TSG-RAN Meeting #19 ***RP-030162***
Birmingham, UK, 11 - 14 March 2003 **(Revision of RP-030108)**

Title: **CRs (R'99 and Rel-4/Rel-5 Category A) to TS 34.109.**

Source: **Panasonic**

Agenda item: **8.2.3**

Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Version-New	Workitem
34.109	023	1	R99	Removal of uplink dummy DCCH transmission function in UE	F	3.8.0	3.9.0	TEI
34.109	024	1	Rel-4	Removal of uplink dummy DCCH transmission function in UE	A	4.4.0	4.5.0	TEI
34.109	025	1	Rel-5	Removal of uplink dummy DCCH transmission function in UE	A	5.2.0	5.3.0	TEI

3GPP TSG-RAN2 Meeting #34 **RP-030162**
Sophia Antipolis, France, 17th-21th February 2003

CR-Form-v7

CHANGE REQUEST

⌘ **34.109** **CR** **023** ⌘**rev** **1** ⌘ Current version: **3.8.0** ⌘

*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:	⌘	Removal of uplink dummy DCCH transmission function in UE		
Source:	⌘	Panasonic		
Work item code:	⌘	TEI	***Date:*** ⌘	18/Feb/2003
Category:	⌘	**F**	***Release:*** ⌘	R99

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: ⌘

In UE Tx conformance testing , the normal test condition is that the UE transmission power is set to the maximum power based on the control of the TPC command from the SS using reference measurement channel as defined in TS34.121.

The transmission data on radio access bearer from UE is sent back to SS continuously because SS continuously transmits data on radio access bearer and test control of UE is indicated to activate the loopback scheme.

Allocated TFCs are below for reference measurement channel.

(TFs of DCH for DCCH, TFs of DCH for DTCH)

TFC0 = (non DCH for DCCH, non DCH for DTCH)

TFC1 = (DCH for DCCH, non DCH for DTCH)

TFC2 = (non DCH for DCCH, DCH for DTCH)

TFC3 = (DCH for DCCH, DCH for DTCH)

The purpose of the transmission of the dummy DCCH was to force the UE to use TFC3. However TFC3 can be blocked by MAC as TFC3 is not belonging to the minimum set of TFCs with the above configuration. Instead, the UE can use TFC2 continuously in order to keep maximum output power in UL .It is proposed to remove the dummy DCCH transmission, which is thought redundant now.

Backwards compatibility analysis:

This CR is backward compatible because this function is no longer used in UE testing.

But the bit for controlling the dummy UL DCCH transmission in IE UE"test loop mode"

	of CLOSE UE TEST LOOP message shall not be used in R99 in order to keep backward . compatibility. **Impact on T1 test specifications**: The CR for TS34.121 is required in order to remove the relevant descriptions.
Summary of change: ⌘	It is proposed that uplink dummy DCCH function is removed. <u>Changes performed with the Revision 1:</u> In subclause 6.2, the sentence "NOTE: this bit shall not be used" was changed into the normative text: "For backward compatibility reason, the bit 3 of octet 1 shall not be used and shall always be set to zero.". (the reference to the NOTE in octet 1, subclause 6.2, also introduced by the rev0 of this CR, was removed as a consequence).
Consequences if not approved: ⌘	Ambiguity would remain since unnecessary function would be defined. Unexpected TFC would be used in the TX conformance test and data transmitted by SS would not be sent back to SS by loopback function in UE. It may be considered as faulty UE behaviour depending on SS implementation, which would result in test failure.

Clauses affected:	⌘	5.3.2.8, 6.2			
Other specs Affected:	⌘	**Y** / **N** **N**: Other core specifications **Y**: Test specifications **N**: O&M Specifications	⌘	TS34.121	
Other comments:	⌘				

How to create CRs using this form:

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< Start of modification >

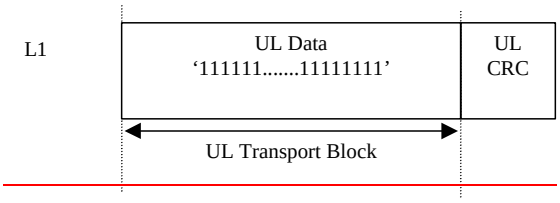
5.3.2.8 ~~Transmission of dummy messages on DCCH~~Void

