3GPP TSG-CN Meeting #25 **NP-040387**
8th – 10th September 2004. Palm Springs, USA.

Source: **TSG CN WG1**

Title: **CR on Rel-6 WI "MBMS" towards TS 44.065**

Agenda item: **9.8**

Document for: **APPROVAL**

This document contains **1 CR on Rel-6 Work Item "MBMS",** that has been agreed by TSG CN WG1 CN#35 meeting and forwarded to TSG CN Plenary meeting #25 for approval.

TDoc #	Tdoc Title	Spec	CR #	Rev	CAT	Current version	WI	Rel
N1-041408	Update of SNDCP - MBMS	44.065	14		B	6.2.0	MBMS	Rel-6

3GPP TSG-CN1 Meeting #35 **Tdoc N1-041408**
Sophia Antipolis, France, 16-20 August 2004

CR-Form-v7

CHANGE REQUEST

⌘ **44.065** **CR** **014** ⌘ **rev** **-** ⌘ Current version: **6.2.0** ⌘

*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 [X] Radio Access Network [ ] Core Network [X]

Title:	⌘	Update of SNDCP – MBMS
Source:	⌘	Ericsson
Work item code:	⌘	MBMS
Date:	⌘	06/07/2004
Category:	⌘	**B**
Release:	⌘	Rel-6

Use one 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 one of the following releases:

2	*(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)*

Reason for change: ⌘ CN1 has worked on TR 29.846 'Multicast Broadcast/Multicast Service (MBMS); CN1 description procedure'. At last CN1#34bis meeting, the CN1 working group made the following working assumptions for CN1#35 on the MBMS work:

- TR 29.846 will be used as the MBMS reference specification for CN1 #35 (for the last time?)
- Stop using TR 29.846 as reference after CN1 #35 and send it for approval to CN #25
- TR 29.846 is converted into 24.008 CRs
- Separate 24.008 CRs will be drafted for MBMS context activation and deactivation
- It was assumed that the transfer can only take place if both MBMS context activation and deactivation procedures can be shifted at the same time
- Ericsson volunteered to draft the 24.008 CRs for MBMS.

Summary of change: ⌘ TR 29.846 has identified the need of update of the SNDCP specification, i.e. TS 44.065 in order to used the NSAPI equals to 1 for point-to-multipoint links for distribution of MBMS data, i.e. Point-to-Multipoint Multicast (PTM-M). All needed chages are transferred from TR 29.846 to TS 24.008.

Consequences if not approved: ⌘ The 3GPP MBMS work will not be completed in the Rel-6 timeframe. The CN1 MBMS work will remain to be transferred from the TR 29.846 to the appropriated TSes, e.g. TS 24.008. No solution for MBMS will be in place at Core Network protocols. Therefore, MBMS will not be able to provide service.

Clauses affected: ⌘ 5.1, 7.2.

[Y] [N]

Other specs affected:	⌘		X	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

FIRST CHANGE

5 Service primitives and functions

5.1 Service primitives

This subclause explains the service primitives used for communication between the SNDCP layer and other layers. See also 3GPP TS 24.007 [4] to get an overall picture of the service primitives. Figure 3 illustrates the service access points through which the primitives are carried out.

