# TSG-RAN Meeting #16 Marco Island, FL, USA, 4 - 7 June 2002

RP-020330

Title: Agreed CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.331 (1)

Source: TSG-RAN WG2

Agenda item: 7.2.3

Doc-1st-	Status-	Spec	CR	Rev	Phase	Subject	Cat	Version	Versio
R2-021247	agreed	25.331	1371		R99	ASN.1 Corrections	F	3.10.0	3.11.0
R2-021248	agreed	25.331	1372		Rel-4	ASN.1 Corrections	А	4.4.0	4.5.0
R2-021249	agreed	25.331	1373		Rel-5	ASN.1 Corrections	А	5.0.0	5.1.0
R2-021250	agreed	25.331	1374		R99	Clarification of unnecessary MP IEs in RADIO BEARER RECONFIGURATION	F	3.10.0	3.11.0
R2-021251	agreed	25.331	1375		Rel-4	Clarification of unnecessary MP IEs in RADIO BEARER RECONFIGURATION	A	4.4.0	4.5.0
R2-021252	agreed	25.331	1376		Rel-5	Clarification of unnecessary MP IEs in RADIO BEARER RECONFIGURATION	A	5.0.0	5.1.0
R2-021258	agreed	25.331	1377		R99	Correction on SIB type	F	3.10.0	3.11.0
R2-021259	agreed	25.331	1378		Rel-4	Correction on SIB type	А	4.4.0	4.5.0
R2-021260	agreed	25.331	1379		Rel-5	Correction on SIB type	А	5.0.0	5.1.0
R2-021264	agreed	25.331	1380		R99	Clarification to the handling of IE "Cells for measurement" received in SIB 11/12	F	3.10.0	3.11.0
R2-021265	agreed	25.331	1381		Rel-4	Clarification to the handling of IE "Cells for measurement" received in SIB 11/12	A	4.4.0	4.5.0
R2-021266	agreed	25.331	1382		Rel-5	Clarification to the handling of IE "Cells for measurement" received in SIB 11/12	A	5.0.0	5.1.0
R2-021363	agreed	25.331	1383	1	R99	Correction to Cell Update procedure	F	3.10.0	3.11.0
R2-021364	agreed	25.331	1384	1	Rel-4	Correction to Cell Update procedure	А	4.4.0	4.5.0
R2-021365	agreed	25.331	1385	1	Rel-5	Correction to Cell Update procedure	А	5.0.0	5.1.0
R2-021272	agreed	25.331	1386		R99	Correction to handling of FACH measurement occasion info in SIB12	F	3.10.0	3.11.0
R2-021273	agreed	25.331	1387		Rel-4	Correction to handling of FACH measurement occasion info in SIB12	A	4.4.0	4.5.0
R2-021274	agreed	25.331	1388		Rel-5	Correction to handling of FACH measurement occasion info in SIB12	A	5.0.0	5.1.0

CHANGE REQUEST									
¥		25.331	CR <mark>1371</mark>	жr	ev	<b>-</b> <sup>#</sup>	Current vers	<sup>ion:</sup> 3.10.0	) <sup>ж</sup>
For <u>HELP</u> of	on u	sing this for	m, see bottom o	of this pag	e or loo	ok at ti adio A	he pop-up text	over the ¥ sy	mbols.
Title	<u>م</u>								
Title:	ተ	ASN. I CC	mections						
Source:	ж	TSG-RAN	I WG2						
Work item code	e: X	TEI					Date: ೫	07.05.2002	
Category:	ж	F Use <u>one</u> of <i>i</i> F (corr A (corr B (add C (fun- D (edin Detailed exp	the following cate rection) responds to a cor lition of feature), ctional modification corial modification planations of the a	egories: rrection in a on of feature ) above categ	<i>n earlie</i> e) gories c	<i>r relea</i> s an	Release: # Use <u>one</u> of 2 se) R96 R97 R98 R99 REL-4	R99 the following rel (GSM Phase 2, (Release 1996) (Release 1997) (Release 1999) (Release 4)	leases: ) ) ) )

Reason for change: # Comments missing from the ASN.1 required to ensure correct understanding. Summary of change: # Section 11.3 **BitModeRLC-SizeInfo** Aligned comment text with standard format. Comment placement corrected **UE-IdleTimersAndConstants** Reintroduced comment that was included in approved CR1330r6, but missed during implementation of the CR. UTRAN-GPSReferenceTime->utran-GPSTimingOfCell UTRAN-GPSReferenceTimeResult ->ue-GPSTimingOfCell Added the required "Actual value..." comment. Multiplier corrected **Impact Analysis:** This CR makes isolated impact corrections to comments in the ASN.1 which are considered Informative, although they are required to understand how the related definition implements the IE shown in the tabular. As such it does not represent a functional change and should therefore not cause interoperability problems.

Consequences if not approved:	жI	Possibility to interpret the ASN.	1 de	finitions inconsistently.
Clauses affected:	ж	11.3		
Other specs affected:	ж	Other core specifications Test specifications O&M Specifications	Ħ	25.331 v4.4.0, CR 1372 25.331 v5.0.0, CR 1373
Other comments:	ж			

## How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. 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.
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- 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.

## 11.3 Information element definitions

UE-ConnTimersAndConstants ::= SEOUENCE { -- Optional is used also for parameters for which the default value is the last one read in SIB1 -- t-301 and n-301 should not be used by the UE in this version of the specification DEFAULT ms2000, T-301 t-301 N-301 n-301 DEFAULT 2, t-302 т-302 DEFAULT ms4000, n-302 N-302 DEFAULT 3. t-304 T-304 DEFAULT ms2000, n-304 N-304 DEFAULT 2. t-305 T-305 DEFAULT m30, t-307 T-307 DEFAULT s30, t-308 T-308 DEFAULT ms160, t-309 T-309 DEFAULT 5, t - 310T-310 DEFAULT ms160, n-310 N-310 DEFAULT 4, t-311 T-311 DEFAULT ms2000, т-312 DEFAULT 1. t-312 -- n-312 shall be ignored if n-312 in UE-ConnTimersAndConstants-v3a0ext is present, and the -- value of that element shall be used instead. n-312 N-312 DEFAULT s1, t-313 т-313 DEFAULT 3, n-313 N-313 DEFAULT s20, t-314 т-314 DEFAULT s12, t-315 т-315 DEFAULT s180, -- n-315 shall be ignored if n-315 in UE-ConnTimersAndConstants-v3a0ext is present, and the -- value of that element shall be used instead. n-315 N-315 DEFAULT s1, t-316 т-316 DEFAULT s30, t-317 T-317 DEFAULT s180 } UE-ConnTimersAndConstants-v3a0ext ::= SEQUENCE { n-312 N-312ext OPTIONAL, n-315 N-315ext OPTIONAL } UE-IdleTimersAndConstants ::= SEQUENCE { t-300 T-300, n-300 N-300. t-312 -- n-312 shall be ignored if n-312 in UE-IdleTimersAndConstants-v3a0ext is present, and the т-312, value of that element shall be used instead. n-312 N-312 } UE-IdleTimersAndConstants-v3a0ext ::= SEQUENCE { N-312ext OPTTONAL n-312 } CHOICE { BitModeRLC-SizeInfo ::= INTEGER (0..127), sizeTypel -- Actual value sizeType2 = (part1 \* 8) + 128 + part2 SEQUENCE { sizeType2 -- Actual <u>value\_sizeType2</u> = (part1 \* 8) + 128 + part2 INTEGER (0..15), part1 part2 INTEGER (1..7) OPTIONAL }, - Actual value sizeType3 = (part1 \* 16) + 256 + part2 SEQUENCE { sizeType3 -- Actual <u>value sizeType3</u> = (part1 \* 16) + 256 + part2 INTEGER (0..47), part1 INTEGER (1..15) OPTIONAL part2 SEQUENCE { sizeType4 Actual value\_sizeType4 = (part1 \* 64) + 1024 + part2 INTEGER (0..62), part1

```
part2
                                               INTEGER (1..63)
                                                                               OPTIONAL
     }
  }
     AN-GPSReferenceTime ::= SEQUENCE {
-- For utran-GPSTimingOfCell values above 23224319999999 are not
  UTRAN-GPSReferenceTime ::=
      -- used in this version of the specification
   -- Actual value utran-GPSTimingOfCell = (ms-part * 429496729<del>5</del>6) + ls-part
utran-GPSTimingOfCell SEQUENCE {
SEQUENCE {
                                           INTEGER (0..1023),
          ms-part
                                           INTEGER (0..4294967295)
          ls-part
      },
      modeSpecificInfo
                                      CHOICE {
                                        SEQUENCE {
          fdd
              referenceIdentity
                                              PrimaryCPICH-Info
          },
          tdd
                                          SEQUENCE {
             referenceIdentity
                                            CellParametersID
          }
                 OPTIONAL,
      }
      sfn
                                           INTEGER (0..4095)
  }
  UTRAN-GPSReferenceTimeResult ::= SEQUENCE {
      -- For ue-GPSTimingOfCell values above 37158911999999 are not
      -- used in this version of the specification
   -- Actual value ue-GPSTimingOfCell = (ms-part * 429496729<del>5</del>6) + ls-part
ue-GPSTimingOfCell SEQUENCE {
         ms-part
                                           INTEGER (0..16383),
         ls-part
                                           INTEGER (0..4294967295)
      },
      modeSpecificInfo
                                       CHOICE {
                                        SEQUENCE {
          fdd
              referenceIdentity
                                           PrimaryCPICH-Info
          },
         tdd
                                         SEQUENCE {
              referenceIdentity
                                               CellParametersID
          }
      },
      sfn
                                  INTEGER (0..4095)
  }
```

	CHANGE REQUEST										CR-Form-v5		
¥		25.331	CR <mark>1</mark>	372	ж <b>г</b>	ev	-	ж	Current	versi	ion:	4.4.0	ж
For <u>HELP</u> o	n u	sing this for	m, see k	bottom of	f this pag	ge or	look a	at the	e pop-up	text	over	the X sy	mbols.
Proposed chang	ge a	affects: ೫	(U)SI	M	ME/UE	X	Radi	o Ac	cess Net	work	X	Core Ne	etwork
Title:	ж	ASN.1 Co	rrection	S									
Source:	ж	TSG-RAN	I WG2										
Work item code	: X	TEI							Date	e: X	07.	05.2002	
Category:	Ħ	A Use <u>one</u> of t F (corr A (corr B (add C (fund D (edit Detailed exp be found in	the follow rection) responds lition of fe ctional mo orial moo lanations 3GPP <u>TR</u>	ving categ to a corre eature), odificatior dification) s of the at <u>21.900</u> .	ories: ection in a n of featur pove cate	an ea re) gorie:	rlier re s can	lease	Release Use <u>or</u> 2 R96 R97 R98 R98 R81 R81	e: # <u>ne</u> of i 3 3 2 4 2-5	RE (GSN (Rele (Rele (Rele (Rele (Rele	L-4 Ilowing rel A Phase 2) pase 1996) pase 1997) pase 1998) pase 1999) pase 4) pase 5)	eases:

Reason for change: ೫	Comments missing from the ASN.1 required to ensure correct understanding.
Summary of change: #	Section 11.3
	BitModeRLC-SizeInfo
	Aligned comment text with standard format.
	Comment placement corrected
	UTRAN-GPSReferenceTime->utran-GPSTimingOfCell
	UTRAN-GPSReferenceTimeResult ->ue-GPSTimingOfCell
	Added the required "Actual value" comment.
	Multiplier corrected
Consequences if #	Possibility to interpret the ASN.1 definitions inconsistently.
not approvou.	
Clauses affected: #	11.3
Other anges	Other agra apositiontions 9 25 321 v2 10 0 CB 1271
other specs њ	25.331 v5.0.0, CR 1371
affected:	Test specifications
	O&M Specifications
Other commonto-	
Uner comments: "	

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# 11.3 Information element definitions

```
BitModeRLC-SizeInfo ::=
                                     CHOICE {
    sizeTypel
                                        INTEGER (0..127),
      -- Actual value sizeType2 = (part1 * 8) + 128 + part2
                                         SEQUENCE {
    sizeType2
           Actual <u>value sizeType2</u> = (part1 * 8) + 128 + part2
         part1
                                              INTEGER (0..15),
                                              INTEGER (1..7)
                                                                              OPTIONAL
         part2
     },
      -- Actual value sizeType3 = (part1 * 16) + 256 + part2
                                          SEQUENCE {
      sizeType3
           - Actual value sizeType3 = (part1 * 16) + 256 + part2
         part1
                                              INTEGER (0..47),
         part2
                                              INTEGER (1..15)
                                                                              OPTIONAL
      },
      -- Actual value sizeType4 = (part1 * 64) + 1024 + part2
          Type4 SEQUENCE {

Actual value sizeType4 = (part1 * 64) + 1024 + part2
      sizeType4
                                              INTEGER (0..62),
         part1
         part2
                                              INTEGER (1..63)
                                                                             OPTIONAL
      }
  }
  UTRAN-GPSReferenceTime ::=
                                         SEQUENCE {
     -- For utran-GPSTimingOfCell values above 2322431999999 are not
      -- used in this version of the specification
    -- Actual value utran-GPSTimingOfCell = (ms-part * 42949672956) + ls-part
SEQUENCE {
      utran-GPSTimingOfCell
         ms-part
                                         INTEGER (0..1023),
         ls-part
                                          INTEGER (0..4294967295)
      },
      modeSpecificInfo
                                     CHOICE {
                                         SEQUENCE {
         fdd
                                             PrimaryCPICH-Info
             referenceIdentity
          },
         tdd
                                          SEQUENCE {
           referenceIdentity
                                            CellParametersID
          }
      }
                     OPTIONAL,
      sfn
                                         INTEGER (0..4095)
  }
  UTRAN-GPSReferenceTimeResult ::=
                                                 SEQUENCE {
      -- For ue-GPSTimingOfCell values above 37158911999999 are not
      -- used in this version of the specification
      -- Actual value ue-GPSTimingOfCell = (ms-part * 42949672956) + ls-part
SEQUENCE {
     ue-GPSTimingOfCell
                                          INTEGER (0.. 16383),
         ms-part
         ls-part
                                          INTEGER (0..4294967295)
      },
                                     CHOICE {
      modeSpecificInfo
                                         SEQUENCE {
          fdd
             referenceIdentity
                                             PrimaryCPICH-Info
          },
         tdd
                                         SEQUENCE {
             referenceIdentity
                                             CellParametersID
          }
      },
      sfn
                                         INTEGER (0..4095)
  }
```

¥	25.331	CR 1373	жrev	- *	Current v	ersion:	5.0.0	ж
For <u>HELP</u> on u	sing this fo	rm, see bottom o	f this page o	r look at	the pop-up te	ext over	the X syr	nbols.
Proposed change a	affects: ೫	(U)SIM	ME/UE X	Radio	Access Netw	ork X	Core Ne	etwork
Title: ೫	ASN.1 Co	orrections						
Source: #	TSG-RAN	WG2						
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Category: ₩	A Use <u>one</u> of F (cor A (cor B (add C (fun D (edi Detailed exp be found in	the following categ rection) responds to a corre dition of feature), ctional modification torial modification) planations of the al 3GPP <u>TR 21.900</u> .	ories: ection in an ea n of feature) pove categorie	arlier relea es can	Release: Use <u>one</u> 2 ase) R96 R97 R98 R99 REL- REL-	#     RE       of the for     (GSN       (Rele     (Rele       (Rele     (Rele       (Rele     (Rele       4     (Rele       5     (Rele	E-5 Mowing rele M Phase 2) ease 1996) ease 1997) ease 1998) ease 1999) ease 4) ease 5)	pases:

Reason for change: #	Comments missing from the ASN.1 required to ensure correct understanding.							
Summary of change: #	Section 11.3							
	BitModeRLC-SizeInfo							
	Aligned comment text with standard format.							
	Comment placement corrected							
	UTRAN-GPSReferenceTime->utran-GPSTimingOfCell							
	Added the required "Actual value _ " comment							
	Added the required Actual value comment.							
	Multiplier corrected							
Consequences if #	Possibility to interpret the ASN.1 definitions inconsistently.							
Clauses affected: #	11.3							
Other specs #	Other core specifications # 25.331 v3.10.0, CR 1371							
	25.331 v4.4.0, CR 1372							
affected:	O&M Specifications							
Other comments: #								

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# 11.3 Information element definitions

```
BitModeRLC-SizeInfo ::=
                                     CHOICE {
    sizeTypel
                                        INTEGER (0..127),
      -- Actual value sizeType2 = (part1 * 8) + 128 + part2
                                         SEQUENCE {
    sizeType2
           Actual <u>value sizeType2</u> = (part1 * 8) + 128 + part2
         part1
                                              INTEGER (0..15),
                                              INTEGER (1..7)
                                                                              OPTIONAL
         part2
     },
      -- Actual value sizeType3 = (part1 * 16) + 256 + part2
                                          SEQUENCE {
      sizeType3
           - Actual value sizeType3 = (part1 * 16) + 256 + part2
         part1
                                              INTEGER (0..47),
         part2
                                              INTEGER (1..15)
                                                                              OPTIONAL
      },
      -- Actual value sizeType4 = (part1 * 64) + 1024 + part2
          Type4 SEQUENCE {

Actual value sizeType4 = (part1 * 64) + 1024 + part2
      sizeType4
                                              INTEGER (0..62),
         part1
         part2
                                              INTEGER (1..63)
                                                                             OPTIONAL
      }
  }
  UTRAN-GPSReferenceTime ::=
                                         SEQUENCE {
     -- For utran-GPSTimingOfCell values above 2322431999999 are not
      -- used in this version of the specification
    -- Actual value utran-GPSTimingOfCell = (ms-part * 42949672956) + ls-part
SEQUENCE {
      utran-GPSTimingOfCell
         ms-part
                                         INTEGER (0..1023),
         ls-part
                                          INTEGER (0..4294967295)
      },
      modeSpecificInfo
                                     CHOICE {
                                         SEQUENCE {
         fdd
                                             PrimaryCPICH-Info
             referenceIdentity
          },
         tdd
                                          SEQUENCE {
           referenceIdentity
                                            CellParametersID
          }
      }
                     OPTIONAL,
      sfn
                                         INTEGER (0..4095)
  }
  UTRAN-GPSReferenceTimeResult ::=
                                                 SEQUENCE {
      -- For ue-GPSTimingOfCell values above 37158911999999 are not
      -- used in this version of the specification
      -- Actual value ue-GPSTimingOfCell = (ms-part * 42949672956) + ls-part
SEQUENCE {
     ue-GPSTimingOfCell
                                          INTEGER (0.. 16383),
         ms-part
         ls-part
                                          INTEGER (0..4294967295)
      },
                                     CHOICE {
      modeSpecificInfo
                                         SEQUENCE {
          fdd
             referenceIdentity
                                             PrimaryCPICH-Info
          },
         tdd
                                         SEQUENCE {
             referenceIdentity
                                             CellParametersID
          }
      },
      sfn
                                         INTEGER (0..4095)
  }
```

	CHANGE REQUEST	CR-Form-v5
ж	25.331 CR 1374 <b># rev</b> - <sup>#</sup>	Current version: <b>3.10.0</b> <sup>#</sup>
For <u>HELP</u> on t	using this form, see bottom of this page or look at th	e pop-up text over the X symbols.
Proposed change	affects: # (U)SIM ME/UE X Radio Ad	ccess Network X Core Network
Title: ೫	Clarification of unnecessary MP IEs in RADIO BE	EARER RECONFIGURATION
Source: #	TSG-RAN WG2	
Work item code: ೫	<sup>E</sup> TEI	Date: ₭ 07.05.2002
Category: ₩	<ul> <li>F</li> <li>Use <u>one</u> of the following categories:</li> <li>F (correction)</li> <li>A (corresponds to a correction in an earlier release</li> <li>B (addition of feature),</li> <li>C (functional modification of feature)</li> <li>D (editorial modification)</li> <li>Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u>.</li> </ul>	Release: %R99Use one of the following releases: 2(GSM Phase 2)e)R96(Release 1996)R97(Release 1997)R98(Release 1998)R99(Release 1999)REL-4(Release 4)REL-5(Release 5)
Reason for chang	e: # Currently there is a "Note" included that mer overcome the Mandatory inclusion of "Down RADIO BEARER RECONFIGURATION eve This information is only "Informative", but it is and the exact conditions under which the IE	ntions what the UTRAN may do to link information per radio link list" in on when no reconfiguration is desired. s essential information for the UE can be ignored need to be clarified
Summary of chan	ge: # Section 8.2.2.2 "Note 2" split into two seperate Notes as it was Section 8.2.2.3 Note relating to IE "RB information to reconfig Note restored to it's original text.	as covering two distinct cases. gure" modified.
	New check added in CELL_DCH->CELL_DC conditions that indicate that the IE "Downlink ignored. Also Note added to explain why this <u>The new check and Note have been removed</u> <u>clarify which IE contents would lead to the UE</u> <u>clarifies the problem relating to the R99 mess</u> <b>Impact Analysis:</b> This is an isolated impact correction to the ha information per radio link list" when received in RECONFIGURATION. It is a correction to a function where the spect sufficiently explicit. It would not affect implement	H section to clarify the exact information per radio link list" can be o check is present. <u>A new Note has been added to</u> <u>behaviour being undefined, and</u> <u>age.</u> Indling of the IE "Downlink in RADIO BEARER ification was ambiguous or not nentations behaving like indicated in

	otherwise.
Consequences if	# Information essential for interoperability incomplete and only contained in
not approved:	Informative Note.
Clauses affected:	9 8777 8773
Clauses affected.	o 0.2.2.2, 0.2.2.0
Other specs	#     Other core specifications     #     25.331 v4.4.0, CR 1375
-	25.331 v5.0.0. CR 1376
affected:	
anceleu.	
Other comments:	*

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## 8.2.2 Reconfiguration procedures



Figure 8.2.2-1: Radio Bearer Establishment, normal case



Figure 8.2.2-2: Radio Bearer Establishment, failure case



Figure 8.2.2-3: Radio bearer reconfiguration, normal flow



Figure 8.2.2-4: Radio bearer reconfiguration, failure case



Figure 8.2.2-5: Radio Bearer Release, normal case



Figure 8.2.2-6: Radio Bearer Release, failure case



Figure 8.2.2-7: Transport channel reconfiguration, normal flow



Figure 8.2.2-8: Transport channel reconfiguration, failure case



Figure 8.2.2-9: Physical channel reconfiguration, normal flow



Figure 8.2.2-10: Physical channel reconfiguration, failure case

## 8.2.2.1 General

Reconfiguration procedures include the following procedures:

- the radio bearer establishment procedure;
- radio bearer reconfiguration procedure;
- the radio bearer release procedure;
- the transport channel reconfiguration procedure; and
- the physical channel reconfiguration procedure.

The radio bearer establishment procedure is used to establish new radio bearer(s).

The radio bearer reconfiguration procedure is used to reconfigure parameters for a radio bearer.

The radio bearer release procedure is used to release radio bearer(s).

The transport channel reconfiguration procedure is used to reconfigure transport channel parameters.

The physical channel reconfiguration procedure is used to establish, reconfigure and release physical channels.

While performing any of the above procedures, these procedures may perform a hard handover - see subclause 8.3.5.

## 8.2.2.2 Initiation

To initiate any one of the reconfiguration procedures, UTRAN should:

- 1> configure new radio links in any new physical channel configuration;
- 1> start transmission and reception on the new radio links;
- 1> for a radio bearer establishment procedure:
  - 2> transmit a RADIO BEARER SETUP message on the downlink DCCH using AM or UM RLC;

- 2> if signalling radio bearer RB4 is setup with this procedure and signalling radio bearers RB1-RB3 were already established prior to the procedure:
  - 3> if the variable "LATEST\_CONFIGURED\_CN\_DOMAIN" has been initialised:
    - 4> connect any radio bearers setup by the same message as signalling radio bearer RB4 to the CN domain indicated in the variable "LATEST CONFIGURED CN DOMAIN".
- 1> for a radio bearer reconfiguration procedure:
  - 2> transmit a RADIO BEARER RECONFIGURATION message on the downlink DCCH using AM or UM RLC.
- 1> for a radio bearer release procedure:
  - 2> transmit a RADIO BEARER RELEASE message on the downlink DCCH using AM or UM RLC.
- 1> for a transport channel reconfiguration procedure:
  - 2> transmit a TRANSPORT CHANNEL RECONFIGURATION message on the downlink DCCH using AM or UM RLC.
- 1> for a physical channel reconfiguration procedure:
  - 2> transmit a PHYSICAL CHANNEL RECONFIGURATION message on the downlink DCCH using AM or UM RLC.
- 1> if the reconfiguration procedure is simultaneous with SRNS relocation procedure:
  - 2> if the transmitted message is a RADIO BEARER RECONFIGURATION:
    - 3> include the IE "New U-RNTI".
  - 2> else:
    - 3> include the IE "Downlink counter synchronisation info".
  - 2> if ciphering and/or integrity protection are activated:
    - 3> include new ciphering and/or integrity protection configuration information to be used after reconfiguration.
  - 2> use the downlink DCCH using AM RLC.
- 1> if transport channels are added, reconfigured or deleted in uplink and/or downlink:

2> set TFCS according to the new transport channel(s).

- 1> if transport channels are added or deleted in uplink and/or downlink, and RB Mapping Info applicable to the new configuration has not been previously provided to the UE, the UTRAN should:
  - 2> send the RB Mapping Info for the new configuration.

In the Radio Bearer Reconfiguration procedure UTRAN may indicate that uplink transmission shall be stopped or continued on certain radio bearers. Uplink transmission on a signalling radio bearer used by the RRC signalling (signalling radio bearer RB1 or signalling radio bearer RB2) should not be stopped.

- NOTE 1: The RADIO BEARER RECONFIGURATION message always includes the IE "RB information to reconfigure", even if UTRAN does not require the reconfiguration of any RB. In these cases, UTRAN may include only the IE "RB identity" within the IE "RB information to reconfigure".
- NOTE 2: The RADIO BEARER RECONFIGURATION message always includes the IE "Downlink information per radio link list", even if UTRAN does not require the reconfiguration of any RL. In these cases, UTRAN may re-send the currently assigned values for the mandatory IEs included within the IE "Downlink information per radio link list".

