Work focused how to optimize the RABs for IMS voice over IP

- Discussions related to ROHC decisions expected at RAN#26 (e.g. mapping between RTP and RTCP in the UE that may impact CN1 and RFC3095).
- Use of more than one scrambling code under investigation (with RAN4).
- 85% of completion, target date March 2005 (RAN#27). Moved from RAN#26

- **Optimisation of downlink channelisation code utilisation for FDD (R1).Introduction of Fractional DPCH (F-DPCH)**
  - CRs were proposed in WG RAN1 and 3. All CRs could not be reached to agreement.
  - Completion level : 80%, Target completion date : RAN#27(03/05)

- **HS-DPCCH ACK/NACK Enhancement (R1):**
  - Two CRs for "Preamble and Postamble to reduce HS-DPCCH transmit power" were endorsed in RAN1 were agreed in RAN2. No documents were treated due to lack of time in RAN3. All the CRs will be submitted as company contributions to RAN #26
  - Completion level : 100%, Completion date : RAN#26(12/04)

Rel-6 Improvements of Radio Interface

- **Improvements of receiver performance of HSDPA UE (R4)**
  - **Performance Requirements of Receive Diversity for HSDPA**
    - **On schedule.**
    - **UE Categories 1-6: 100%**
    - **UE Categories 7-8: 75% (Work planned for completion in March 05).**
  - **Improved performance requirements for HSDPA categories 7 and 8**
    - **On progress. Simulation assumptions agreed.**
    - **Expected completion date June 2005).**

After December

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Packet Switched Streaming Rel-6 (1/2)

This Feature refers to the PSS enhancements done in Release 6

- Stage 1: completed in TS 22.233.

- Documentations restructured compared to earlier Releases. New structure encompasses TS 26.244, TS 26.245 and TS 26.246, as well as CRs to TS 26.234.

- Adoption of SVG Tiny 1.2 for approval at SA#26.

- Completion in SA4 expected by March 2005. 95 % completed. The characterization and the verification of the audio codecs still have to be completed.

Packet Switched Streaming Rel-6 (2/2)

Codecs selection for PSS and MMS:

Video Codec for PSS, MMS, PS Conversational and CS Multimedia (3G-324M): partly completed

- H.264/AVC approved at SA#25 as "recommended" decoder
- SA4 was tasked to possibly define the encoder: reply provided to TSG SA together with a new WID on Video Codec Performance Requirement for Release 7

Audio Codec for PSS and MMS: partly completed

- **Completed aspects:**
  - Competition for Lower and Higher Bit Rate Audio Codec
  - Design Constraints and Performance Requirements
  - Subjective tests and Global Analysis
  - Approval of the selection tests (for ETSI to pay Host/Testing and Global Analysis Laboratories)
  - Set of Specs on Extended AMR-WB (AMR-WB+) and Enhanced aacPlus completed except for fixed-point version and conformance e.g. test sequences.
- **Aspects to be completed by March 2005:**
  - TR on performance related to content/bit rate (not critical)
  - Fixed-point codec versions and conformance issues

Presence

Some open items

- **Updated Presence WID is brought to this plenary for approval (CN5 TR part is deleted from CN1 WID).**

- **Stages 1 and 2: approved in resp. TS 22.141 and TS 23.141**

- **Codec and Formats aspects: 95 % completed (was 20% in Sept). TS 26.141 (Media formats and codecs for IMS Messaging and Presence) for approval at SA#26. Open items relate to audio codec specs not yet completed (fixed-point C-code TS, conformance TS, characterisation TR).**

- **Stage 3:**
  - **TS 24.141 (CN1) 95% completed (was "91%" in Sept) because of dependency to two IETF drafts, no known work at the moment.**
  - **Pk interface for the support of Presence (CN3): work still expected but no completion date anticipated. No input received so far, supporting companies asked again to contribute. Comment from CN#26: the feature can be completed without Pk interface.**
  - **OSA aspects completed (officially part of the "OSA Improvements" Feature):**
    - **TS 29.198-14 on "OSA API; Presence and Availability Management"**
    - **TS 29.199-14 on "OSA; Parlay X web services; Presence"**
  - **Alignment to be checked with latest set of SA2's interface (Pr and Pp)**

