

MCC Review of the Work Plan at Plenaries #15

This presentation does not include the results of TSG
CN, RAN, T and SA #15

Content

- Review of Rel-4 and Rel-5 testing activities
- Review of progress on all features presently anticipated for Rel-5
- Features with unclear status (Rel-5 or Rel-6?)
- Review of Rel-6 features
- Summary of Foreseen Completion Dates
- Conclusion

In **Black**: Name of the task

In **Red**: important statement

In **Green**: question to plenary



Testing activities



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UE Testing Rel-4 (1/2)

- ***Note: R99 test activities not covered here***
- **Not started yet:**
 - *Testing of RAB support for RoHC (delayed to Sep 02)*
 - *Testing Emergency call enhancements for CS based calls (SIG) (delayed to June 02 for prose and Dec 02 for TTCN)*
- **Presented for approval:**
 - *WID on Conformance Testing of UE MExE capability (Feasibility study)*

UE Testing Rel-4 (2/2)

- **Ongoing activities** (% complete, foreseen completion date):
 - *LCR_TDD, Testing RF Radio Transmission and Reception (RF)* (80 %, June 02)
 - *LCR_TDD, Testing Layer 2 and 3 protocol aspects (SIG)* (10%, **delayed** to Dec 02 for prose and Dec 03 for TTCN)
 - *Optimisation of Test Time, RF Aspects (FDD and TDD) (RF)* (40 %, June 02 for both)
 - *Extensions to R99 Test cases (SIG, covers the completion of FDD prose and TTCN)* (25%, **delayed** to Dec 02 for prose and mar 03 for TTCN)
 - *Maintenance of the R99 test specification and test cases (SIG)* (50%, ongoing)
 - *Creation of the Release 99 TCs for TDD, prose and TTCN (SIG)* (25%, Sep 02 for prose and Mar 03 for TTCN)

UE Testing Release Independent

- **Testing UMTS 1800/1900:**
 - RF part **finished**
 - Signalling expected for June 02 (prose) and Mar 03 (TTCN)
- **Optimisation of Test Time, RF Aspects (FDD and TDD)**
 - 70% completed, **delayed** to Sept 02

UE Testing Rel-5

WI under study and seeking supporting companies (no change since last meeting)

- Improvements of Radio Interface
 - Testing improvement of inter-frequency and inter-system measurement
 - Testing Hybrid ARQ II/III
 - Testing Improved usage of downlink resource in FDD for CCTrCHs of dedicated type
 - Testing Terminal Power saving features
 - Testing DSCH power control improvement in soft handover
- RAN Improvements
 - Testing Radio access bearer support enhancements – TM except ROHC (ROHC belongs to Rel-4)
- Emergency call enhancements
 - Stage 3 for emergency calls and packet emergency calls in general (Core requirement and testing moved to Rel6)

3GPP TSG CN/RAN/SA #15
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Rel-5 Features

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Complete List of Features (1/2)

Unique ID	Title
2	Evolutions of the transport in the UTRAN [in progress]
4	Evolutions of the transport in the CN [in progress]
2476	High Speed Downlink Packet Access
1216	Improvements of Radio Interface [in progress]
9	RAN improvements [in progress]
1273	Provisioning of IP-based multimedia services
34001	Extended Transparent End-to-End PS Streaming Service
1652	Emergency call enhancements [in progress]
1517	Global Text Telephony
1637	OSA enhancements [in progress]
1638	CAMEL phase 4
2464	MExE enhancements Rel-5
1625	Wideband Telephony Service - AMR
1826	Terminal interfaces
1536	Location Services enhancements [in progress]
1560	UICC/(U)SIM enhancements and interworking [in progress]

Complete List of Features (2/2)

Unique ID	Title
1800	(U)SIM toolkit enhancements [in progress]
1571	Security enhancements [in progress]
1861	Miscellaneous UE Conformance Testing Activities
1365	Support of Push Services
1142	Charging and OAM&P
2062	Subscription Management
2243	Intra Domain Connection of RAN Nodes to Multiple CN Nodes
2320	GERAN improvements
2499	Support of Presence Capability
2507	Display of Service Provider name on UE
2520	User Equipment Management
2527	Emergency calls without UICC/SIM in netw. with IMS
2556	End to End QoS for PS Domain including IMS
2569	Messaging enhancements Rel-5
13000	Service Change and UDI Fallback
35009	Trace Management

Evolutions of the Transport in the UTRAN

IP Transport in the UTRAN (R3) – Rel-5. Completed.

