

CHANGE REQUEST

27.001 CR 113 rev 2 Current version: **5.8.0**

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


Title:	Alignment to R99 correction of NA value for Data Compression		
Source:	NTT DoCoMo		
Work item code:	TEI5	Date:	03/06/2005
Category:	A	Release:	Rel-5
<i>Use one of the following categories:</i> 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 .		<i>Use one of the following releases:</i> 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:	<p>This is an essential correction.</p> <p>NP-000605, which proposed to set the default setting of field value (NA) for Data Compression to “NO.. compression not possible/allowed” for R99 and Rel-4, was approved in CN#10. However, due to misimplementation of the CR only for R99, R99 specifies that NA value for DC to be “DC.. compression possible/allowed”. Consequently, the NA value for DC is different between R99 and Rel-4 onward.</p> <p>Since vendors may have already implemented the “incorrect” NA value, rejections which occur between MSs and networks with different NA values for DC need to be prevented.</p>
Summary of change:	A note is added to Table B.1 to take into account backward compatibility.
Consequences if not approved:	Call setup requests would be rejected unexpectedly.

Clauses affected:	B.1.1.2										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table>	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications Test specifications O&M Specifications	
Y	N										
<input type="checkbox"/>	<input checked="" type="checkbox"/>										
<input type="checkbox"/>	<input checked="" type="checkbox"/>										
<input type="checkbox"/>	<input checked="" type="checkbox"/>										
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 MODIFIED SECTION** =====

B.1.1.2 Interpretation of the Diagrams

The purpose of the subsequent diagrams is to achieve unambiguous representation of the individual contents of the PLMN BC-IE for the various occurrences during the call set-up phase, covering all bearer services and teleservices according to 3GPP TS 22.002 and 3GPP TS 22.003.

The basic principle adopted is a graphic scheme, or mask, wherein the ordinate designates the individual parameters of the PLMN BC-IE and the abscissa gives the possible field values of these parameters. The abbreviations used in these sections are defined in table B.5. The allowed content of any PLMN BC-IE is represented by a number of graphs connecting parameter values (abscissa points) of all parameters (ordinate points). Each graphic scheme is subdivided into two independent parts:

- "Layer/Protocol related" part; and
- "Radio Channel related" part.

The generation of all PLMN BC-IEs in all call set-up messages shall be in accordance with these graphs. Subclauses B.1.2 through B.1.11 show individual sets of graphs for each service group (BS/TS) and for each type of applicable Information Transfer Capability.

In addition, the following rules apply:

- Those parameters which have only one possible field value for all recognized services are shown in table B.5, where they are marked accordingly in the column "common setting of field values". They are not represented in the graphic scheme.
- Not all parameters of the PLMN BC-IE are relevant for each service (BS/TS). This is represented by specific abscissa points with a value of "NA" (Not Applicable) allocated to these parameters. The graphs pass through these points for each such parameter. The actual field value to be used in the PLMN BC-IE is marked in the column "default setting of field values (NA)" of table B.5. An abscissa point with a value of "NAV" (Not Available) indicates that the entire octet carrying this parameter (see table B.2 "General Structure of the PLMN BC-Information Element") shall be omitted.
- Unless FTM is applied, there is a particular dependency of the parameters "User Information Layer 2 Protocol (UIL2P)" and "Connection Element (CE)":
 - If the MS sends a PLMN BC-IE with a CE value other than "Transparent (T)", the parameter UIL2P is essential. Its field value must be set as indicated in the applicable graph.
 - If the MSC sends a PLMN BC-IE in the SETUP message, the parameter UIL2P may also be absent in the case of the CE parameter value being other than "Transparent (T)".
- In case FTM is applied, the PLMN BC-IE shows a CE value "non-transparent", SA value "asynchronous", and RA value X.31 flag stuffing. The UIL2P is not available.
- Certain parameters of the PLMN BC-IE may be negotiated during the connection establishment phase. Table B.1 shows these parameters and the relations of their values in the SETUP message and in the CALL CONFIRMED/CALL PROCEEDING message, respectively, both for the mobile-originated and mobile-terminated case. A parameter may indicate a field value of one of the following types:
 - "requested value" indicating a request which cannot be changed by the responding entity;
 - "offered value" indicating a proposal which may be changed by the responding entity;
 - a particular choice value leaving it up to the responding entity which value ultimately applies;
 - "as requested" indicating that the requested value applies and is confirmed (by returning it);
 - "selected value" indicating that a particular value applies either out of the offered set or as a free choice out of the defined set of values;
 - "supported value" indicating a value supported by the responding entity.