Generic User Profile

Some open items to be completed by March 2005

- Stage 1 in TS 22.242 (approved)
- General Stage 2 in TS 23.240 (approved)
- Stage 2 for Data Description Framework in TS 23.241: approved but still to be aligned with 29.240. At CN#26, 23.241 changed into a TR 23.941, approved at CN#26.
- Stage 3:
  - TS 24.241 on GUP Access; Common Objects: approved
  - TS 29.240 (CN4) about 70% ready, sent for information at CN#26. Estimated finishing date CN#27 March 2005 (moved four times).
  - Dependencies on the Liberty Alliance Project
- Security aspects:
  - to be covered by CRs. Work on progress, in collaboration with Liberty Alliance, to be completed by March 2005.

OSA Improvements

Cleaning up of Stage 2 to be completed by March 2005

- **Stage 1: SA1's CRs to SA#26 to remove requirements from TS 22.127 on:**
  - **User Data Management (OSA-GUP support),**
  - **IP session function,**
  - **User-Application Authentication .**
- **Stage 2 now in TS 23.198, owned by CN5**
  - **Stage 2 used to be in SA2's TS 23.127 but TS 23.127 covers both OSA and VHE aspects and VHE is not anymore part of Rel6.**
  - **TS 23.198 consists of OSA's part of TS 23.127 plus CN5's CRs.**
  - **SA2's 23.127 is to be withdrawn from Release 6 onwards at next SA2 meeting**
  - **TS 23.198 is submitted to CN#26 for information only (due to SA2 handover delays) and for final approval at CN#27 (Mar 2005)**
- **Stage 3 covered by 37 TS and TR (29.198/199-xy, 29.998-xy), already completed**
- **Some overlaps with OMA (29.199 Parlay X Web Services).**

Charging Management

TSG Approval target moved to Jun 2005 (was Sep 2004 then Dec 2004)

Already SA Approved 8 TS/TR:

32.240	Charging architecture and principles
32.250	Circuit Switched (CS) domain charging
32.251	Packet Switched (PS) domain charging
32.270	Multimedia Messaging Service (MMS) charging – see also MMS slide
32.295	Charging Data Record (CDR) transfer
32.815	Online Charging System (OCS) architecture study
32.297	Charging Data Record (CDR) file format and transfer
32.299	Diameter charging applications – see also IMS slide

SA#26 approval 3 TSs & new Rel-6 WID:

32.260	IP Multimedia Subsystem (IMS) charging – see also IMS slide
32.271	Location Services (LCS) charging – see also LCS slide
32.296	Online Charging System (OCS): Applications and interfaces
WID	Rel-6 on 32.273 MBMS Charging approval target 06/2005 – see also MBMS slide

Completion date for 4 TSs Jun 2005:

32.252	Wireless Local Area Network (WLAN) charging – see also WLAN slide
32.272	PoC charging - coordinate with OMA– see also PoC slide
32.273	MBMS charging– work will start in Jan 2005 (SA5#40bis) – see also MBMS slide
32.298	Charging Data Record (CDR) parameter description

OAM&P (1/2)

In full: Operation, Administration, Maintenance and Provisioning

Overall Status: SA already approved some 90 TSs, 20 more TSs for approval at SA#26/SA#27

- **Composed of four independent BBs (1/2):**
  - **BB: Principles, high level Requirements & Architecture (completed June 04)**
  - **BB: Network Infrastructure Management (completed Dec 04)**
  - **BB: Performance Management (completed Dec 04)**

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

- **Four independent BBs (2/2):**
  - **Subscriber and Equipment Trace Management (SA5 part completed Dec 04)**
    - **SA5 32.423 (Trace data definition and management) – for SA#26 approval**
    - **SA5 52.008 (GSM subscriber and equipment trace) – for SA#26 approval**
    - **SA5 removed via Rel-6 CR Signalling Based Activation of Trace in IMS (Reason CN1/IETF dependency on SIP)**
    - **SA5 Rel-7 WID to be provided if/when New Rapporteur available**

