**3GPP TSG SA WG4— SA4#34**                                            **S4-050128**
**February 21-25, 2005**
**Lisbon, Portugal**

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| **Title:** | Reply LS on Reception Acknowledgement for MBMS |
| **Response to:** | Response LS on Reception Acknowledgement for MBMS |
| **Release:** | Rel-6 |
| **Work Item:** | MBMS |

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|---|---|
| **Source:** | SA4 |
| **To:** | SA3 |
| **Cc:** | SA5, SA2, SA1 |

**Contact Person:**
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**Attachments:**      None

# 1. Overall Description

SA4 thank SA3 for their Response liaison on Reception Acknowledgement.

In order to finalize SA4's work on MBMS User Service, SA4 would like clarifications on SA3's intention expressed in their previous LS.

1) Background:
SA4 question "SA3 are kindly asked to consider the implications of using reception reports for acknowledgement collection noting that acknowledgement collection may be used by the BM-SC to take further action."

SA3 answer: "SA3 believe that there is no guarantee that a BM-SC will receive a reception report from a UE. This may happen for many genuine reasons as well as malicious ones. Applying integrity protection to a reception report will at least guarantee that the reception report was created by a specific UE and stop a malicious UE spoofing reception reports. It is indicated in the attachment that reception report will be contained in a HTTP POST. SA3 should be able to provide integrity protection using HTTP Digest, although the full details of this have not been studied."

SA4 understands TS 22.246 (MBMS Stage 1) explicitly requires a secured mechanism for delivery verification. SA4 would like to get confirmation that SA3 will provide integrity protection using HTTP Digest within MBMS Rel-6 for this procedure.

2) Background:
SA4 question: "Further SA3 are kindly asked to consider the feasibility of extending the delivery acknowledgement mechanism for charging purposes and to report back to SA4 on whether this is possible"

SA3 answer: "The only possibility for secure charging based on a delivery acknowledgement seems to delay delivery of the appropriate key (MSK) until after the BM-SC has received the delivery acknowledgement. SA3 have not studied the impacts and complexities that such a mechanism may impose on the overall system."

SA4 understands clause 6.1 TS 22.246 (MBMS Stage 1) seems to require the possibility for charging based on delivery verification. Such a solution could be based on the following
- Prior to file reception UE performs key registration (SA3 http based registration procedure; upper part of figure 6.1 in TS33.246 v6.1.0)

- UEs buffer ciphered file data
- Following complete reception of a file, UEs acknowledge reception of a file (RAck or StaR)
- BM-SC delivers the MSK to the acknowledging UE following reception of a UE acknowledgement (SA3 MIKEY based MSK key delivery; lower part of figure 6.1 in TS33.246 v6.1.0)

SA4 would like to get confirmation that SA3 will provide secure charging based on a delivery acknowledgement - according to the solution indicated above - within MBMS Rel-6.


## 2. Actions

**ACTION:** SA4 kindly asks SA3 to answer the 2 questions above. SA3 and SA4 have meetings ongoing at the same time. A reply within this week would be appreciated very much.


## 3. Date of Next TSG-SA4 Meetings

SA4#35                                          9 - 13 May 2005   San Diego, USA.