

Source: Vodafone Group
Title: Planning for the R4 part of "Release 2000"
Document for: Decision
Agenda Item: 7.8

At the recent SA ad-hoc on Release 2000 in Helsinki, Vodafone took on the task to analyse progress on the various work items currently planned for Release 2000 and to identify which of these might be ready at various timescales for a potential 'R4'.

In line with the ad hoc's proposal that a Release should be complete and implementable, the various work items have been grouped into "Stand Alone Features". A Stand Alone Feature is meant to be a set of work items which are implementable, and, which can be included or excluded from R4 without impact on any other Stand Alone Feature. We have worked closely with the SA2 secretary, Alain Sultan, and sought assistance from a number of experts in various groups.

The progress on each Stand Alone Feature has been analysed and the TSG plenary at which the last of the core specifications (ie excluding testing and O+M) will be approved and stable has been estimated. Future progress is however highly dependent on contributions and whether unforeseen problems are encountered. We have tried to be reasonably accurate: over-optimistic inclusion of SAFs in R4 will merely lead to MCC having the difficult task of "un-incorporating" change requests for the parts of SAFs which are eventually excluded from R4.¹

Each line item on the Project Plan has been examined and estimates updated where appropriate. **The result is shown in the next page.**² It can be seen in summary that:

- 7 SAFs are already complete, or will be by 12/00 (TSG#10)
- 35 SAFs are expected to be complete by 03/01 (TSG#11), ie 28 more than in 12/00
- 46 SAFs are expected to be complete by 06/01 (TSG#12), ie 11 more than in 03/01.

Unfortunately, these figures still exclude the GERAN features. However we think that this does not greatly change the overall picture.

Analysis

- It is not considered that sufficient features will be complete by TSG#10
- However, those that can be ready by TSG#11 in March 2001 would provide a very useful Release 4. These features would provide a commercially useful enhancement to the UMTS and are considered important to be released before the IM Sub-System Release 5. It would be undesirable to delay these features any later since they are needed by operators and manufacturers. Also, if they were released at the same time as the IM SS, this would be a very large amount of new work, which would prove difficult to 'digest', design and implementation.
- Those features which would not be complete until TSG#12 are limited in number. R4 should not be delayed until this date, since the other features 'cannot wait' and it is important for releases not to be too close in time – six months would be too close to R5.

Conclusion

Vodafone propose that Release 4 be targeted for completion in March 2001. This is a realistic timescale and provides a useful content before Release 5.

SA is invited to endorse this proposal.

¹ With only 3, 6, or 9 months to go for R4 we need to be accurate. With 15 months to go for R5 it is more sensible to set 'stretching' milestones and completion dates.

² The allocation of SAFs to R4 dates on the next page is the same as in the email sent out by Vodafone on the SA email reflector on 7/9/00. It is a 'cut and paste' of different views (filters) of the project plan.

1 Standalone Features expected to be completed by 12/00 or earlier

- 1.1 RRM Support over Iub and Iur: RRM optimisation
- 1.2 Distinction in CS domain of emergency call types to different emergency services
- 1.3 Facsimile
- 1.4 Bearer Modification without pre-notification
- 1.5 LCS support in the core network CS domain
- 1.6 MAP application layer security
- 1.7 Evolution of GSM PS algorithms (e.g. GEA 2 deployment)

2 Standalone Features expected to be completed by 03/01 but after 12/00

- 2.1 QoS optimisation for AAL2 connections over Iub and Iur interfaces
- 2.2 PS-domain handover for real-time services (Master)
- 2.3 User/signalling data transport on TCP/RTP/UDP/IP based bearers (Nb/Nc)
- 2.4 User/signalling data transport on ATM/AAL2 bearers (Nb/Nc)
- 2.5 Improvement of inter-frequency and inter-system measurement
- 2.6 FDD Base station classification
- 2.7 Hybrid ARQ II/III
- 2.8 Low Chip Rate TDD option
- 2.9 Header compression removal/stripping in the RAN
- 2.10 Enable bearer independent Circuit-switched network architecture
- 2.11 Circuit-switched multimedia services
- 2.12 CAMEL phase 4
- 2.13 3rd MExE classmark
- 2.14 MExE Security
- 2.15 Tandem Free aspects for 3G and between 2G and 3G systems
- 2.16 Multimedia Messaging
- 2.17 Co-ordination O&M messaging Specification
- 2.18 Security Management (Key Administration and Distribution for MAP)
- 2.19 Geographical Area description: DEfined Geographical Areas (DEGA)
- 2.20 UE positioning in UTRA FDD
- 2.21 QoS for CS services at HOs (inter-MSC and SRNS change)
- 2.22 Common PCN Handset Specification (CPHS)
- 2.23 Enhancements to (U)SIM toolkit secure messaging
- 2.24 Protocol Standardisation of a SIM Toolkit Interpreter
- 2.25 UICC Java API
- 2.26 "Control plane protection in core network (e.g., GTP, CAP, MAP/IP, provided by IPsec) "
- 2.27 Visibility and Configurability of security
- 2.28 Miscellaneous security issues

Standalone Features expected to be completed by 06/01 but after 03/01

- 3.1 Radio access bearer support enhancement (Master)
- 3.2 Emergency call recalling capability enhancement
- 3.3 Global Text telephony
- 3.4 AT command support (Feasibility Study and possible support)
- 3.5 Wideband Telephony Service - AMR (Master)
- 3.6 Transcoder-Free Operation (TrFO)
- 3.7 LCS support in the core network PS domain
- 3.8 LCS interoperation aspects
- 3.9 UE positioning in UTRA TDD
- 3.10 Evolution of GSM CS algorithms (e.g. A5/3 development and deployment)
- 3.11 GERAN Security

Note: these work items are taken from the 14/08/00 version of the MCC project plan.