      CN Trace WID (involves CN1 and CN4) has been split into two parts:
    - **the non-SIP-based Trace is for Rel-6 (CN4 leadership-updated WID for approval in CN#26), FCD is March 2005 and**
    - **the SIP-based Trace for Rel-7 (CN1 leadership – WID brought to CN#26 for approval). Rel-7 WID contains the task for CN1 on trace activation/deactivation over SIP between IMS entities (TS 24.229) and CN4 work on trace activation/deactivation over Cx interface (TS 29.228) FCD is June 2005. SA5 has to clarify the situation with respect to Rel-7 and if appropriate, to produce the Rel-7 WID.**

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IP Flow Based Bearer Charging

- SA2 TS 23.125 was approved at SA#23. 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.
- CN3 aspects: work just completed for Gx. Rx interface is 65 % complete, FCD is March 2005.

Subscription Management (SuM)

TSG Approval target moved to Mar 2005 (was Sep 2004, Dec 2004)

Already SA Approved 4 TSs/TR

- **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**

SA#26 approval (2nd tentative) for 1 TS:

- **32.172 SuM NRM IRP Information Service (IS)**

Target approval Mar 2005 for 1 TS:

- **SuM NRM IRP XML Definition – "32.175" baseline draft available**

Content

- **Review of non-Release related activities**
  - Testing
  - Pre Release 6
  - Feasibility Studies
- *Review of on-going features*
  - Features completed up to September 2004 (as reminder)
  - Features completed between September and December 2004
  - Features still not completed but asked to be part of Release 6
  - *Release 7 Features*
- **Conclusion**

IMS aspects not in Release 6 (1/2)

– **SA2 proposes not to create "IMS Phase 3" yet, therefore all IMS phase 2 functionalities not completed on time or new IMS functionalities are so far reported as stand-alone features in Release 7.**

– **CN1 proposes to CN#26 a new WID "IMS Stage-3 IETF Protocol Alignment" for Rel-7. This WI covers Protocol evolution to keep the IMS aligned with IETF. The WID is marked as a feature under the leadership of CN1, therefore no corresponding feature is necessary in SA2 for the time being and the work can be started without SA support.**

  • **The objectives is to ensure protocol alignment between 3GPP Stage 3 postponed Release 5 and 6 IMS work and IETF, in particular for the review of existing and future capabilities provided in SIP by IETF, and provide documentation as whether these capabilities are supported in the IMS or not.**

  • **An appropriate acronym, different than IMS3, should be found (e.g. IMS- TEI7), as the feature is pure protocol maintenance with no new user features.**

IMS aspects not in Release 6 (2/2)

– **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 migh 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 include this functionality 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"2.0.0 is presented for approval at SA #26**
  - **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 started, 10% completed, FCD April 2005

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: WID on Emergency Call Enhancements for IP& PS Based Calls – stage 3 for Rel-7 brought to CN#26 for approval in NP-040498. Completion date Sept 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

- **TS 23.228 is affected and will be approved by SA#27, so TS 24.229 will also be affected. No technical work started.**

- **Stage 3: WID update on Protocol impact from providing IMS services via fixed broadband for Rel-7 (CN1) is brought to CN#26 for approval in NP-040497, according to CN#25 recommendation to specify the objective for each task.**

Support of SMS and MMS over IP networks

- **WID approved at SA#25, presented by SA2. A TR might be presented in March, to be approved by June 2005.**

RAN Release 7 features

RAB support enhancement (R2)

- **Optimisation of DL channelisation code utilisation for TDD (R1)**
  - Two documents were discussed RAN1 #39, "Optimisation of DL Code Utilisation for 3.84 Mcps and 1.28 Mcps TDD"
  - Completion level : 50%, Completion date : RAN#27(03/05) (Moved from RAN#26)

Multiple Input Multiple Output antennas (MIMO)

- No contributions on any WG, progress delayed due to the completion of Rel-6 features
- Estimated completion level is 60% at RAN1. Completion date for WG1: RAN #27(03/05), for WG2, 3 and 4: RAN #30(12/05)