- RAN WG3 believes that the IP-Transport Work Item and the associated CRs to specifications is completed enough to ensure exhaustive implementation and use of the IP-Transport option in UTRAN.
- All change requests needed for the introduction of IP Transport option in the UTRAN are submitted to TSG RAN#15 for approval.
- TR 25.933 v2.0.0 will be submitted to TSG RAN#15 for approval.

Evolution of transport in UTRAN and GERAN (R3) – Rel-5.

- **No work was done** on this WI. WI is not complete.
- Work on-going in TSG GERAN.

Evolution of the transport for CN

- *SUA Feasibility Study*
 - *Finished at TSG CN #14*

HSDPA (1/2)

Or “High Speed Downlink Packet Access”

Completed.

- **General issues (R2)**
 - Completion date (core specifications): March 2002.
 - Joint R1/R2 and R2/R3 meetings in February.
 - Substantial progress:
 - Corrections and updates to Stage 2 description in TS 25.308
- **Physical Layer (R1)**
 - Almost all key issues have been fixed.
 - TR to be submitted for approval.
 - CRs to core specifications to be submitted for approval.

HSDPA (2/2)

- **Layer 2 and 3 aspects (R2)**
 - CRs to core specifications to be submitted for approval.
- **Iub/Iur protocol aspects (R3)**
 - CRs have been written for all RAN3 specifications.
- **RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing (R4)**
 - Good progress, completion expected in June.

Improvements of Radio Interface (1/4)

Items (almost) on schedule:

- ***Enhancement on the DSCH hard split mode (R1): On schedule. CRs to be submitted to RAN#15***
- ***BS Classification for 1.28 Mcps TDD option (R4): Completion date moved to June.***
- ***TDD BS classification (R4): Agreement on all topics, the work is almost completed. The CRs will be presented in June, R4 proposes to keep the WI in Release 5.***

Items in progress but delayed:

- ***Multiple Input Multiple Output antennas (MIMO) (R1): Little progress***
 - ***FDD BS classification (R4): Completion date moved to December***
- =>RAN#15 shall take a decision to keep them or not in Rel5**

Improvements of Radio Interface (2/4)

Items finished:

- *UMTS1800/1900 (R4). Finished at RAN#14*

No progress on:

- *Improvement of inter-frequency and inter-system measurement (R1)*
- *Improved usage of downlink resource in FDD for CCTrCHs (R2) (not for Rel5)*
- *Terminal power saving feature (R2) (“basket” feature)*

Improvements of Radio Interface (3/4) Feasibility Studies

FSs ongoing:

- Radio link performance enhancements (R1): **Work on progress.** TR on Tx-diversity to be provided to RAN #15 for information
- Deployment of UTRA in additional spectrum arrangements (R4).
Work on progress
- Improvement of inter-frequency and inter-system measurements for 1.28 Mcps TDD (R1) **Small progress.** Behind schedule
- Fast Cell Selection (FCS) for HS-DSCH (R1): **No progress**
- UTRA Wide Band Distribution Systems (R4) Completion date **moved to March 2003**, depends on the progress on micro-pico BS classification.

Improvements of Radio Interface (4/4) Feasibility Studies

FSs finished:

- Mitigating the effect of CPICH interference at the UE (R4):
Completed. It was agreed in R4 to create a Rel-6 WI.***
- FS on the re-introduction of the downlink SIR measurement
(R4). Finished at RAN#14***

FS proposed to be re-opened:

- FS on UE antenna efficiency test method performance
requirements (R4). The FS was closed in RAN#14. It was agreed
to follow the work done by CTIA. A number of issues have
arisen, R4 considers the Study should be reopened.***

=>RAN#15 shall take a decision

RAN improvements (1/2)

- **On schedule:**
 - *RL Timing Adjustment (R3)*
 - **Completed.** TR 25.878 will be submitted for approval. CRs will be submitted to TSG RAN#15 for approval.
 - *Separation of resource reservation and radio link activation (R3)*
 - **Completed.** TR 25.879 will be submitted for approval. CRs will be submitted to TSG RAN#15 for approval.
 - *Node B synchronisation for 1.28 Mcps TDD (R1)*
 - **Completed.** TR 25.836 will be submitted for approval. CRs will be submitted to TSG RAN#15 for approval.
 - *RRM optimization for lur and lub (R3)*
 - **Completed.** CRs submitted to TSG RAN#15 for approval.