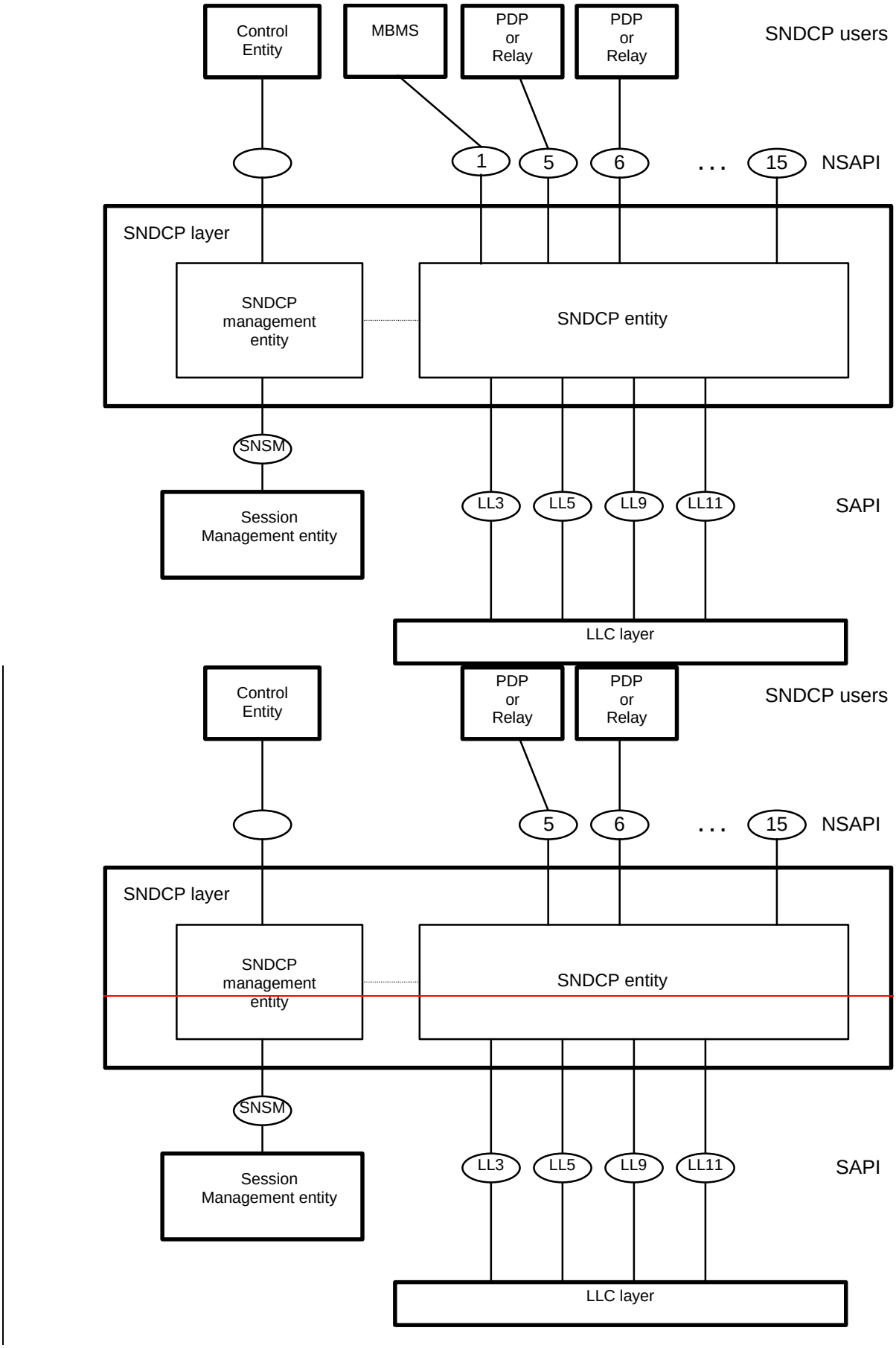

Figure 3: Service Access Points provided and used by SNDCP

NEXT CHANGE

7.2 SN-PDU Formats

Each SN-PDU shall contain an integral number of octets, and shall comprise a header part and a data part. An SN-PDU shall contain data from a single N-PDU only. Two different SN-PDU formats are defined. The SN-DATA PDU shall be used for acknowledged data transfer and SN-UNITDATA PDU for unacknowledged data transfer.

Bit	8	7	6	5	4	3	2	1
Oct 1	X	F	T	M	NSAPI			
2	DCOMP				PCOMP			
3	N-PDU number - acknowledged mode							
…	Data segment							
N								

Figure 18: SN-DATA PDU format

Bit	8	7	6	5	4	3	2	1
Oct 1	X	F	T	M	NSAPI			
2	DCOMP				PCOMP			
3	Segment number				N-PDU number - unacknowledged mode			
4	N-PDU number - unacknowledged mode (continued)							
…	Data segment							
N								

Figure 19: SN-UNITDATA PDU format

More bit (M):

0 Last segment of N-PDU.

1 Not the last segment of N-PDU, more segments to follow.

SN-PDU Type (T):

0 SN-DATA PDU.

1 SN-UNITDATA PDU.

First segment indicator bit (F):

0 This SN-PDU is not the first segment of an N-PDU.

The octet including DCOMP and PCOMP is not included in the SN-DATA PDU or SN-UNITDATA PDU format. Also the octet for N-PDU number for acknowledged mode is not included in the SN-DATA PDU format.

1 This SN-PDU is the first segment of an N-PDU. The octet for DCOMP and PCOMP is included in the SN-DATA PDU or SN-UNITDATA PDU format. Also the octet for N-PDU number for acknowledged mode is included in the SN-DATA PDU format.

Spare bit (X):

0 Shall be set to 0 by the transmitting SNDCP entity and ignored by the receiving SNDCP entity.

NSAPI:

0 Escape mechanism for future extensions.

1 Point-to-Multipoint Multicast (PTM-M) information for Multimedia Broadcast/Multicast Service (MBMS).

2-4 Reserved for future use.

5-15 Dynamically allocated NSAPI value (see subclause 6.1).

The SGSN shall ignore any uplink data traffic of SN-PDUs with an NSAPI = 1.

SN-PDU with an unallocated NSAPI value shall be ignored by the receiving SNDCP entity without error notification.

Data compression coding (DCOMP):

0 No compression.

1-14 Points to the data compression identifier negotiated dynamically (see subclause 6.6).

15 Reserved for future extensions.

SN-PDU with an unallocated DCOMP value shall be ignored by the receiving SNDCP entity without error notification.

Protocol control information compression coding (PCOMP):

0 No compression.

1-14 Points to the protocol control information compression identifier negotiated dynamically (see subclause 6.5).

15 Reserved for future extensions.

SN-PDU with an unallocated PCOMP value shall be ignored by the receiving SNDCP entity without error notification.

Segment number:

0-15 Sequence number for segments carrying an N-PDU.

N-PDU number - acknowledged mode:

0-255 N-PDU number of the N-PDU.

N-PDU number - unacknowledged mode:

0-4095N-PDU number of the N-PDU.