<u>NOTE 3:</u> <u>Moreover, tThe RADIO BEARER RECONFIGURATION message always includes the IE "Primary CPICH Info" (FDD) or IE "Primary CCPCH Info" (TDD) within IE "Downlink information per radio link <u>list"</u>. This implies that in case UTRAN applies the RADIO BEARER RECONFIGURATION message to move the UE to CELL\_FACH state, it has to indicate a cell. However, UTRAN may indicate any cell; the UE anyhow performs cell selection and notifies UTRAN if it selects another cell than indicated by UTRAN.</u>

If the IE "Activation Time" is included, UTRAN should set it to a value taking the UE performance requirements into account.

UTRAN should take the UE capabilities into account when setting the new configuration.

If the message is used to initiate a transition from CELL\_DCH to CELL\_FACH state, the UTRAN may assign a CPCH configuration to be used in that cell by the UE. UTRAN may also assign a C-RNTI to be used in that cell by the UE.

## 8.2.2.3 Reception of RADIO BEARER SETUP or RADIO BEARER RECONFIGURATION or RADIO BEARER RELEASE or TRANSPORT CHANNEL RECONFIGURATION or PHYSICAL CHANNEL RECONFIGURATION message by the UE

The UE shall be able to receive any of the following messages:

- RADIO BEARER SETUP message; or
- RADIO BEARER RECONFIGURATION message; or
- RADIO BEARER RELEASE message; or
- TRANSPORT CHANNEL RECONFIGURATION message; or
- PHYSICAL CHANNEL RECONFIGURATION message;

and perform a hard handover, even if no prior UE measurements have been performed on the target cell and/or frequency.

If the UE receives:

- a RADIO BEARER SETUP message; or
- a RADIO BEARER RECONFIGURATION message; or
- a RADIO BEARER RELEASE message; or
- a TRANSPORT CHANNEL RECONFIGURATION message; or
- a PHYSICAL CHANNEL RECONFIGURATION message:

it shall:

- 1> set the variable ORDERED\_RECONFIGURATION to TRUE;
- 1> perform the physical layer synchronisation procedure as specified in [29];
- 1> act upon all received information elements as specified in subclause 8.6, unless specified in the following and perform the actions below.

The UE may first release the physical channel configuration used at reception of the reconfiguration message. The UE shall then:

- 1> in FDD, if the IE "PDSCH code mapping" is included but the IE "PDSCH with SHO DCH Info" is not included and if the DCH has only one link in its active set:
  - 2> act upon the IE "PDSCH code mapping" as specified in subclause 8.6; and
  - 2> infer that the PDSCH will be transmitted from the cell from which the downlink DPCH is transmitted.

1> enter a state according to subclause 8.6.3.3.

In case the UE receives a RADIO BEARER RECONFIGURATION message including the IE "RB information to reconfigure" that only includes the IE "RB identity", the UE shall:

- 1> handle the message as if IE "RB information to reconfigure" was absent.
- NOTE: The RADIO BEARER RECONFIGURATION message always includes the IE "RB information to reconfigure". UTRAN has to include it even if it does not require the reconfiguration of any RB.

If after state transition the UE enters CELL\_DCH state, the UE shall, after the state transition:

- 1> remove any C-RNTI from MAC;
- 1> clear the variable C\_RNTI.

In FDD, if after state transition the UE leaves CELL\_DCH state, the UE shall, after the state transition:

- 1> remove any DSCH-RNTI from MAC;
- 1> clear the variable DSCH\_RNTI.

If the UE was in CELL\_DCH state upon reception of the reconfiguration message and remains in CELL\_DCH state, the UE shall:

- 1> if the IE "Uplink DPCH Info" is absent, not change its current UL Physical channel configuration;
- 1> if the IE "Downlink information for each radio link" is absent, not change its current DL Physical channel configuration.

If after state transition the UE enters CELL\_FACH state, the UE shall, after the state transition:

- 1> if the IE "Frequency info" is included in the received reconfiguration message:
  - 2> select a suitable UTRA cell according to [4] on that frequency.
- 1> if the IE "Frequency info" is not included in the received reconfiguration message:

2> select a suitable UTRA cell according to [4].

1> if the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selects another cell than indicated by this IE or the received reconfiguration message did not include the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD):

2> initiate a cell update procedure according to subclause 8.3.1 using the cause "Cell reselection";

- 2> when the cell update procedure completed successfully:
  - 3> if the UE is in CELL\_PCH or URA\_PCH state:
    - 4> initiate a cell update procedure according to subclause 8.3.1 using the cause "Uplink data transmission";
    - 4> proceed as below.
- 1> start timer T305 using its initial value if timer T305 is not running and if periodical update has been configured by T305 in the IE "UE Timers and constants in connected mode" set to any other value than "infinity" in system information block type 1;
- 1> select PRACH according to subclause 8.5.17;

NOTE:
 The RADIO BEARER RECONFIGURATION message always includes the IE "Downlink information per radio link list" containing the mandadtory IEs, even if UTRAN does not require the reconfiguration of any RL. In FDD, if the UE receives a RADIO BEARER RECONFIGURATION message where the IE "Downlink information per radio link list" includes only a number of "Primary CPICH Info" IEs, but the correct Primary CPICH for each of the cells in the active set is not included, then the UE behaviour is undefined.

- 1> select Secondary CCPCH according to subclause 8.5.19;
- 1> use the transport format set given in system information;
- 1> if the IE "UTRAN DRX cycle length coefficient" is included in the same message:

2> ignore that IE and stop using DRX.

- 1> if the contents of the variable C\_RNTI is empty:
  - 2> perform a cell update procedure according to subclause 8.3.1 using the cause "Cell reselection";
  - 2> when the cell update procedure completed successfully:
    - 3> if the UE is in CELL\_PCH or URA\_PCH state:
      - 4> initiate a cell update procedure according to subclause 8.3.1 using the cause "Uplink data transmission";
      - 4> proceed as below.

If the UE was in CELL\_FACH state upon reception of the reconfiguration message and remains in CELL\_FACH state, the UE shall:

- 1> if the IE "Frequency info" is included in the received reconfiguration message:
  - 2> select a suitable UTRA cell according to [4] on that frequency;
  - 2> if the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selected another cell than indicated by this IE or the received reconfiguration message did not include the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD):
    - 3> initiate a cell update procedure according to subclause 8.3.1 using the cause "cell reselection";
    - 3> when the cell update procedure completed successfully:
      - 4> proceed as below.

The UE shall transmit a response message as specified in subclause 8.2.2.4, setting the information elements as specified below. The UE shall:

- 1> if the received reconfiguration message included the IE "Downlink counter synchronisation info"; or
- 1> if the received reconfiguration message is a RADIO BEARER RECONFIGURATION and the IE "New U-RNTI" is included:
  - 2> re-establish RB2;
  - 2> set the new uplink and downlink HFN of RB2 to MAX(uplink HFN of RB2, downlink HFN of RB2);
  - 2> increment by one the downlink and uplink HFN values for RB2;
  - 2> calculate the START value according to subclause 8.5.9;
  - 2> include the calculated START values for each CN domain in the IE "START list" in the IE "Uplink counter synchronisation info".
- 1> if the received reconfiguration message did not include the IE "Downlink counter synchronisation info":
  - 2> if the variable START\_VALUE\_TO\_TRANSMIT is set:

3> include and set the IE "START" to the value of that variable.

2> if the variable START\_VALUE\_TO\_TRANSMIT is not set and the IE "New U-RNTI" is included:

3> calculate the START value according to subclause 8.5.9;

- 3> include the calculated START values for each CN domain in the IE "START list" in the IE "Uplink counter synchronisation info".
- 2> if the received reconfiguration message caused a change in the RLC size for any RB using RLC-AM:
  - 3> calculate the START value according to subclause 8.5.9;
  - 3> include the calculated START values for the CN domain associated with the corresponding RB identity in the IE "START list" in the IE "Uplink counter synchronisation info".
- 1> if the received reconfiguration message contained the IE "Ciphering mode info" or contained the IE "Integrity protection mode info":
  - 2> set the IE "Status" in the variable SECURITY\_MODIFICATION for all the CN domains in the variable SECURITY\_MODIFICATION to "Affected".
- 1> if the received reconfiguration message contained the IE "Ciphering mode info":
  - 2> include and set the IE "Radio bearer uplink ciphering activation time info" to the value of the variable RB\_UPLINK\_CIPHERING\_ACTIVATION\_TIME\_INFO.
- 1> if the received reconfiguration message did not contain the IE "Ciphering activation time for DPCH" in IE "Ciphering mode info":
  - 2> if prior to this procedure there exist no transparent mode RLC radio bearers:
    - 3> if, at the conclusion of this procedure, the UE will be in CELL\_DCH state; and
    - 3> if, at the conclusion of this procedure, at least one transparent mode RLC radio bearer exists:

4> include the IE "COUNT-C activation time" and specify a CFN value for this IE.

- 2> if prior to this procedure there exists at least one transparent mode RLC radio bearer:
  - 3> if, at the conclusion of this procedure, no transparent mode RLC radio bearers exist:
    - 4> include the IE "COUNT-C activation time" and specify a CFN value for this IE.
- 1> set the IE "RRC transaction identifier" to the value of "RRC transaction identifier" in the entry for the received message in the table "Accepted transactions" in the variable TRANSACTIONS; and
- 1> clear that entry;
- 1> if the variable PDCP\_SN\_INFO is not empty:

2> include the IE "RB with PDCP information list" and set it to the value of the variable PDCP\_SN\_INFO.

- 1> in TDD, if the procedure is used to perform a handover to a cell where timing advance is enabled, and the UE can calculate the timing advance value in the new cell (i.e. in a synchronous TDD network):
  - 2> set the IE "Uplink Timing Advance" according to subclause 8.6.6.26.
- 1> if the IE "Integrity protection mode info" was present in the received reconfiguration message:
  - 2> start applying the new integrity protection configuration in the uplink for signalling radio bearer RB2 from and including the transmitted response message.

If after state transition the UE enters CELL\_PCH or URA\_PCH state, the UE shall, after the state transition and transmission of the response message:

1> if the IE "Frequency info" is included in the received reconfiguration message:

2> select a suitable UTRA cell according to [4] on that frequency.

1> if the IE "Frequency info" is not included in the received reconfiguration message:

2> select a suitable UTRA cell according to [4].

- 1> prohibit periodical status transmission in RLC;
- 1> remove any C-RNTI from MAC;
- 1> clear the variable C\_RNTI;
- 1> start timer T305 using its initial value if timer T305 is not running and if periodical update has been configured by T305 in the IE "UE Timers and constants in connected mode" set to any other value than "infinity" in system information block type 1;
- 1> select Secondary CCPCH according to subclause 8.5.19;
- 1> if the IE "UTRAN DRX cycle length coefficient" is included in the same message:
  - 2> use the value in the IE "UTRAN DRX Cycle length coefficient" for calculating Paging occasion and PICH Monitoring Occasion as specified in subclause 8.6.3.2.
- 1> if the IE "UTRAN DRX cycle length coefficient" is not included in the same message:

2> set the variable INVALID\_CONFIGURATION to TRUE.

1> if the UE enters CELL\_PCH state from CELL\_DCH state, and the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selected another cell than indicated by this IE or the received reconfiguration message did not include the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD):

2> initiate a cell update procedure according to subclause 8.3.1 using the cause "cell reselection";

2> when the cell update procedure completed successfully:

3> the procedure ends.

1> if the UE enters CELL\_PCH state from CELL\_FACH state, and the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selected another cell than indicated by this IE:

2> initiate a cell update procedure according to subclause 8.3.1 using the cause "cell reselection";

2> when the cell update procedure is successfully completed:

3> the procedure ends.

1> if the UE enters URA\_PCH state, and after cell selection the criteria for URA update caused by "URA reselection" according to subclause 8.3.1 is fulfilled:

2> initiate a URA update procedure according to subclause 8.3.1 using the cause "URA reselection";

2> when the URA update procedure is successfully completed:

3> the procedure ends.

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## How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

## 8.2.2.2 Initiation

To initiate any one of the reconfiguration procedures, UTRAN should:

- 1> configure new radio links in any new physical channel configuration;
- 1> start transmission and reception on the new radio links;
- 1> for a radio bearer establishment procedure:
  - 2> transmit a RADIO BEARER SETUP message on the downlink DCCH using AM or UM RLC;
  - 2> if signalling radio bearer RB4 is setup with this procedure and signalling radio bearers RB1-RB3 were already established prior to the procedure:
    - 3> if the variable "LATEST\_CONFIGURED\_CN\_DOMAIN" has been initialised:
      - 4> connect any radio bearers setup by the same message as signalling radio bearer RB4 to the CN domain indicated in the variable "LATEST CONFIGURED CN DOMAIN".
- 1> for a radio bearer reconfiguration procedure:
  - 2> transmit a RADIO BEARER RECONFIGURATION message on the downlink DCCH using AM or UM RLC.
- 1> for a radio bearer release procedure:
  - 2> transmit a RADIO BEARER RELEASE message on the downlink DCCH using AM or UM RLC.
- 1> for a transport channel reconfiguration procedure:
  - 2> transmit a TRANSPORT CHANNEL RECONFIGURATION message on the downlink DCCH using AM or UM RLC.
- 1> for a physical channel reconfiguration procedure:
  - 2> transmit a PHYSICAL CHANNEL RECONFIGURATION message on the downlink DCCH using AM or UM RLC.
- 1> if the reconfiguration procedure is simultaneous with SRNS relocation procedure:
  - 2> if the transmitted message is a RADIO BEARER RECONFIGURATION:

3> include the IE "New U-RNTI".

- 2> else:
  - 3> include the IE "Downlink counter synchronisation info".
- 2> if ciphering and/or integrity protection are activated:
  - 3> include new ciphering and/or integrity protection configuration information to be used after reconfiguration.
- 2> use the downlink DCCH using AM RLC.
- 1> if transport channels are added, reconfigured or deleted in uplink and/or downlink:
  - 2> set TFCS according to the new transport channel(s).
- 1> if transport channels are added or deleted in uplink and/or downlink, and RB Mapping Info applicable to the new configuration has not been previously provided to the UE, the UTRAN should:
  - 2> send the RB Mapping Info for the new configuration.

In the Radio Bearer Reconfiguration procedure UTRAN may indicate that uplink transmission shall be stopped or continued on certain radio bearers. Uplink transmission on a signalling radio bearer used by the RRC signalling (signalling radio bearer RB1 or signalling radio bearer RB2) should not be stopped.

- NOTE 1: The <u>R99</u> RADIO BEARER RECONFIGURATION message always includes the IE "RB information to reconfigure", even if UTRAN does not require the reconfiguration of any RB. In these cases, UTRAN may include only the IE "RB identity" within the IE "RB information to reconfigure".
- NOTE 2: The <u>R99</u> RADIO BEARER RECONFIGURATION message always includes the IE "Downlink information per radio link list", even if UTRAN does not require the reconfiguration of any RL. In these cases, UTRAN may re-send the currently assigned values for the mandatory IEs included within the IE "Downlink information per radio link list".
- <u>NOTE 3</u> <u>-Moreover, tThe R99</u> RADIO BEARER RECONFIGURATION message always includes the IE "Primary CPICH Info" (FDD) or IE "Primary CCPCH Info" (TDD) <u>within IE "Downlink information per</u> <u>radio link list"</u>. This implies that in case UTRAN applies the RADIO BEARER RECONFIGURATION message to move the UE to CELL\_FACH state, it has to indicate a cell. However, UTRAN may indicate any cell; the UE anyhow performs cell selection and notifies UTRAN if it selects another cell than indicated by UTRAN.

If the IE "Activation Time" is included, UTRAN should set it to a value taking the UE performance requirements into account.

UTRAN should take the UE capabilities into account when setting the new configuration.

If the message is used to initiate a transition from CELL\_DCH to CELL\_FACH state, the UTRAN may assign a CPCH configuration to be used in that cell by the UE. UTRAN may also assign a C-RNTI to be used in that cell by the UE.

8.2.2.3 Reception of RADIO BEARER SETUP or RADIO BEARER RECONFIGURATION or RADIO BEARER RELEASE or TRANSPORT CHANNEL RECONFIGURATION or PHYSICAL CHANNEL RECONFIGURATION message by the UE

The UE shall be able to receive any of the following messages:

- RADIO BEARER SETUP message; or
- RADIO BEARER RECONFIGURATION message; or
- RADIO BEARER RELEASE message; or
- TRANSPORT CHANNEL RECONFIGURATION message; or
- PHYSICAL CHANNEL RECONFIGURATION message;

and perform a hard handover, even if no prior UE measurements have been performed on the target cell and/or frequency.

If the UE receives:

- a RADIO BEARER SETUP message; or
- a RADIO BEARER RECONFIGURATION message; or
- a RADIO BEARER RELEASE message; or
- a TRANSPORT CHANNEL RECONFIGURATION message; or
- a PHYSICAL CHANNEL RECONFIGURATION message:

### it shall:

- 1> set the variable ORDERED\_RECONFIGURATION to TRUE;
- 1> perform the physical layer synchronisation procedure as specified in [29];

1> act upon all received information elements as specified in subclause 8.6, unless specified in the following and perform the actions below.

The UE may:

1> maintain a list of the set of cells to which the UE has Radio Links if the IE "Cell ID" is present.

The UE may first release the physical channel configuration used at reception of the reconfiguration message. The UE shall then:

1> in FDD, if the IE "PDSCH code mapping" is included but the IE "PDSCH with SHO DCH Info" is not included and if the DCH has only one link in its active set:

2> act upon the IE "PDSCH code mapping" as specified in subclause 8.6; and

2> infer that the PDSCH will be transmitted from the cell from which the downlink DPCH is transmitted.

1> enter a state according to subclause 8.6.3.3.

In case the UE receives a RADIO BEARER RECONFIGURATION message including the IE "RB information to reconfigure" that only includes the IE "RB identity", the UE shall:

1> handle the message as if IE "RB information to reconfigure" was absent.

NOTE: The <u>R99</u> RADIO BEARER RECONFIGURATION message always includes the IE "RB information to reconfigure". UTRAN has to include it even if it does not require the reconfiguration of any RB.

If after state transition the UE enters CELL\_DCH state, the UE shall, after the state transition:

1> remove any C-RNTI from MAC;

1> clear the variable C\_RNTI.

In FDD, if after state transition the UE leaves CELL\_DCH state, the UE shall, after the state transition:

- 1> remove any DSCH-RNTI from MAC;
- 1> clear the variable DSCH\_RNTI.

If the UE was in CELL\_DCH state upon reception of the reconfiguration message and remains in CELL\_DCH state, the UE shall:

- 1> if the IE "Uplink DPCH Info" is absent, not change its current UL Physical channel configuration;
- 1> if the IE "Downlink information for each radio link" is absent, not change its current DL Physical channel configuration.
- NOTE:
   The R99 RADIO BEARER RECONFIGURATION message always includes the IE "Downlink information per radio link list" containing the mandadtory IEs, even if UTRAN does not require the reconfiguration of any RL. In FDD, if the UE receives a RADIO BEARER RECONFIGURATION message where the IE "Downlink information per radio link list" includes only a number of "Primary CPICH Info" IEs, but the correct Primary CPICH for each of the cells in the active set is not included, then the UE behaviour is undefined.

If after state transition the UE enters CELL\_FACH state, the UE shall, after the state transition:

1> if the IE "Frequency info" is included in the received reconfiguration message:

2> select a suitable UTRA cell according to [4] on that frequency.

1> if the IE "Frequency info" is not included in the received reconfiguration message:

2> select a suitable UTRA cell according to [4].

1> if the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selects another cell than indicated by this IE or the received reconfiguration message did not include the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD):

- 2> initiate a cell update procedure according to subclause 8.3.1 using the cause "Cell reselection";
- 2> when the cell update procedure completed successfully:
  - 3> if the UE is in CELL\_PCH or URA\_PCH state:
    - 4> initiate a cell update procedure according to subclause 8.3.1 using the cause "Uplink data transmission";
    - 4> proceed as below.
- 1> start timer T305 using its initial value if timer T305 is not running and if periodical update has been configured by T305 in the IE "UE Timers and constants in connected mode" set to any other value than "infinity" in system information block type 1;
- 1> select PRACH according to subclause 8.5.17;
- 1> select Secondary CCPCH according to subclause 8.5.19;
- 1> use the transport format set given in system information;
- 1> if the IE "UTRAN DRX cycle length coefficient" is included in the same message:

2> ignore that IE and stop using DRX.

- 1> if the contents of the variable C\_RNTI is empty:
  - 2> perform a cell update procedure according to subclause 8.3.1 using the cause "Cell reselection";
  - 2> when the cell update procedure completed successfully:
    - 3> if the UE is in CELL\_PCH or URA\_PCH state:
      - 4> initiate a cell update procedure according to subclause 8.3.1 using the cause "Uplink data transmission";
      - 4> proceed as below.

If the UE was in CELL\_FACH state upon reception of the reconfiguration message and remains in CELL\_FACH state, the UE shall:

1> if the IE "Frequency info" is included in the received reconfiguration message:

- 2> select a suitable UTRA cell according to [4] on that frequency;
- 2> if the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selected another cell than indicated by this IE or the received reconfiguration message did not include the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD):
  - 3> initiate a cell update procedure according to subclause 8.3.1 using the cause "cell reselection";
  - 3> when the cell update procedure completed successfully:
    - 4> proceed as below.

The UE shall transmit a response message as specified in subclause 8.2.2.4, setting the information elements as specified below. The UE shall:

- 1> if the received reconfiguration message included the IE "Downlink counter synchronisation info"; or
- 1> if the received reconfiguration message is a RADIO BEARER RECONFIGURATION and the IE "New U-RNTI" is included:
  - 2> re-establish RB2;

2> set the new uplink and downlink HFN of RB2 to MAX(uplink HFN of RB2, downlink HFN of RB2);

- 2> increment by one the downlink and uplink HFN values for RB2;
- 2> calculate the START value according to subclause 8.5.9;
- 2> include the calculated START values for each CN domain in the IE "START list" in the IE "Uplink counter synchronisation info".
- 1> if the received reconfiguration message did not include the IE "Downlink counter synchronisation info":
  - 2> if the variable START\_VALUE\_TO\_TRANSMIT is set:
    - 3> include and set the IE "START" to the value of that variable.
  - 2> if the variable START\_VALUE\_TO\_TRANSMIT is not set and the IE "New U-RNTI" is included:
    - 3> calculate the START value according to subclause 8.5.9;
    - 3> include the calculated START values for each CN domain in the IE "START list" in the IE "Uplink counter synchronisation info".
  - 2> if the received reconfiguration message caused a change in the RLC size for any RB using RLC-AM:
    - 3> calculate the START value according to subclause 8.5.9;
    - 3> include the calculated START values for the CN domain associated with the corresponding RB identity in the IE "START list" in the IE "Uplink counter synchronisation info".
- 1> if the received reconfiguration message contained the IE "Ciphering mode info" or contained the IE "Integrity protection mode info":
  - 2> set the IE "Status" in the variable SECURITY\_MODIFICATION for all the CN domains in the variable SECURITY\_MODIFICATION to "Affected".
- 1> if the received reconfiguration message contained the IE "Ciphering mode info":
  - 2> include and set the IE "Radio bearer uplink ciphering activation time info" to the value of the variable RB\_UPLINK\_CIPHERING\_ACTIVATION\_TIME\_INFO.
- 1> if the received reconfiguration message did not contain the IE "Ciphering activation time for DPCH" in IE "Ciphering mode info":
  - 2> if prior to this procedure there exist no transparent mode RLC radio bearers:
    - 3> if, at the conclusion of this procedure, the UE will be in CELL\_DCH state; and
    - 3> if, at the conclusion of this procedure, at least one transparent mode RLC radio bearer exists:
      - 4> include the IE "COUNT-C activation time" and specify a CFN value for this IE.
  - 2> if prior to this procedure there exists at least one transparent mode RLC radio bearer:
    - 3> if, at the conclusion of this procedure, no transparent mode RLC radio bearers exist:
      - 4> include the IE "COUNT-C activation time" and specify a CFN value for this IE.
- 1> set the IE "RRC transaction identifier" to the value of "RRC transaction identifier" in the entry for the received message in the table "Accepted transactions" in the variable TRANSACTIONS; and

1> clear that entry;

1> if the variable PDCP\_SN\_INFO is not empty:

2> include the IE "RB with PDCP information list" and set it to the value of the variable PDCP\_SN\_INFO.

1> in TDD, if the procedure is used to perform a handover to a cell where timing advance is enabled, and the UE can calculate the timing advance value in the new cell (i.e. in a synchronous TDD network):

2> set the IE "Uplink Timing Advance" according to subclause 8.6.6.26.

- 1> if the IE "Integrity protection mode info" was present in the received reconfiguration message:
  - 2> start applying the new integrity protection configuration in the uplink for signalling radio bearer RB2 from and including the transmitted response message.

If after state transition the UE enters CELL\_PCH or URA\_PCH state, the UE shall, after the state transition and transmission of the response message:

1> if the IE "Frequency info" is included in the received reconfiguration message:

2> select a suitable UTRA cell according to [4] on that frequency.

1> if the IE "Frequency info" is not included in the received reconfiguration message:

2> select a suitable UTRA cell according to [4].

- 1> prohibit periodical status transmission in RLC;
- 1> remove any C-RNTI from MAC;
- 1> clear the variable C\_RNTI;
- 1> start timer T305 using its initial value if timer T305 is not running and if periodical update has been configured by T305 in the IE "UE Timers and constants in connected mode" set to any other value than "infinity" in system information block type 1;
- 1> select Secondary CCPCH according to subclause 8.5.19;
- 1> if the IE "UTRAN DRX cycle length coefficient" is included in the same message:
  - 2> use the value in the IE "UTRAN DRX Cycle length coefficient" for calculating Paging occasion and PICH Monitoring Occasion as specified in subclause 8.6.3.2.
- 1> if the IE "UTRAN DRX cycle length coefficient" is not included in the same message:

2> set the variable INVALID\_CONFIGURATION to TRUE.

1> if the UE enters CELL\_PCH state from CELL\_DCH state, and the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selected another cell than indicated by this IE or the received reconfiguration message did not include the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD):

2> initiate a cell update procedure according to subclause 8.3.1 using the cause "cell reselection";

2> when the cell update procedure completed successfully:

3> the procedure ends.

