Title:	**Joint meeting RAN4-SA4 on MBMS (Sophia Antipolis, 4-6 April 2005) : guidance for simulations and error patterns for the audio codec characterisation tests**
Source:	TSG RAN Chairman and SA4 Secretary / SA4 SQ SWG Chairman
To:	TSG SA, TSG RAN WG4, TSG SA WG4, TSG GERAN
Attached:	S4-040803

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1. Introduction

At TSG#26 meeting in December 2004, SA4 asked TSG RAN and TSG GERAN guidance for simulations and the provision of adequate error patterns to complete the MBMS audio codec performance characterisation phase 2 of (subjective) testing.

At their last meeting#23 in Tampa (24-28 January 2005), TSG GERAN replied that the provision of adequate error patterns for MBMS simulations using GPRS/EGPRS was left to the action of individual (and interested) Companies, and at last SA4#34 meeting in Lisbon (21-25 February 2005) at least one Company committed to this purpose (and simulation results are expected to be provided at next SA4#35 meeting in early May 2005).

TSG RAN#26 replied to SA4 (in Liaison Statement RP-040546=TSGS#26(04)0893=S4-050009) that

> *The MBMS performance requirements defined by TSG RAN WG4 will not be completed before September 05, and this work is linked to the request from SA4*

SA4 needs the information well before September 2005 to complete the MBMS User Services Release 6 feature, and suggested (in Liaison Statement RP-050105=S4-050214) a discussion at the RAN4 MBMS ad-hoc Meeting on April 4-6, 2005. However, on a specific request raised by the SA4 Secretary during SA4#34 to avoid the repetition of a few previous (negative) experiences (i.e. no show of delegates ...), **no SA4 Company could commit to attend the Joint meeting RAN4-SA4 on MBMS**, and **THIS IS THE MATTER of CONCERN !**

Technical aspects

SA4 believes that the FEC on application layer should be part of the overall performance studies, and ROHC should also be taken into account in case it is specified for Rel-6 (which has been confirmed at TSG RAN#27). After the selection of an FEC code, still a contentious issue between two solutions, i.e. Raptor and RS codes, SA4 will provide the information required to perform simulations on the application layer (in case no decision occurs at TSG SA#27 Plenary on FEC, both candidate codes should still be considered for the simulations).

SA4 informed TSG RAN and TSG SA (in Liaison Statement RP-050105=S4-050214 and in TSGS#27(05)0132) that SA4 has made a working assumption to use the approach described in the attached Tdoc S4-040803, which was produced in origin to study the quality of multimedia services (video, audio, etc.) when delivered over IMS. The proposed methodology includes two parts: (1) Generation and use of link level PDU loss patterns for 3GPP bearers and (2) a network simulator to introduce packet losses in RTP streams.

SA4 asked RAN to review the link level PDU error masks (in Section 2.1 and Appendix C of S4-040803) and advise SA4 on the applicability of these masks. This matter can de discussed at the Joint meeting RAN4-SA4.

SA4 asked RAN (and GERAN) to review the RTP Packet Loss Simulator (in Section 2.2 and Appendix A of S4-040803) and advise SA4 on the applicability of this approach to introduce packet losses in multimedia streams delivered over RTP. This matter can de discussed at the Joint meeting RAN4-SA4.

2. Action

Companies attending TSG SA are kindly requested to assure that RAN4 and SA4 delegates will attend the Joint meeting on MBMS on April 4-6, 2005, at Sophia Antipolis, France.