

# *Review of the Work Plan at Plenaries #25*

This version does not include updates from TSG #25

# Content

- Review of testing activities and pre-Rel-6
- 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

# ***Note on terminology used in these slides***

- **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

# *Testing and pre-Rel-6 activities*

**Applies to pre-Release 6 Features**

# ***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 activities on pre-Rel-6, except the corrections**





# ***Review of on-going features***



# List of on-going Features (1/4)

UID	Feature	WG
2	<b>Evolutions of the transport in the UTRAN: Deleted</b>	RP
1216	<b>Improvements of Radio Interface</b>	RP
3	<b>RAN Feasibility Studies</b>	RP
2468	<b>Multiple Input Multiple Output antennas (MIMO)</b>	R1
20003	<b>FDD Enhanced Uplink</b>	RP
9	<b>RAN improvements</b>	RP
32045	<b>PS domain and IMS impacts for supporting IMS Emergency calls</b>	S2
32023	<b>Location Services enhancements 2</b>	S2
1571	<b>Security enhancements</b>	S3
32021	<b>IMS Phase 2</b>	S1
32063	<b>3GPP Enablers for services like Push to Talk over Cellular (PoC)</b>	S2
32062	<b>Interworking aspects and migration scenarios for IPv4 based IMS I</b>	S2
11032	<b>Interoperability and Commonality between IMS using different "IP</b>	S2
1365	<b>Support of Push Services</b>	S1

# List of on-going Features (2/4)

UID	Feature	WG
42009	Multimedia Messaging (MMS) enhancements	T2
42005	Rel-6 MExE enhancements	T2
2062	Subscription Management	S5
2499	Support of Presence Capability	S1
50056	Enhanced A/Gb feasibility study	GP
50063	Flexible Layer One for GERAN	GP
50041	Uplink TDOA feasibility study	GP
2544	Multimedia Broadcast and Multicast Service	S1
31006	Speech Recognition and Speech Enabled Services	S1
31008	Generic User Profile	S1
31010	Digital Rights Management	S1
31012	WLAN-UMTS Interworking	S1
31015	Priority Service	S1
31018	Network Sharing	S1

# List of on-going Features (3/4)

UID	Feature	WG
32016	QoS Improvements	S2
33002	Support for subscriber certificates	S3
15010	Rel-6 OSA enhancements	S1
50401	Addition of frequency bands to GSM	GP
50130	Seamless support of streaming services in A/Gb mode	GP
34300	Performance characterisation of default codecs for PS conversatio	S4
31029	DELETE: Study of Feature Interactions Requirements	S1
31030	Study on Privacy Capability	S1
35010	OAM&P	S5
35016	Charging Management	S5
1800	Rel-6 UICC/USIM enhancements and interworking	T3
34022	Packet Switched Streaming Services Rel-6	S4
34023	AMR-WB extension for high audio quality	S4
34027	Codec Enhancements for Packet Switched Conversational Multime	S4

# List of on-going Features (4/4)

UID	Feature	WG
34028	3G-324M Improvements	S4
51101	Single Antenna Receiver Interference Cancellation (SAIC)	GP,G1
50500	Support of Conversational Services in A/Gb mode via the PS domain	GP
12006	Enhancement of dialled service for CAMEL	S1
32060	Bandwidth and resource savings in CS networks	S2
33018	FS on (U)SIM Security Reuse by Peripheral Devices on Local Interf	S3
50600	Multiple TBF in A/Gb mode	GP,G2
50096	Alignment between the test-regimes for GERAN capable MS	G3
50444	Addition of U-TDOA in the CS domain	GP
50445	Addition of U-TDOA in the PS domain	GP
50101	Advanced Receiver Performance	GP
50109	Reduction of PS service interruption in Dual Transfer Mode	G2
12008	CAMEL prepay interworking with SCUDIF	N2
31046	Circuit Switched Video and Voice Service Improvements	S1
32064	Access Class Barring and Overload Protection	S2
32066	Combining CS bearers with IMS	S2

**Features (partly) completed by  
September 2004  
(completed items proposed to belong to  
Rel-6)**

# **Rel-6 RAN Work Items 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 lur and lub; 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).**
  - RAN1 agreed to raise question to RAN whether further work on compressed mode enhancements is useful in RAN1.
  - One document was submitted to RAN3#43, but it was not treated.
  - Completion date: **RAN#25(09/04)**
- **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).