1> if the UE enters CELL\_PCH state from CELL\_FACH state, and the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selected another cell than indicated by this IE:

2> initiate a cell update procedure according to subclause 8.3.1 using the cause "cell reselection";

2> when the cell update procedure is successfully completed:

3> the procedure ends.

- 1> if the UE enters URA\_PCH state, and after cell selection the criteria for URA update caused by "URA reselection" according to subclause 8.3.1 is fulfilled:
  - 2> initiate a URA update procedure according to subclause 8.3.1 using the cause "URA reselection";
  - 2> when the URA update procedure is successfully completed:

3> the procedure ends.

	CHANGE REQUEST	CR-Form-v5
ж	25.331 CR 1376	Current version: <b>5.0.0</b> <sup>#</sup>
For <u>HELP</u> on usi	ng this form, see bottom of this page or look at the	pop-up text over the X symbols.
Proposed change af	fects: ¥ (U)SIM ME/UE X Radio Aco	cess Network X Core Network
Title: #	Clarification of unnecessary MP IEs in RADIO BE	ARER RECONFIGURATION
Source: #	TSG-RAN WG2	
Work item code: 🕷 🗌	TEI	<i>Date:</i> ೫ <mark>07.05.2002</mark>
Category: ⊮ ∪ D b	A Ise <u>one</u> of the following categories: <i>F</i> (correction) A (corresponds to a correction in an earlier release <i>B</i> (addition of feature), <i>C</i> (functional modification of feature) <i>D</i> (editorial modification) retailed explanations of the above categories can e found in 3GPP <u>TR 21.900</u> .	Release: # REL-5 Use <u>one</u> 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)
Reason for change:	Currently there is a "Note" included that ment overcome the Mandatory inclusion of "Downline RADIO BEARER RECONFIGURATION ever This information is only "Informative", but it is and the exact conditions under which the IE of	tions what the UTRAN may do to ink information per radio link list" in when no reconfiguration is desired. essential information for the UE can be ignored need to be clarified
Summary of change	*# Section 8.2.2.2	
	"Note 2" split into two seperate Notes as it was Section 8.2.2.3 Note relating to IE "RB information to reconfigu New check added in CELL_DCH->CELL_DCH- conditions that indicate that the IE "Downlink in ignored. Also Note added to explain why this <u>The new check and Note have been removed.</u> <u>clarify which IE contents would lead to the UE</u> <u>clarifies the problem relating to the R99 messa</u>	s covering two distinct cases. ure" modified. I section to clarify the exact nformation per radio link list" can be check is present. <u>A new Note has been added to</u> <u>behaviour being undefined, and</u> <u>age.</u>
Consequences if	9 Information essential for interoperability incore	molete and only contained in
not approved:	Informative Note.	
Clauses affected:	¥ 8.2.2.2, 8.2.2.3	
Other specs affected:	%       Other core specifications       %       25.331         Test specifications       25.331         O&M Specifications       0	/3.10.0, CR 1374 /4.4.0, CR 1375

## Other comments: #

#### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

## 8.2.2.2 Initiation

To initiate any one of the reconfiguration procedures, UTRAN should:

- 1> configure new radio links in any new physical channel configuration;
- 1> start transmission and reception on the new radio links;
- 1> for a radio bearer establishment procedure:
  - 2> transmit a RADIO BEARER SETUP message on the downlink DCCH using AM or UM RLC;
  - 2> if signalling radio bearer RB4 is setup with this procedure and signalling radio bearers RB1-RB3 were already established prior to the procedure:
    - 3> if the variable "LATEST\_CONFIGURED\_CN\_DOMAIN" has been initialised:
      - 4> connect any radio bearers setup by the same message as signalling radio bearer RB4 to the CN domain indicated in the variable "LATEST CONFIGURED CN DOMAIN".
- 1> for a radio bearer reconfiguration procedure:
  - 2> transmit a RADIO BEARER RECONFIGURATION message on the downlink DCCH using AM or UM RLC.
- 1> for a radio bearer release procedure:
  - 2> transmit a RADIO BEARER RELEASE message on the downlink DCCH using AM or UM RLC.
- 1> for a transport channel reconfiguration procedure:
  - 2> transmit a TRANSPORT CHANNEL RECONFIGURATION message on the downlink DCCH using AM or UM RLC.
- 1> for a physical channel reconfiguration procedure:
  - 2> transmit a PHYSICAL CHANNEL RECONFIGURATION message on the downlink DCCH using AM or UM RLC.
- 1> if the reconfiguration procedure is simultaneous with SRNS relocation procedure:
  - 2> if the transmitted message is a RADIO BEARER RECONFIGURATION:

3> include the IE "New U-RNTI".

- 2> else:
  - 3> include the IE "Downlink counter synchronisation info".
- 2> if ciphering and/or integrity protection are activated:
  - 3> include new ciphering and/or integrity protection configuration information to be used after reconfiguration.
- 2> use the downlink DCCH using AM RLC.
- 1> if transport channels are added, reconfigured or deleted in uplink and/or downlink:
  - 2> set TFCS according to the new transport channel(s).
- 1> if transport channels are added or deleted in uplink and/or downlink, and RB Mapping Info applicable to the new configuration has not been previously provided to the UE, the UTRAN should:
  - 2> send the RB Mapping Info for the new configuration.

In the Radio Bearer Reconfiguration procedure UTRAN may indicate that uplink transmission shall be stopped or continued on certain radio bearers. Uplink transmission on a signalling radio bearer used by the RRC signalling (signalling radio bearer RB1 or signalling radio bearer RB2) should not be stopped.

- NOTE 1: The <u>R99</u> RADIO BEARER RECONFIGURATION message always includes the IE "RB information to reconfigure", even if UTRAN does not require the reconfiguration of any RB. In these cases, UTRAN may include only the IE "RB identity" within the IE "RB information to reconfigure".
- NOTE 2: The <u>R99</u> RADIO BEARER RECONFIGURATION message always includes the IE "Downlink information per radio link list", even if UTRAN does not require the reconfiguration of any RL. In these cases, UTRAN may re-send the currently assigned values for the mandatory IEs included within the IE "Downlink information per radio link list".
- <u>NOTE 3:</u> <u>-Moreover, tThe R99</u> RADIO BEARER RECONFIGURATION message always includes the IE "Primary CPICH Info" (FDD) or IE "Primary CCPCH Info" (TDD) <u>within IE "Downlink information per</u> <u>radio link list"</u>. This implies that in case UTRAN applies the RADIO BEARER RECONFIGURATION message to move the UE to CELL\_FACH state, it has to indicate a cell. However, UTRAN may indicate any cell; the UE anyhow performs cell selection and notifies UTRAN if it selects another cell than indicated by UTRAN.

If the IE "Activation Time" is included, UTRAN should set it to a value taking the UE performance requirements into account.

UTRAN should take the UE capabilities into account when setting the new configuration.

If the message is used to initiate a transition from CELL\_DCH to CELL\_FACH state, the UTRAN may assign a CPCH configuration to be used in that cell by the UE. UTRAN may also assign a C-RNTI to be used in that cell by the UE.

8.2.2.3 Reception of RADIO BEARER SETUP or RADIO BEARER RECONFIGURATION or RADIO BEARER RELEASE or TRANSPORT CHANNEL RECONFIGURATION or PHYSICAL CHANNEL RECONFIGURATION message by the UE

The UE shall be able to receive any of the following messages:

- RADIO BEARER SETUP message; or
- RADIO BEARER RECONFIGURATION message; or
- RADIO BEARER RELEASE message; or
- TRANSPORT CHANNEL RECONFIGURATION message; or
- PHYSICAL CHANNEL RECONFIGURATION message;

and perform a hard handover, even if no prior UE measurements have been performed on the target cell and/or frequency.

If the UE receives:

- a RADIO BEARER SETUP message; or
- a RADIO BEARER RECONFIGURATION message; or
- a RADIO BEARER RELEASE message; or
- a TRANSPORT CHANNEL RECONFIGURATION message; or
- a PHYSICAL CHANNEL RECONFIGURATION message:

### it shall:

- 1> set the variable ORDERED\_RECONFIGURATION to TRUE;
- 1> perform the physical layer synchronisation procedure as specified in [29];

1> act upon all received information elements as specified in subclause 8.6, unless specified in the following and perform the actions below.

The UE may:

1> maintain a list of the set of cells to which the UE has Radio Links if the IE "Cell ID" is present.

The UE may first release the physical channel configuration used at reception of the reconfiguration message. The UE shall then:

1> in FDD, if the IE "PDSCH code mapping" is included but the IE "PDSCH with SHO DCH Info" is not included and if the DCH has only one link in its active set:

2> act upon the IE "PDSCH code mapping" as specified in subclause 8.6; and

2> infer that the PDSCH will be transmitted from the cell from which the downlink DPCH is transmitted.

1> enter a state according to subclause 8.6.3.3.

In case the UE receives a RADIO BEARER RECONFIGURATION message including the IE "RB information to reconfigure" that only includes the IE "RB identity", the UE shall:

1> handle the message as if IE "RB information to reconfigure" was absent.

NOTE: The <u>R99</u> RADIO BEARER RECONFIGURATION message always includes the IE "RB information to reconfigure". UTRAN has to include it even if it does not require the reconfiguration of any RB.

If after state transition the UE enters CELL\_DCH state, the UE shall, after the state transition:

1> remove any C-RNTI from MAC;

1> clear the variable C\_RNTI.

In FDD, if after state transition the UE leaves CELL\_DCH state, the UE shall, after the state transition:

- 1> remove any DSCH-RNTI from MAC;
- 1> clear the variable DSCH\_RNTI.

If the UE was in CELL\_DCH state upon reception of the reconfiguration message and remains in CELL\_DCH state, the UE shall:

- 1> if the IE "Uplink DPCH Info" is absent, not change its current UL Physical channel configuration;
- 1> if the IE "Downlink information for each radio link" is absent, not change its current DL Physical channel configuration;
- NOTE:
   The R99 RADIO BEARER RECONFIGURATION message always includes the IE "Downlink information per radio link list" containing the mandadtory IEs, even if UTRAN does not require the reconfiguration of any RL. In FDD, if the UE receives a RADIO BEARER RECONFIGURATION message where the IE "Downlink information per radio link list" includes only a number of "Primary CPICH Info" IEs, but the correct Primary CPICH for each of the cells in the active set is not included, then the UE behaviour is undefined.
- 1> if "DPCH frame offset" is included for one or more RLs in the active set:

2> use its value to determine the beginning of the DPCH frame in accordance with the following:

- 3> if the received IE "DPCH frame offset" is across the value range border compared to the DPCH frame offset currently used by the UE:
  - 4> consider it to be a request to adjust the timing with 256 chips across the frame border (e.g. if the UE receives value 0 while the value currently used is 38144 consider this as a request to adjust the timing with +256 chips).
- 3> if after taking into account value range borders, the received IE "DPCH frame offset" corresponds to a request to adjust the timing with a step exceeding 256 chips:

- 4> set the variable INVALID\_CONFIGURATION to FALSE.
- 3> and the procedure ends.
- 2> adjust the radio link timing accordingly.

If after state transition the UE enters CELL\_FACH state, the UE shall, after the state transition:

- 1> if the IE "Frequency info" is included in the received reconfiguration message:
  - 2> select a suitable UTRA cell according to [4] on that frequency.
- 1> if the IE "Frequency info" is not included in the received reconfiguration message:
  - 2> select a suitable UTRA cell according to [4].
- 1> if the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selects another cell than indicated by this IE or the received reconfiguration message did not include the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD):
  - 2> initiate a cell update procedure according to subclause 8.3.1 using the cause "Cell reselection";
  - 2> when the cell update procedure completed successfully:
    - 3> if the UE is in CELL\_PCH or URA\_PCH state:
      - 4> initiate a cell update procedure according to subclause 8.3.1 using the cause "Uplink data transmission";
      - 4> proceed as below.
- 1> start timer T305 using its initial value if timer T305 is not running and if periodical update has been configured by T305 in the IE "UE Timers and constants in connected mode" set to any other value than "infinity" in system information block type 1;
- 1> select PRACH according to subclause 8.5.17;
- 1> select Secondary CCPCH according to subclause 8.5.19;
- 1> use the transport format set given in system information;
- 1> if the IE "UTRAN DRX cycle length coefficient" is included in the same message:

2> ignore that IE and stop using DRX.

- 1> remove any H-RNTI stored;
- 1> clear the variable H\_RNTI;
- 1> if the contents of the variable C\_RNTI is empty:
  - 2> perform a cell update procedure according to subclause 8.3.1 using the cause "Cell reselection";
  - 2> when the cell update procedure completed successfully:
    - 3> if the UE is in CELL\_PCH or URA\_PCH state:
      - 4> initiate a cell update procedure according to subclause 8.3.1 using the cause "Uplink data transmission";
      - 4> proceed as below.

If the UE was in CELL\_FACH state upon reception of the reconfiguration message and remains in CELL\_FACH state, the UE shall:

1> if the IE "Frequency info" is included in the received reconfiguration message:

2> select a suitable UTRA cell according to [4] on that frequency;
- 2> if the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selected another cell than indicated by this IE or the received reconfiguration message did not include the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD):
  - 3> initiate a cell update procedure according to subclause 8.3.1 using the cause "cell reselection";
  - 3> when the cell update procedure completed successfully:
    - 4> proceed as below.

The UE shall transmit a response message as specified in subclause 8.2.2.4, setting the information elements as specified below. The UE shall:

- 1> if the received reconfiguration message included the IE "Downlink counter synchronisation info"; or
- 1> if the received reconfiguration message is a RADIO BEARER RECONFIGURATION and the IE "New U-RNTI" is included:
  - 2> re-establish RB2;
  - 2> set the new uplink and downlink HFN of RB2 to MAX(uplink HFN of RB2, downlink HFN of RB2);
  - 2> increment by one the downlink and uplink HFN values for RB2;
  - 2> calculate the START value according to subclause 8.5.9;
  - 2> include the calculated START values for each CN domain in the IE "START list" in the IE "Uplink counter synchronisation info".
- 1> if the received reconfiguration message did not include the IE "Downlink counter synchronisation info":
  - 2> if the variable START\_VALUE\_TO\_TRANSMIT is set:
    - 3> include and set the IE "START" to the value of that variable.
  - 2> if the variable START\_VALUE\_TO\_TRANSMIT is not set and the IE "New U-RNTI" is included:
    - 3> calculate the START value according to subclause 8.5.9;
    - 3> include the calculated START values for each CN domain in the IE "START list" in the IE "Uplink counter synchronisation info".
  - 2> if the received reconfiguration message caused a change in the RLC size for any RB using RLC-AM:
    - 3> calculate the START value according to subclause 8.5.9;
    - 3> include the calculated START values for the CN domain associated with the corresponding RB identity in the IE "START list" in the IE "Uplink counter synchronisation info".
- 1> if the received reconfiguration message contained the IE "Ciphering mode info" or contained the IE "Integrity protection mode info":
  - 2> set the IE "Status" in the variable SECURITY\_MODIFICATION for all the CN domains in the variable SECURITY\_MODIFICATION to "Affected".
- 1> if the received reconfiguration message contained the IE "Ciphering mode info":
  - 2> include and set the IE "Radio bearer uplink ciphering activation time info" to the value of the variable RB\_UPLINK\_CIPHERING\_ACTIVATION\_TIME\_INFO.
- 1> if the received reconfiguration message did not contain the IE "Ciphering activation time for DPCH" in IE "Ciphering mode info":
  - 2> if prior to this procedure there exist no transparent mode RLC radio bearers:
    - 3> if, at the conclusion of this procedure, the UE will be in CELL\_DCH state; and

- 3> if, at the conclusion of this procedure, at least one transparent mode RLC radio bearer exists:
  - 4> include the IE "COUNT-C activation time" and specify a CFN value for this IE.
- 2> if prior to this procedure there exists at least one transparent mode RLC radio bearer:
  - 3> if, at the conclusion of this procedure, no transparent mode RLC radio bearers exist:
    - 4> include the IE "COUNT-C activation time" and specify a CFN value for this IE.
- 1> set the IE "RRC transaction identifier" to the value of "RRC transaction identifier" in the entry for the received message in the table "Accepted transactions" in the variable TRANSACTIONS; and
- 1> clear that entry;
- 1> if the variable PDCP\_SN\_INFO is not empty:
  - 2> include the IE "RB with PDCP information list" and set it to the value of the variable PDCP\_SN\_INFO.
- 1> in TDD, if the procedure is used to perform a handover to a cell where timing advance is enabled, and the UE can calculate the timing advance value in the new cell (i.e. in a synchronous TDD network):
  - 2> set the IE "Uplink Timing Advance" according to subclause 8.6.6.26.
- 1> if the IE "Integrity protection mode info" was present in the received reconfiguration message:
  - 2> start applying the new integrity protection configuration in the uplink for signalling radio bearer RB2 from and including the transmitted response message.

If after state transition the UE enters CELL\_PCH or URA\_PCH state, the UE shall, after the state transition and transmission of the response message:

- 1> if the IE "Frequency info" is included in the received reconfiguration message:
  - 2> select a suitable UTRA cell according to [4] on that frequency.
- 1> if the IE "Frequency info" is not included in the received reconfiguration message:
  - 2> select a suitable UTRA cell according to [4].
- 1> prohibit periodical status transmission in RLC;
- 1> remove any C-RNTI from MAC;
- 1> clear the variable C\_RNTI;
- 1> remove any H-RNTI stored;
- 1> clear the variable H\_RNTI;
- 1> start timer T305 using its initial value if timer T305 is not running and if periodical update has been configured by T305 in the IE "UE Timers and constants in connected mode" set to any other value than "infinity" in system information block type 1;
- 1> select Secondary CCPCH according to subclause 8.5.19;
- 1> if the IE "UTRAN DRX cycle length coefficient" is included in the same message:
  - 2> use the value in the IE "UTRAN DRX Cycle length coefficient" for calculating Paging occasion and PICH Monitoring Occasion as specified in subclause 8.6.3.2.
- 1> if the IE "UTRAN DRX cycle length coefficient" is not included in the same message:

2> set the variable INVALID\_CONFIGURATION to TRUE.

1> if the UE enters CELL\_PCH state from CELL\_DCH state, and the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selected another cell

than indicated by this IE or the received reconfiguration message did not include the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD):

2> initiate a cell update procedure according to subclause 8.3.1 using the cause "cell reselection";

2> when the cell update procedure completed successfully:

3> the procedure ends.

1> if the UE enters CELL\_PCH state from CELL\_FACH state, and the received reconfiguration message included the IE "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD), and the UE selected another cell than indicated by this IE:

2> initiate a cell update procedure according to subclause 8.3.1 using the cause "cell reselection";

2> when the cell update procedure is successfully completed:

3> the procedure ends.

1> if the UE enters URA\_PCH state, and after cell selection the criteria for URA update caused by "URA reselection" according to subclause 8.3.1 is fulfilled:

2> initiate a URA update procedure according to subclause 8.3.1 using the cause "URA reselection";

2> when the URA update procedure is successfully completed:

3> the procedure ends.

# 3GPP TSG-RAN WG2 Meeting #29

## Tdoc R2-021258

R99

(GSM Phase 2)

(Release 1996)

(Release 1997)

(Release 1998)

(Release 1999)

(Release 4)

CR-Form-v5.1

Gyeongju, Korea, 13 - 17 May 2002 CHANGE REQUEST ж Current version: 3.10.0 # 25.331 CR 1377 жrev For **HELP** on using this form, see bottom of this page or look at the pop-up text over the **#** symbols. ME/UE X Radio Access Network X Core Network Proposed change affects: # (U)SIM Title: **#** Correction on SIB type TSG-RAN WG2 Source: Ж Work item code: # TEI Date: # 2002-05-16 Ж F Category: Release: # Use one of the following categories: Use one of the following releases: F (correction) 2 A (corresponds to a correction in an earlier release) R96 B (addition of feature). R97 **C** (functional modification of feature) R98 **D** (editorial modification) R99 Detailed explanations of the above categories can REL-4 be found in 3GPP TR 21.900. REL-5 (Release 5) In subclause 8.1.1.1.4, SIB types 15.2 and 15.3 are missing for SIBs which Reason for change: # 1. may have multiple occurrences. 2. In the semantics description for the IE "PLMN value tag" in IE "Scheduling information" (10.3.8.16), SIB type 15.3 is missing from the excluding criterion so that it seems that SIB type 15.3 may use this IE. In fact, this IE is for SIB type 1 only. 3. The tabular IE "SIB type" (10.3.8.21) in IE "References to other system information blocks and scheduling blocks" (10.3.8.14) in IE "Master Information Block" (10.2.48.8.1) contains MIB itself, which is not correct. This is inconsistent with the ASN.1 part. 1. In subclause 8.1.1.1.4, the missing "SIB types 15.2 and 15.3" is added. Summary of change: # 2. The semantics description for the IE "PLMN value tag" in IE "Scheduling

information" (10.3.8.16) is clarified to be used for SIB type 1 only. 3. IE "SIB type" (10.3.8.21) in IE "References to other system information blocks and scheduling blocks" (10.3.8.14) in IE "Master Information Block" (10.2.48.8.1) is changed to a new IE "SIB and SB type", which contains SIBs and SBs only. 4. A minbor typo in subclause 8.1.1.7.2 is corrected. Impact analysis: No actual functionalities are affected by this CR. There are no backwards compatibility problems since this CR contains only clarifications of inconsistency between tabular and ASN.1 IEs. Consequences if # Incorrect tabular IEs. not approved: **#** 8.1.1.1.4, 8.1.1.7.2, 10.3.8.14, 10.3.8.16, 10.3.8.x (new) Clauses affected: ж Other core specifications # 25.331 v4.4.0, CR 1378 Other specs

Test specifications

affected:

25.331 v5.0.0, CR 1379

		O&M Specifications	
	_		
Other comments:	ж	No test cases will be affected by implementation of this CR.	

#### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

#### 8.1.1.1.4 Re-assembly of segments

The RRC layer in the UE shall perform re-assembly of segments. All segments belonging to the same master information block, scheduling block or system information block shall be assembled in ascending order with respect to the segment index. When all segments of the master information block, scheduling block or a system information block have been received, the UE shall perform decoding of the complete master information block, scheduling block or system information block types 15.2, 15.3 and 16, which may have multiple occurrences, each occurrence shall be re-assembled independently.

The UE shall discard system information blocks of which segments were missing, of which segments were received out of sequence and/or for which duplicate segments were received. The only valid sequence is an ascending one with the sequence starting with the First Segment of the associated System Information Block.

#### 8.1.1.7.2 Synchronised modification of system information blocks

For modification of some system information elements, e.g. reconfiguration of the channels, it is important for the UE to know exactly when a change occurs. In such cases, the UTRAN should notify the SFN when the change will occur as well as the new value tag for the master information block in the IE "BCCH modification info" transmitted in the following way:

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- 1> To reach UEs in idle mode, CELL\_PCH state and URA\_PCH state, the IE "BCCH modification info" is contained in a PAGING TYPE 1 message transmitted on the PCCH in all paging occasions in the cell;
- 1> To reach UEs in CELL\_FACH state, the IE "BCCH modification info" is contained in a SYSTEM INFORMATION CHANGE INDICATION message transmitted on the BCCH mapped on at least one FACH on every Secondary CCPCH in the cell.

Upon reception of a PAGING TYPE 1 message or a SYSTEM INFORMATION CHANGE INDICATION message containing the IE "BCCH modification info" containing the IE "MIB value tag" and containing the <u>"IE "BCCH</u> modification time", the UE shall:

1> perform the actions as specified in subclause 8.1.1.7.3 at the time, indicated in the IE "BCCH Modification Info".

Information Element/Group	Need	Multi	Type and reference	Semantics description
Other information elements				
MIB Value tag	MP		MIB Value tag 10.3.8.9	
CN information elements				
Supported PLMN types	MP		PLMN Type 10.3.1.12	
PLMN Identity	CV-GSM		PLMN Identity 10.3.1.11	
ANSI-41 information elements				
ANSI-41 Core Network Information	CV-ANSI- 41		ANSI-41 Core Network Information 10.3.9.1	
References to other system information blocks and scheduling blocks	MP		References to other system information blocks and scheduling blocks 10.3.8.14	

#### 10.2.48.8.1 Master Information Block

Condition	Explanation
GSM	The IE is mandatory present if the IE "Supported
	PLMN Types" is set to 'GSM-MAP' or 'GSM-MAP
	AND ANSI-41', and not needed otherwise
ANSI-41	The IE is mandatory present if the IE "Supported
	PLMN Types" is set to 'ANSI-41' or 'GSM-MAP AND
	ANSI-41', and not needed otherwise

[...]

## 10.3.8.14 References to other system information blocks and scheduling blocks

Information element/Group name	Need	Multi	Type and reference	Semantics description
References to other system information blocks	MP	1 to <maxsib></maxsib>		System information blocks for which multiple occurrences are used, may appear more than once in this list
>Scheduling information	MP		Scheduling information, 10.3.8.16	
>SIB <u>and SB</u> type	MP		SIB <u>and SB</u> Type, 10.3.8. <del>21</del> X	

[...]

|

## 10.3.8.16 Scheduling information

Information Element/Group	Need	Multi	Type and	Semantics description
name			reference	
CHOICE Value tag	OP			
>PLMN Value tag			PLMN Value tag 10.3.8.10	This IE is included if the following conditions are fulfilled: the area scope for the system information block is set to "PLMN" in table 8.1.1. a value tag is used to indicate changes in the system information block. the SIB type does not equals system information block type 16
>Predefined configuration identity and value tag			Predefined configuration identity and value tag 10.3.8.11	This IE is included if the following conditions are fulfilled: the SIB type equals system information block type 16
>Cell Value tag			Cell Value tag 10.3.8.4	This IE is included if the following conditions are fulfilled: the area scope for the system information block is set to "cell" in table 8.1.1. a value tag is used to indicate changes in the system information block.
>SIB occurrence identity and value tag			SIB occurrence identity and value tag 10.3.8.20b	This IE is included if the following conditions are fulfilled: the SIB type equals system information block types 15.2 and 15.3
Scheduling	MP			
>SEG_COUNT	MD		SEG COUNT 10.3.8.17	Default value is 1
>SIB_REP	MP		Integer (4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096)	Repetition period for the SIB in frames
>SIB_POS	MP		Integer (0 Rep-2 by	Position of the first segment Rep is the value of the

Information Element/Group	Need	Multi	Type and	Semantics description
name			reference	
			step of 2)	SIB_REP IE
>SIB_POS offset info	MD	115		see below for default value
>>SIB_OFF	MP		Integer(232	Offset of subsequent
			by step of 2)	segments

Field	Default value
SIB_POS offset info	The default value is that all segments are consecutive, i.e., that the SIB_OFF = 2 for all segments except when MIB segment/complete MIB is scheduled to be transmitted in between segments from same SIB. In that case, SIB_OFF=4 in between segments which are scheduled to be transmitted at SFNprime = 8 *n-2 and 8*n + 2, and SIB_OFF=2 for the rest of the segments.