~~If UE test loop mode 1 or 2 is active and the active radio bearer configuration includes an uplink DCCH mapped to a DCH then:~~

~~If DCCH dummy transmission is enabled and there is no DCCH data to be sent (i.e. there are no Layer 2/3 messages to be sent) then the UE shall set all bits in the uplink DCH transport block associated with a DCCH to 1, see figure 5.3.2.8.1.~~

~~If DCCH dummy transmission is enabled the SS shall discard any received DCH transport blocks associated with a DCCH having its bits set to 1.~~

~~NOTE: DCCH dummy transmission is only intended for uplink RF testing for which reference radio measurement channels according to TS 34.121 [8], Annex C for FDD mode and to TS 34.122 [9], Annex C for TDD mode respectively are used.~~



~~Figure 5.3.2.8.1. Bit pattern to use for DCCH dummy transmission~~

< End of modification >

< Start of modification >

6.2 CLOSE UE TEST LOOP

This message is only sent in the direction SS to UE.

Information Element	Reference	Presence	Format	Length
Protocol discriminator	TS 24.007 [1], subclause 11.2.3.1.1	M	V	½
Skip indicator	TS 24.007 [1], subclause 11.2.3.1.2	M	V	½
Message type		M	V	1
UE test loop mode		M	V	1
UE test loop mode 1 LB setup		C	LV	1-13

where message type is:

8	7	6	5	4	3	2	1	bit no.
0	1	0	0	0	0	0	0	octet 1

where UE test loop mode is:

8	7	6	5	4	3	2	1	bit no.
0	0	0	0	0	~~Y1~~0	X2	X1	octet 1

X2=0 and X1=0 then UE test loop mode 1 loop back scheme according to 5.3.2.6 shall be performed by the UE (loopback of RLC SDUs or PDCP SDUs).

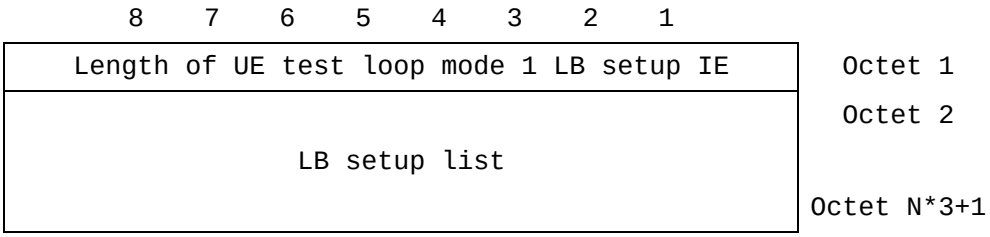
X2=0 and X1=1 then UE test loop mode 2 loop back scheme according to 5.3.2.7 shall be performed by the UE (loopback of transport block data and CRC bits).

For backward compatibility reason, the bit 3 of octet 1 shall not be used and shall always be set to zero.

~~Y1 =0 then the DCCH dummy transmission according to 5.3.2.8 shall be disabled.~~

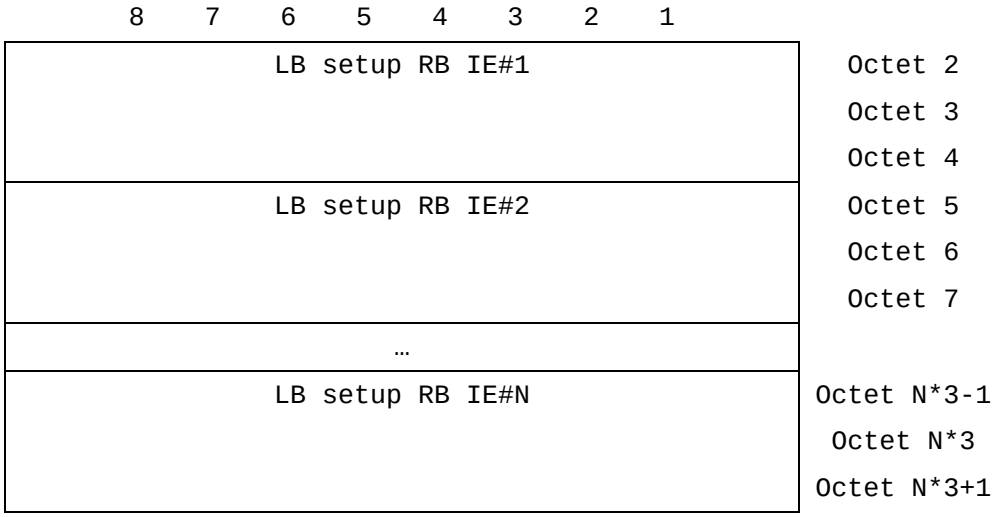
~~Y1 =1 then the DCCH dummy transmission according to 5.3.2.8 shall be enabled.~~

