

Status Report for WI to TSG

Work Item Name: Introduction of Multimedia Broadcast/Multicast Service (MBMS) in RAN

SOURCE: Nokia, Juho Pirskanen

TSG: RAN

WG: 2

E-mail address rapporteur: Juho.Pirskanen@nokia.com

Ref. to WI sheet: RAN_Work_Items.doc

Progress Report since the last TSG (for all involved WGs):

The TR 25.992 (MBMS UTRAN/GERAN Requirements) is presented to TSG_RAN #21 for approval. It was noted in RAN #20 that GERAN should review the TR before approval. The TR was sent to GERAN #15 for the review. GERAN noted the TR.

It should be also noted that no major changes or additions is done since MBMS ad hoc in Wokingham 15th – 16th January 2003, and work in RAN2 and RAN3 has clearly moved to TS25.346. In RAN2 #37 MCC provided editorial clean up to TR, which were agreed.

The TR with more detailed cover page can be found in the following Tdoc:

RP-030426 3GPP TR 25.992 v2.0.2: "Multimedia Broadcast/Multicast Service (MBMS); UTRAN/GERAN requirements"

Since RAN#20, MBMS discussions took place in RAN2#37, where UE MBMS capability principles were agreed. Principles were included to TS25.346 and can be summarized by following points:

- UE MBMS capability is not sent to UTRAN and is subject to UE implementation, including the relation between MBMS capability and actual RRC state
- UE may be counted although its actual capability does not allow to receive MBMS transmissions
- The standard will describe a minimum UE capability requirement in order to allow operators to configure MBMS channels
- There may be a minimum UE capability defined per service category

In addition to this, exchange of LSs between RAN2 and SA4 is continued to clarify further the usage of SDP and RTCP in MBMS (R2-031966).

Moreover MBMS discussion took place in RAN3#37, where following points were agreed and included to TS25.346:

- New definitions were introduced
- Clarification when MBMS Service Context is created and released in CRNC
- Clarifications when UE linking is performed
- Clarification to Session Start and Session Stop procedures and addition of associated signalling
- Addition of RNC registration procedure and associated signalling
- Addition RNC De-registration procedure
- CN De-registration

Associated signalling for RNC De-registration procedure and CN De-registration procedure with associated signalling were identified and included as placeholders in TS and thus marked with FFS.

Furthermore, exchanging of LSs between RAN3 and SA2 is started to align TS25.346 and TS23.246 [R3-031240].

The Figure 1 presents the statistics of MBMS contributions in last RAN2 and RAN3 meetings.

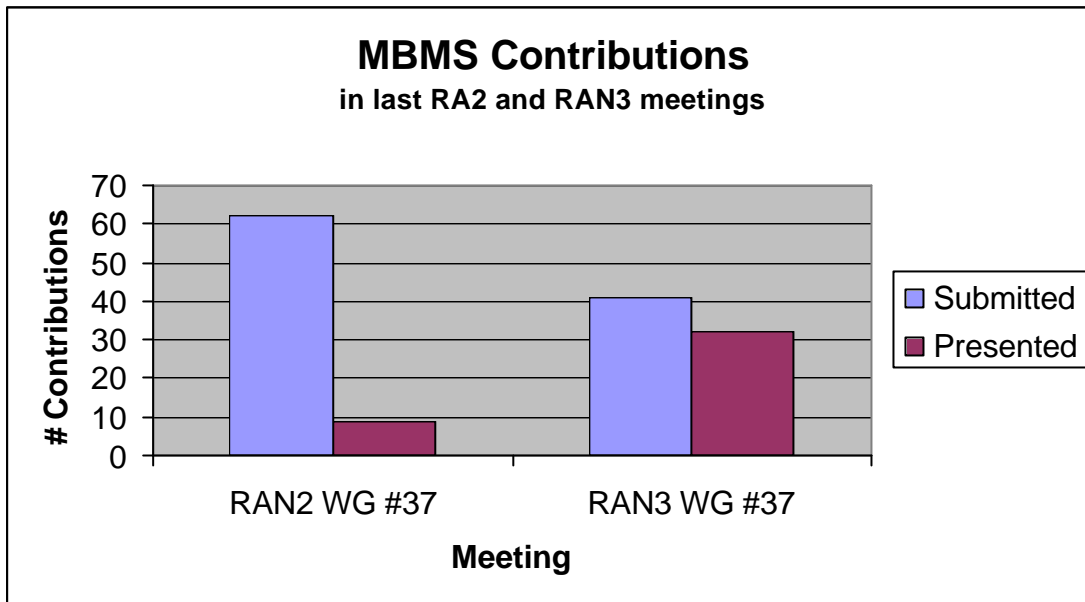


Figure 1: Number of MBMS contributions in RAN2 #37 and RAN3 #37

List of Completed elements (for complex work items):

- ?? TSG SA1: Stage-1 (TS-22.146) has been completed.
- ?? TSG SA2: Stage-2 (TR 23.846) has been completed.

List of open issues:

In RAN1

- ?? L1 point-to-multipoint MBMS issues.

In RAN2

- ?? MBMS Notifications solution.
- ?? Details of UE capability
- ?? Details on MBMS point-to-multipoint UTRAN protocol stack. (RLC, PDCP)
- ?? Details on MBMS point-to-multipoint Logical/Transport channel multiplexing.

In RAN3

- ?? Detail UTRAN MBMS signalling flows, (Iur, Iub procedures).
- ?? Distribution of Sessions Start in the whole SGSN service area
- ?? De-registration,
- ?? Optional "duration of session" indication
- ?? Signalling of Multicast Service Area.

Estimates of the level of completion (when possible):

As the TR25.992 has reached a mature level and principles of UE capability and Iu procedures has been included to TS25.346, it can be concluded that the level of completion is 40%, even though number of not presented contributions remains high.

WI completion date review resulting from the discussion at the working group:

Current completion date March 2004 is seen reasonable.

References to WG's internal documentation and/or TRs:

- R2-031966 Reply to LS (S4-030388) on RTCP signalling in MBMS
- R3-031240: LS Response on a new question about RAN assumption