#### 10.3.8.21 SIB type

The SIB type identifies a specific system information block.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
SIB type	MP		Enumerated, see below	

The list of values to encode is:

Master information block,

System Information Type 1,

System Information Type 2,

System Information Type 3,

System Information Type 4,

System Information Type 5,

System Information Type 6,

System Information Type 7,

System Information Type 8,

System Information Type 9,

System Information Type 10,

System Information Type 11,

System Information Type 12,

System Information Type 13,

System Information Type 13.1,

System Information Type 13.2,

System Information Type 13.3,

System Information Type 13.4,

System Information Type 14,

System Information Type 15,

System Information Type 15.1,

System Information Type 15.2,

System Information Type 15.3,

System Information Type 15.4,

System Information Type 15.5,

System Information Type 16,

System Information Type 17,

System Information Type 18,

Scheduling Block 1,

Scheduling Block 2.

In addition, two spare values are needed.

#### 10.3.8.22 SIB type SIBs only

The SIB type identifies a specific system information block.

Information Element/Group	Need	Multi	Type and	Semantics description
name			reference	
SIB type SIBs only	MP		Enumerated,	
			see below	

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The list of values to encode is:

System Information Type 1,

System Information Type 2,

System Information Type 3,

System Information Type 4,

System Information Type 5,

System Information Type 6,

System Information Type 7,

System Information Type 8,

System Information Type 9,

System Information Type 10,

System Information Type 11,

System Information Type 12,

System Information Type 13,

System Information Type 13.1,

System Information Type 13.2,

System Information Type 13.3,

System Information Type 13.4,

System Information Type 14,

System Information Type 15,

System Information Type 15.1,

System Information Type 15.2,

System Information Type 15.3,

System Information Type 15.4,

System Information Type 15.5,

System Information Type 16,

System Information Type 17,

System Information Type 18.

In addition, five spare values are needed.

#### 10.3.8.X SIB and SB type

The SIB type identifies a specific system information block.

Information Element/Group	Need	<u>Multi</u>	Type and	Semantics description
<u>name</u>			<u>reference</u>	
SIB and SB type	<u>MP</u>		Enumerated,	
			see below	

The list of values to encode is:

- System Information Type 1,
- System Information Type 2,
- System Information Type 3,
- System Information Type 4,
- System Information Type 5,
- System Information Type 6,
- System Information Type 7,
- System Information Type 8,
- System Information Type 9,
- System Information Type 10,
- System Information Type 11,
- System Information Type 12,
- System Information Type 13,
- System Information Type 13.1,
- System Information Type 13.2,
- System Information Type 13.3,
- System Information Type 13.4,
- System Information Type 14,
- System Information Type 15,
- System Information Type 15.1,
- System Information Type 15.2,
- System Information Type 15.3,
- System Information Type 15.4,
- System Information Type 15.5,
- System Information Type 16,

- System Information Type 17,
- System Information Type 18,
- Scheduling Block 1,
- Scheduling Block 2.
- In addition, three spare values are needed.

```
_ _
      OTHER INFORMATION ELEMENTS (10.3.8)
_ _
[...]
MasterInformationBlock ::= SEQUENCE {
       mib-ValueTag
                                    MIB-ValueTag,
       -- TABULAR: The PLMN identity and ANSI-41 core network information
       -- are included in PLMN-Type.
       plmn-Type
                                     PLMN-Type,
       pImn-Type PLMN-Type,
sibSb-ReferenceList SIBSb-ReferenceList,
   -- Extension mechanism for non- release99 information
       nonCriticalExtensions SEQUENCE {}
                                                                       OPTIONAL
}
MIB-ValueTag ::=
                                 INTEGER (1..8)
[...]
SchedulingInformation ::=
                                  SEQUENCE {
   scheduling
                                   SEQUENCE {
       segCount
                                         SegCount
                                                                        DEFAULT 1,
                                          CHOICE {
       sib-Pos
           \ensuremath{{\ensuremath{\text{--}}}} The element name indicates the repetition period and the value
           -- (multiplied by two) indicates the position of the first segment.
                                             INTEGER (0..1),
           rep4
                                             INTEGER (0..3),
           rep8
           rep16
                                             INTEGER (0..7),
           rep32
                                             INTEGER (0..15),
           rep64
                                             INTEGER (0..31),
           rep128
                                             INTEGER (0..63),
           rep256
                                             INTEGER (0..127),
                                             INTEGER (0..255),
           rep512
           rep1024
                                             INTEGER (0..511),
           rep2048
                                             INTEGER (0..1023),
           rep4096
                                             INTEGER (0..2047)
       },
       sib-PosOffsetInfo
                                         SibOFF-List
                                                                       OPTIONAL
   }
}
SchedulingInformationSIB ::=
                                      SEQUENCE {
   sib-Type
                                      SIB-TypeAndTag,
                                     SchedulingInformation
   scheduling
}
SchedulingInformationSIBSb ::=
                                     SEQUENCE {
   sibSb-Type
                                      SIBSb-TypeAndTag,
   scheduling
                                      SchedulingInformation
}
SegCount ::=
                                  INTEGER (1..16)
                                  INTEGER (1..15)
SegmentIndex ::=
-- Actual value SFN-Prime = 2 * IE value
SFN-Prime ::=
                                 INTEGER (0..2047)
SIB-Data-fixed ::=
                                 BIT STRING (SIZE (222))
SIB-Data-variable ::=
                                 BIT STRING (SIZE (1..214))
SIBOccurIdentity ::=
                              INTEGER (0..15)
SIBOccurrenceIdentityAndValueTag ::=
                                    SEOUENCE {
   sibOccurIdentity
                                 SIBOccurIdentity,
   sibOccurValueTag
                                  SIBOccurValueTag
}
                             INTEGER (0..15)
SIBOccurValueTag ::=
SIB-ReferenceList ::=
                                  SEQUENCE (SIZE (1..maxSIB)) OF
```

SchedulingInformationSIB SIBSb-ReferenceList ::= SEQUENCE (SIZE (1..maxSIB)) OF SchedulingInformationSIBSb SIB-ReferenceListFACH ::= SEQUENCE (SIZE (1..maxSIB-FACH)) OF SchedulingInformationSIB SIB-Type ::= ENUMERATED { masterInformationBlock, systemInformationBlockType1, systemInformationBlockType2, systemInformationBlockType3, systemInformationBlockType4, systemInformationBlockType5, systemInformationBlockType6, systemInformationBlockType7, systemInformationBlockType8, systemInformationBlockType9, systemInformationBlockType10, systemInformationBlockType11, systemInformationBlockType12, systemInformationBlockType13, systemInformationBlockType13-1, systemInformationBlockType13-2, systemInformationBlockType13-3, systemInformationBlockType13-4, systemInformationBlockType14, systemInformationBlockType15, systemInformationBlockType15-1, systemInformationBlockType15-2, systemInformationBlockType15-3, systemInformationBlockType16, systemInformationBlockType17, systemInformationBlockType15-4, systemInformationBlockType18, schedulingBlock1, schedulingBlock2, systemInformationBlockType15-5, spare1, spare2 } SIB-TypeAndTag ::= CHOICE { PLMN-ValueTag, sysInfoType1 CellValueTag, sysInfoType2 sysInfoType3 CellValueTag, sysInfoType4 CellValueTag, sysInfoType5 CellValueTag. sysInfoType6 CellValueTag, sysInfoType7 NULL, CellValueTag, sysInfoType8 sysInfoType9 NULL, NULL, sysInfoType10 CellValueTag, sysInfoType11 sysInfoType12 CellValueTag, sysInfoType13 CellValueTag, sysInfoType13-1 CellValueTag, sysInfoType13-2 CellValueTag, sysInfoType13-3 CellValueTag, sysInfoType13-4 CellValueTag, sysInfoType14 NULL, sysInfoType15 CellValueTag, sysInfoType16 PredefinedConfigIdentityAndValueTag, sysInfoType17 NULL, sysInfoType15-1 CellValueTag, SIBOccurrenceIdentityAndValueTag, sysInfoType15-2 sysInfoType15-3 SIBOccurrenceIdentityAndValueTag, sysInfoType15-4 CellValueTag, sysInfoType18 CellValueTag, sysInfoType15-5 CellValueTag, spare5 NULL, spare4 NULL, spare3 NULL, spare2 NULL, spare1 NULT. } SIBSb-TypeAndTag ::= CHOICE { PLMN-ValueTag, sysInfoType1

sysInfoType2	CellValueTag,
sysInfoType3	CellValueTag,
sysInfoType4	CellValueTag,
sysInfoType5	CellValueTag,
sysInfoType6	CellValueTag,
sysInfoType7	NULL,
sysInfoType8	CellValueTag,
sysInfoType9	NULL,
sysInfoType10	NULL,
sysInfoTypel1	CellValueTag,
sysInfoType12	CellValueTag,
sysInfoType13	CellValueTag,
sysInfoType13-1	CellValueTag,
sysInfoType13-2	CellValueTag,
sysInfoType13-3	CellValueTag,
sysInfoType13-4	CellValueTag,
sysInfoType14	NULL,
sysInfoType15	CellValueTag,
sysInfoTypel6	PredefinedConfigIdentityAndValueTag,
sysInfoType17	NULL,
sysInfoTypeSB1	CellValueTag,
sysInfoTypeSB2	CellValueTag,
sysInfoType15-1	CellValueTag,
sysInfoType15-2	SIBOccurrenceIdentityAndValueTag,
sysInfoType15-3	SIBOccurrenceIdentityAndValueTag,
sysInfoType15-4	CellValueTag,
sysInfoType18	CellValueTag,
sysInfoType15-5	CellValueTag,
spare2	NULL,
sparel	NULL

}

# 3GPP TSG-RAN WG2 Meeting #29

## Tdoc R2-021259

4.4.0

Date: # 2002-05-16

2

R96

R97

R98

R99

REL-4

Use one of the following releases:

(GSM Phase 2)

(Release 1996)

(Release 1997)

(Release 1998)

(Release 1999)

(Release 4)

REL-5 (Release 5)

CR-Form-v5.1

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Gyeongju, Korea, 13 - 17 May 2002 CHANGE REQUEST ж 25.331 CR 1378 ж Current version: жrev For <u>**HELP**</u> on using this form, see bottom of this page or look at the pop-up text over the **#** symbols. ME/UE X Radio Access Network X Core Network Proposed change affects: # (U)SIM Title: **#** Correction on SIB type **# TSG-RAN WG2** Source: Work item code: # TEI ж Category: Α 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) Detailed explanations of the above categories can be found in 3GPP TR 21.900. Reason for change: # 1. In subclause 8.1.1.1.4, SIB types 15.2 and 15.3 are missing for SIBs which may have multiple occurrences.

	2. 3.	In the semantics description for the IE "PLMN value tag" in IE "Scheduling information" (10.3.8.16), SIB type 15.3 is missing from the excluding criterion so that it seems that SIB type 15.3 may use this IE. In fact, this IE is for SIB type 1 only. The tabular IE "SIB type" (10.3.8.21) in IE "References to other system information blocks and scheduling blocks" (10.3.8.14) in IE "Master Information Block"(10.2.48.8.1) contains MIB itself, which is not correct. This is inconsistent with the ASN.1 part.
Summary of change:	1. 2. 3.	In subclause 8.1.1.1.4, the missing "SIB types 15.2 and 15.3" is added. The semantics description for the IE "PLMN value tag" in IE "Scheduling information" (10.3.8.16) is clarified to be used for SIB type 1 only. IE "SIB type" (10.3.8.21) in IE "References to other system information

3.	IE "SIB type" (10.3.8.21) in IE "References to other system information
	blocks and scheduling blocks" (10.3.8.14) in IE "Master Information
	Block"(10.2.48.8.1) is changed to a new IE "SIB and SB type", which
	contains SIBs and SBs only.
4.	A minbor typo in subclause 8.1.1.7.2 is corrected.

Consequences if not approved:	# Incorrect tabular IEs.
Clauses affected:	# 8.1.1.1.4, 8.1.1.7.2, 10.3.8.14, 10.3.8.16, 10.3.8.x (new)
Other specs	%         Other core specifications         %         25.331 v3.10.0, CR           25.331 v5.0.0, CR         25.331 v5.0.0, CR

Other specs affected:	æ	Other core specifications # Test specifications O&M Specifications	25.331 v3.10.0, CR 1377 25.331 v5.0.0, CR 1379			
Other comments:	% No test cases will be affected by implementation of this CR.					

How to create CRs using this form:

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- 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

#### 8.1.1.1.4 Re-assembly of segments

The RRC layer in the UE shall perform re-assembly of segments. All segments belonging to the same master information block, scheduling block or system information block shall be assembled in ascending order with respect to the segment index. When all segments of the master information block, scheduling block or a system information block have been received, the UE shall perform decoding of the complete master information block, scheduling block or system information block types 15.2, 15.3 and 16, which may have multiple occurrences, each occurrence shall be re-assembled independently.

The UE shall discard system information blocks of which segments were missing, of which segments were received out of sequence and/or for which duplicate segments were received. The only valid sequence is an ascending one with the sequence starting with the First Segment of the associated System Information Block.

#### 8.1.1.7.2 Synchronised modification of system information blocks

For modification of some system information elements, e.g. reconfiguration of the channels, it is important for the UE to know exactly when a change occurs. In such cases, the UTRAN should notify the SFN when the change will occur as well as the new value tag for the master information block in the IE "BCCH modification info" transmitted in the following way:

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- 1> To reach UEs in idle mode, CELL\_PCH state and URA\_PCH state, the IE "BCCH modification info" is contained in a PAGING TYPE 1 message transmitted on the PCCH in all paging occasions in the cell;
- 1> To reach UEs in CELL\_FACH state, the IE "BCCH modification info" is contained in a SYSTEM INFORMATION CHANGE INDICATION message transmitted on the BCCH mapped on at least one FACH on every Secondary CCPCH in the cell.

Upon reception of a PAGING TYPE 1 message or a SYSTEM INFORMATION CHANGE INDICATION message containing the IE "BCCH modification info" containing the IE "MIB value tag" and containing the <u>"IE "BCCH</u> modification time", the UE shall:

1> perform the actions as specified in subclause 8.1.1.7.3 at the time, indicated in the IE "BCCH Modification Info".

Information Element/Group	Need	Multi	Type and	Semantics description
name			reference	-
Other information elements				
MIB Value tag	MP		MIB Value	
			tag 10.3.8.9	
CN information elements				
Supported PLMN types	MP		PLMN Type	
			10.3.1.12	
PLMN Identity	CV-GSM		PLMN	
			Identity	
			10.3.1.11	
ANSI-41 information elements				
ANSI-41 Core Network	CV-ANSI-		ANSI-41	
Information	41		Core	
			Network	
			Information	
			10.3.9.1	
References to other system	MP		References	
information blocks and			to other	
scheduling blocks			system	
			information	
			DIOCKS and	
			scheduling	
			DIOCKS	
			10.3.8.14	

#### 10.2.48.8.1 Master Information Block

Condition	Explanation
GSM	The IE is mandatory present if the IE "Supported
	PLMN Types" is set to 'GSM-MAP' or 'GSM-MAP
	AND ANSI-41', and not needed otherwise
ANSI-41	The IE is mandatory present if the IE "Supported
	PLMN Types" is set to 'ANSI-41' or 'GSM-MAP AND
	ANSI-41', and not needed otherwise

[...]

## 10.3.8.14 References to other system information blocks and scheduling blocks

Information element/Group name	Need	Multi	Type and reference	Semantics description
References to other system information blocks	MP	1 to <maxsib></maxsib>		System information blocks for which multiple occurrences are used, may appear more than once in this list
>Scheduling information	MP		Scheduling information, 10.3.8.16	
>SIB <u>and SB</u> type	MP		SIB <u>and SB</u> Type, 10.3.8. <del>21</del> X	

[...]

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## 10.3.8.16 Scheduling information

Information Element/Group	Need	Multi	Type and	Semantics description
name			reference	
CHOICE Value tag	OP			
>PLMN Value tag			PLMN Value tag 10.3.8.10	This IE is included if the following conditions are fulfilled: the area scope for the system information block is set to "PLMN" in table 8.1.1. a value tag is used to indicate changes in the system information block. the SIB type does not equals system information block type 16
>Predefined configuration identity and value tag			Predefined configuration identity and value tag 10.3.8.11	This IE is included if the following conditions are fulfilled: the SIB type equals system information block type 16
>Cell Value tag			Cell Value tag 10.3.8.4	This IE is included if the following conditions are fulfilled: the area scope for the system information block is set to "cell" in table 8.1.1. a value tag is used to indicate changes in the system information block.
>SIB occurrence identity and value tag			SIB occurrence identity and value tag 10.3.8.20b	This IE is included if the following conditions are fulfilled: the SIB type equals system information block types 15.2 and 15.3
Scheduling	MP			
>SEG_COUNT	MD		SEG COUNT 10.3.8.17	Default value is 1
>SIB_REP	MP		Integer (4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096)	Repetition period for the SIB in frames
>SIB_POS	MP		Integer (0 Rep-2 by	Position of the first segment Rep is the value of the

Information Element/Group	Need	Multi	Type and	Semantics description
name			reference	
			step of 2)	SIB_REP IE
>SIB_POS offset info	MD	115		see below for default value
>>SIB_OFF	MP		Integer(232	Offset of subsequent
			by step of 2)	segments

Field	Default value
SIB_POS offset info	The default value is that all segments are consecutive, i.e., that the SIB_OFF = 2 for all segments except when MIB segment/complete MIB is scheduled to be transmitted in between segments from same SIB. In that case, SIB_OFF=4 in between segments which are scheduled to be transmitted at SFNprime = 8 *n-2 and 8*n + 2, and SIB_OFF=2 for the rest of the segments.

### 10.3.8.21 SIB type

The SIB type identifies a specific system information block.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
SIB type	MP		Enumerated, see below	

The list of values to encode is:

Master information block,

System Information Type 1,

System Information Type 2,

System Information Type 3,

System Information Type 4,

System Information Type 5,

System Information Type 6,

System Information Type 7,

System Information Type 8,

System Information Type 9,

System Information Type 10,

System Information Type 11,

System Information Type 12,

System Information Type 13,

System Information Type 13.1,

System Information Type 13.2,

System Information Type 13.3,

System Information Type 13.4,

System Information Type 14,

System Information Type 15,

System Information Type 15.1,

System Information Type 15.2,

System Information Type 15.3,

System Information Type 15.4,

System Information Type 15.5,

System Information Type 16,

System Information Type 17,

System Information Type 18,

Scheduling Block 1,

Scheduling Block 2.

In addition, two spare values are needed.

#### 10.3.8.22 SIB type SIBs only

The SIB type identifies a specific system information block.

Information Element/Group	Need	Multi	Type and	Semantics description
name			reference	
SIB type SIBs only	MP		Enumerated,	
			see below	

The list of values to encode is:

System Information Type 1,

System Information Type 2,

System Information Type 3,

System Information Type 4,

System Information Type 5,

System Information Type 6,

System Information Type 7,

System Information Type 8,

System Information Type 9,

System Information Type 10,

System Information Type 11,

System Information Type 12,

System Information Type 13,

System Information Type 13.1,

System Information Type 13.2,

System Information Type 13.3,

System Information Type 13.4,

System Information Type 14,

System Information Type 15,

System Information Type 15.1,

System Information Type 15.2,

System Information Type 15.3,

System Information Type 15.4,

System Information Type 15.5,

System Information Type 16,

System Information Type 17,

System Information Type 18.

In addition, five spare values are needed.

### 10.3.8.X SIB and SB type

The SIB type identifies a specific system information block.

Information Element/Group	Need	<u>Multi</u>	Type and	Semantics description
name			<u>reference</u>	
SIB and SB type	MP		Enumerated,	
			see below	

The list of values to encode is:

- System Information Type 1,
- System Information Type 2,
- System Information Type 3,
- System Information Type 4,
- System Information Type 5,
- System Information Type 6,
- System Information Type 7,
- System Information Type 8,
- System Information Type 9,
- System Information Type 10,
- System Information Type 11,
- System Information Type 12,
- System Information Type 13,
- System Information Type 13.1,
- System Information Type 13.2,
- System Information Type 13.3,
- System Information Type 13.4,
- System Information Type 14,
- System Information Type 15,
- System Information Type 15.1,
- System Information Type 15.2,
- System Information Type 15.3,
- System Information Type 15.4,
- System Information Type 15.5,
- System Information Type 16,

- System Information Type 17,
- System Information Type 18,
- Scheduling Block 1,
- Scheduling Block 2.
- In addition, three spare values are needed.

```
_ _
      OTHER INFORMATION ELEMENTS (10.3.8)
_ _
[...]
MasterInformationBlock ::= SEQUENCE {
       mib-ValueTag
                                    MIB-ValueTag,
       -- TABULAR: The PLMN identity and ANSI-41 core network information
       -- are included in PLMN-Type.
       plmn-Type
                                     PLMN-Type,
       pImn-Type PLMN-Type,
sibSb-ReferenceList SIBSb-ReferenceList,
   -- Extension mechanism for non- release99 information
       nonCriticalExtensions SEQUENCE {}
                                                                       OPTIONAL
}
MIB-ValueTag ::=
                                 INTEGER (1..8)
[...]
SchedulingInformation ::=
                                  SEQUENCE {
   scheduling
                                   SEQUENCE {
       segCount
                                         SegCount
                                                                        DEFAULT 1,
                                          CHOICE {
       sib-Pos
           \ensuremath{{\ensuremath{\text{--}}}} The element name indicates the repetition period and the value
           -- (multiplied by two) indicates the position of the first segment.
                                             INTEGER (0..1),
           rep4
                                             INTEGER (0..3),
           rep8
           rep16
                                             INTEGER (0..7),
           rep32
                                             INTEGER (0..15),
           rep64
                                             INTEGER (0..31),
           rep128
                                             INTEGER (0..63),
           rep256
                                             INTEGER (0..127),
                                             INTEGER (0..255),
           rep512
           rep1024
                                             INTEGER (0..511),
           rep2048
                                             INTEGER (0..1023),
           rep4096
                                             INTEGER (0..2047)
       },
       sib-PosOffsetInfo
                                         SibOFF-List
                                                                       OPTIONAL
   }
}
SchedulingInformationSIB ::=
                                      SEQUENCE {
   sib-Type
                                      SIB-TypeAndTag,
                                     SchedulingInformation
   scheduling
}
SchedulingInformationSIBSb ::=
                                     SEQUENCE {
   sibSb-Type
                                      SIBSb-TypeAndTag,
   scheduling
                                      SchedulingInformation
}
SegCount ::=
                                  INTEGER (1..16)
                                  INTEGER (1..15)
SegmentIndex ::=
-- Actual value SFN-Prime = 2 * IE value
SFN-Prime ::=
                                 INTEGER (0..2047)
SIB-Data-fixed ::=
                                 BIT STRING (SIZE (222))
SIB-Data-variable ::=
                                 BIT STRING (SIZE (1..214))
SIBOccurIdentity ::=
                              INTEGER (0..15)
SIBOccurrenceIdentityAndValueTag ::=
                                    SEOUENCE {
   sibOccurIdentity
                                 SIBOccurIdentity,
   sibOccurValueTag
                                  SIBOccurValueTag
}
                             INTEGER (0..15)
SIBOccurValueTag ::=
SIB-ReferenceList ::=
                                  SEQUENCE (SIZE (1..maxSIB)) OF
```

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sysInfoType1

SchedulingInformationSIB SIBSb-ReferenceList ::= SEQUENCE (SIZE (1..maxSIB)) OF SchedulingInformationSIBSb SIB-ReferenceListFACH ::= SEQUENCE (SIZE (1..maxSIB-FACH)) OF SchedulingInformationSIB ENUMERATED { SIB-Type ::= masterInformationBlock, systemInformationBlockType1, systemInformationBlockType2, systemInformationBlockType3, systemInformationBlockType4, systemInformationBlockType5, systemInformationBlockType6, systemInformationBlockType7, systemInformationBlockType8, systemInformationBlockType9, systemInformationBlockType10, systemInformationBlockType11, systemInformationBlockType12, systemInformationBlockType13, systemInformationBlockType13-1, systemInformationBlockType13-2, systemInformationBlockType13-3, systemInformationBlockType13-4, systemInformationBlockType14, systemInformationBlockType15, systemInformationBlockType15-1, systemInformationBlockType15-2, systemInformationBlockType15-3, systemInformationBlockType16, systemInformationBlockType17, systemInformationBlockType15-4, systemInformationBlockType18, schedulingBlock1, schedulingBlock2, systemInformationBlockType15-5, spare1, spare2 } SIB-TypeAndTag ::= CHOICE { PLMN-ValueTag, sysInfoType1 CellValueTag, sysInfoType2 sysInfoType3 CellValueTag, sysInfoType4 CellValueTag, sysInfoType5 CellValueTag. sysInfoType6 CellValueTag, sysInfoType7 NULL, CellValueTag, sysInfoType8 sysInfoType9 NULL, NULL, sysInfoType10 CellValueTag, sysInfoType11 sysInfoType12 CellValueTag, sysInfoType13 CellValueTag, sysInfoType13-1 CellValueTag, sysInfoType13-2 CellValueTag, sysInfoType13-3 CellValueTag, sysInfoType13-4 CellValueTag, sysInfoType14 NULL, CellValueTag, sysInfoType15 sysInfoType16 PredefinedConfigIdentityAndValueTag, sysInfoType17 NULL, sysInfoType15-1 CellValueTag, sysInfoType15-2 SIBOccurrenceIdentityAndValueTag, sysInfoType15-3 SIBOccurrenceIdentityAndValueTag, sysInfoType15-4 CellValueTag, sysInfoType18 CellValueTag, sysInfoType15-5 CellValueTag, spare5 NULL, spare4 NULL, spare3 NULL, spare2 NULL, spare1 NULT. } SIBSb-TypeAndTag ::= CHOICE { PLMN-ValueTag,

sysInfoType2 sysInfoType3 sysInfoType4 sysInfoType5 sysInfoType6 sysInfoType7 sysInfoType9 sysInfoType10 sysInfoType11 sysInfoType13-1 sysInfoType13-2 sysInfoType13-2 sysInfoType13-4 sysInfoType14 sysInfoType15 sysInfoType15 sysInfoType58 sysInfoType15-1 sysInfoType15-2 sysInfoType15-3 sysInfoType15-3 sysInfoType15-5 spare2 spare1	CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, NULL, CellValueTag, NULL, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, PredefinedConfigIdentityAndValueTag, NULL, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, SIBOccurrenceIdentityAndValueTag, SIBOccurrenceIdentityAndValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, NULL, NULL,
sparel	NULL

