3GPP TSG CT Meeting #28

1ˢᵗ – 3ʳᵈ June 2005. Quebec, CANADA.

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CP-0500043

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Source:	**CT3**
Title:	**CRs to Rel-6 related to Auth-Application-Id on Work Item "MBMS"**
Agenda item:	**9.8**
Document for:	**APPROVAL**

Introduction:

This document contains 1 CR to Rel-6 on Work Item "MBMS" that have been agreed by TSG CT WG3, and are forwarded to TSG CT Plenary for approval.

WG_tdoc	Spec	CR	R	Cat	Title	Rel	C_Ver	Work Item
C3-050384	29.061	166	1	F	Correction to the use of Auth-Application-Id in Gmb	Rel-6	6.4.0	MBMS

CR-Form-v7.1

CHANGE REQUEST

| ⌘ | **29.061 CR 166** | ⌘**rev** | **1** | ⌘ | Current version: | **6.4.0** | ⌘ |

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME ☐ Radio Access Network ☐ Core Network **X**

Title: ⌘	Correction to the use of Auth-Application-Id in Gmb	
Source: ⌘	Nortel Networks, Ericsson	
Work item code:⌘	MBMS	***Date:*** ⌘ 29/04/2005

Category: ⌘	**F**	***Release:*** ⌘ Rel-6

Use <u>one</u> of the following categories:
   F *(correction)*
   A *(corresponds to a correction in an earlier release)*
   B *(addition of feature),*
   C *(functional modification of feature)*
   D *(editorial modification)*
Detailed explanations of the above categories can
be found in 3GPP TR 21.900.

Use <u>one</u> of the following releases:
   Ph2 (GSM Phase 2)
   R96 (Release 1996)
   R97 (Release 1997)
   R98 (Release 1998)
   R99 (Release 1999)
   Rel-4 (Release 4)
   Rel-5 (Release 5)
   Rel-6 (Release 6)
   Rel-7 (Release 7)

Reason for change: ⌘	In the target specification it is said that Gmb should have a specific Application Id in order to univocally identify it. But there is no specification of how this specific application id is included in the message.

The following facts occur:
- The standard way of using vendor specific application ids is using the Vendor-Specific-Application-Id AVP.
- Diameter Base Application states that only one Application Id AVP can be used at the same time.
- The commands used in this protocol have the "Auth-Application-Id" AVP as a mandatory AVP,
- According to IETF politics, the standard Diameter command should have their mandatory parameters unmodified and always being included in the message.
- According to standard Diameter extensions, it is only feasible to add optional parameters to the already defined parameters if the command code is not changed. These optional parameters could be added in all the applications that use a particular standard command.
- Auth-Application-Id and Vendor-Specific-Application-Id share the same numbering space.

The conclusion is that it is not feasible to follow the standard way of including the what forbids to have a specific Vendor-Specific-Application-Id AVP as it should be and a specific way of doing it should be stated without breaking the main rules set up by IETF.

Summary of change: ⌘	{ Auth-Application-Id } is used to include the Gmb application id value in order to keep the standard command code unchanged. It is also explicitly said that capabilities negotiation will use the Vendor-Specific-Application-Id following the normal procedure.
Consequences if not approved: ⌘	It is not explained where to include the Gmb application id.

Clauses affected:	⌘	17		
		Y	**N**	
Other specs affected:	⌘		**X**	Other core specifications	⌘
			X	Test specifications
			X	O&M Specifications
Other comments:	⌘			

************   FIRST MODIFIED SECTION   **********

17   Usage of Diameter on Gmb interface

Signalling between GGSN and BM-SC is exchanged at Gmb reference point. BM-SC functions for different MBMS bearer services may be provided by different physical network elements. To allow this distribution of BM-SC functions, the Gmb protocol must support the use of proxies to correctly route the different signalling interactions in a manner which is transparent to the GGSN.

The GGSN uses the Gmb interface

- to request authorisation/deactivation of a user for a multicast MBMS service,

- to register/de-register the GGSN for receiving a multicast MBMS service.

- to receive indication of session start and session stop messages, which shall cause the GGSN, SGSN and RAN to set up/tear down the appropriate resources for the service. For further details, see 3GPP TS 23.246 [65].

The support of Gmb within the GGSN is optional, and needed for MBMS.

The Gmb application is defined as an IETF vendor specific Diameter application, where the vendor is 3GPP. The vendor identifier assigned by IANA to 3GPP (http://www.iana.org/assignments/enterprise-numbers) is 10415. The Gmb application identifier value assigned by IANA is xxx.

Due to the definition of the commands used in Gmb protocol, there is no possibility to skip the Auth-Application-Id AVP and use the Vendor-Specific-Application-Id AVP instead. Therefore the Gmb application identifier value shall be included in the Auth-Application-Id AVP.

The BM-SC and the GGSN shall advertise the support of the Gmb application by including the value of the application identifier in the Auth-Application-Id AVP and the value of the 3GPP (10415) in the Vendor-Id AVP of the Capabilities-Exchange-Request and Capabilities-Exchange-Answer commands as specified in RFC 3588 [66], i.e. as part of the Vendor-Specific-Application-Id AVP. The Capabilities-Exchange-Request and Capabilities-Exchange-Answer commands are specified in the Diameter Base Protocol.

************   END of MODIFIED SECTION   **********