# 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 luant 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

## 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
- Work in Rel-7 on Optimisation of downlink channelisation code utilisation for FDD and TDD: see corresponding slide

## ***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.**
  - **Estimated level of completion = 100%**
- **Radiolink performance enhancements (R1):**
  - **RAN1 agreed two CRs to TS 25.899 to complete the analysis of the gains of the ACK/NACK enhancement.**
- **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**

# 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: Most aspects to be done by OMA. **CN1 involvement still to be checked. OMA will do most of the Stage 3.** CN4 refers to OMA specs in particular for Le, Lr and Lpp interfaces. SA2 has sent an LS to OMA to check their capability/willingness of doing Stage 3. From SP-040232: OMA to finish their work by **October 2004**.
- 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:
  - performance specification for CELL\_PCH and URA\_PCH, to be solved in RAN4 with CRs
  - 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 is asked to approve the WI endorsed by the WGs. **FCD?**

### –U-TDOA positioning method in GERAN

- GERAN aspects **95 % complete**

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

# IMS Phase 2 (1/3)

## Different independent items:

- Stages 1 & 2 **completed** (in resp. 22.228 and 23.228) for:
  - IMS Local services.
    - Stage 3: still not started. FCD in CN1 is now **June 2005**. **To be moved to Release 7 (and create IMS Phase 3)?**
  - 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 approval at CN#25, 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 (used for Presence and Trace, enhancement of Mn interface) : **Moved to Rel-7. See corresponding slide.**

# 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). Stage 3 work not started. **No FCD** (move to Rel-7?).
- Enhancements to Cx and Sh interfaces:
  - CRs on definition of public identities and sharing of public identities approved. Completion date is **September**. New specification to coordinate Diameter-based interfaces within 3GPP. **Completed??**
  - New specification to coordinate Diameter-based interfaces (3GPP TS 29.230) is sent for information and approval 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. **Almost 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 **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. **To be deleted?**
- 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
  - IMS Messaging and IMS Group Management depend on OMA's SIP/SIMPLE Instant messaging and SIMPLE Presence, to be completed respectively by June and November 2004 according to SP-040232



# *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.

# ***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.**

# ***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.
- No OMA dependency needed.

# 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 is needed (SA#24 clarification) **but the problem of inconsistency between OMA's and 3GPP's stages 1 persists.**
- 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.
- Results from **OMA** already available. They are referenced in 3GPP documents and publicly available.
- Status at OMA : "OMA Candidate Enabler" completed last May

# ***WLAN/UMTS interworking (1/2)***

- **Stage 1: Work is **stable**; Fine tuning in progress.**
  - Clarification to WLAN PLMN Selection
  - Use of the SSID List at WLAN PLMN Selection
  - Clarification of Interworking between PLMN and WLANs clause 5.1.7.1
  - Clarification of the relationship between different levels of WLAN interworking
  - Clarification on the WLAN identities lists for I-WLAN selection
- **Stage 2 in TS 23.234, approved at SA#23**
- **SA5 work on WLAN charging (TS 32.252) not ready, awaiting for stabilisation of TS 23.234.**

# **WLAN/UMTS interworking (2/2)**

## **For scenario 2:**

- CN1: **completed**, TS 24.234 brought to this plenary **for approval**.
- CN4 aspects:
  - WID updated; new requirements (reference points) from SA2 added.
  - TS 29.234 **presented for approval** in CN#25. Work almost **completed**.

## **For scenario 3:**

- Stage 3 started, 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 not analysed by CN, it is not yet clear which ones are mandatory in Rel-6 and which ones can be defined in later releases. **Comment from SA#24: To be clarified by CN4 and SA2 dialogs. Result at SA#25: no dialog has been started.**

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.**

See new WID on support of SMS and MMS over IP networks (including WLAN) is proposed by SA2

# 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.



TM



# 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 (part of Release 6).**
  - 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

# ***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.**

# ***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 forwarded 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 TM officially closed CN2)

# 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 produced at SA#25 for approval (c/o SA4)**

# 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)**



# Support for Subscriber Certificates

- Stages 1 and 2 defined by SA3:
  - Draft TR 33.919 GAA; System Description. Was presented to SA#22 for information, **to be presented to SA#25 for approval.**
  - Draft TS 33.220 GAA; Generic Bootstrapping Architecture. **Approved** at SA#23.
  - Draft TS 33.221GAA; Support for Subscriber Certificates. **Approved** at SA#23.
  - Draft TS 33.141 GAA/HTTPS. **Approved** at SA#24.
- Stage 3 defined by CN4: TS 29.109 approved in CN#25. Work **completed.**
- SA1 and SA2 work **done.**
- **To be confirmed:** 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.