RAN improvements (2/2)

- ***Re-arrangement of Iub Transport Bearers (R3)***
 - **Completed.** TR 25.880 will be submitted for approval. CRs will be submitted to TSG RAN#15 for approval.
- **Ongoing:**
 - ***SRNS Relocation Procedure Enhancement***
 - As RAN3 did not have any time to handle this SI during the last two RAN3 meetings, the **proposed Target date is TSG RAN#16.** Therefore the level of completion has not changed since the last TSG-RAN meeting: 80%.
 - ***RAB support enhancement (R2)***
 - New work **started** by RAN 2: RFC 3095 context relocation in SRNS relocation. TR 25.860 v1.0.0 submitted to TSG RAN #15 for information.

IMS (1/8)

Or “IP-based Multimedia Services”

- **Stage 1 in 22.228 already in v.5.**
 - Corrections on ISIM, access independence, identities, messaging and group management.
 - Change to 22.115 for charging (including Pre-paid)
- **Overall Stage 2 in 23.228 in v.5 since SA#13.**
 - Remaining Stage 2 issue solved for:
 - Charging (including on-line charging): TR 23.815 to be presented in v.2 at SA#15
 - Lot of corrections and clarifications, e.g. on QoS handling, IP v4/v6 interworking (still not solved), mapping PDP context(s) <-> media component(s), Local services, use of pre-Rel-5 USIM, SIP compression (mandatory).
- **Detailed Stage 2 and Stage 3: see next slides**

IMS (2/8)

Now provided for **approval** (formal change control)
from CN1 :

- Stage 2 TS 23.218v201 on call model (100 %)
- Stage 3 TS 24.228v202 on information flows (85%)
- Stage 3 TS 24.229v201 on protocol details (85%)

Freezing of TS 23.218 is requested, but **NOT**
freezing TSs 24.228 and 24.229 now.

Lot of dependencies to IETF work for Stage 3.

Completion dates for IETF dependencies to be clarified.

- Performance characterisation of codecs : a TR on the issue still to be started: not critical

IMS (3/8)

Security aspects (“Access Security for IMS”):

- **Stage 3** targeted for **June 2002** approval
 - 33.203 presented for **approval** at SA#15. 2 mechanisms for Integrity Protection still under consideration (Annex C): choice to be made when IETF drafts more stable. This open issue should be solved in **June**.

IMS (4/8)

Aspects completed:

- Specification of SLF (Subscription Locator Function): **completed** at N4

IMS (5/8)

- **Aspects not yet stable:**
 - SIP compression : Stage 2 done, Stage 3 to be completed by **June** by N1 (also linked to IETF dependencies)
 - Go interface: see slide on end-to-end QoS (**June**)
 - Cx interface: still ongoing, to be completed by **June**
 - Lawful interception. 33.108 (Handover Interface, Stage 3) for information at SA#15: Target completion date is **June** but does not yet cover multimedia aspects. Multimedia aspects to be clarified by the SA3-LI group.

IMS (6/8)

- Other aspects **still not stable**. To be confirmed at TSG#15 if planned for Rel-5 or Rel-6:
 - Header removal/compression in UTRAN and/or GERAN
 - IMS local services: Stage 2 just defined (CR 149 to 23.228), Stage 3 not started
 - Sh and Si interfaces are of concern for Rel-5
 - CAMEL in IMS: see separate slide

IMS (7/8)

still not stable (cont'd):

- **IMS to PS interworking: CN3 has decided to move the finalisation date to **March 2003** => **Moved to Rel6?****

 - Done for user plane (use of transcoder)
 - Location of interworking function for the control plane still under discussion in SA2.
 - Interworking between 3GPP profile of SIP and IETF SIP still under discussion at CN3
 - IP v4/v6 interworking not solved at S2

- **IMS to CS interworking: CN3 has decided to move the finalisation date to **June 2003** => **Moved to Rel6?****

 - Work for TS 29.163 is completed but ITU-T SG11 part on SIP to BICC / ISUP interworking (moved from February 2002 to November 2002) remains the blocking point

IMS (8/8)

- **Moved to Rel6:**
 - **Identification portability (was number portability) in IMS**

Extended Streaming

(in full: Extended Transparent End-to-End Packet Switched Mobile Streaming Applications)

Feature **completed** at SA#15:

- Stage 1: TS 22.233 presented to SA#15 for approval, and CR to 22.105 on End-user performance expectations-Streaming Services
- Stage 2: TS 26.233 and TS 26.234 Rel-5 provided through CRs to Rel-4, presented to SA#15 for approval
- Stage 3: TS 26.236 “Transport Protocol for PS Conversational Multimedia applications” presented to SA#15 for approval
- LS to SA4 on PSS Rel-6 Work Program

Emergency call enhancements

For PS and IMS: for **Rel-6** as decided at SA#14.