where UE test loop mode 1 LB setup is:



N is the number of LB entities in the LB setup list and is less than or equal to 4.

where LB setup list is:



where LB Setup RB IE#k is:

8	7	6	5	4	3	2	1	bit no.
Z15	Z14	Z13	Z12	Z11	Z10	Z9	Z8	octet 1
Z7	Z6	Z5	Z4	Z3	Z2	Z1	Z0	octet 2
Reserved			Q4	Q3	Q2	Q1	Q0	octet 3

Z15..Z0 = Uplink RLC SDU size in bits 0.. 65535 (binary coded, Z15 is most significant bit and Z0 least significant bit), see Note 1.

Q4..Q0 = RB identity number, 5..32 (binary coded, Q4 is most significant bit and Q0 least significant bit), where RB identity identifies the radio bearer, see [5] TS 25.331. The range is limited to 5..32 due to RB0 to RB4 are reserved for signalling radio bearers.

NOTE: The parameter UL RLC SDU size is only applicable for UE test loop mode 1 and for radio bearers not using the PDCP protocol layer, see subclause 5.3.2.6.2. The UE capability for the parameter UL RLC SDU size is stated by the UE manufacturer as an Implementation Conformations Statement (ICS) as defined in TS 34.123-2 [17], subclause A.4.3.1 table A.13. The UE Total RLC AM buffer size according to the UE Radio Access Capabilities defined in TS 25.306 [18] shall not be exceeded.

< End of modification >

3GPP TSG-RAN2 Meeting #34
Sophia Antipolis, France, 17th-21th February 2003

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CHANGE REQUEST

⌘ **34.109** **CR** **024** ⌘**rev** **1** ⌘ Current version: **4.4.0** ⌘

*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 ☐

Title:	⌘	Removal of uplink dummy DCCH transmission function in UE
Source:	⌘	Panasonic
Work item code:	⌘	TEI
Date:	⌘	18/Feb/2003
Category:	⌘	**A**
Release:	⌘	Rel-4

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)*
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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: ⌘

In UE Tx conformance testing , the normal test condition is that the UE transmission power is set to the maximum power based on the control of the TPC command from the SS using reference measurement channel as defined in TS34.121.

The transmission data on radio access bearer from UE is sent back to SS continuously because SS continuously transmits data on radio access bearer and test control of UE is indicated to activate the loopback scheme.

Allocated TFCs are below for reference measurement channel.

(TFs of DCH for DCCH, TFs of DCH for DTCH)

TFC0 = (non DCH for DCCH, non DCH for DTCH)

TFC1 = (DCH for DCCH, non DCH for DTCH)

TFC2 = (non DCH for DCCH, DCH for DTCH)

TFC3 = (DCH for DCCH, DCH for DTCH)

If TFC3 is used with keeping maximum power on uplink, as this TFC is not belonging to minimum set of TFC then this TFC shall be blocked (i.e. Another TFC shall be selected by TFC selection in MAC.). Test condition cannot be kept during the test.

The condition as the transmission power is the maximum can be achieved by the transmission of only DTCH.

Moreover this function has been intended to use for conformance test purpose. Now from the conformance testing point of view, this function is no meaning and if this is used in Tx testing the above problem is caused.