**Features planned to be completed by  
December 2004  
(might belong to Rel-7)**

# FDD Uplink Enhancements (EDCH)

## Physical Layer (R1) :

- Two meeting and Joint session with RAN2, agreed upon TTI and physical channel structure, and discussed about the signalling support for HARQ 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.
- Open issues: details of the TFC selection and Hybrid ARQ
- Level of completion: 40 %.
- Stage 2 TS 25.309 is updated and proposed for approval.

## Layer 3 Aspects (R3):

- Work was started in the last RAN3 meeting
- 3 contributions were presented for initial discussions
- A WG internal document skeleton (TR R3.015) was agreed to collect all agreements found in RAN3
- The completion level is estimated 5%

## 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

# ***Charging Management***

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

**Already SA Approved:**

- 32.250 / 32.297

**for SA#25 approval:**

- 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
- 32.272 Push-to-talk over Cellular (PoC) charging

## ***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 is documented in the TR 29.846 which is brought to this plenary for approval.
- 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:**

- One additional RAN1 and RAN2 Rel-6 ad-hoc in Cannes, 21-24 June.
- Agreement on the description of the MICH.
- Progress on MBMS change information and MBMS neighbour cell information.
- Progress on Frequency Layer Convergence and MBMS.
- Progress to introduce Stage 3 CRs: Design choices, AS/NAS interaction.
- Joint session between RAN2 and SA4 to clarify the repair functionality, service announcement and other issues.

#### **– RAN3**

- Progress on UE linking via lur (the counting is internal to the RAN). Stage 3 CR editing has started.

#### **– RAN4**

- Interaction of R99 measurement requirements and MBMS under study.
- Open issues: Soft combining mandatory, UE capability (memory requirements), delivery method of the scheduling information, effects of possible soft combining (in RAN2 and RAN3), conclusion of measurement and MBMS reception performance.

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

## ***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)
- The CN1 implication, mentioned in the WID, has still **to be checked**.

# OAM&P

## ***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)
    - 12 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

## *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
    - For SA#25 approval: 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
  - **CN1 Trace WID brought to CN#25 for approval. CN1 does not see any way to complete the 24.229 task for 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). Trace to be moved to Rel-7?**

# ***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).**

# ***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. Especially for GPRS, it was discussed how to add 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. See separate slides for audio/video codecs.**
- **SA5 doing the charging (TS 32.270 for approval at SA#25).**
- **CN5 is developing a Multi-Media Messaging SCF (TS 29.198-15 for approval 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**

## **For SA#25 Approval:**

- **32.172 SuM NRM IRP Information Service (IS)**
- **32.803 Process Guide; Use Cases in UML**

Target SA#26 Approval **Dec 2004** for:

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

# Network Sharing (1/2)

## Work **on-going**.

- FS in TR 22.951 approved at SA #18.
- Stage 1: **Complete**, covered by CRs.
- Stage 2: 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.
- No standardised OAM&P for this feature in Rel-6

# Network Sharing (2/2)

## RAN part:

- LS from RAN2 to CN1 and SA2 about PLMN identity information clarification.
- RAN3 agreed on re-routing function and indication of selected PLMN-Id.
- Progress on the broadcast of multiple PLMNs (PLMN list inserted in the broadcast, indication if the pre Rel-6 PLMN-Id belongs to the multiple PLMN list).
- Progress on the indication of the selected PLMN (RANAP).
- Introduction of RAN-centric rerouting function for MOCN in 25.413.
- Open issues
  - What PLMN identity information is to be provided in CN INFORMATION INFO message and in INITIAL DIRECT TRANSFER message. RANAP reject causes.
- Estimated level of completion: 85%.
- Completion date: **December**, was September.



# OSA Improvements

FCD moved to **Dec 04 (was 09/04)** because of CN5 new Stage 2 responsibility (23.127)

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
- **New TS 23.198** for Stage 2. Discontinue from Rel6 onwards TS 23.127 as it 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)**

- submitted for CN#25 Approval:
  - 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 provided in 3GPP.**

# ***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:**

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

H.264/AVC proposed as “optional” decoder for MMS, PSS and PSC in March/June 2004, could be recommended (“should” vs. “may”) as video codec for MMS, PSS, PSC, and 3G-324M, if formal **objections** raised at SA4#32 in August are removed, and/or DISCUSSION/DECISION solicited by Companies at SA#25 indicate the way forward.

