September 1 5, 2003, Erlangen, Germany

Agenda Item: 4.26.3.1

3GPP TSG SA WG3 Security — S3#30

S3-030507

06 - 10 October 2003

Povoa de Varzim, Portugal

TSG-SA4#28 meeting

September 1-5, 2003, Erlangen, Germany

Agenda Item: 4.2

Title: Reply to LS on "Update of WID on MBMSUsage of RTCP & SDP in MBMS"

Response to: S4-030585/S1-0300876 and S4-030661/S4-031002643/R2-032032

Release: Release 6
Work Item: MBMS

Source: SA4

To: TSG-SA1RAN2

Cc: SA2, SA3, SA5, TSG SA2, TSG RAN3RAN2, RAN3, GERAN1, GERAN2, CN1.

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Attachments: <u>\$4-030669.</u>none

1. Overall Description

SA4 would like to thank SA1 for the LSs regarding the progress of MBMS user services in TS 22.246. SA4 would like to communicate to all the involved WGs that the WID on MBMS has been updated (see document attached), and that the TS 22.246 will be taken into consideration for the definition of the MBMS protocols and codecs.

SA4 would like to thank RAN2 for their liaison statements on usage of RTCP and SDP in MBMS.

SA4 would like to confirm the RAN2 understanding that RTCP in uplink is not used over an MBMS bearer, as there is no uplink channel in such bearer. However, SA4 understands that particular MBMS applications (or services) might make use of an additional point-to-point bi-directional PDP context where RTCP could turn to be useful. However, this additional PDP context is not a default configuration (and the use of it depends on the application)

Regarding the RAN2 questions about SDP, specific answers to RAN2 questions follow:

1. How will the SDP information be provided to the UE?

SDP includes information about the session (media and payload types, bandwidth, etc.). It should be clarified that the SDP information for a multicast session is not delivered to the UE in that session (i.e., within the same multicast stream as the MBMS service content itself), but by some means outside the scope of that session. The SDP information can be delivered in a number of ways, including:

a) Embedding it in the device prior to it being distributed (fixed channels);

- b)Downloading from a server using a point-to-point connection (e.g., via HTTP);
- c)Embedding it in an MMS;
- d)Presenting it in an MBMS service announcement (using a separate MBMS broadcast or multicast session);

e)Other means.

2.Is the transfer information of the SDP information transparent to RAN in both the multicast mode and the broadcast mode?

It is transparent to the session being described, and uses the resources of the delivery mechanism it uses. Therefore it is transparent to the RAN.

3. Since there might be users starting to receive a session somewhere during the session, does this mean that the SDP information is repeated with a sufficiently low period so that users starting to receive the MBMS session "somewhere in the middle", are still quickly able to obtain the SDP information?

All users receive the SDP information prior to joining in to an MBMS session. The SDP is the information that the terminal needs in order to join in. If SDP is delivered in an MBMS service announcement (option "d" above) then it may be desirable to repeat the announcement. However, details of this option (including frequency and number of repetitions) are dependent on the service announcement protocol used (not currently specified), and these details should be operator configurable. (The IETF 'SAP' protocol is an example multicast announcement protocol carrying SDP information). For the other delivery mechanisms (a, b, c above) the SDP delivery is preceded by a user request, and thus repetition is not needed.

2. Actions:

None.

3. Dates of next SA4 Meetings:

Title	Date	Location	Country	Host
SA4#29	24-28 Nov. 2003	TBD	TBD	TBD
SA4#30	23-27 Feb. 2004	TBD	TBD	TBD

Erlangen, Germany, 1-3 September 2003.

Source: TSG SA WG4

Title: Work Item Description on Definition of MBMS user

servicesscenarios and requirements, media codecs, formats and transport/application protocols teleservice using Multimedia

Broadcast/Multicast Service (MBMS)

Document for: Approval Agenda Item: 13.67.4.3

Work Item Description

Definition of <u>MBMS</u> user services<u>scenarios and requirements</u>, media <u>codecs</u>, formats and transport/application protocols <u>teleservice</u> using Multimedia Broadcast/Multicast Service (MBMS)

1 3GPP Work Area

		Radio Access
		Core Network
X	<i>(</i>	Services

2 Linked work items

MBMS (2544) Packet Switched Streaming Service (34022) MMS Enhancements (42009) DRM (31010)

The relevant WGs will be kept informed of the progress of the work: SA2, SA3, SA5, CN1, RAN2, RAN3, GERAN1 and GERAN2.

3 Justification

Following on development of Stage 1 and 2 of MBMS specifications that define the bearer service for MBMS, there is now the need to define MBMS user services scenarios and requirements a teleservice that uses such bearer. This implies that a limited set of media codecs, formats and transport/application protocols for MBMS need to be specified. Information about typical MBMS application will be useful to for the design of the bearer in GERAN and RAN.

4 Objective

This work item will cover MBMS user services scenarios and requirements teleservice requirements and the definition of a set of media codecs, formats and transport/application protocols. The specification work will take into consideration the need to maximize the reuse of existing features of other 3GPP services. The impact of DRM will be taken into account within the work.

5 Service Aspects

SA1 will need to define a teleservice and describe possible application scenarios so that the codecs can be designed. The service examples should also provide guidance on quality of service expectations for the benefit of the radio access networks groups. This work item defines the media codec, format and

transport/application protocols to support <u>these MBMS</u> teleservice user services seenarios and requirements. Reuse of PSS and MMS features will be considered.

6 MMI-Aspects

None.

7 Charging Aspects

Requirements for charging will need to be addressed.

8 Security Aspects

The main security responsibility for this work item is owned by SA3. SA1 and SA4 will take guidance from SA3.

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes	✓	✓	✓	✓	
No	←				
Don't					
know					

10 Expected Output and Time scale (to be updated at each plenary)

	New specifications						
Spec No.	Title		Prime rsp. WG	rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
†S	_	teleservice and protocols decs	SA4	SA2, SA3	SA#22	SA#23	
†s	MBMS <u>user</u> services scenarios and teleservice requirements		SA1		SA#21	SA#22	
			Atte	cted existi	ng specifica	tions	
Spec No.	CR	Subject			Approved	at plenary#	Comments

11 Work Item Rapporteur

Igor Curcio (Nokia)

12 Work Item Leadership

Primary responsibility TSG SA WG4 Secondary responsibility TSG SA WG1

13 Supporting Companies

Vodafone, 3, T-Mobile, Siemens, Nortel Networks, Nokia, Ericsson.

14 Classification of the WI (if known)

X	Feature (go to 14a)
<u>X</u>	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature None 2544 Multimedia Broadcast and Multicast Service

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)