7.68 Mcps TDD

- RAN1, RAN2, RAN3: No contributions
- RAN4: Work Started. Discussion on the frequency bands of applicability of the new Option
- Completion date : RAN #29(09/05) for WG1, 2 and 3, RAN #30(12/05) for WG4

UMTS2600 (RAN4)

- Work Started. Discussion on the introduction of the TDD mode in the scope. Completion by June 2005

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: June 2005 (was March)**

- **Progress: 25% completion at December 2004 (no progress since previous plenary)**

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. Next step to be determined.**

- **RAN2, RAN3, GERAN and CN1 have just been contacted by SA2 to check the TR and develop appropriate work.**

LCS enhancements 3

Contains:

– **LCS for 3GPP Interworking WLAN (SA1): Stage 1 Work Ongoing on 22.935.**

– **Work on Velocity has been done in SA1.**

– **U-TDOA positioning method in RAN**

  • **Message flows including LMU definitions discussed.**
  • **15% of completion, target date June 2006 (RAN#32).**

GALILEO

– **Extension of A-GPS to include GALILEO and other satellite navigation systems (SA1): completed in SA1**

– **Support for Global Navigation Satellite Systems in GERAN: no technical work started. WID updated.**

– **FS on applicability of GALILEO for LCS (SA2). Work stopped at SA2 because of lack of contributions.**

Selective Disabling of UE Capabilities

- **Work commenced on Stage 1**
- **potential OMA dependency**

All-IP Network Feasibility Study

- **Work ongoing on Stage 1 (22.978); Presented for information at SA #26.**

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Enhancements of VGCS in public networks

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

- **VGCS in public networks for communication of public authority officials approved in GERAN (GP-041837) FCD April 2005. No technical work started.**

- **WID approved at CN#25 for corresponding CN1 and CN4 aspects. No technical work started.**

Multi system mobile stations

- **Name changed from Behaviour of multi system terminals**

- **Work ongoing in SA1**
  - **TR to be provided in 22.936 not before TSG SA#27**

Other WIs for approval at SA#26

- **SA1:**
  - **WI for Combinational Services**
  - **CAMEL Trunk Triggers**
- **SA3:**
  - **Access Security Enhancements**
  - **Development of UEA2 and UIA2**
  - **Security Requirement for Open Platforms in 3GPP**
- **New WIDs approved at TSG #26 not listed in this version of the presentation**

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**

WIs already approved at GERAN#21

- **Generic Access to A/Gb interface FS COMPLETED**
- **Generic Access to A/Gb interface (GP-042247) FCD April 2005**
- **FS of Enhanced Support of Video Telephony started in GERAN (GP-042221) FCD April 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**
- **Improvement of inter-frequency and inter-system measurement (R1). Closed at RAN#25(09/04). No agreement on the gain of the proposed techniques**

Content

- **Review of non-Release related activities**
  - **Testing**
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- *Conclusion*

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Conclusion

- In September, 14 features were anticipated to be completed by December.
- To date, 8 of these features have been actually completed, and one feature has been completed earlier than expected (December instead of March). Several features have been re-arranged, so now 10 features (excluding fully OAM and charging) are anticipated to be completed in March 2005.
- It is proposed that:
  – Features completed are part of Release 6
  – During TSG#26, open points for the 10 postponed features should be carefully investigated so that a serious assumption can be taken on whether these features can be completed in a reasonable time and then be part of Release 6. These features are:
    - AMR-WB+
    - MBMS User Services (Building block of MBMS)
    - The Rel-6 RAN improvements, including FDD Uplink Enhancements (EDCH), Improvements of receiver performance of HSDPA UE (to be individually decided by RAN)
    - Rel-6 Improvements of Radio Interface (same comment)
    - Packet Switched Streaming Rel-6
    - Presence
    - Generic User Profile
    - OSA Improvements
    - IP flow based charging
    - Trace (part of OAM&P)
  – The same process should be applied to incomplete parts of splitable features (mainly IMS phase 2 and (U)ICC/(U)SIM enhancements)