Status: **technical work almost completed**, signaling to be checked by **December 2004** (part of Release 6, depending on DISCUSSION/DECISION at SA#25).

PSS/MMS **Audio codec:** see next slide

# Packet Switched Streaming Rel-6 (2/2)

## Audio Codec

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: way forward/selection discussed in SA#24 and guidance to SA4 provided in SP-040481: set of specs for both Extended AMR-WB (AMR-WB+) and Enhanced aacPlus + alternative CRs presented **for DISCUSSION/DECISION** 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)

- Info from SP-040232: OMA's Standard Transcoding Interface (STI) V1.0 supposed to be completed in June 2004

## ***AMR-WB+***

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

## ***Codec Enhancements for Packet Switched Conversational Multimedia Applications***

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

## ***3G-324M Improvements (Circuit Switched)***

- 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.
- Dependency on OMA's SIP/SIMPLE Instant messaging and SIMPLE Presence, to be completed respectively by June and November 2004 according to SP-040232

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

# *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 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** for information of TR 23.979, approval by **December** (but dependant on stable input from OMA). OMA's work to be completed by December according to SP-040232.
- **No work ongoing on Stage 3** at the moment. Awaiting Stage 2 to be progressed. **Not before Stage 2 is completed.**
- SA5 cooperation on Charging with OMA MCC & PoC WGs™ (see Slide on Charging Management)
- Speech Codecs for PoC: status requested by OMA (see SP-040494 "LS reply about speech codec for PoC" from 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**
  - Original version presented by SA1
  - Estimated completion date is December

# *Rel-7 RAN improvements*

## RAB support enhancement (R2)

- 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 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#27(03/05)**

# ***IMS Phase 3 (to be created)***

- **Mp (MRFC - MRFP) interface protocol definitions (used for Presence and Trace)**
  - **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).**
  - **Note that Presence and Trace can work without Mp interface, which can be considered an enhancement of the Mn interface.**

# 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%. Completion date for WG1, 2 and 3: **RAN #27**(03/05), for WG 4: **RAN #30**(12/05)

# **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 GERAN2 (to be confirmed once Stage 2 is more stable).**
- **New FS of Enhanced Support of Video Telephony started in GERAN (GP-042247)**

# ***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 **June 2005** (postponed from November 2004 and often before that). No contributions received, will **not be part of R6** if there is not a dramatic change of priority.
- Stage 3 Completion date **June 2005** (was last estimated for Sept/Dec 2004 and postponed twice before that).
- No action identified so far for GERAN and SA3.
- Dependencies from IETF, T3. RAN3 might be involved on priority.

## ***IMS enhancement for NGN***

- **WID approved at SA#24**
- **TS 23.228 is affected and will be approved by SA#27**

## ***Support of SMS and MMS over IP networks***

- **WID approved at SA#24**
- **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

TM



# ACBOP

## In full: 3GPP Access Class Barring and Overload Protection

- 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:**

- FS on applicability of GALILEO for LCS (SA2)
- Extension of A-GPS to include GALILEO and other satellite navigation systems (SA1): Stage 2 Completed
- Accuracy of information Indication of capability (SA1)
- Toward A-GNSS concept (SA1)
- LCS for 3GPP Interworking WLAN (SA1): Stage 1 Completed
- Support for Global Navigation Satellite Systems in GERAN (GERAN)

## ***Selective Disabling of UE Capabilities (potential OMA dependency)***

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



# *All-IP Network Feasibility Study*

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



# ***Enhancements of VGCS in public networks***

- **Work commenced with CRs to Stage 1 (42.068);**
- **Voice Group Call Services (VGCS) in public networks for communication of public authority officials approved in GERAN (GP-041837)**
- **WID to be presented at CN#25 for corresponding CN1 aspects**

## *Multi system mobile stations*

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

# ***Other new WIs for approval at SA#25***

- **SA3: Security for early IMS**
- **SA1: Enhance the USAT MMS presentation WI (for early implementation)**

# *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)**





**Reminder on deleted items**

# *Deleted items in GERAN*

- **GPRS Extended Measurement Reporting,  
GPRS Idle Interference Measurements,  
Unsynchronized (blind) Cell Change Order  
towards a GSM cell**



# *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

# ***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 (21 Features completed in September, 11 more 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
- **For “splitable” Features, the scheme above applies to the stand-alone parts of the Features**