}

# 3GPP TSG-RAN WG2 Meeting #29

## Tdoc R2-021260

Current version: **5.0.0** 

ж

CR-Form-v5.1

ж

Gyeongju, Korea, 13 - 17 May 2002 **CHANGE REQUEST** ж 25.331 CR 1379 жrev For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the **#** symbols. (U)SIM ME/UE X Radio Access Network X Core Network Proposed change affects: # Title: **#** Correction on SIB type

Source:	ж	TSG	G-RA	<mark>N WG</mark>	2									
Work item code:	ж	TEI									Date:	ж	2002-05-1	16
Category:	æ	A Use <u>c</u> F L Detail be fou	o <u>ne</u> c = (co A (co B (a) C (fu C (fu C (e) led e und i	of the fo prrection prrespo ddition unctiona ditorial xplanat n 3GPF	llowing o n) nds to a of featur I modifica nodifica ions of t <u>TR 21.</u>	categorie correcti re), cation of tition) the abov <u>900</u> .	es: ion in a f feature e cateç	n earl e) gories	<i>ier releas</i> can	Re U se)	lease: lse <u>one</u> 2 R96 R97 R98 R99 REL- REL-	: 第 2 of : 4 5	REL-5 the following (GSM Phase (Release 19 (Release 19 (Release 19 (Release 19 (Release 4) (Release 5)	releases: 92) 96) 97) 98) 99)
Reason for chan Summary of cha	nge:	: Ж	1. 2. 3.	In sub may h In the inform so that type 1 The ta inform Inform is inco	oclause ave mu seman nation" ti t see only. abular I nation b nation E onsister	8.1.1.1 ultiple o tics des (10.3.8. ems that E "SIB t blocks a Block"(1 nt with t 8.1.1.1	.4, SIE ccurre scriptic 16), S t SIB ty type" ( nd sch 0.2.48 he AS .4, the	3 type inces on for IB typ ype 1 10.3. neduli 3.8.1) N.1 p	es 15.2 a the IE " be 15.3 i 5.3 may 8.21) in ng block contains art.	and 1 PLMI is mis use IE "R ks" (1 s MIE 3 type	5.3 ard N value ssing fi this IE deferen 0.3.8. 3 itself,	e m e ta rom . In nce: 14) , wh	ag" in IE "So the exclud fact, this IE to other sy in IE "Mast hich is not c	SIBs which cheduling ling criterion E is for SIB ystem er orrect. This
			2. 3. 4.	The s inform IE "SI blocks Block conta A min	emantion" B type" s and s '(10.2.4 ins SIB bor typ	cs desc (10.3.8. ' (10.3.8 chedulir 18.8.1) i s and S o in sub	16) is 3.21) ir ng bloo is char Bs on oclause	for the clarif n IE "I cks" ( nged ly. e 8.1.	te IE "Pl ed to be Reference 10.3.8.1 to a new 1.7.2 is	LMN e use ces to 14) in v IE " corre	value d for S o other IE "Ma SIB an ected.	tag SIB r sy aste nd S	" in IE "Sch type 1 only. stem inform er Informatio SB type", wh	eduling nation on nich
Consequences i not approved:	f	жI	Inco	rrect ta	ibular II	Es.								
Clauses affected	d:	ж	8.1	.1.1.4,	<mark>8.1.1.7</mark>	<mark>.2, 10.3</mark>	8 <mark>.8.14,</mark>	10.3	<mark>8.16, 10</mark>	0.3.8.	<mark>x (new</mark>	v)		
Other specs		ж	(	Other o	ore spe	ecificatio	ons	ж	25.331 25.331	1 v3.1 1 v4.4	0.0, C I.0, CF	R 1 R 13	1377 378	
affected:			(	D&M S	pecificat	ations								

Other comments: **%** No test cases will be affected by implementation of this CR.

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

#### 8.1.1.1.4 Re-assembly of segments

The RRC layer in the UE shall perform re-assembly of segments. All segments belonging to the same master information block, scheduling block or system information block shall be assembled in ascending order with respect to the segment index. When all segments of the master information block, scheduling block or a system information block have been received, the UE shall perform decoding of the complete master information block, scheduling block or system information block types 15.2, 15.3 and 16, which may have multiple occurrences, each occurrence shall be re-assembled independently.

The UE shall discard system information blocks of which segments were missing, of which segments were received out of sequence and/or for which duplicate segments were received. The only valid sequence is an ascending one with the sequence starting with the First Segment of the associated System Information Block.

#### 8.1.1.7.2 Synchronised modification of system information blocks

For modification of some system information elements, e.g. reconfiguration of the channels, it is important for the UE to know exactly when a change occurs. In such cases, the UTRAN should notify the SFN when the change will occur as well as the new value tag for the master information block in the IE "BCCH modification info" transmitted in the following way:

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- 1> To reach UEs in idle mode, CELL\_PCH state and URA\_PCH state, the IE "BCCH modification info" is contained in a PAGING TYPE 1 message transmitted on the PCCH in all paging occasions in the cell;
- 1> To reach UEs in CELL\_FACH state, the IE "BCCH modification info" is contained in a SYSTEM INFORMATION CHANGE INDICATION message transmitted on the BCCH mapped on at least one FACH on every Secondary CCPCH in the cell.

Upon reception of a PAGING TYPE 1 message or a SYSTEM INFORMATION CHANGE INDICATION message containing the IE "BCCH modification info" containing the IE "MIB value tag" and containing the <u>"IE "BCCH</u> modification time", the UE shall:

1> perform the actions as specified in subclause 8.1.1.7.3 at the time, indicated in the IE "BCCH Modification Info".

Information Element/Group	Need	Multi	Type and reference	Semantics description
Other information elements				
MIB Value tag	MP		MIB Value tag 10.3.8.9	
CN information elements				
Supported PLMN types	MP		PLMN Type 10.3.1.12	
PLMN Identity	CV-GSM		PLMN Identity 10.3.1.11	
ANSI-41 information elements				
ANSI-41 Core Network Information	CV-ANSI- 41		ANSI-41 Core Network Information 10.3.9.1	
References to other system information blocks and scheduling blocks	MP		References to other system information blocks and scheduling blocks 10.3.8.14	

#### 10.2.48.8.1 Master Information Block

Condition	Explanation
GSM	The IE is mandatory present if the IE "Supported
	PLMN Types" is set to 'GSM-MAP' or 'GSM-MAP
	AND ANSI-41', and not needed otherwise
ANSI-41	The IE is mandatory present if the IE "Supported
	PLMN Types" is set to 'ANSI-41' or 'GSM-MAP AND
	ANSI-41', and not needed otherwise

[...]
# 10.3.8.14 References to other system information blocks and scheduling blocks

Information element/Group name	Need	Multi	Type and reference	Semantics description
References to other system information blocks	MP	1 to <maxsib></maxsib>		System information blocks for which multiple occurrences are used, may appear more than once in this list
>Scheduling information	MP		Scheduling information, 10.3.8.16	
>SIB <u>and SB</u> type	MP		SIB <u>and SB</u> Type, 10.3.8. <del>21</del> X	

[...]

|

# 10.3.8.16 Scheduling information

Information Element/Group	Need	Multi	Type and	Semantics description
name			reference	
CHOICE Value tag	OP			
>PLMN Value tag			PLMN Value tag 10.3.8.10	This IE is included if the following conditions are fulfilled: the area scope for the system information block is set to "PLMN" in table 8.1.1. a value tag is used to indicate changes in the system information block. the SIB type does not equals system information block type 16
>Predefined configuration identity and value tag			Predefined configuration identity and value tag 10.3.8.11	This IE is included if the following conditions are fulfilled: the SIB type equals system information block type 16
>Cell Value tag			Cell Value tag 10.3.8.4	This IE is included if the following conditions are fulfilled: the area scope for the system information block is set to "cell" in table 8.1.1. a value tag is used to indicate changes in the system information block.
>SIB occurrence identity and value tag			SIB occurrence identity and value tag 10.3.8.20b	This IE is included if the following conditions are fulfilled: the SIB type equals system information block types 15.2 and 15.3
Scheduling	MP			
>SEG_COUNT	MD		SEG COUNT 10.3.8.17	Default value is 1
>SIB_REP	MP		Integer (4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096)	Repetition period for the SIB in frames
>SIB_POS	MP		Integer (0 Rep-2 by	Position of the first segment Rep is the value of the

Information Element/Group	Need	Multi	Type and	Semantics description
name			reference	
			step of 2)	SIB_REP IE
>SIB_POS offset info	MD	115		see below for default value
>>SIB_OFF	MP		Integer(232	Offset of subsequent
			by step of 2)	segments

Field	Default value
SIB_POS offset info	The default value is that all segments are consecutive, i.e., that the SIB_OFF = 2 for all segments except when MIB segment/complete MIB is scheduled to be transmitted in between segments from same SIB. In that case, SIB_OFF=4 in between segments which are scheduled to be transmitted at SFNprime = 8 *n-2 and 8*n + 2, and SIB_OFF=2 for the rest of the segments.

## 10.3.8.21 SIB type

The SIB type identifies a specific system information block.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
SIB type	MP		Enumerated, see below	

The list of values to encode is:

Master information block,

System Information Type 1,

System Information Type 2,

System Information Type 3,

System Information Type 4,

System Information Type 5,

System Information Type 6,

System Information Type 7,

System Information Type 8,

System Information Type 9,

System Information Type 10,

System Information Type 11,

System Information Type 12,

System Information Type 13,

System Information Type 13.1,

System Information Type 13.2,

System Information Type 13.3,

System Information Type 13.4,

System Information Type 14,

System Information Type 15,

System Information Type 15.1,

System Information Type 15.2,

System Information Type 15.3,

System Information Type 15.4,

System Information Type 15.5,

System Information Type 16,

System Information Type 17,

System Information Type 18,

Scheduling Block 1,

Scheduling Block 2.

In addition, two spare values are needed.

### 10.3.8.22 SIB type SIBs only

The SIB type identifies a specific system information block.

Information Element/Group	Need	Multi	Type and	Semantics description
name			reference	
SIB type SIBs only	MP		Enumerated,	
			see below	

The list of values to encode is:

System Information Type 1,

System Information Type 2,

System Information Type 3,

System Information Type 4,

System Information Type 5,

System Information Type 6,

System Information Type 7,

System Information Type 8,

System Information Type 9,

System Information Type 10,

System Information Type 11,

System Information Type 12,

System Information Type 13,

System Information Type 13.1,

System Information Type 13.2,

System Information Type 13.3,

System Information Type 13.4,

System Information Type 14,

System Information Type 15,

System Information Type 15.1,

System Information Type 15.2,

System Information Type 15.3,

System Information Type 15.4,

System Information Type 15.5,

System Information Type 16,

System Information Type 17,

System Information Type 18.

In addition, five spare values are needed.

# 10.3.8.X SIB and SB type

The SIB type identifies a specific system information block.

Information Element/Group	Need	<u>Multi</u>	Type and	Semantics description
name			<u>reference</u>	
SIB and SB type	MP		Enumerated,	
			see below	

The list of values to encode is:

- System Information Type 1,
- System Information Type 2,
- System Information Type 3,
- System Information Type 4,
- System Information Type 5,
- System Information Type 6,
- System Information Type 7,
- System Information Type 8,
- System Information Type 9,
- System Information Type 10,
- System Information Type 11,
- System Information Type 12,
- System Information Type 13,
- System Information Type 13.1,
- System Information Type 13.2,
- System Information Type 13.3,
- System Information Type 13.4,
- System Information Type 14,
- System Information Type 15,
- System Information Type 15.1,
- System Information Type 15.2,
- System Information Type 15.3,
- System Information Type 15.4,
- System Information Type 15.5,
- System Information Type 16,

- System Information Type 17,
- System Information Type 18,
- Scheduling Block 1,
- Scheduling Block 2.
- In addition, three spare values are needed.

```
_ _
      OTHER INFORMATION ELEMENTS (10.3.8)
_ _
[...]
MasterInformationBlock ::= SEQUENCE {
       mib-ValueTag
                                    MIB-ValueTag,
       -- TABULAR: The PLMN identity and ANSI-41 core network information
       -- are included in PLMN-Type.
       plmn-Type
                                     PLMN-Type,
       pImn-Type PLMN-Type,
sibSb-ReferenceList SIBSb-ReferenceList,
   -- Extension mechanism for non- release99 information
       nonCriticalExtensions SEQUENCE {}
                                                                       OPTIONAL
}
MIB-ValueTag ::=
                                 INTEGER (1..8)
[...]
SchedulingInformation ::=
                                  SEQUENCE {
   scheduling
                                   SEQUENCE {
       segCount
                                         SegCount
                                                                        DEFAULT 1,
                                          CHOICE {
       sib-Pos
           \ensuremath{{\ensuremath{\text{--}}}} The element name indicates the repetition period and the value
           -- (multiplied by two) indicates the position of the first segment.
                                             INTEGER (0..1),
           rep4
                                             INTEGER (0..3),
           rep8
           rep16
                                             INTEGER (0..7),
           rep32
                                             INTEGER (0..15),
           rep64
                                             INTEGER (0..31),
           rep128
                                             INTEGER (0..63),
           rep256
                                             INTEGER (0..127),
                                             INTEGER (0..255),
           rep512
           rep1024
                                             INTEGER (0..511),
           rep2048
                                             INTEGER (0..1023),
           rep4096
                                             INTEGER (0..2047)
       },
       sib-PosOffsetInfo
                                         SibOFF-List
                                                                       OPTIONAL
   }
}
SchedulingInformationSIB ::=
                                      SEQUENCE {
   sib-Type
                                      SIB-TypeAndTag,
                                     SchedulingInformation
   scheduling
}
SchedulingInformationSIBSb ::=
                                     SEQUENCE {
   sibSb-Type
                                      SIBSb-TypeAndTag,
   scheduling
                                      SchedulingInformation
}
SegCount ::=
                                  INTEGER (1..16)
                                  INTEGER (1..15)
SegmentIndex ::=
-- Actual value SFN-Prime = 2 * IE value
SFN-Prime ::=
                                 INTEGER (0..2047)
SIB-Data-fixed ::=
                                 BIT STRING (SIZE (222))
SIB-Data-variable ::=
                                 BIT STRING (SIZE (1..214))
SIBOccurIdentity ::=
                              INTEGER (0..15)
SIBOccurrenceIdentityAndValueTag ::=
                                    SEOUENCE {
   sibOccurIdentity
                                 SIBOccurIdentity,
   sibOccurValueTag
                                  SIBOccurValueTag
}
                             INTEGER (0..15)
SIBOccurValueTag ::=
SIB-ReferenceList ::=
                                  SEQUENCE (SIZE (1..maxSIB)) OF
```

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SchedulingInformationSIB SIBSb-ReferenceList ::= SEQUENCE (SIZE (1..maxSIB)) OF SchedulingInformationSIBSb SIB-ReferenceListFACH ::= SEQUENCE (SIZE (1..maxSIB-FACH)) OF SchedulingInformationSIB ENUMERATED { SIB-Type ::= masterInformationBlock, systemInformationBlockType1, systemInformationBlockType2, systemInformationBlockType3, systemInformationBlockType4, systemInformationBlockType5, systemInformationBlockType6, systemInformationBlockType7, systemInformationBlockType8, systemInformationBlockType9, systemInformationBlockType10, systemInformationBlockType11, systemInformationBlockType12, systemInformationBlockType13, systemInformationBlockType13-1, systemInformationBlockType13-2, systemInformationBlockType13-3, systemInformationBlockType13-4, systemInformationBlockType14, systemInformationBlockType15, systemInformationBlockType15-1, systemInformationBlockType15-2, systemInformationBlockType15-3, systemInformationBlockType16, systemInformationBlockType17, systemInformationBlockType15-4, systemInformationBlockType18, schedulingBlock1, schedulingBlock2, systemInformationBlockType15-5, spare1, spare2 } SIB-TypeAndTag ::= CHOICE { PLMN-ValueTag, sysInfoType1 sysInfoType2 CellValueTag, sysInfoType3 CellValueTag, sysInfoType4 CellValueTag, sysInfoType5 CellValueTag. sysInfoType6 CellValueTag, sysInfoType7 NULL, CellValueTag, sysInfoType8 sysInfoType9 NULL, NULL, sysInfoType10 CellValueTag, sysInfoType11 sysInfoType12 CellValueTag, sysInfoType13 CellValueTag, sysInfoType13-1 CellValueTag, sysInfoType13-2 CellValueTag, sysInfoType13-3 CellValueTag, sysInfoType13-4 CellValueTag, sysInfoType14 NULL, sysInfoType15 CellValueTag, sysInfoType16 PredefinedConfigIdentityAndValueTag, sysInfoType17 NULL, sysInfoType15-1 CellValueTag, sysInfoType15-2 SIBOccurrenceIdentityAndValueTag, sysInfoType15-3 SIBOccurrenceIdentityAndValueTag, sysInfoType15-4 CellValueTag, sysInfoType18 CellValueTag, sysInfoType15-5 CellValueTag, spare5 NULL, spare4 NULL, spare3 NULL, spare2 NULL, spare1 NULT. } SIBSb-TypeAndTag ::= CHOICE {

```
sysInfoType1
```

PLMN-ValueTag,

}

3GPP

sysInfoType2 sysInfoType4 sysInfoType5 sysInfoType6 sysInfoType7 sysInfoType9 sysInfoType10 sysInfoType11 sysInfoType13 sysInfoType13-1 sysInfoType13-2 sysInfoType13-4 sysInfoType14 sysInfoType15 sysInfoType55 sysInfoType55 sysInfoType55-1 sysInfoType15-2 sysInfoType15-3 sysInfoType15-4 sysInfoType15-5 spare2 spare1	CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, NULL, CellValueTag, NULL, NULL, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, CellValueTag, SIBOccurrenceIdentityAndValueTag, SIBOccurrenceIdentityAndValueTag, CellValueTag,
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### 3GPP TSG-RAN WG2 Meeting #29 Gveongiu, Korea, May 13-17, 2002

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CHANGE REQUEST												
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**How to create CRs using this form:** Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

### 8.6.7.3 Intra-frequency/Inter-frequency/Inter-RAT cell info list

If the IE "Intra-frequency cell info list" is received in System Information Block Type 11, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

1> if the IE "Removed Intra-frequency cells" is received:

2> ignore the IE.

1> if the IE "Remove all intra-frequency cells" is received:

2> ignore the IE.

- 1> if the IE "New Intra-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:

3> if the IE "Intra-frequency cell id" is received:

- 4> store received cell information at this position in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
- 4> mark the position "occupied".
- 3> if the IE "Intra-frequency cell id" is not received:
  - 4> store the received cell information at the first vacant position in ascending order in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST; and
  - 4> mark the position as "occupied".

1> if the IE "Cells for measurement" is received:

### 2> ignore the IE.

If the IE "Intra-frequency cell info list" is received in System Information Block Type 12, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Intra-frequency cells" is received:
  - 2> at the position indicated by the IE "Intra-frequency cell id" clear the cell information stored in the variable CELL\_INFO\_LIST; and
  - 2> mark the position "vacant".
- 1> if the IE "Remove all intra-frequency cells" is received:
  - 2> for each position referring to an intra frequency cell in the variable CELL\_INFO\_LIST:

3> mark the position "vacant".

- 1> if the IE "New Intra-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:
    - 3> if the IE "Intra-frequency cell id" is received:
      - 4> store received cell information at this position in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 4> mark the position "occupied".
    - 3> if the IE "Intra-frequency cell id" is not received:

- 4> store the received cell information at the first vacant position in ascending order in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST; and
- 4> mark the position as "occupied".

2> ignore the IE.

If the IE "Intra-frequency cell info list" is received in a MEASUREMENT CONTROL message, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Intra-frequency cells" is received, at the position indicated by the IE "Intra-frequency cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and
  - 2> mark the position "vacant".
- 1> if the IE "Remove all intra-frequency cells" is received:
  - 2> for each position referring to an intra frequency cell in the variable CELL\_INFO\_LIST:
    - 3> mark the position "vacant".
- 1> if the IE "New Intra-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:
    - 3> if the IE "Intra-frequency cell id" is received:
      - 4> store received cell information at this position in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 4> mark the position "occupied".
    - 3> if the IE "Intra-frequency cell id" is not received:
      - 4> store the received cell information at the first vacant position in ascending order in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST; and
      - 4> mark the position as "occupied".
- 1> if the IE "Cells for measurement" is received, in the measurement configured by this message only:
  - 2> consider Intra-frequency cells whose cell information is stored at the position indicated by the IE "Intrafrequency cell id" in the variable CELL\_INFO\_LIST.
- 1> if the IE "Cells for measurement" is not received, in the measurement configured by this message:

2> consider all Intra-frequency cells whose cell information is stored in CELL\_INFO\_LIST.

If the IE "Inter-frequency cell info list" is received in System Information Block Type 11 update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

1> if the IE "Removed Inter-frequency cells" is received:

2> ignore the IE.

1> if the IE "Remove all inter-frequency cells" is received:

2> ignore the IE.

- 1> if the IE "New Inter-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:

- 3> if the IE "Inter-frequency cell id" is received:
  - 4> store received cell information at this position in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
  - 4> mark the position "occupied".
- 3> if the IE "Inter-frequency cell id" is not received:
  - 4> store the received cell information at the first vacant position in ascending order in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST; and
  - 4> mark the position as "occupied".

#### 2> ignore the IE.

If the IE "Inter-frequency cell info list" is received in System Information Block Type 12, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Inter-frequency cells" is received, at the position indicated by the IE "Inter-frequency cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and
  - 2> mark the position "vacant".
- 1> if the IE "Remove all inter-frequency cells" is received:
  - 2> for each position referring to an inter-frequency cell in the variable CELL\_INFO\_LIST:
    - 3> clear the cell information stored in the variable CELL\_INFO\_LIST; and
    - 3> mark the position "vacant".
- 1> if the IE "New Inter-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:
    - 3> if the IE "Inter-frequency cell id" is received:
      - 4> store received cell information at this position in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 4> mark the position "occupied".
    - 3> if the IE "Inter-frequency cell id" is not received:
      - 4> store the received cell information at the first vacant position in ascending order in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST; and
      - 4> mark the position as "occupied".

### 1> if the IE "Cells for measurement" is received:

2> ignore the IE.

If the IE "Inter-frequency cell info list" is received in a MEASUREMENT CONTROL message, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order:

- 1> if the IE "Removed Inter-frequency cells" is received, at the position indicated by the IE "Inter-frequency cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and
  - 2> mark the position "vacant".

1> if the IE "Remove all inter-frequency cells" is received:

- 2> for each position referring to an inter-frequency cell in the variable CELL\_INFO\_LIST:
  - 3> clear the cell information stored in the variable CELL\_INFO\_LIST; and
  - 3> mark the position "vacant".
- 1> if the IE "New Inter-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:
    - 3> if the IE "Inter-frequency cell id" is received:
      - 4> store received cell information at this position in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 4> mark the position "occupied".
    - 3> if the IE "Inter-frequency cell id" is not received:
      - 4> store the received cell information at the first vacant position in ascending order in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST; and
      - 4> mark the position as "occupied".

1> if the IE "Cells for measurement" is received, in the measurement configured by this message only:

- 2> consider Inter-frequency cells whose cell information is stored at the position indicated by the IE "Interfrequency cell id" in the variable CELL\_INFO\_LIST.
- 1> if the IE "Cells for measurement" is not received, in the measurement configured by this message:
  - 2> consider all Inter-frequency cells whose cell information is stored in CELL\_INFO\_LIST.

If the IE "Inter-RAT cell info list" is received in System Information Block Type 11, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

1> if the IE "Removed Inter-RAT cells" is received:

2> ignore the IE.

- 1> if the IE "Remove all inter-RAT cells" is received:
  - 2> ignore the IE.

- 2> if the IE "Radio Access Technology" is set to "None":
  - 3> ignore the cell.
- 2> otherwise:
  - 3> update the variable CELL\_INFO\_LIST as follows:
    - 4> if the IE "Inter-RAT cell id" is received:
      - 5> store received cell information at this position in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 5> mark the position "occupied".
    - 4> if the IE "Inter-RAT cell id" is not received:
      - 5> store the received cell information at the first vacant position in ascending order in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST; and

5> mark the position as "occupied".

1> if the IE "Cells for measurement" is received:

2> ignore the IE.

If the IE "Inter-RAT cell info list" is received in System Information Block Type 12, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Inter-RAT cells" is received, at the position indicated by the IE "Inter-RAT cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and

2> mark the position "vacant".

1> if the IE "Remove all inter-RAT cells" is received:

2> for each position referring to an inter-RAT cell in the variable CELL\_INFO\_LIST:

3> clear the cell information stored in the variable CELL\_INFO\_LIST; and

3> mark the position "vacant".

- 1> if the IE "New Inter-RAT cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> if the IE "Radio Access Technology" is set to "None":

3> ignore the cell.

- 2> otherwise:
  - 3> update the variable CELL\_INFO\_LIST as follows:
    - 4> if the IE "Inter-RAT cell id" is received:
      - 5> store received cell information at this position in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 5> mark the position "occupied".
    - 4> if the IE "Inter-RAT cell id" is not received:
      - 5> store the received cell information at the first vacant position in ascending order in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST; and
      - 5> mark the position as "occupied".