For **Rel-5** the decision is to use the CS emergency call feature, and CRs to do this is included in the IMS TSs now for **approval**.

No activity for CS nor for PS emergency call enhancements **for Rel-5**.

Global Text Telephony

- **Completed** and closed at SA#12

Reminder: VHE enhancements deleted at TSG#14

OSA (1/3)

Feature re-structured

- **Stage 1 is completed – CRs on:**
 - **Security requirements on User Profile Management**
 - **OSA support of a Generic Network Interface Function**
 - **Retrieval of IP Session Information**
 - **Charging Requirements**
 - **OSA WID update for Release 6**

OSA (2/3)

Progress on OSA BBs:

- **Call Control: completed**
- **User Interaction : completed**
- **Mobility: open issues remain, reference to the LCS architecture to be added.**
- **Account Management: completed, No associated architecture expected**
- **Presence: to be completed in SA2#23**
- **Terminal Capabilities : open for IMS (certainly in R6), current support is for WAP and MExE terminals only (same as R99 and R4). Still open for SA1. Linked to GUP stage 2 and/or terminal capabilities WI (if created)**

OSA (3/3)

- **Data Session Control: Nothing new for R5**
- **User Profile Management (and associated security – see OSA security task): open, lack of network support for R5, rely on GUP stage 2 (not started yet)**
- **Charging: may be completed in SA2#23, based on charging architecture status**
- **Information Services open, no network support in R5.**
- **Network Capabilities: completion linked to GUP stage 2 (not started yet). Low priority level.**

N5'S INPUT MISSING

CAMEL phase 4 (1/3)

- **Stage 2 and Stage 3: Draft TSs are sent to CN#15 for information. CN2 recommendation is to approve these specifications in June.**

Progress on CAMEL4 BBs:

Completed:

- Interactions with Optimal Routing
- CAMEL control over MT SMS
- Provision of location information of called subscriber
- Inclusion of ODB data in the CSE-HLR interface
- Inclusion of flexible tone injection: CPH interaction is FFS

CAMEL phase 4 (2/3)

Completed 80% and more, to be completed by **June** (still proposed for Rel-5):

- Call Party Handling
- Notification of GPRS mobility management to CSE
- Location information during an ongoing call
- GPRS Any Time Interrogation
- Mid call procedure for MO and MT calls

SA1 agreed removal of the feature “Enhancements of dialled services”. If SA#15 approves related CR, this BB will be removed from the WP for Release 5.

CAMEL phase 4 (3/3)

CN2#22 agreed to move target date to June (little progress) for:

- Support of CAMEL by the IMS
- Charging notification to the CSE

=>TSG #15 to decide if still part of Rel-5

SA1 agreed introduction of “Transfer of the IMEI (with SW version) to the CSE”. If SA#15 approves related CR, this item will be added to the WP.

MExE Enhancements Rel-5

MExE Improvements and Investigations:

- **Completed.** Main enhancements:
 - investigate ECMA “Common Language Infrastructure” Support as Classmark 4
 - General enhancements and improvements
 - security enhancements

MExE Security Analysis:

- **Delayed.** Little progress due to lack of input, scheduled for **June 2002** but unlikely to be completed

WB-AMR (1/2)

Globally completed.

Presented for Completion:

- Codec specifications : **COMPLETED**
- Characterisation tests : phase 2 on-going **not critical**
- AMR Wide Band and Narrow-Band Interworking : technical work done **COMPLETED**
- Interworking of AMR WB with Fixed Network Wideband Legacy Codecs : **not required/needed**
- AMR WB Floating point : TS 26.204 v. 2.0.0 release 5 presented to SA #15 for approval **COMPLETED**
- TFO AMR WB : TS 28.062 Release 5 provided through CRs to Release 4 version **COMPLETED**

WB-AMR (2/2)

- **CN aspects:**
 - **Codec selection and GSM-UTRAN interworking proposal made**
 - **TFO and TrFO signalling (50% ready); not critical**
 - **Radio Access Bearer optimisation; on-going**
 - **Radio Access Bearer renegotiation (impact at least on 23.018)**
 - **Tones and announcements : not required /low priority**
 - **Billing, accounting and call detail record aspects; on-going**
 - **WB Conferencing and WB Voice Group calls; not critical**
 - **Adaptation of subscriber data in HLR/VLR; on-going**
 - **Legal interception. on-going**