Table B.1: BC-Parameters subject to negotiation procedure

Mobile Originated Call:

BC-parameter	Message	
	SETUP	CALL PROC
NDB	Requested value	as requested
NPB	Requested value	as requested
NSB	Requested value	as requested
CE	Requested value (T/NT)	as requested
	"both" with the preferred value indicated (e.g. both NT)	selected value (T/NT)
UIL2P	Requested value ⁹⁾ or NAV ¹⁾	as requested or NAV ⁴⁾
User Rate	Requested value	as requested
DC	Requested value ²⁾	as requested or "NO" ⁷⁾
FNUR	Requested value	supported value
Other MT	Requested value	supported value
UIMI	Requested value	supported value

Mobile Terminated Call:

BC-parameter	Message	
	SETUP	CALL CONF
NDB	Offered value	selected value (free choice)
NPB	offered value	selected value (free choice)
NSB	offered value	selected value (free choice)
CE	requested value (T/NT)	as requested or selected value (T/NT) (free choice) ³⁾
	"both" with the preferred value indicated (e.g. both NT)	selected value (T/NT)
Sync/ Asynchronous	requested value	as requested or selected value ¹⁰⁾
Rate adaptation/Other rate adaptation	requested value	as requested or selected value ¹¹⁾
UIL2P	offered value ²⁾ or NAV ⁴⁾	selected or NAV ¹⁾
User Rate	offered value	selected value ⁵⁾
DC	requested value ²⁾	as requested or "NO" ⁷⁾
FNUR	offered value	selected value ⁶⁾
Other MT	offered value	selected value ⁶⁾
UIMI	offered value	selected value ⁸⁾

- 1) For CE:T only, out-band flow control, or RA:X.31 flag stuffing requested by the MS.
- 2) Not for CE:T.
- 3) When the SETUP message contains no BC-IE (single numbering scheme).
- 4) "NAV" shall not be interpreted as an out-band flow control request by the MS.
- 5) The modification of User Rate shall be in conjunction with Modem Type and Intermediate Rate.
- 6) The modification of the Fixed Network User Rate shall be in conjunction with the Modem Type and/or Other Modem Type.
- 7) In case of a Mobile Terminated Call, if the SETUP message does not contain a BC-IE, the MS shall behave as if the DC is set to "data compression not possible".
[If a sending entity, based on an earlier version of the protocol, sends a SETUP message containing "DC.. compression possible/ allowed" instead of the default value "NO.. compression not possible/allowed" as defined in Table B.5 then the receiving MS or the receiving network may ignore the DC value and may return either "NO.. compression not possible/allowed" or "DC.. compression possible/allowed" in the CALL CONF/CALL PROC message.](#)
 In case of a MO CALL or a MT CALL where no BC-IE is included in the CALL PROCEEDING or CALL CONFIRMED message, respectively, the MS or the network shall behave as if the DC was set to "data compression not possible" or "data compression not allowed", respectively.
- 8) Less or equal to the offered value.
- 9) Not for CT:T or FTM (i.e., CE:NT, SA:A, RA:X.31 flag stuffing).
- 10) For FTM and PIAFS, this parameter may be negotiated. See Table B.4e for details.
- 11) For FTM, PIAFS and Multimedia, this parameter may be negotiated. See Table B.4f for details.

===== **END OF MODIFICATION** =====