1> if the IE "Cells for measurement" is received:

2> ignore the IE.

If the IE "Inter-RAT cell info list" is received in a MEASUREMENT CONTROL message, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Inter-RAT cells" is received, at the position indicated by the IE "Inter-RAT cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and

2> mark the position "vacant".

- 1> if the IE "Remove all inter-RAT cells" is received:
  - 2> for each position referring to an inter-RAT cell in the variable CELL\_INFO\_LIST:
    - 3> clear the cell information stored in the variable CELL\_INFO\_LIST; and
    - 3> mark the position "vacant".

- 2> if the IE "Radio Access Technology" is set to "None":
  - 3> ignore the cell.
- 2> otherwise:
  - 3> update the variable CELL\_INFO\_LIST as follows:
    - 4> if the IE "Inter-RAT cell id" is received:
      - 5> store received cell information at this position in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 5> mark the position "occupied".
    - 4> if the IE "Inter-RAT cell id" is not received:
      - 5> store the received cell information at the first vacant position in ascending order in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST; and
      - 5> mark the position as "occupied".
- 1> if the IE "Cells for measurement" is received, in the measurement configured by this message only:
  - 2> consider Inter-RAT cells whose cell information is stored at the position indicated by the IE "Inter-RAT cell id" in the variable CELL\_INFO\_LIST.
- 1> if the IE "Cells for measurement" is not received, in the measurement configured by this message:
  - 2> consider all Inter-RAT cells whose cell information is stored in CELL\_INFO\_LIST.
- 1> if the IE "Cell selection and re-selection info for SIB11/12" is present:
  - 2> ignore the IE.

# 10.3.7.13 Inter-frequency cell info list

Contains the information for the list of measurement objects for an inter-frequency measurement.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
CHOICE Inter-frequency cell removal	OP			
>Remove all inter-frequency cells				No data
>Remove some inter-frequency cells				
>>Removed inter-frequency cells	MP	1 <maxcellm eas&gt;</maxcellm 		
>>>Inter-frequency cell id	MP		Integer(0 <maxcellme as&gt;-1)</maxcellme 	
>No inter-frequency cells removed				No data
New inter-frequency cells	OP	1 to <maxcellm eas&gt;</maxcellm 		
>Inter-frequency cell id	MD		Integer(0 <maxcellme as&gt;-1)</maxcellme 	
>Frequency info	MD		Frequency info 10.3.6.36	Default value is the value of the previous "frequency info" in the list (note : the first occurrence is then MP)
>Cell info	MP		Cell info 10.3.7.2	
Cell for measurement	CV- BCHopt	1 to <maxcellm eas&gt;</maxcellm 		
>Inter-frequency cell id	MP		Integer(0 <maxcellme as&gt;-1)</maxcellme 	

Condition	Explanation
BCHopt	This IE is not needed when sent in SYSTEM
	INFORMATION. Otherwise, the IE is Optional

# 10.3.7.33 Intra-frequency cell info list

Contains the information for the list of measurement objects for an intra-frequency measurement.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
CHOICE Intra-frequency cell removal	OP			Absence of this IE is equivalent to choice "Remove no intra-frequency cells".
>Remove all intra-frequency cells				No data
>Remove some intra-frequency cells				
>>Removed intra-frequency cells	MP	1 to <maxcell Meas&gt;</maxcell 		
>>>Intra-frequency cell id	MP		Integer(0 <maxcellmea s&gt; - 1)</maxcellmea 	
>Remove no intra-frequency cells				
New intra-frequency cells	OP	1 to <maxcell Meas&gt;</maxcell 		This information element must be present when "Intra- frequency cell info list" is included in the system information
>Intra-frequency cell id	OP		Integer(0 <maxcellmea s&gt; - 1)</maxcellmea 	
>Cell info	MP		Cell info 10.3.7.2	This IE must be included for the serving cell when the IE "Intra frequency cell info list" is included in System Information Block type 11.
Cells for measurement	CV- BCHopt	1 to <maxcell Meas&gt;</maxcell 		
>Intra-frequency cell id	MP		Integer(0 <maxcellmea s&gt;-1)</maxcellmea 	

Condition	Explanation
BCHopt	This IE is not needed when sent in SYSTEM
	INFORMATION. Otherwise, the IE is Optional

### 3GPP TSG-RAN WG2 Meeting #29 Gveongiu, Korea, May 13-17, 2002

# Tdoc R2-021265

Jyeongju, Korea	a, May '	13-17, 2	2002				
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For <u>HELP</u> on us	sing this	form, see	e bottom of	this page o	r look at	the pop-up text	over the # symbols.
Proposed change a	ffects:	₩ (U)	SIM	ME/UE X	Radio	Access Network	k X Core Network
Title: អ	Clarific	ation to t	he handling	of IE "Cell	s for me	asurement" rece	eived in SIB 11/12
Source: ೫	TSG-R	<mark>AN WG2</mark>					
Work item code: ೫	TEI					Date: ೫	2002-05-03
Category: ೫	A Use <u>one</u> F (c A (c B (a C (f D (tailed) be found	of the follo orrection) correspon addition of unctional editorial m explanatio in 3GPP	owing catego ds to a corre feature), modification odification) ons of the ab <u>TR 21.900</u> .	ories: ction in an ea of feature) ove categoria	arlier rele es can	Release: # Use <u>one</u> of 2 ease) R96 R97 R98 R99 REL-4 REL-5	REL-4 the following releases: (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5)
Reason for change Summary of chang	: ೫ 1. e:೫ 1.	Accordin measuren info list" impossib cell info All the in are remo	ng to 25.331 nent" is not and "Intra-f le to receive list" and "In npossible bu ved.	v3.10.0 secti needed (also requency cel the IE "Cell tra-frequency llets regardi	ons 10.3 not press l info list s for mea y cell info ng "if the	.7.13 and 10.3.7.3 ent in ASN.1) for t" when sent in SI asurement" when o list" are sent in S e IE "Cells for mea	33, the IE "Cell for IE "Inter-frequency cell B11/12. Therefore, it is the IE "Inter-frequency SIB11/12. asurement" is received"
Consequences if not approved:	策 Unr	ecessary	handling of I	IE "Cells for	measure	ement"	
Clauses affected:	Ж <mark>8.</mark> (	5.7.3					
Other specs affected:	ж	Other co Test spe O&M Sp	ecifications	ations S	f 25.3 25.3	31 v3.10.0, CR 31 v5.0.0, CR 13	1380 382
Other comments:	ж						

### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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.
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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.

### 8.6.7.3 Intra-frequency/Inter-frequency/Inter-RAT cell info list

If the IE "Intra-frequency cell info list" is received in System Information Block Type 11, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

1> if the IE "Removed Intra-frequency cells" is received:

2> ignore the IE.

1> if the IE "Remove all intra-frequency cells" is received:

2> ignore the IE.

- 1> if the IE "New Intra-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:

3> if the IE "Intra-frequency cell id" is received:

- 4> store received cell information at this position in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
- 4> mark the position "occupied".
- 3> if the IE "Intra-frequency cell id" is not received:
  - 4> store the received cell information at the first vacant position in ascending order in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST; and
  - 4> mark the position as "occupied".

1> if the IE "Cells for measurement" is received:

### 2> ignore the IE.

If the IE "Intra-frequency cell info list" is received in System Information Block Type 12, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Intra-frequency cells" is received:
  - 2> at the position indicated by the IE "Intra-frequency cell id" clear the cell information stored in the variable CELL\_INFO\_LIST; and
  - 2> mark the position "vacant".
- 1> if the IE "Remove all intra-frequency cells" is received:
  - 2> for each position referring to an intra frequency cell in the variable CELL\_INFO\_LIST:

3> mark the position "vacant".

- 1> if the IE "New Intra-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:
    - 3> if the IE "Intra-frequency cell id" is received:
      - 4> store received cell information at this position in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 4> mark the position "occupied".
    - 3> if the IE "Intra-frequency cell id" is not received:

- 4> store the received cell information at the first vacant position in ascending order in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST; and
- 4> mark the position as "occupied".

2> ignore the IE.

If the IE "Intra-frequency cell info list" is received in a MEASUREMENT CONTROL message, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Intra-frequency cells" is received, at the position indicated by the IE "Intra-frequency cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and

2> mark the position "vacant".

- 1> if the IE "Remove all intra-frequency cells" is received:
  - 2> for each position referring to an intra frequency cell in the variable CELL\_INFO\_LIST:

3> mark the position "vacant".

- 1> if the IE "New Intra-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:
    - 3> if the IE "Intra-frequency cell id" is received:
      - 4> store received cell information at this position in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 4> mark the position "occupied".
    - 3> if the IE "Intra-frequency cell id" is not received:
      - 4> store the received cell information at the first vacant position in ascending order in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST; and
      - 4> mark the position as "occupied".
- 1> if the IE "Cells for measurement" is received, in the measurement configured by this message only:
  - 2> consider Intra-frequency cells whose cell information is stored at the position indicated by the IE "Intrafrequency cell id" in the variable CELL\_INFO\_LIST.
- 1> if the IE "Cells for measurement" is not received, in the measurement configured by this message:

2> consider all Intra-frequency cells whose cell information is stored in CELL\_INFO\_LIST.

If the IE "Inter-frequency cell info list" is received in System Information Block Type 11 update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

1> if the IE "Removed Inter-frequency cells" is received:

2> ignore the IE.

1> if the IE "Remove all inter-frequency cells" is received:

2> ignore the IE.

1> if the IE "New Inter-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:

2> update the variable CELL\_INFO\_LIST as follows:

- 3> if the IE "Inter-frequency cell id" is received:
  - 4> store received cell information at this position in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
  - 4> mark the position "occupied".
- 3> if the IE "Inter-frequency cell id" is not received:
  - 4> store the received cell information at the first vacant position in ascending order in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST; and
  - 4> mark the position as "occupied".

#### 2> ignore the IE.

If the IE "Inter-frequency cell info list" is received in System Information Block Type 12, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Inter-frequency cells" is received, at the position indicated by the IE "Inter-frequency cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and
  - 2> mark the position "vacant".
- 1> if the IE "Remove all inter-frequency cells" is received:
  - 2> for each position referring to an inter-frequency cell in the variable CELL\_INFO\_LIST:
    - 3> clear the cell information stored in the variable CELL\_INFO\_LIST; and
    - 3> mark the position "vacant".
- 1> if the IE "New Inter-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:
    - 3> if the IE "Inter-frequency cell id" is received:
      - 4> store received cell information at this position in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 4> mark the position "occupied".
    - 3> if the IE "Inter-frequency cell id" is not received:
      - 4> store the received cell information at the first vacant position in ascending order in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST; and
      - 4> mark the position as "occupied".

### 1> if the IE "Cells for measurement" is received:

2> ignore the IE.

If the IE "Inter-frequency cell info list" is received in a MEASUREMENT CONTROL message, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order:

- 1> if the IE "Removed Inter-frequency cells" is received, at the position indicated by the IE "Inter-frequency cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and
  - 2> mark the position "vacant".

1> if the IE "Remove all inter-frequency cells" is received:

- 2> for each position referring to an inter-frequency cell in the variable CELL\_INFO\_LIST:
  - 3> clear the cell information stored in the variable CELL\_INFO\_LIST; and
  - 3> mark the position "vacant".
- 1> if the IE "New Inter-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:
    - 3> if the IE "Inter-frequency cell id" is received:
      - 4> store received cell information at this position in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 4> mark the position "occupied".
    - 3> if the IE "Inter-frequency cell id" is not received:
      - 4> store the received cell information at the first vacant position in ascending order in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST; and
      - 4> mark the position as "occupied".

1> if the IE "Cells for measurement" is received, in the measurement configured by this message only:

- 2> consider Inter-frequency cells whose cell information is stored at the position indicated by the IE "Interfrequency cell id" in the variable CELL\_INFO\_LIST.
- 1> if the IE "Cells for measurement" is not received, in the measurement configured by this message:
  - 2> consider all Inter-frequency cells whose cell information is stored in CELL\_INFO\_LIST.

If the IE "Inter-RAT cell info list" is received in System Information Block Type 11, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

1> if the IE "Removed Inter-RAT cells" is received:

2> ignore the IE.

- 1> if the IE "Remove all inter-RAT cells" is received:
  - 2> ignore the IE.

- 2> if the IE "Radio Access Technology" is set to "None":
  - 3> ignore the cell.
- 2> otherwise:
  - 3> update the variable CELL\_INFO\_LIST as follows:
    - 4> if the IE "Inter-RAT cell id" is received:
      - 5> store received cell information at this position in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 5> mark the position "occupied".
    - 4> if the IE "Inter-RAT cell id" is not received:
      - 5> store the received cell information at the first vacant position in ascending order in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST; and

5> mark the position as "occupied".

1> if the IE "Cells for measurement" is received:

2> ignore the IE.

If the IE "Inter-RAT cell info list" is received in System Information Block Type 12, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Inter-RAT cells" is received, at the position indicated by the IE "Inter-RAT cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and

2> mark the position "vacant".

1> if the IE "Remove all inter-RAT cells" is received:

2> for each position referring to an inter-RAT cell in the variable CELL\_INFO\_LIST:

3> clear the cell information stored in the variable CELL\_INFO\_LIST; and

3> mark the position "vacant".

- 1> if the IE "New Inter-RAT cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> if the IE "Radio Access Technology" is set to "None":

3> ignore the cell.

- 2> otherwise:
  - 3> update the variable CELL\_INFO\_LIST as follows:
    - 4> if the IE "Inter-RAT cell id" is received:
      - 5> store received cell information at this position in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 5> mark the position "occupied".
    - 4> if the IE "Inter-RAT cell id" is not received:
      - 5> store the received cell information at the first vacant position in ascending order in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST; and
      - 5> mark the position as "occupied".

1> if the IE "Cells for measurement" is received:

2> ignore the IE.

If the IE "Inter-RAT cell info list" is received in a MEASUREMENT CONTROL message, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Inter-RAT cells" is received, at the position indicated by the IE "Inter-RAT cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and

2> mark the position "vacant".

- 1> if the IE "Remove all inter-RAT cells" is received:
  - 2> for each position referring to an inter-RAT cell in the variable CELL\_INFO\_LIST:
    - 3> clear the cell information stored in the variable CELL\_INFO\_LIST; and
    - 3> mark the position "vacant".

- 2> if the IE "Radio Access Technology" is set to "None":
  - 3> ignore the cell.
- 2> otherwise:
  - 3> update the variable CELL\_INFO\_LIST as follows:
    - 4> if the IE "Inter-RAT cell id" is received:
      - 5> store received cell information at this position in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 5> mark the position "occupied".
    - 4> if the IE "Inter-RAT cell id" is not received:
      - 5> store the received cell information at the first vacant position in ascending order in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST; and
      - 5> mark the position as "occupied".
- 1> if the IE "Cells for measurement" is received, in the measurement configured by this message only:
  - 2> consider Inter-RAT cells whose cell information is stored at the position indicated by the IE "Inter-RAT cell id" in the variable CELL\_INFO\_LIST.
- 1> if the IE "Cells for measurement" is not received, in the measurement configured by this message:
  - 2> consider all Inter-RAT cells whose cell information is stored in CELL\_INFO\_LIST.
- 1> if the IE "Cell selection and re-selection info for SIB11/12" is present:
  - 2> ignore the IE.

### 3GPP TSG-RAN WG2 Meeting #29 Gyeongiu, Korea, May 13-17, 2002

# Tdoc R2-021266

Syeongju, Korea, May 13-17, 2002						
		CHAN	GE REQ	UEST		CR-Form-v5.1
ж	<mark>25.331</mark>	CR 1382	ж rev	<b>-</b> #	Current versio	<sup>n:</sup> <mark>5.0.0</mark> <sup>#</sup>
For <u>HELP</u> on us	sing this for	rm, see bottom o	of this page or	look at the	e pop-up text o	ver the # symbols.
Proposed change a	ffects: #	(U)SIM	ME/UE X	Radio Aco	cess Network	X Core Network
Title: ដ	Clarificati	on to the handlir	ng of IE "Cells	for measu	rement" receiv	ved in SIB 11/12
Source: ೫	TSG-RAN	WG2				
Work item code: ଝ	TEI				Date: ೫	2002-05-03
Category: ₩	A Use <u>one</u> of F (con A (cor B (add C (fun D (edi Detailed ex be found in	the following cate rection) responds to a cor dition of feature), ctional modification torial modification olanations of the a 3GPP <u>TR 21.900</u>	gories: rection in an ea on of feature) ) above categorie	rlier release s can	Release: # Use <u>one</u> of th 2 (0 ) R96 (F R97 (F R98 (F R99 (F REL-4 (F REL-5 (F	REL-5 De following releases: GSM Phase 2) Release 1996) Release 1997) Release 1998) Release 1999) Release 4) Release 5)
Reason for change Summary of chang	: # 1. A m in in ce e: # 1. A ar	ccording to 25.33 easurement" is no fo list" and "Intra npossible to receiv ell info list" and " Il the impossible l re removed.	1 v3.10.0 section of needed (also not prequency cell ve the IE "Cells Intra-frequency bullets regardin	ons 10.3.7.1 not present i info list" w for measure cell info lis g "if the IE	3 and 10.3.7.33, in ASN.1) for IF hen sent in SIB ement" when th t" are sent in SI "Cells for measu	, the IE "Cell for E "Inter-frequency cell 11/12. Therefore, it is e IE "Inter-frequency B11/12. urement" is received"
Consequences if not approved:		essary handling o	f IE "Cells for	measuremer	nt"	
Chauses affected: Other specs	ж <u>8.6.7</u> ЖОО	ther core specifi	cations #	25.331	/3.10.0, CR 13	880
affected:		est specification: &M Specification	s ns	25.331 v	v4.4.0, CR 138	31
Other comments:	ж					

### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

### 8.6.7.3 Intra-frequency/Inter-frequency/Inter-RAT cell info list

If the IE "Intra-frequency cell info list" is received in System Information Block Type 11, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

1> if the IE "Removed Intra-frequency cells" is received:

2> ignore the IE.

1> if the IE "Remove all intra-frequency cells" is received:

2> ignore the IE.

- 1> if the IE "New Intra-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:

3> if the IE "Intra-frequency cell id" is received:

- 4> store received cell information at this position in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
- 4> mark the position "occupied".
- 3> if the IE "Intra-frequency cell id" is not received:
  - 4> store the received cell information at the first vacant position in ascending order in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST; and
  - 4> mark the position as "occupied".

1> if the IE "Cells for measurement" is received:

### 2> ignore the IE.

If the IE "Intra-frequency cell info list" is received in System Information Block Type 12, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Intra-frequency cells" is received:
  - 2> at the position indicated by the IE "Intra-frequency cell id" clear the cell information stored in the variable CELL\_INFO\_LIST; and
  - 2> mark the position "vacant".
- 1> if the IE "Remove all intra-frequency cells" is received:
  - 2> for each position referring to an intra frequency cell in the variable CELL\_INFO\_LIST:

3> mark the position "vacant".

- 1> if the IE "New Intra-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:
    - 3> if the IE "Intra-frequency cell id" is received:
      - 4> store received cell information at this position in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 4> mark the position "occupied".
    - 3> if the IE "Intra-frequency cell id" is not received:

- 4> store the received cell information at the first vacant position in ascending order in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST; and
- 4> mark the position as "occupied".

2> ignore the IE.

If the IE "Intra-frequency cell info list" is received in a MEASUREMENT CONTROL message, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Intra-frequency cells" is received, at the position indicated by the IE "Intra-frequency cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and

2> mark the position "vacant".

- 1> if the IE "Remove all intra-frequency cells" is received:
  - 2> for each position referring to an intra frequency cell in the variable CELL\_INFO\_LIST:

3> mark the position "vacant".

- 1> if the IE "New Intra-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:
    - 3> if the IE "Intra-frequency cell id" is received:
      - 4> store received cell information at this position in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 4> mark the position "occupied".
    - 3> if the IE "Intra-frequency cell id" is not received:
      - 4> store the received cell information at the first vacant position in ascending order in the Intra-frequency cell info list in the variable CELL\_INFO\_LIST; and
      - 4> mark the position as "occupied".
- 1> if the IE "Cells for measurement" is received, in the measurement configured by this message only:
  - 2> consider Intra-frequency cells whose cell information is stored at the position indicated by the IE "Intrafrequency cell id" in the variable CELL\_INFO\_LIST.
- 1> if the IE "Cells for measurement" is not received, in the measurement configured by this message:

2> consider all Intra-frequency cells whose cell information is stored in CELL\_INFO\_LIST.

If the IE "Inter-frequency cell info list" is received in System Information Block Type 11 update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

1> if the IE "Removed Inter-frequency cells" is received:

2> ignore the IE.

1> if the IE "Remove all inter-frequency cells" is received:

2> ignore the IE.

1> if the IE "New Inter-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:

2> update the variable CELL\_INFO\_LIST as follows:

- 3> if the IE "Inter-frequency cell id" is received:
  - 4> store received cell information at this position in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
  - 4> mark the position "occupied".
- 3> if the IE "Inter-frequency cell id" is not received:
  - 4> store the received cell information at the first vacant position in ascending order in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST; and
  - 4> mark the position as "occupied".

#### 2> ignore the IE.

If the IE "Inter-frequency cell info list" is received in System Information Block Type 12, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Inter-frequency cells" is received, at the position indicated by the IE "Inter-frequency cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and
  - 2> mark the position "vacant".
- 1> if the IE "Remove all inter-frequency cells" is received:
  - 2> for each position referring to an inter-frequency cell in the variable CELL\_INFO\_LIST:
    - 3> clear the cell information stored in the variable CELL\_INFO\_LIST; and
    - 3> mark the position "vacant".
- 1> if the IE "New Inter-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:
    - 3> if the IE "Inter-frequency cell id" is received:
      - 4> store received cell information at this position in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 4> mark the position "occupied".
    - 3> if the IE "Inter-frequency cell id" is not received:
      - 4> store the received cell information at the first vacant position in ascending order in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST; and
      - 4> mark the position as "occupied".

### 1> if the IE "Cells for measurement" is received:

2> ignore the IE.

If the IE "Inter-frequency cell info list" is received in a MEASUREMENT CONTROL message, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order:

- 1> if the IE "Removed Inter-frequency cells" is received, at the position indicated by the IE "Inter-frequency cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and
  - 2> mark the position "vacant".

1> if the IE "Remove all inter-frequency cells" is received:

- 2> for each position referring to an inter-frequency cell in the variable CELL\_INFO\_LIST:
  - 3> clear the cell information stored in the variable CELL\_INFO\_LIST; and
  - 3> mark the position "vacant".
- 1> if the IE "New Inter-frequency cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> update the variable CELL\_INFO\_LIST as follows:
    - 3> if the IE "Inter-frequency cell id" is received:
      - 4> store received cell information at this position in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 4> mark the position "occupied".
    - 3> if the IE "Inter-frequency cell id" is not received:
      - 4> store the received cell information at the first vacant position in ascending order in the Inter-frequency cell info list in the variable CELL\_INFO\_LIST; and
      - 4> mark the position as "occupied".

1> if the IE "Cells for measurement" is received, in the measurement configured by this message only:

- 2> consider Inter-frequency cells whose cell information is stored at the position indicated by the IE "Interfrequency cell id" in the variable CELL\_INFO\_LIST.
- 1> if the IE "Cells for measurement" is not received, in the measurement configured by this message:
  - 2> consider all Inter-frequency cells whose cell information is stored in CELL\_INFO\_LIST.

If the IE "Inter-RAT cell info list" is received in System Information Block Type 11, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

1> if the IE "Removed Inter-RAT cells" is received:

2> ignore the IE.

- 1> if the IE "Remove all inter-RAT cells" is received:
  - 2> ignore the IE.

- 2> if the IE "Radio Access Technology" is set to "None":
  - 3> ignore the cell.
- 2> otherwise:
  - 3> update the variable CELL\_INFO\_LIST as follows:
    - 4> if the IE "Inter-RAT cell id" is received:
      - 5> store received cell information at this position in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 5> mark the position "occupied".
    - 4> if the IE "Inter-RAT cell id" is not received:
      - 5> store the received cell information at the first vacant position in ascending order in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST; and

5> mark the position as "occupied".

1> if the IE "Cells for measurement" is received:

2> ignore the IE.

If the IE "Inter-RAT cell info list" is received in System Information Block Type 12, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Inter-RAT cells" is received, at the position indicated by the IE "Inter-RAT cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and

2> mark the position "vacant".

1> if the IE "Remove all inter-RAT cells" is received:

2> for each position referring to an inter-RAT cell in the variable CELL\_INFO\_LIST:

3> clear the cell information stored in the variable CELL\_INFO\_LIST; and

3> mark the position "vacant".

- 1> if the IE "New Inter-RAT cells" is received, for each cell, and in the same order as the cells appear in the IE:
  - 2> if the IE "Radio Access Technology" is set to "None":

3> ignore the cell.

- 2> otherwise:
  - 3> update the variable CELL\_INFO\_LIST as follows:
    - 4> if the IE "Inter-RAT cell id" is received:
      - 5> store received cell information at this position in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 5> mark the position "occupied".
    - 4> if the IE "Inter-RAT cell id" is not received:
      - 5> store the received cell information at the first vacant position in ascending order in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST; and
      - 5> mark the position as "occupied".

1> if the IE "Cells for measurement" is received:

2> ignore the IE.

If the IE "Inter-RAT cell info list" is received in a MEASUREMENT CONTROL message, the UE shall update the variable CELL\_INFO\_LIST accordingly and in the following order. The UE shall:

- 1> if the IE "Removed Inter-RAT cells" is received, at the position indicated by the IE "Inter-RAT cell id":
  - 2> clear the cell information stored in the variable CELL\_INFO\_LIST; and

2> mark the position "vacant".

- 1> if the IE "Remove all inter-RAT cells" is received:
  - 2> for each position referring to an inter-RAT cell in the variable CELL\_INFO\_LIST:
    - 3> clear the cell information stored in the variable CELL\_INFO\_LIST; and
    - 3> mark the position "vacant".