Terminal Interfaces Rel-5

- **Wide Area Data Synchronization**
 - vObjects and Other Constructs for Use in Data Synchronization
Proposal from T2 to **delete** work item and continue work as part of
the Generic User Profile (Rel-6).
=>TSG T#15 shall confirm
- **Terminal Local Model enhancements**
completed

LCS in Rel-5

- **LCS activities for Rel-5 are:**
 - *Location Services for GERAN in A/Gb Mode*
 - *LCS for GERAN in Iu Mode*
 - *Specification for the Le Interface*
 - *Support of the Presence Service Architecture*
 - **Stage 1 already *completed***
 - **Stage 2 *completed*: 23.871 in v.2.0.0, CRs to 23.271**
 - **Stage 3:**
 - **Check at CN #15 the status of LCS Stage 3, at least for LCS/Presence interactions**
 - **Location Services for GERAN in A/Gb Mode : *completed* at GERAN, LCS for GERAN in Iu Mode: *on-going* at GERAN**
 - **UE positioning:**
 - **UE positioning enhancements for 1.28 Mcps TDD: *completed***
 - **Open interface between the SMLC and the SRNC within the UTRAN to support UTRAN Rel-4 Positioning: *not started***
- **Activites identified for Rel-6: see *LCS Rel-6 slide***

UICC/(U)SIM enhancements and interworking

- **“C SIM API”** – Missing info (no MCC T3 support)
- *Reminder: “UICC/USIM Transport Protocol” deleted at T#14.*

(U)SIM toolkit enhancements

- **“USAT Interpreter”** – Missing info (no MCC T3 support)
- *Reminder: “Enhancements to (U)SIM toolkit secure messaging” deleted at T#14.*

=>TSG T#15 are asked to provide info on the completion date for these features

Security Enhancements Rel-5 (1/2)

- Network domain security
 - MAP application layer security (Automatic Key Management):
 - Good progress on 33.200 - Rel-5 CR to be presented to SA#15 for **approval**
 - NDS/IP:
 - TS 33.210 to be presented to SA#15 for **approval**

Security Enhancements Rel-5 (2/2)

- FIGS
 - **Still no contribution to SA WG3 and no progress. Deleted from Work Plan by SA WG3 .**
- *Reminder: Protection for user plane data (GTP-U) deleted at SA#14*

Charging and OAM&P

- No information

Subscription Management

- No information

User Equipment Management - Feasibility Study

- No information

Iu-Flex

Full name: “Intra Domain Connection of RAN Nodes to Multiple CN Nodes”

Work **completed** (except for GERAN):

- Stage 2 completed in TS 23.236 at SA#13
- Stage 3 CN:
 - completed for CN1 at CN#14, potentially some CRs to come from CN4
- Stage 3 RAN:
 - Completed for RAN3: CRs and TR 25.875 v2.0.0 are submitted to TSG RAN#15 for approval
- Stage 3 GERAN:
 - Just started at GERAN #8

GERAN (1/3)

Ongoing Work Items for Release 5 (all in **progress**):

- GERAN/UTRAN interface evolution 1 (evolution of Iu PS)
- GERAN/UTRAN interface evolution 2 (evolution of Iu CS)
- GERAN Inter BSC NACC improvements over the Gb Interface
- 8PSK AMR HR
- GERAN enhancements for streaming services 1 & 2
- Intra Domain Connection of RAN Nodes to Multiple CN Nodes:
Overall System Architecture started at GERAN#8
- Uplink TDOA feasibility study started at GERAN#7

GERAN (2/3)

Ongoing Work Items for Release 5 **not started**:

- GERAN improvements 2/3 : MS conformance test for Intra BSC NACC
- GERAN support for IP multimedia : MS and BTS conformance test
- Alignment of 3G functional split and Iu : MS and BTS conformance test
- Enhanced Power Control : MS and BTS conformance test
- Wideband telephony services (UMTS) : MS and BTS conformance test
- Location services (UMTS) : BTS conformance test

GERAN (3/3)

Work Items for Release 5 **completed**:

- Location Services (LCS) for GERAN in A/Gb Mode
- Real Time QoS for packet services including VoIP
- GERAN improvement : Low chip rate TDD option
- GERAN improvement : Gb over IP
- 700 MHz spectrum support (Release 4) : Closed except BTS conformance test on-going
- GB Enhancements Stage 2 / Stage 3 Closed