Summary of change:	⌘	It is proposed that uplink dummy DCCH function is removed. Changes performed with the Revision 1: In subclause 6.2, the sentence “NOTE: this bit shall not be used” was changed into the normative text: “For backward compatibility reason, the bit 3 of octet 1 shall not be used and shall always be set to zero.”. (the reference to the NOTE in octet 1, subclause 6.2, also introduced by the rev0 of this CR, was removed as a consequence).
Consequences if not approved:	⌘	Ambiguity is remained since unnecessary function is defined.

Clauses affected:	⌘	5.3.2.8, 6.2			
		Y	**N**		
Other specs Affected:	⌘		**X**	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

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< Start of modification >

5.3.2.8 ~~Transmission of dummy messages on DCCH~~Void

~~If UE test loop mode 1 or 2 is active and the active radio bearer configuration includes an uplink DCCH mapped to a DCH then:~~

~~If DCCH dummy transmission is enabled and there is no DCCH data to be sent (i.e. there are no Layer 2/3 messages to be sent) then the UE shall set all bits in the uplink DCH transport block associated with a DCCH to 1, see figure 5.3.2.8.1.~~

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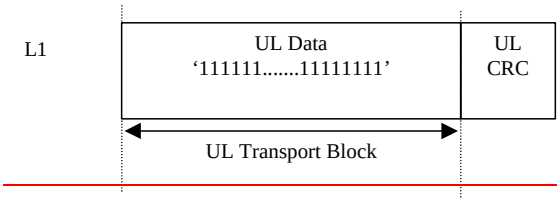

~~Figure 5.3.2.8.1. Bit pattern to use for DCCH dummy transmission~~

< End of modification >

< Start of modification >

6.2 CLOSE UE TEST LOOP

This message is only sent in the direction SS to UE.

Information Element	Reference	Presence	Format	Length
Protocol discriminator	TS 24.007 [1], subclause 11.2.3.1.1	M	V	½
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Message type		M	V	1
UE test loop mode		M	V	1
UE test loop mode 1 LB setup		C	LV	1-13

where message type is:

8	7	6	5	4	3	2	1	bit no.
0	1	0	0	0	0	0	0	octet 1

where UE test loop mode is:

8	7	6	5	4	3	2	1	bit no.
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For backward compatibility reason, the bit 3 of octet 1 shall not be used and shall always be set to zero.

~~Y1 =0 then the DCCH dummy transmission according to 5.3.2.8 shall be disabled.~~

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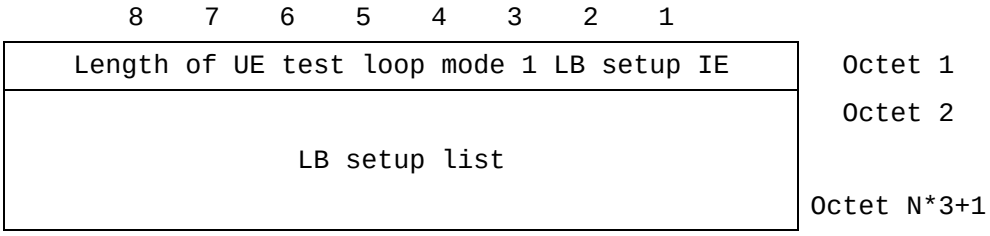
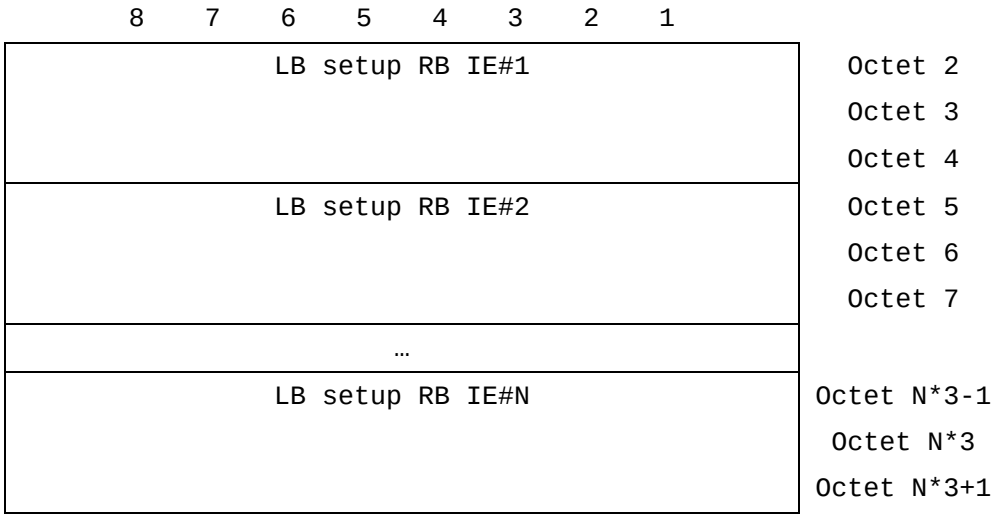
where UE test loop mode 1 LB setup is:



N is the number of LB entities in the LB setup list and is less than or equal to 4.

where LB setup list is:



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CHANGE REQUEST

⌘ **34.109** **CR** **025** ⌘**rev** **1** ⌘ Current version: **5.2.0** ⌘

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

Title:	⌘	Removal of uplink dummy DCCH transmission function in UE		
Source:	⌘	Panasonic		
Work item code:	⌘	TEI	***Date:*** ⌘	18/Feb/2003
Category:	⌘	**A**	***Release:*** ⌘	Rel-5

Use one of the following categories:
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A *(corresponds to a correction in an earlier release)*
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R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change: ⌘

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Consequences if not approved:	⌘	Ambiguity is remained since unnecessary function is defined.

Clauses affected:	⌘	5.3.2.8, 6.2			
		Y	**N**		
Other specs Affected:	⌘		**X**	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

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< Start of modification >

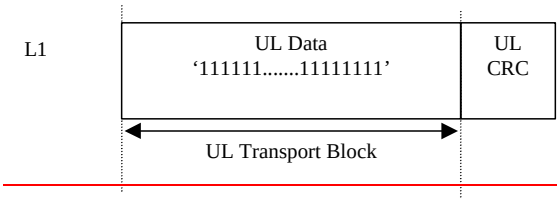
5.3.2.8 ~~Transmission of dummy messages on DCCH~~Void

~~If UE test loop mode 1 or 2 is active and the active radio bearer configuration includes an uplink DCCH mapped to a DCH then:~~

~~If DCCH dummy transmission is enabled and there is no DCCH data to be sent (i.e. there are no Layer 2/3 messages to be sent) then the UE shall set all bits in the uplink DCH transport block associated with a DCCH to 1, see figure 5.3.2.8.1.~~

~~If DCCH dummy transmission is enabled the SS shall discard any received DCH transport blocks associated with a DCCH having its bits set to 1.~~

~~NOTE: DCCH dummy transmission is only intended for uplink RF testing for which reference radio measurement channels according to TS 34.121 [8], Annex C for FDD mode and to TS 34.122 [9], Annex C for TDD mode respectively are used.~~



~~Figure 5.3.2.8.1. Bit pattern to use for DCCH dummy transmission~~

< End of modification >

< Start of modification >

6.2 CLOSE UE TEST LOOP

This message is only sent in the direction SS to UE.

Information Element	Reference	Presence	Format	Length
Protocol discriminator	TS 24.007 [1], subclause 11.2.3.1.1	M	V	½
Skip indicator	TS 24.007 [1], subclause 11.2.3.1.2	M	V	½
Message type		M	V	1
UE test loop mode		M	V	1
UE test loop mode 1 LB setup		C	LV	1-13

where message type is:

8	7	6	5	4	3	2	1	bit no.
0	1	0	0	0	0	0	0	octet 1

where UE test loop mode is:

8	7	6	5	4	3	2	1	bit no.
0	0	0	0	0	~~Y1~~0	X2	X1	octet 1

X2=0 and X1=0 then UE test loop mode 1 loop back scheme according to 5.3.2.6 shall be performed by the UE (loopback of RLC SDUs or PDCP SDUs).