- 2> if the IE "Radio Access Technology" is set to "None":
  - 3> ignore the cell.
- 2> otherwise:
  - 3> update the variable CELL\_INFO\_LIST as follows:
    - 4> if the IE "Inter-RAT cell id" is received:
      - 5> store received cell information at this position in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST, possibly overwriting any existing information in this position; and
      - 5> mark the position "occupied".
    - 4> if the IE "Inter-RAT cell id" is not received:
      - 5> store the received cell information at the first vacant position in ascending order in the Inter-RAT cell info list in the variable CELL\_INFO\_LIST; and
      - 5> mark the position as "occupied".
- 1> if the IE "Cells for measurement" is received, in the measurement configured by this message only:
  - 2> consider Inter-RAT cells whose cell information is stored at the position indicated by the IE "Inter-RAT cell id" in the variable CELL\_INFO\_LIST.
- 1> if the IE "Cells for measurement" is not received, in the measurement configured by this message:
  - 2> consider all Inter-RAT cells whose cell information is stored in CELL\_INFO\_LIST.
- 1> if the IE "Cell selection and re-selection info for SIB11/12" is present:
  - 2> ignore the IE.

### 3GPP TSG-RAN WG2 Meeting #29 Gyeongiu Korea May 13-17 2002

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# Tdoc R2-021363

*	<b>25.331</b> CR <b>1383 # rev r1 #</b> Current version: <b>3.10.0 #</b>			
For <u>HELP</u> on u	using this form, see bottom of this page or look at the pop-up text over the # symbols.			
Proposed change	affects: # (U)SIM ME/UE X Radio Access Network X Core Network			
Title: ೫	Correction to start timers when initiating the cell update procedure in CELL_DCH state			
Source: ೫	TSG-RAN WG2			
Work item code: ೫	TEI Date: # 2002-05-16			
Category: ⊮	FRelease: %R99Use one of the following categories:Use one of the following releases:F (correction)2A (corresponds to a correction in an earlier release)R96B (addition of feature),R97C (functional modification of feature)R98D (editorial modification)R99D (editorial modification)R99D tetailed explanations of the above categories canREL-4be found in 3GPP TR 21.900.REL-5			
	<ul> <li>c a transformer of the excentions, when RL failure of RLC unrecoverable erforting CELL_DCH occurs, neither timer T314 nor T315 will be started before performing cell selection procedures. Therefore, if the UE could not find a suitable cell, it would keep searching in CELL_FACH state until the battery power is exhausted and would stay in connected mode for longer time than intended.</li> <li>(a) When T314&gt;0 with no associated RAB is established and T315=0 with associated RABs are established.</li> <li>(ab) When T315&gt;0 with no associated RAB is established and T314=0 with associated RABs are established.</li> <li>(be) When T315&gt;0 with no associated RAB is established and T314=0 with no associated RAB are established.</li> <li>(be) When T315&gt;0 with no associated RAB is established and T314=0 with no associated RAB are established.</li> <li>The table listed below illustrated all the possible scenarios if RL failure or RLC unrecoverable error in CELL_DCH occurs and the corresponding actions. The entries marked with gray color are the scenarios a, b, and e-mentioned above.</li> <li>Scenarios if RL failure or RLC unrecoverable error in CELL_DCH occurs Actions in current text T314=0</li> <li>With no associated RABs T315=0</li> <li>With no associated RABs T315=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With associated RABs</li></ul>			
	With no associated RABs			
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	1314=0 With no associated RABs T315 $\circ$ 0			
	With associated RABs Start timer T315			
	T314=0			
	With associated RABs T315>0			
	With no associated RABs Release all RBs associated with T314			
	T314=0			
	With associated RABs T315>0			
	With associated RABs Release all RBs associated with T314 and start timer T315			
	With no associated $R \Delta Bs = T315-0$			
	With no associated RABs Start timer T314			
	T314>0			
	With no associated RABs T315=0			
	With associated RABsRelease all RBs associated with T315 and start timer T314			
	T314>0			
	With associated RABs T315=0			
	With no associated RABs Start timer T314			
	With associated RABs T315-0			
	With associated RABs Release all RBs associated with T315 and start timer T314			
	T314>0			
	With no associated RABs T315>0			
	With no associated RABs Start timer T314			
	T314>0			
	With no associated RABs T315>0			
	With associated KABS Start timer 1315 T31 $4$ >0			
	With associated RABs T315>0			
	With no associated RABs Start timer T314			
	T314>0			
	With associated RABs T315>0			
	With associated RABsStart timer T314 and T315			
	2. The table 13.1 in 25.331 regarding when to start T314 is not consistent with the			
	procedure text.			
Summary of change: #	1 Refore performing cell selection procedures. (For case (a) start timer T314, for case			
Summary of change. m	and (b) and (c) start timer T315 the UE shall release all its radio resources and enter			
	idle mode.			
	2. If only RRC connection exists, the timer T314 shall also be started.			
	Impact Analysis:			
	<ul> <li>Corrected functionality: Initiating Cell Opdate procedure in CELL_DCH state</li> <li>Correction to a function where the specification was:</li> </ul>			
	• Concertion to a function where the specification was.			
	<ul> <li>Would not affect implementations behaving like indicated in the CR, would</li> </ul>			
	affect implementations supporting the corrected functionality otherwise.			
Conconverses # 00	If the LIE could not find a suitable call when DL failure or DL Commences blocks in			
not approved	If the OE could not find a suitable cell when KL failure of KLU unrecoverable error in CELL DCH occurs, for the cases a h and c mentioned above, it would keep searching in			
	CELL FACH state until the battery power is exhausted and would stay in connected mode			
	for longer time than intended.			

Other specs	ж	Other core specifications	ж	25.331 v4.4.0, CR 1384 25.331 v5.0.0, CR 1385
affected:		O&M Specifications		
Other comments:	ж			

#### How to create CRs using this form:

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- 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

### 8.3.1.2 Initiation

A UE shall initiate the cell update procedure in the following cases:

- 1> Uplink data transmission:
  - 2> if the UE is in URA\_PCH or CELL\_PCH state; and
  - 2> if the UE has uplink RLC data PDU or uplink RLC control PDU on RB1 or upwards to transmit:

3> perform cell update using the cause "uplink data transmission".

- 1> Paging response:
  - 2> if the criteria for performing cell update with the cause specified above in the current subclause is not met; and
  - 2> if the UE in URA\_PCH or CELL\_PCH state, receives a PAGING TYPE 1 message fulfilling the conditions for initiating a cell update procedure specified in subclause 8.1.2.3:
    - 3> perform cell update using the cause "paging response".
- 1> Radio link failure:
  - 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met; and
  - 2> if the UE is in CELL\_DCH state; and
  - 2> if the criteria for radio link failure is met as specified in subclause 8.5.6:

3> perform cell update using the cause "radio link failure".

- 1> Re-entering service area:
  - 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met; and
  - 2> if the UE is in CELL\_FACH or CELL\_PCH state; and
  - 2> if the UE has been out of service area and re-enters service area before T307 or T317 expires:

3> perform cell update using the cause "re-entering service area".

- 1> RLC unrecoverable error:
  - 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met; and
  - 2> if the UE detects RLC unrecoverable error [16] in an AM RLC entity:
    - 3> perform cell update using the cause "RLC unrecoverable error".

1> Cell reselection:

- 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met:
  - 3> if the UE is in CELL\_FACH or CELL\_PCH state and the UE performs cell re-selection; or
  - 3> if the UE is in CELL\_FACH state and the variable C\_RNTI is empty:
    - 4> perform cell update using the cause "cell reselection".
- 1> Periodical cell update:

- 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met; and
- 2> if the UE is in CELL\_FACH or CELL\_PCH state; and
- 2> if the timer T305 expires; and
- 2> if the criteria for "in service area" as specified in subclause 8.5.5.2 is fulfilled; and
- 2> if periodic updating has been configured by T305 in the IE "UE Timers and constants in connected mode" set to any other value than "infinity":
  - 3> perform cell update using the cause "periodical cell update".
- A UE in URA\_PCH state shall initiate the URA update procedure in the following cases:
  - 1> URA reselection:
    - 2> if the UE detects that the current URA assigned to the UE, stored in the variable URA\_IDENTITY, is not present in the list of URA identities in system information block type 2; or
    - 2> if the list of URA identities in system information block type 2 is empty; or
    - 2> if the system information block type 2 can not be found:

3> perform URA update using the cause "change of URA".

- 1> Periodic URA update:
  - 2> if the criteria for performing URA update with the causes as specified above in the current subclause are not met; and
  - 2> if the timer T305 expires while the UE is in the service area; and
  - 2> if periodic updating has been configured by T305 in the IE "UE Timers and constants in connected mode" set to any other value than "infinity":

3> perform URA update using the cause "periodic URA update".

When initiating the URA update or cell update procedure, the UE shall:

- 1> stop timer T305;
- 1> if the UE is in CELL\_DCH state:
  - 2> in the variable RB\_TIMER\_INDICATOR, set the IE "T314 expired" and the IE "T315 expired" to FALSE;
  - 2> if the stored values of the timer T314 and timer T315 are both equal to zero, or if the stored value of the timer T314 is equal to zero and there are no radio bearers associated with any radio access bearers for which in the variable ESTABLISHED RABS the value of the IE "Re-establishment timer" is set to "useT315":
    - 3> release all its radio resources;
    - 3> indicate release (abort) of the established signalling connections (as stored in the variable ESTABLISHED\_SIGNALLING\_CONNECTIONS) and established radio access bearers (as stored in the variable ESTABLISHED\_RABS) to upper layers;
    - 3> clear the variable ESTABLISHED\_SIGNALLING\_CONNECTIONS;
    - 3> clear the variable ESTABLISHED\_RABS;
    - 3> enter idle mode;
    - 3> perform other actions when entering idle mode from connected mode as specified in subclause 8.5.2;
    - 3> and the procedure ends.

- 2> if the stored value of the timer T314 is equal to zero:
  - 3> release all radio bearers, associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT314";
  - 3> in the variable RB\_TIMER\_INDICATOR set the IE "T314 expired" to TRUE.
- 2> if the stored value of the timer T315 is equal to zero:
  - 3> release all radio bearers associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT315";
  - 3> in the variable RB\_TIMER\_INDICATOR set the IE "T315 expired" to TRUE.
- 2> if the stored value of the timer T314 is greater than zero:
  - 3> if there are radio bearers associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT314":

4> start timer T314.

- 3> if there are no radio bearers associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT314" or "useT315":
  - 4> start timer T314.
- 2> if the stored value of the timer T315 is greater than zero:
  - 3> if there are radio bearers associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT315":
    - 4> start timer T315.
- 2> for the released radio bearer(s):
  - 3> delete the information about the radio bearer from the variable ESTABLISHED\_RABS;
  - 3> when all radio bearers belonging to the same radio access bearer have been released:
    - 4> indicate local end release of the radio access bearer to upper layers using the CN domain identity together with the RAB identity stored in the variable ESTABLISHED\_RABS;
    - 4> delete all information about the radio access bearer from the variable ESTABLISHED\_RABS.
- 2> select a suitable UTRA cell according to [4];
- 2> set the variable ORDERED\_RECONFIGURATION to FALSE.
- 1> set the variables PROTOCOL\_ERROR\_INDICATOR, FAILURE\_INDICATOR, UNSUPPORTED\_CONFIGURATION and INVALID\_CONFIGURATION to FALSE;
- 1> set the variable CELL\_UPDATE\_STARTED to TRUE;
- 1> move to CELL\_FACH state, if not already in that state;
- 1> if the UE performs cell re-selection:
  - 2> clear the variable C\_RNTI; and
  - 2> stop using that C\_RNTI just cleared from the variable C\_RNTI in MAC.
- 1> set CFN in relation to SFN of current cell according to subclause 8.5.15;
- 1> in case of a cell update procedure:
  - 2> set the contents of the CELL UPDATE message according to subclause 8.3.1.3;
  - 2> submit the CELL UPDATE message for transmission on the uplink CCCH.

1> in case of a URA update procedure:

2> set the contents of the URA UPDATE message according to subclause 8.3.1.3;

2> submit the URA UPDATE message for transmission on the uplink CCCH.

1> set counter V302 to 1;

1> start timer T302 when the MAC layer indicates success or failure in transmitting the message.

# 13.1 Timers for UE

1

Timer	Start	Stop	At expiry
T300	Transmission of RRC CONNECTION REQUEST	Reception of RRC CONNECTION SETUP	Retransmit RRC CONNECTION REQUEST if V300 =< N300, else go to Idle mode
T302	Transmission of CELL UPDATE/URA UPDATE	Reception of CELL UPDATE CONFIRM/URA UPDATE CONFIRM	Retransmit CELL UPDATE/URA UPDATE if V302 =< N302, else, go to Idle mode
T304	Transmission of UE CAPABILITY INFORMATION	Reception of UE CAPABILITY INFORMATION CONFIRM	Retransmit UE CAPABILITY INFORMATION if V304 =< N304, else initiate a cell update procedure
T305	Entering CELL_FACH or URA_PCH or CELL_PCH state. Reception of CELL UDPATE CONFIRM/URA UPDATE CONFIRM.	Entering another state.	Transmit CELL UPDATE if T307 is not activated and the UE detects "in service area". Otherwise, if T307 is not active, start T307.
T307	When the timer T305 has expired and the UE detects "out of service area".	When the UE detects "in service area".	Transit to idle mode
T308	Transmission of RRC CONNECTION RELEASE COMPLETE	Not stopped	Transmit RRC CONNECTION RELEASE COMPLETE if V308 <=N308, else go to idle mode.
Т309	Upon reception of CELL CHANGE ORDER FROM UTRAN message	Successful response to a connection establishment request in the new cell.	Resume the connection to UTRAN
T310	Transmission of PUSCH CAPACITY REQUEST	Reception of PHYSICAL SHARED CHANNEL ALLOCATION	Transmit PUSCH CAPACITY REQUEST if V310 =< N310, else procedure stops.
T311	Reception of PHYSICAL SHARED CHANNEL ALLOCATION message with the CHOICE "PUSCH allocation" set to "PUSCH allocation pending".	Reception of PHYSICAL SHARED CHANNEL ALLOCATION message with CHOICE " <i>PUSCH allocation</i> " set to "PUSCH allocation assignment".	UE may initiate a PUSCH capacity request procedure.
T312	When the UE starts to establish dedicated CH	When the UE detects N312 "in sync" indication from L1	The criteria for physical channel establishment failure is fulfilled
T313	When the UE detects consecutive N313 "out of sync" indication from L1.	When the UE detects consecutive N315 "in sync" indication from L1.	The criteria for Radio Link failure is fulfilled
T314	When the criteria for radio link failure are fulfilled. The timer is started only if radio bearer(s) that are associated with T314 exist or if only RRC connection exists.	When the Cell Update procedure has been completed.	See subclause 8.3.1.13
T315	When the criteria for radio link failure are fulfilled. The timer is started only if radio bearer(s) that are associated with T315 exist.	When the Cell Update procedure has been completed.	See subclause 8.3.1.14
T316	When the UE detects "out of service area" in URA_PCH or CELL_PCH state	When the UE detects "in service area".	Initiate cell update procedure if in service area is detected. Otherwise start timer T317, transit to CELL_FACH state and initiate cell update procedure when the UE detects "in service area".

Timer	Start	Stop	At expiry
T317	When the T316 expires or when in CELL_FACH state, the UE detects "out of service area".	When the UE detects "in service area".	Transit to idle mode

# 3GPP TSG-RAN WG2 Meeting #29 Gyeongiu Korea May 13-17 2002

# Tdoc R2-021364

	CR-Form-v5.1			
CHANGE REQUEST				
ж	<b>25.331</b> CR <b>1384 # rev r1 #</b> Current version: <b>4.4.0 #</b>			
For <u>HELP</u> on u	sing this form, see bottom of this page or look at the pop-up text over the $#$ symbols.			
Proposed change	affects: # (U)SIM ME/UE X Radio Access Network X Core Network			
<i>Title:</i> ដ	Correction to start timers when initiating the cell update procedure in CELL_DCH state			
Source: ೫	TSG-RAN WG2			
Work item code: %	TEI Date: # 2002-05-16			
Category: ₩	ARelease: %REL-4Use one of the following categories:Use one of the following releases:F (correction)2A (corresponds to a correction in an earlier release)R96B (addition of feature),R97C (functional modification of feature)R98D (editorial modification)R99D (editorial modification)R99D tetailed explanations of the above categories canREL-4be found in 3GPP TR 21.900.REL-5C (release 5)			
Reason for change	<ul> <li>2: # 1. In the following scenarios, when RL failure or RLC unrecoverable error in CELL_DCH occurs, neither timer T314 nor T315 will be started before performing cell selection procedures. Therefore, if the UE could not find a suitable cell, it would keep searching in CELL_FACH state until the battery power is exhausted and would stay in connected mode for longer time than intended.</li> <li>(a) When T315&gt;0 with no associated RAB is established and T314=0 with associated RABs are established.</li> <li>(b) When T315&gt;0 with no associated RAB is established and T314=0 with no associated RAB are established.</li> <li>The table listed below illustrated all the possible scenarios if RL failure or RLC unrecoverable error in CELL_DCH occurs and the corresponding actions. The entries marked with gray color are the scenarios mentioned above.</li> <li>Scenarios if RL failure or RLC unrecoverable error in CELL_DCH occurs Actions in current text</li> <li>T314=0</li> <li>With no associated RABs T315=0</li> <li>With no associated RABs T315=0</li> <li>With no associated RABs T315=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs T315=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li></ul>			

	T314=0		
	With no associated RABs T315>0		
	With associated RABs Start timer T315		
	1314=0 With appreciated DADs T215: 0		
	With associated RABs 1315>0		
	With no associated KABS Kelease all KBS associated with $1514$		
	With associated RARs T315\0		
	With associated RABs $Release all RBs associated with T31/ and start timer T315$		
	T314>0		
	With no associated RABs T315=0		
	With no associated RABs Start timer T314		
	T314>0		
	With no associated RABs T315=0		
	With associated RABs Release all RBs associated with T315 and start timer T314		
	T314>0		
	With associated RABs T315=0		
	With no associated RABs Start timer T314		
	T314>0		
	With associated RABs T315=0		
	With associated RABs Release all RBs associated with T315 and start timer T314		
	1314>0		
	With no associated RABs 1315>0 With no associated PAPa Start timer T214		
	T214>0		
	With no associated PARs T315\0		
	With associated RABs Start timer T315		
	T314>0		
	With associated RABs T315>0		
	With no associated RABs Start timer T314		
	T314>0		
	With associated RABs T315>0		
	With associated RABs Start timer T314 and T315		
	<b>2</b> The data 12 1 is 25 221 merelies. The desired T214 is not even interd with the		
	2. The table 15.1 in 25.551 regarding when to start 1514 is not consistent with the		
	procedure text.		
Summary of change: #	1. For case (a) and (b), the UE shall release all its radio resources and enter idle		
	mode.		
	2. If only RRC connection exists, the timer T314 shall also be started.		
Concernance if M	If the UE could not find a suitable cell when DL foilure on DLC unsuccessful error in		
not approved:	CELL DCH occurs, for the cases a h and c mentioned above, it would keep searching in		
	CELL EACH state until the battery power is exhausted and would stay in connected mode		
	for longer time than intended.		
Clauses affected: #	8.3.1.2, 13.1		
Other space 4	Other core specifications $\frac{925331}{25331}$		
	25.331 v5.0.0 CR 1385		
affected:	Test specifications		
	O&M Specifications		
Other comments: ೫			

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# 8.3.1.2 Initiation

A UE shall initiate the cell update procedure in the following cases:

- 1> Uplink data transmission:
  - 2> if the UE is in URA\_PCH or CELL\_PCH state; and
  - 2> if the UE has uplink RLC data PDU or uplink RLC control PDU on RB1 or upwards to transmit:

3> perform cell update using the cause "uplink data transmission".

- 1> Paging response:
  - 2> if the criteria for performing cell update with the cause specified above in the current subclause is not met; and
  - 2> if the UE in URA\_PCH or CELL\_PCH state, receives a PAGING TYPE 1 message fulfilling the conditions for initiating a cell update procedure specified in subclause 8.1.2.3:
    - 3> perform cell update using the cause "paging response".
- 1> Radio link failure:
  - 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met; and
  - 2> if the UE is in CELL\_DCH state; and
  - 2> if the criteria for radio link failure is met as specified in subclause 8.5.6:

3> perform cell update using the cause "radio link failure".

- 1> Re-entering service area:
  - 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met; and
  - 2> if the UE is in CELL\_FACH or CELL\_PCH state; and
  - 2> if the UE has been out of service area and re-enters service area before T307 or T317 expires:

3> perform cell update using the cause "re-entering service area".

- 1> RLC unrecoverable error:
  - 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met; and
  - 2> if the UE detects RLC unrecoverable error [16] in an AM RLC entity:
    - 3> perform cell update using the cause "RLC unrecoverable error".

1> Cell reselection:

- 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met:
  - 3> if the UE is in CELL\_FACH or CELL\_PCH state and the UE performs cell re-selection; or
  - 3> if the UE is in CELL\_FACH state and the variable C\_RNTI is empty:
    - 4> perform cell update using the cause "cell reselection".
- 1> Periodical cell update:

- 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met; and
- 2> if the UE is in CELL\_FACH or CELL\_PCH state; and
- 2> if the timer T305 expires; and
- 2> if the criteria for "in service area" as specified in subclause 8.5.5.2 is fulfilled; and
- 2> if periodic updating has been configured by T305 in the IE "UE Timers and constants in connected mode" set to any other value than "infinity":
  - 3> perform cell update using the cause "periodical cell update".
- A UE in URA\_PCH state shall initiate the URA update procedure in the following cases:
  - 1> URA reselection:
    - 2> if the UE detects that the current URA assigned to the UE, stored in the variable URA\_IDENTITY, is not present in the list of URA identities in system information block type 2; or
    - 2> if the list of URA identities in system information block type 2 is empty; or
    - 2> if the system information block type 2 can not be found:

3> perform URA update using the cause "change of URA".

- 1> Periodic URA update:
  - 2> if the criteria for performing URA update with the causes as specified above in the current subclause are not met; and
  - 2> if the timer T305 expires while the UE is in the service area; and
  - 2> if periodic updating has been configured by T305 in the IE "UE Timers and constants in connected mode" set to any other value than "infinity":

3> perform URA update using the cause "periodic URA update".

When initiating the URA update or cell update procedure, the UE shall:

- 1> stop timer T305;
- 1> if the UE is in CELL\_DCH state:
  - 2> in the variable RB\_TIMER\_INDICATOR, set the IE "T314 expired" and the IE "T315 expired" to FALSE;
  - 2> if the stored values of the timer T314 and timer T315 are both equal to zero, or if the stored value of the timer T314 is equal to zero and there are no radio bearers associated with any radio access bearers for which in the variable ESTABLISHED RABS the value of the IE "Re-establishment timer" is set to "useT315":
    - 3> release all its radio resources;
    - 3> indicate release (abort) of the established signalling connections (as stored in the variable ESTABLISHED\_SIGNALLING\_CONNECTIONS) and established radio access bearers (as stored in the variable ESTABLISHED\_RABS) to upper layers;
    - 3> clear the variable ESTABLISHED\_SIGNALLING\_CONNECTIONS;
    - 3> clear the variable ESTABLISHED\_RABS;
    - 3> enter idle mode;
    - 3> perform other actions when entering idle mode from connected mode as specified in subclause 8.5.2;
    - 3> and the procedure ends.

- 2> if the stored value of the timer T314 is equal to zero:
  - 3> release all radio bearers, associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT314";
  - 3> in the variable RB\_TIMER\_INDICATOR set the IE "T314 expired" to TRUE.
- 2> if the stored value of the timer T315 is equal to zero:
  - 3> release all radio bearers associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT315";
  - 3> in the variable RB\_TIMER\_INDICATOR set the IE "T315 expired" to TRUE.
- 2> if the stored value of the timer T314 is greater than zero:
  - 3> if there are radio bearers associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT314":

4> start timer T314.

- 3> if there are no radio bearers associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT314" or "useT315":
  - 4> start timer T314.
- 2> if the stored value of the timer T315 is greater than zero:
  - 3> if there are radio bearers associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT315":
    - 4> start timer T315.
- 2> for the released radio bearer(s):
  - 3> delete the information about the radio bearer from the variable ESTABLISHED\_RABS;
  - 3> when all radio bearers belonging to the same radio access bearer have been released:
    - 4> indicate local end release of the radio access bearer to upper layers using the CN domain identity together with the RAB identity stored in the variable ESTABLISHED\_RABS;
    - 4> delete all information about the radio access bearer from the variable ESTABLISHED\_RABS.
- 2> select a suitable UTRA cell according to [4];
- 2> set the variable ORDERED\_RECONFIGURATION to FALSE.
- 1> set the variables PROTOCOL\_ERROR\_INDICATOR, FAILURE\_INDICATOR, UNSUPPORTED\_CONFIGURATION and INVALID\_CONFIGURATION to FALSE;
- 1> set the variable CELL\_UPDATE\_STARTED to TRUE;
- 1> move to CELL\_FACH state, if not already in that state;
- 1> if the UE performs cell re-selection:
  - 2> clear the variable C\_RNTI; and
  - 2> stop using that C\_RNTI just cleared from the variable C\_RNTI in MAC.
- 1> set CFN in relation to SFN of current cell according to subclause 8.5.15;
- 1> in case of a cell update procedure:
  - 2> set the contents of the CELL UPDATE message according to subclause 8.3.1.3;
  - 2> submit the CELL UPDATE message for transmission on the uplink CCCH.

1> in case of a URA update procedure:

2> set the contents of the URA UPDATE message according to subclause 8.3.1.3;

2> submit the URA UPDATE message for transmission on the uplink CCCH.

1> set counter V302 to 1;

1> start timer T302 when the MAC layer indicates success or failure in transmitting the message.