End-to-End QoS (1/2)

Work ongoing, to be **completed by June.**

- Stage 2 in TS 23.207 already **completed**, lot of CRs, in particular on determining the highest QoS
- No additional reduction of Stage 2 options (still 3 options)
- Stage 3: TS 29.207 (“Policy control over Gs interface”) and 29.208 (“End-to-end QoS signalling flows”) to be presented to CN#15 for information, completion of work expected by CN3 in **June 2002.**

End-to-End QoS (2/2)

- **SA4 issues:**
 - UMTS QoS mapping for both streaming and conversational services applications:
completed
 - QoS parameter values for various media types:
further guidance would be needed/beneficial
from S1 to S4 in order to complete the work:
Ongoing

Messaging Enhancements: MMS

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

Almost completed

- **MMS REL-5 stage 2 finalised; one open item on stage 3**
- **Main enhancements**
 - Address resolution and Mobile Number Portability (stage 2 + stage 3)
 - MM7 (MMS Relay/Server – MMS VAS Applications) (stage 2 + stage 3)
 - Support of persistent storage in MMS (stage 2)
 - Enhanced interworking issues (stage 2 + stage 3)
- **Open items:**
 - MM7 stage 3 expected for **June 2002**
 - Support of "Recipient Party pays" charging model in MMS (late requirement from SA1 cannot be achieved in Rel-5)
- **MM1 (interface MMS User Agent and MMS Server/Relay) stage 3 will be defined by WAP Forum**
- **Responsibility for Media formats and codecs for MMS has been transferred from T2 to SA4 (TS 23.140 -> TS 26.140). TS 26.140 presented to SA Plenary for **approval**.**

Messaging Enhancements: EMS

EMS (Enhanced Messaging Service) enhancements completed

- **main enhancements**
 - use of extended objects, with compression
 - bitmap graphics, including colour
 - hyperlink IE
 - vector based graphics format
 - monophonic and polyphonic sound formats

Service Change and UDI Fallback (SCUDIF)

- **Stage 1:**
 - CR to 22.101 on Service change and fallback for UDI/RDI multimedia calls
- **Stage 3:**
 - CRs to 24.008, 23.972, 27.001 & 29.007 to be presented to CN#15
- **Work Item Status:**
 - **Almost complete** with the approval of the above CRs. Remaining issue: interworking with ISUP (requirement just added).

Features with Unclear Status (Rel-5 or Rel-6?)

Presence

- Stage 1 already **completed**, still in Rel-5 for SA1
 - Stage 2 **on-going** normally: TR 23.841 presented to SA#15 for information (v.1.0.0)
 - Stage 3 and other aspects (security, charging, testing) **not started**, to be started in September at N1
- =>TSG CN#15 to give an estimate on time needed to define the Stage 3
- =>TSG SA#15 to confirm to which release it belongs (SA#14 decision was to check at SA#15, SA1 says it's for Rel5)
- Presence Release 6 WID by SA1:
 - maintenance (other WG's will have PS as a R6 item)
 - enhancements (e.g. security, charging, attributes etc.)

UE functionality split

- TR on Feasibility Study from S1 and T2 presented for Approval for Rel-5

Display of SP name on UE

- Stage 1 completed: requirements defined by S1 are still valid
 - Stage 2 & 3: missing info from T3 (no MCC support)
- =>TSG T#15 are asked to clarify the status of this feature**

Release 6 features

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Multimedia Broadcast/Multicast Service (MBMS)

- **Stage 1 CRs on:**
 - **MBMS Broadcast and Multicast Sessions**
 - **Power consumption minimisation for MBMS**
- **Stage 2 progressing well at S2**
- **Stage 3 not started (not at CN nor at T)**

Push Services

Now clarified that it applies to Rel-6

- **SA1's requirements provided for Rel-6**
- **Push Service Service aspects (Stage 1) 22.174 v 0.6.0 sent to all groups**
- **SA2 will work on Stage 2 for Rel-6 (a FS was done for Rel-5)**

Wireless LAN (WLAN)

- **Stage 1 to be presented for information to SA#15**
 - 22.934 V 1.0.0
- **Updated WID for S1 activities on WLAN presented for approval**
- **WID for S2 activities on WLAN presented to SA#15**
- **Stage 3 not started (not yet defined)**

Network Sharing (NetShare)