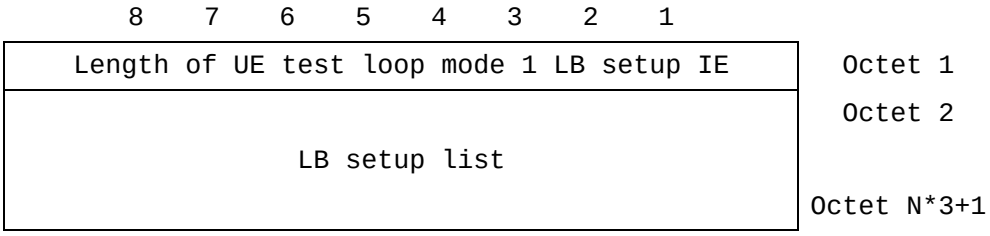
X2=0 and X1=1 then UE test loop mode 2 loop back scheme according to 5.3.2.7 shall be performed by the UE (loopback of transport block data and CRC bits).

For backward compatibility reason, the bit 3 of octet 1 shall not be used and shall always be set to zero.

~~Y1 =0 then the DCCH dummy transmission according to 5.3.2.8 shall be disabled.~~

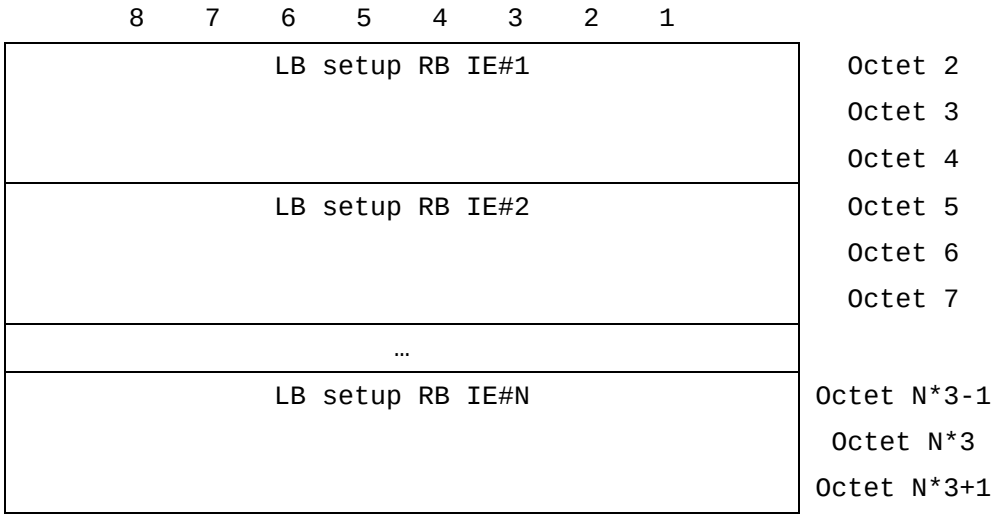
~~Y1 =1 then the DCCH dummy transmission according to 5.3.2.8 shall be enabled.~~

where UE test loop mode 1 LB setup is:



N is the number of LB entities in the LB setup list and is less than or equal to 4.

where LB setup list is:



where LB Setup RB IE#k is:

8	7	6	5	4	3	2	1	bit no.
Z15	Z14	Z13	Z12	Z11	Z10	Z9	Z8	octet 1
Z7	Z6	Z5	Z4	Z3	Z2	Z1	Z0	octet 2
Reserved			Q4	Q3	Q2	Q1	Q0	octet 3

Z15..Z0 = Uplink RLC SDU size in bits 0.. 65535 (binary coded, Z15 is most significant bit and Z0 least significant bit), see Note 1.

Q4..Q0 = RB identity number, 5..32 (binary coded, Q4 is most significant bit and Q0 least significant bit), where RB identity identifies the radio bearer, see [5] TS 25.331. The range is limited to 5..32 due to RB0 to RB4 are reserved for signalling radio bearers.

NOTE: The parameter UL RLC SDU size is only applicable for UE test loop mode 1 and for radio bearers not using the PDCP protocol layer, see subclause 5.3.2.6.2. The UE capability for the parameter UL RLC SDU size is stated by the UE manufacturer as an Implementation Conformations Statement (ICS) as defined in TS 34.123-2 [17], subclause A.4.3.1 table A.13. The UE Total RLC AM buffer size according to the UE Radio Access Capabilities defined in TS 25.306 [18] shall not be exceeded.

< End of modification >