- **S1 activities started: TR skeleton started, to include:**
 - **Identification of the main scenarios in which network sharing can manifest**
 - **Identify the requirements applicable to any of the scenarios, (to be mainly user's requirement, and possibly security and charging requirements)**
 - **Analyse more in depth the available technical solutions, and check if the existing requirements are sufficient**
 - **Other activities (Stage 2 and 3) not yet started**

MExE Enhancements Rel-6

- ***WID MExE Rel-6 Improvements and Investigations***
presented for approval to TSG-T
- ***WID MExE Run-Time Independent Framework***
presented for approval to TSG-T

LCS in Rel-6

- **Activities identified for Rel-6:**
 - Interactions with 3GPP Generic User Profile
 - Security aspects of enhanced support for user privacy in location services (SA3)
 - GMLC - GMLC interface (SA2)

“IMS Enhancements”

- **WID not created yet**
- **It will include the Rel-5 postponed items and/or the newly created ones.**
- **Moved from Rel-5:**
 - **Identification portability (was number portability) in IMS**
- **Newly created:**
 - **Radio optimisation impacts on PS domain architecture**

Other Release 6 features (1/2)

- ***Generic User Profile:***
 - Work ongoing in SA1, SA2 and T2
 - TR 22.240 V0.6.0 on GUP sent to other groups
 - Investigation ongoing on the degree to which OSA interfaces provide the needed functionality for GUP
- ***Digital Rights Management:***
 - Stage 1 document presented to SA for information (TS 22.242, Version 1.0.0)
- ***Speech Recognition and Speech Enabled Services***
 - Stage 1 (TR 22.243) is stable in SA1.
 - Aurora part belongs to Rel-5.

Other Release 6 features (2/2)

- ***FS on Priority Service***
 - **Work started at SA1**
 - **Priority Service Feasibility Study Technical Report is deemed 75-80% complete**
 - **TR 22.950 presented for information at SA #15**
 - **Feature Code for Priority Service required**

Emergency call enhancements

Rel-6

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

- SA2 work completion target moved from TSG T#16 to TSG#18
- Stage 3 (mostly by CN1?) must re-target its completion date

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

- Requirements covered by SA1 in 22.228
- Stage 3 work has started in CN1, but completion depends on the related IMS progress still under discussion in SA2.

Summary of Completion Dates

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Summary

- The two following slides provide a summary of the Foreseen Completion Dates: they provide the number of the TSG meeting at which the feature is completed or anticipated to be completed.
- Abbreviations used in next slides:
 - “UID” = Unique ID (Reference in the Work Plan)
 - “FCD” = Foreseen Completion Date
 - “?” = no clear estimation, to be clarified at TSG#15
 - “+” = and (the feature can be split and the resulting BBs can be completed independently)
 - “several” = the feature consists in a lot of independent BBs with different completion dates
 - In **Red**: Features particularly relevant

Foreseen Completion Date (1/2)

UID	Title	FCD
2	Evolutions of the transport in the UTRAN [in progress]	15
4	Evolutions of the transport in the CN [in progress]	14
2476	High Speed Downlink Packet Access	15
1216	Improvements of Radio Interface [in progress]	16+later
9	RAN improvements [in progress]	15+16
1273	Provisioning of IP-based multimedia services	16+later
34001	Extended Transparent End-to-End PS Streaming Service	15
1652	Emergency call enhancements [in progress]	Del
1517	Global Text Telephony	12
1637	OSA enhancements [in progress]	15?
1638	CAMEL phase 4	16+later?
2464	MExE enhancements Rel-5	15+16
1625	Wideband Telephony Service - AMR	15
1826	Terminal interfaces	15
1536	Location Services enhancements [in progress]	15?
1560	UICC/(U)SIM enhancements and interworking [in progress]	?

Foreseen Completion Date (2/2)

UID	Title	FCD
1800	(U)SIM toolkit enhancements [in progress]	?
1571	Security enhancements [in progress]	15
1861	Miscellaneous UE Conformance Testing Activities	NA
1365	Support of Push Services	18?
1142	Charging and OAM&P	NA
2062	Subscription Management	NA?
2243	Intra Domain Connection of RAN Nodes to Multiple CN Nodes	15
2320	GERAN improvements	GERAN8+9?
2499	Support of Presence Capability	18?
2507	Display of Service Provider name on UE	?
2520	User Equipment Management	NA?
2527	Emergency calls without UICC/SIM in netw. with IMS	18
2556	End to End QoS for PS Domain including IMS	16
2569	Messaging enhancements Rel-5	15+16
13000	Service Change and UDI Fallback	15+16
35009	Trace Management	?



Sorted by Completion Date



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Foreseen Completion Date (1/2)

UID	Title	FCD
1517	Global Text Telephony	12
4	Evolutions of the transport in the CN [in progress]	14
2	Evolutions of the transport in the UTRAN [in progress]	15
2476	High Speed Downlink Packet Access	15
34001	Extended Transparent End-to-End PS Streaming Service	15
1625	Wideband Telephony Service - AMR	15
1826	Terminal interfaces	15
1571	Security enhancements [in progress]	15
2243	Intra Domain Connection of RAN Nodes to Multiple CN Nodes	15
1637	OSA enhancements [in progress]	15?
1536	Location Services enhancements [in progress]	15?
9	RAN improvements [in progress]	15+16
2464	MExE enhancements Rel-5	15+16
2569	Messaging enhancements Rel-5	15+16
13000	Service Change and UDI Fallback	15+16
2556	End to End QoS for PS Domain including IMS	16

Foreseen Completion Date (2/2)

UID	Title	FCD
1216	Improvements of Radio Interface [in progress]	16+later
1273	Provisioning of IP-based multimedia services	16+later
1638	CAMEL phase 4	16+later?
2320	GERAN improvements	GERAN8+9?
2527	Emergency calls without UICC/SIM in netw. with IMS	18
1365	Support of Push Services	18?
2499	Support of Presence Capability	18?
1560	UICC/(U)SIM enhancements and interworking [in progress]	?
1800	(U)SIM toolkit enhancements [in progress]	?
2507	Display of Service Provider name on UE	?
35009	Trace Management	?
2062	Subscription Management	NA?
2520	User Equipment Management	NA?
1861	Miscellaneous UE Conformance Testing Activities	NA
1142	Charging and OAM&P	NA

Conclusion

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Conclusion (1/2)

- **Many features are either completed at TSG #15 or anticipated to be completed at TSG #16**
- **It is proposed to decide at TSG#15 which features belong to Rel-5 but to allow until TSG#16 -exceptionally more- for the actual completion of the Rel-5 features (not including charging and testing aspects)**

Conclusion (2/2)

- **The Features proposed to belong to Rel-5 are the ones that are anticipated to be completed by TSG#16**
- **When a splittable Feature can be partly completed by TSG #16, it is proposed to split it in two: only the part to be completed by TSG#16 is proposed to belong to Rel-5**
- **The two following pages provide the complete list of the Features belonging entirely or partly to Rel-5, and an incomplete list of those belonging to Rel-6, if the above proposal is accepted.**

Features entirely For Rel-5

UID	Title	FCD
1517	Global Text Telephony	12
4	Evolutions of the transport in the CN [in progress]	14
2	Evolutions of the transport in the UTRAN [in progress]	15
2476	High Speed Downlink Packet Access	15
34001	Extended Transparent End-to-End PS Streaming Service	15
1625	Wideband Telephony Service - AMR	15
1826	Terminal interfaces	15
1571	Security enhancements [in progress]	15
2243	Intra Domain Connection of RAN Nodes to Multiple CN Nodes	15
1637	OSA enhancements [in progress]	15?
1536	Location Services enhancements [in progress]	15?
9	RAN improvements [in progress]	15+16
2464	MExE enhancements Rel-5	15+16
2569	Messaging enhancements Rel-5	15+16
13000	Service Change and UDI Fallback	15+16
2556	End to End QoS for PS Domain including IMS	16

Other Features

UID	Title	FCD
1216	Improvements of Radio Interface [in progress]	16+later
1273	Provisioning of IP-based multimedia services	16+later
1638	<u>CAMEL phase 4</u>	16+later?
2320	<u>GERAN improvements</u>	GERAN8+9?
2527	<i>Emergency calls without UICC/SIM in netw. with IMS</i>	18
1365	<i><u>Support of Push Services</u></i>	18?
2499	<i><u>Support of Presence Capability</u></i>	18?
1560	<u>UICC/(U)SIM enhancements and interworking [in progress]</u>	?
1800	<u>(U)SIM toolkit enhancements [in progress]</u>	?
2507	<u>Display of Service Provider name on UE</u>	?
35009	<u>Trace Management</u>	?
2062	<u>Subscription Management</u>	NA?
2520	<u>User Equipment Management</u>	NA?
1861	Miscellaneous UE Conformance Testing Activities	NA
1142	Charging and OAM&P	NA

Bold: Partly for Rel-5

Italic: only for Rel-6

Underlined: To be clarified (also applicable to previous page)