# 13.1 Timers for UE

1

Timer	Start	Stop	At expiry
T300	Transmission of RRC CONNECTION REQUEST	Reception of RRC CONNECTION SETUP	Retransmit RRC CONNECTION REQUEST if V300 =< N300, else go to Idle mode
T302	Transmission of CELL UPDATE/URA UPDATE	Reception of CELL UPDATE CONFIRM/URA UPDATE CONFIRM	Retransmit CELL UPDATE/URA UPDATE if V302 =< N302, else, go to Idle mode
T304	Transmission of UE CAPABILITY INFORMATION	Reception of UE CAPABILITY INFORMATION CONFIRM	Retransmit UE CAPABILITY INFORMATION if V304 =< N304, else initiate a cell update procedure
T305	Entering CELL_FACH or URA_PCH or CELL_PCH state. Reception of CELL UDPATE CONFIRM/URA UPDATE CONFIRM.	Entering another state.	Transmit CELL UPDATE if T307 is not activated and the UE detects "in service area". Otherwise, if T307 is not active, start T307.
T307	When the timer T305 has expired and the UE detects "out of service area".	When the UE detects "in service area".	Transit to idle mode
T308	Transmission of RRC CONNECTION RELEASE COMPLETE	Not stopped	Transmit RRC CONNECTION RELEASE COMPLETE if V308 <=N308, else go to idle mode.
Т309	Upon reception of CELL CHANGE ORDER FROM UTRAN message	Successful response to a connection establishment request in the new cell.	Resume the connection to UTRAN
T310	Transmission of PUSCH CAPACITY REQUEST	Reception of PHYSICAL SHARED CHANNEL ALLOCATION	Transmit PUSCH CAPACITY REQUEST if V310 =< N310, else procedure stops.
T311	Reception of PHYSICAL SHARED CHANNEL ALLOCATION message with the CHOICE "PUSCH allocation" set to "PUSCH allocation pending".	Reception of PHYSICAL SHARED CHANNEL ALLOCATION message with CHOICE " <i>PUSCH allocation</i> " set to "PUSCH allocation assignment".	UE may initiate a PUSCH capacity request procedure.
T312	When the UE starts to establish dedicated CH	When the UE detects N312 "in sync" indication from L1	The criteria for physical channel establishment failure is fulfilled
T313	When the UE detects consecutive N313 "out of sync" indication from L1.	When the UE detects consecutive N315 "in sync" indication from L1.	The criteria for Radio Link failure is fulfilled
T314	When the criteria for radio link failure are fulfilled. The timer is started only if radio bearer(s) that are associated with T314 exist or if only RRC connection exists.	When the Cell Update procedure has been completed.	See subclause 8.3.1.13
T315	When the criteria for radio link failure are fulfilled. The timer is started only if radio bearer(s) that are associated with T315 exist.	When the Cell Update procedure has been completed.	See subclause 8.3.1.14
T316	When the UE detects "out of service area" in URA_PCH or CELL_PCH state	When the UE detects "in service area".	Initiate cell update procedure if in service area is detected. Otherwise start timer T317, transit to CELL_FACH state and initiate cell update procedure when the UE detects "in service area".

Timer	Start	Stop	At expiry
T317	When the T316 expires or when in CELL_FACH state, the UE detects "out of service area".	When the UE detects "in service area".	Transit to idle mode

# 3GPP TSG-RAN WG2 Meeting #29 Gyeongiu Korea May 13-17 2002

# Tdoc R2-021365

Gycongju, nore	a, way 13-17, 2002			
CHANGE REQUEST				
H	<b>25.331</b> CR <b>1385 # rev r1</b> <sup># Current version: 5.0.0 <sup>#</sup></sup>			
For <u>HELP</u> on u	using this form, see bottom of this page or look at the pop-up text over the $st$ symbols.			
Proposed change	affects: # (U)SIM ME/UE X Radio Access Network X Core Network			
Title: #	Correction to start timers when initiating the cell update procedure in CELL_DCH state			
Source: ೫	TSG-RAN WG2			
Work item code: ೫	TEI Date: 육 2002-05-16			
Category: ₩	ARelease: #REL-5Use one of the following categories:Use one of the following releases:F (correction)2A (corresponds to a correction in an earlier release)R96B (addition of feature),R97C (functional modification of feature)R98D (editorial modification)R99D (editorial modifications of the above categories canREL-4be found in 3GPP TR 21.900.REL-5			
Reason for change	<ul> <li>8 1. In the following scenarios, when RL failure or RLC unrecoverable error in CELL_DCH occurs, neither timer T314 nor T315 will be started before performing cell selection procedures. Therefore, if the UE could not find a suitable cell, it would keep searching in CELL_FACH state until the battery power is exhausted and would stay in connected mode for longer time than intended.</li> <li>(a) When T315&gt;0 with no associated RAB is established and T314=0 with associated RABs are established.</li> <li>(b) When T315&gt;0 with no associated RAB is established and T314=0 with no associated RAB are established.</li> <li>(b) When T315&gt;0 with no associated RAB is established and T314=0 with no associated RAB are established.</li> <li>The table listed below illustrated all the possible scenarios if RL failure or RLC unrecoverable error in CELL_DCH occurs and the corresponding actions. The entries marked with gray color are the scenarios mentioned above.</li> <li>Scenarios if RL failure or RLC unrecoverable error in CELL_DCH occurs Actions in current text T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs T315=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With no associated RABs Release all its radio resources and enter idle mode T314=0</li> <li>With associat</li></ul>			

	T314=0			
	With no associated RABs T315>0			
	With associated RABs Start timer T315			
	T314=0			
	With associated RABs T315>0			
	With no associated RABs Release all RBs associated with T314			
	T314=0			
	With associated RABs T315>0			
	With associated RABs Release all RBs associated with T314 and start timer T315			
	T314>0			
	With no associated RABs T315=0			
	With no associated RABs Start timer T314			
	T31 $4$ >0			
	With no associated $PABs = T315-0$			
	With associated RABs Palease all PBs associated with T315 and start timer T314			
	T31 $4$ N			
	With associated $\mathbf{P} \wedge \mathbf{R}_{s} = \mathbf{T}^{2} 1^{5} - 0$			
	With no associated RADs 1515–0			
	T214 $\times$ 0			
	With associated DARs T215-0			
	With associated PARs Palance all PRs associated with T215 and start timer T214			
	T21 $4$ >0			
	With no associated DARs T215\0			
	With no associated RABs Start timer T314			
	T21 $4$ >0			
	With no associated DARs T215\0			
	With associated DABs Start timer T215			
	T21 $4$ >0			
	1314>0 With associated DADs T215>0			
	With associated RABs T315>0 With as associated PAPs Start timer T214			
	T314>0			
	With associated RARs T215\0			
	With associated RABs Start timer T314 and T315			
	with associated KADS Start uniter 1514 and 1515			
	2. The table 13.1 in 25.331 regarding when to start T314 is not consistent with the			
	procedure text.			
	•			
Summary of change: #	1. For case (a) and (b), the UE shall release all its radio resources and enter idle			
	mode.			
	2. If only RRC connection exists, the timer T314 shall also be started.			
Consequences if <b>#</b>	If the UE could not find a suitable cell when RL failure or RLC unrecoverable error in			
not approved:	CELL_DCH occurs, for the cases a, b and c mentioned above, it would keep searching in			
	CELL_FACH state until the battery power is exhausted and would stay in connected mode			
	for longer time than intended.			
Clauses affected: #	8.3.1.2, 13.1			
Other specs ೫	Other core specifications # 25.331 v3.10.0, CR 1383			
-	25.331 v4.4.0, CR 1384			
affected:	Test specifications			
	O&M Specifications			
Other comments: ೫				

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

# 8.3.1.2 Initiation

A UE shall initiate the cell update procedure in the following cases:

- 1> Uplink data transmission:
  - 2> if the UE is in URA\_PCH or CELL\_PCH state; and
  - 2> if the UE has uplink RLC data PDU or uplink RLC control PDU on RB1 or upwards to transmit:

3> perform cell update using the cause "uplink data transmission".

- 1> Paging response:
  - 2> if the criteria for performing cell update with the cause specified above in the current subclause is not met; and
  - 2> if the UE in URA\_PCH or CELL\_PCH state, receives a PAGING TYPE 1 message fulfilling the conditions for initiating a cell update procedure specified in subclause 8.1.2.3:
    - 3> perform cell update using the cause "paging response".
- 1> Radio link failure:
  - 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met; and
  - 2> if the UE is in CELL\_DCH state; and
  - 2> if the criteria for radio link failure is met as specified in subclause 8.5.6:

3> perform cell update using the cause "radio link failure".

- 1> Re-entering service area:
  - 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met; and
  - 2> if the UE is in CELL\_FACH or CELL\_PCH state; and
  - 2> if the UE has been out of service area and re-enters service area before T307 or T317 expires:

3> perform cell update using the cause "re-entering service area".

- 1> RLC unrecoverable error:
  - 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met; and
  - 2> if the UE detects RLC unrecoverable error [16] in an AM RLC entity:
    - 3> perform cell update using the cause "RLC unrecoverable error".

1> Cell reselection:

- 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met:
  - 3> if the UE is in CELL\_FACH or CELL\_PCH state and the UE performs cell re-selection; or
  - 3> if the UE is in CELL\_FACH state and the variable C\_RNTI is empty:
    - 4> perform cell update using the cause "cell reselection".
- 1> Periodical cell update:

- 2> if none of the criteria for performing cell update with the causes specified above in the current subclause is met; and
- 2> if the UE is in CELL\_FACH or CELL\_PCH state; and
- 2> if the timer T305 expires; and
- 2> if the criteria for "in service area" as specified in subclause 8.5.5.2 is fulfilled; and
- 2> if periodic updating has been configured by T305 in the IE "UE Timers and constants in connected mode" set to any other value than "infinity":
  - 3> perform cell update using the cause "periodical cell update".
- A UE in URA\_PCH state shall initiate the URA update procedure in the following cases:
  - 1> URA reselection:
    - 2> if the UE detects that the current URA assigned to the UE, stored in the variable URA\_IDENTITY, is not present in the list of URA identities in system information block type 2; or
    - 2> if the list of URA identities in system information block type 2 is empty; or
    - 2> if the system information block type 2 can not be found:

3> perform URA update using the cause "change of URA".

- 1> Periodic URA update:
  - 2> if the criteria for performing URA update with the causes as specified above in the current subclause are not met; and
  - 2> if the timer T305 expires while the UE is in the service area; and
  - 2> if periodic updating has been configured by T305 in the IE "UE Timers and constants in connected mode" set to any other value than "infinity":

3> perform URA update using the cause "periodic URA update".

When initiating the URA update or cell update procedure, the UE shall:

- 1> stop timer T305;
- 1> if the UE is in CELL\_DCH state:
  - 2> in the variable RB\_TIMER\_INDICATOR, set the IE "T314 expired" and the IE "T315 expired" to FALSE;
  - 2> if the stored values of the timer T314 and timer T315 are both equal to zero, or if the stored value of the timer T314 is equal to zero and there are no radio bearers associated with any radio access bearers for which in the variable ESTABLISHED RABS the value of the IE "Re-establishment timer" is set to "useT315":
    - 3> release all its radio resources;
    - 3> indicate release (abort) of the established signalling connections (as stored in the variable ESTABLISHED\_SIGNALLING\_CONNECTIONS) and established radio access bearers (as stored in the variable ESTABLISHED\_RABS) to upper layers;
    - 3> clear the variable ESTABLISHED\_SIGNALLING\_CONNECTIONS;
    - 3> clear the variable ESTABLISHED\_RABS;
    - 3> enter idle mode;
    - 3> perform other actions when entering idle mode from connected mode as specified in subclause 8.5.2;
    - 3> and the procedure ends.

- 2> if the stored value of the timer T314 is equal to zero:
  - 3> release all radio bearers, associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT314";
  - 3> in the variable RB\_TIMER\_INDICATOR set the IE "T314 expired" to TRUE.
- 2> if the stored value of the timer T315 is equal to zero:
  - 3> release all radio bearers associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT315";
  - 3> in the variable RB\_TIMER\_INDICATOR set the IE "T315 expired" to TRUE.
- 2> if the stored value of the timer T314 is greater than zero:
  - 3> if there are radio bearers associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT314":

4> start timer T314.

- 3> if there are no radio bearers associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT314" or "useT315":
  - 4> start timer T314.
- 2> if the stored value of the timer T315 is greater than zero:
  - 3> if there are radio bearers associated with any radio access bearers for which in the variable ESTABLISHED\_RABS the value of the IE "Re-establishment timer" is set to "useT315":
    - 4> start timer T315.
- 2> for the released radio bearer(s):
  - 3> delete the information about the radio bearer from the variable ESTABLISHED\_RABS;
  - 3> when all radio bearers belonging to the same radio access bearer have been released:
    - 4> indicate local end release of the radio access bearer to upper layers using the CN domain identity together with the RAB identity stored in the variable ESTABLISHED\_RABS;
    - 4> delete all information about the radio access bearer from the variable ESTABLISHED\_RABS.
- 2> select a suitable UTRA cell according to [4];
- 2> set the variable ORDERED\_RECONFIGURATION to FALSE.
- 1> set the variables PROTOCOL\_ERROR\_INDICATOR, FAILURE\_INDICATOR, UNSUPPORTED\_CONFIGURATION and INVALID\_CONFIGURATION to FALSE;
- 1> set the variable CELL\_UPDATE\_STARTED to TRUE;
- 1> move to CELL\_FACH state, if not already in that state;
- 1> if the UE performs cell re-selection:
  - 2> clear the variable C\_RNTI; and
  - 2> stop using that C\_RNTI just cleared from the variable C\_RNTI in MAC.
- 1> set CFN in relation to SFN of current cell according to subclause 8.5.15;
- 1> in case of a cell update procedure:
  - 2> set the contents of the CELL UPDATE message according to subclause 8.3.1.3;
  - 2> submit the CELL UPDATE message for transmission on the uplink CCCH.

1> in case of a URA update procedure:

2> set the contents of the URA UPDATE message according to subclause 8.3.1.3;

2> submit the URA UPDATE message for transmission on the uplink CCCH.

1> set counter V302 to 1;

1> start timer T302 when the MAC layer indicates success or failure in transmitting the message.

# 13.1 Timers for UE

1

Timer	Start	Stop	At expiry
T300	Transmission of RRC CONNECTION REQUEST	Reception of RRC CONNECTION SETUP	Retransmit RRC CONNECTION REQUEST if V300 =< N300, else go to Idle mode
T302	Transmission of CELL UPDATE/URA UPDATE	Reception of CELL UPDATE CONFIRM/URA UPDATE CONFIRM	Retransmit CELL UPDATE/URA UPDATE if V302 =< N302, else, go to Idle mode
T304	Transmission of UE CAPABILITY INFORMATION	Reception of UE CAPABILITY INFORMATION CONFIRM	Retransmit UE CAPABILITY INFORMATION if V304 =< N304, else initiate a cell update procedure
T305	Entering CELL_FACH or URA_PCH or CELL_PCH state. Reception of CELL UDPATE CONFIRM/URA UPDATE CONFIRM.	Entering another state.	Transmit CELL UPDATE if T307 is not activated and the UE detects "in service area". Otherwise, if T307 is not active, start T307.
T307	When the timer T305 has expired and the UE detects "out of service area".	When the UE detects "in service area".	Transit to idle mode
T308	Transmission of RRC CONNECTION RELEASE COMPLETE	Not stopped	Transmit RRC CONNECTION RELEASE COMPLETE if V308 <=N308, else go to idle mode.
Т309	Upon reception of CELL CHANGE ORDER FROM UTRAN message	Successful response to a connection establishment request in the new cell.	Resume the connection to UTRAN
T310	Transmission of PUSCH CAPACITY REQUEST	Reception of PHYSICAL SHARED CHANNEL ALLOCATION	Transmit PUSCH CAPACITY REQUEST if V310 =< N310, else procedure stops.
T311	Reception of PHYSICAL SHARED CHANNEL ALLOCATION message with the CHOICE "PUSCH allocation" set to "PUSCH allocation pending".	Reception of PHYSICAL SHARED CHANNEL ALLOCATION message with CHOICE " <i>PUSCH allocation</i> " set to "PUSCH allocation assignment".	UE may initiate a PUSCH capacity request procedure.
T312	When the UE starts to establish dedicated CH	When the UE detects N312 "in sync" indication from L1	The criteria for physical channel establishment failure is fulfilled
T313	When the UE detects consecutive N313 "out of sync" indication from L1.	When the UE detects consecutive N315 "in sync" indication from L1.	The criteria for Radio Link failure is fulfilled
T314	When the criteria for radio link failure are fulfilled. The timer is started only if radio bearer(s) that are associated with T314 exist or if only RRC connection exists.	When the Cell Update procedure has been completed.	See subclause 8.3.1.13
T315	When the criteria for radio link failure are fulfilled. The timer is started only if radio bearer(s) that are associated with T315 exist.	When the Cell Update procedure has been completed.	See subclause 8.3.1.14
T316	When the UE detects "out of service area" in URA_PCH or CELL_PCH state	When the UE detects "in service area".	Initiate cell update procedure if in service area is detected. Otherwise start timer T317, transit to CELL_FACH state and initiate cell update procedure when the UE detects "in service area".

Timer	Start	Stop	At expiry
T317	When the T316 expires or when in CELL_FACH state, the UE detects "out of service area".	When the UE detects "in service area".	Transit to idle mode

CR-Form-v5									
¥	25.	.331	CR <mark>1386</mark>	жrе	ev -	жC	Current vers	ion: <mark>3</mark>	.10.0 <sup>#</sup>
For <u>HELP</u> on u	For <b>HELP</b> on using this form, see bottom of this page or look at the pop-up text over the <b>#</b> symbols.								
Proposed change	Proposed change affects: # (U)SIM ME/UE X Radio Access Network Core Network								
Title: ೫	Cor	rectior	n to handling of	FACH mea	asuremen	nt occa	<mark>ision info in</mark>	SIB12	
Source: ೫	TS	G-RAN	WG2						
Work item code: भ	TEI						<i>Date:</i>	02/0	5/2002
Category: ₩	<b># F Release: #</b> R99         Use one of the following categories: <i>F</i> (correction) <i>Use one of the following releases: F</i> (correction) <i>2</i> (GSM Phase 2) <b>A</b> (corresponds to a correction in an earlier release)       R96 (Release 1996) <b>B</b> (addition of feature),       R97 (Release 1997) <b>C</b> (functional modification of feature)       R98 (Release 1998) <b>D</b> (editorial modification)       R99 (Release 1999)         Detailed explanations of the above categories can       REL-4 (Release 4)         be found in 3GPP TR 21 900       REL-5 (Release 5)								
Baasan far abang	a. 99	The	handling of the	abaanaa of	the IE 'E			nt o o o	acion info! in
Summary of chang	<ul> <li>ason for change: a The handling of the absorbe of the LF / SIB11 the spec currently states:</li> <li>"UE may perform inter-frequency/inter-RAT measurements or inter-frequency/inter-RAT cell re-selection evaluation, if the UE capabilities permit such measurements while simultaneously receiving the S-CCPCH of the servicell"</li> <li>For SIB12 the spec currently states:</li> <li>"UE shall perform neither inter-frequency/inter-RAT measurements nor inter-frequency/inter-RAT cell re-selection evaluation, independent of UE measurement capabilities"</li> <li>The difference in handling of SIB12 compared to SIB11 seems to be an overs in CR826r4 which changed the handling in SIB11.</li> <li>mmary of change: #</li> <li>The handling of SIB12 is aligned with SIB11, allowing a UE with appropriate capabilities to perform measurement for inter-frequency and inter-RAT reselection even if FACH measurement occasions are not provided.</li> <li>Isolated Impact Analysis         <ul> <li>Functionality corrected: Inter-freq and inter-RAT measurements for cell reselection in CELL_FACH. The corrected functionality only impacts terminals that support the appropriate measurement capabilities.</li> <li>Isolated impact statement: Correction to a function where specification was inconsistent. Would not affect implementations behaving like indicated in the G would affect implementations supporting the corrected functionality otherwise.</li> </ul> </li> </ul>						ly states: ter- poilities permit CH of the serving nts nor inter- UE o be an oversig appropriate ter-RAT ded. for cell acts terminals licated in the CF lity otherwise.		
		lf a L frequ	JE does not implency and inter-	element this RAT meas	CR, it wind the content of the conte	ill be fo for ce	orbidden fro Il reselectio	om per on in C	form inter- ELL_FACH eve

	if they have capabilities to perform such measurements without measurement occasions. Such UEs will have to go out of coverage before being able to select an inter-frequency or inter-RAT cell.
	This CR should not have any implementation implications for the UTRAN.
	Impact on test specifications No impact. 34.123 does not currently contain any tests for inter-frequency or inter-RAT reselection in CELL_FACH. 34.123 does not currently contain any tests for inter-frequency or inter-RAT reselection in CELL_FACH for which measurement occasions are not provided.
Consequences if # not approved:	UEs will be forbidden from performing inter-frequency and inter-RAT measurements for cell reselection in CELL_FACH even if they have capabilities to perform such measurements without measurement occasions. Such UEs will have to go out of coverage before being able to select an inter-frequency or inter- RAT cell.
Clauses affected: #	8.1.1.6.12

Clauses affected:	ж 8.1.1.6.12						
Other specs	ж	Other core specifications	ж	25.331 v4.4.0, CR 1387 25.331 v5.0.0, CR 1388			
affected:		Test specifications					
Other comments:	ж						

#### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

#### 8.1.1.6.11 System Information Block type 11

The UE should store all relevant IEs included in this system information block. The UE shall:

- 1> if IE "FACH measurement occasion info" is included:
  - 2> act as specified in subclause 8.6.7.
- 1> else:
  - 2> may perform inter-frequency/inter-RAT measurements or inter-frequency/inter-RAT cell re-selection evaluation, if the UE capabilities permit such measurements while simultaneously receiving the S-CCPCH of the serving cell.
- 1> clear the variable CELL\_INFO\_LIST;
- 1> act upon the received IE "Intra-frequency cell info list"/"Inter-frequency cell info list"/"Inter-RAT cell info list" as described in subclause 8.6.7.3;
- 1> if in idle mode; or
- 1> if in connected mode and if System Information Block type 12 is not broadcast in the cell:
  - 2> if included, store the IE "Intra-frequency reporting quantity" and the IE "Intra-frequency measurement reporting criteria" or "Periodical reporting criteria" in order to activate reporting when state CELL\_DCH is entered;
- 1> if in connected mode and if System Information Block type 12 is not broadcast in the cell:
  - 2> read the IE "Traffic volume measurement information";
  - 2> if no traffic volume measurement with the measurement identity indicated in the IE "Traffic volume measurement" was set up or modified through a MEASUREMENT CONTROL message:

3> update the variable MEASUREMENT\_IDENTITY with the measurement information received in that IE.

- 1> if IE "Use of HCS" is set to "used", indicating that HCS is used, do the following:
  - 2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Intra-frequency cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

- 2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Intra-frequency cell info list":
  - 3> for that cell use the same parameter values as used for the preceding IE "Intra-frequency cell info list".
- 2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Inter-frequency cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Inter-frequency cell info list":

3> for that cell use the same parameter values as used for the preceding IE "Inter-frequency cell info list".

2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Inter-RAT Cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Inter-RAT cell info list": 3> for that cell use the same parameter values as used for the preceding IE "Inter-RAT cell info list".

- 1> if the value of the IE "Cell selection and reselection quality measure" is different from the value of the IE "Cell selection and reselection quality measure" obtained from System Information Block type 3 or System Information Block type 4:
  - 2> use the value of the IE from this System Information Block and ignore the value obtained from System Information Block type 3 or System Information Block type 4.
- 1> if in connected mode, and System Information Block type 12 is indicated as used in the cell:

2> read and act on information sent in System Information Block type 12 as indicated in subclause 8.1.1.6.12.

### 8.1.1.6.12 System Information Block type 12

If in connected mode, the UE should store all relevant IEs included in this system information block. The UE shall:

- 1> if IE "FACH measurement occasion info" is included:
  - 2> act as specified in subclause 8.6.7.
- 1> else:
  - 2> may perform inter-frequency/inter-RAT measurements or inter-frequency/inter-RAT cell re-selection evaluation, if the UE capabilities permit such measurements while simultaneously receiving the S-CCPCH of the serving cell.
  - 2> perform neither inter frequency/inter RAT measurements nor inter frequency/inter RAT cell re selection evaluation, independent of UE measurement capabilities.
- 1> act upon the received IE "Intra-frequency cell info list"/"Inter-frequency cell info list"/"Inter-RAT cell info list" as described in subclause 8.6.7.3;
- 1> if any of the IEs "Intra-frequency measurement quantity", "Intra-frequency reporting quantity for RACH reporting", "Maximum number of reported cells on RACH" or "Reporting information for state CELL\_DCH" are not included in the system information block:
  - 2> read the corresponding IE(s) in system information block type 11 and use that information for the intrafrequency measurement.
- 1> if included in this system information block or in System Information Block type 11:
  - 2> store the IE "Intra-frequency reporting quantity" and the IE "Intra-frequency measurement reporting criteria" or "Periodical reporting criteria" in order to activate reporting when state CELL\_DCH is entered.
- 1> if the IE "Traffic volume measurement information" is not included in this system information block:

2> read the corresponding IE in System Information Block type 11.

- 1> if the IE "Traffic volume measurement information" was received either in this system information block or in System Information Block type 11:
  - 2> if no traffic volume measurement with the measurement identity indicated in the IE "Traffic volume measurement" was set up or modified through a MEASUREMENT CONTROL message:
    - 3> update the variable MEASUREMENT\_IDENTITY with the measurement information received in that IE.

1> if in CELL\_FACH state:

- 2> start or continue the traffic volume measurements stored in the variable MEASUREMENT\_IDENTITY that are valid in CELL\_FACH state.
- 1> if IE "Use of HCS" is set to "used", indicating that HCS is used, do the following:

2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Intra-frequency cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Intra-frequency cell info list":

3> for that cell use the same parameter values as used for the preceding IE "Intra-frequency cell info list".

2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Inter-frequency cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

- 2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Inter-frequency cell info list":
  - 3> for that cell use the same parameter values as used for the preceding IE "Inter-frequency cell info list".
- 2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Inter-RAT cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Inter-RAT cell info list":

3> for that cell use the same parameter values as used for the preceding IE "Inter-RAT cell info list".

- 1> if the value of the IE "Cell selection and reselection quality measure" is different from the value of the IE "Cell selection and reselection quality measure" obtained from System Information Block type 3 or System Information Block type 4:
  - 2> use the value of the IE from this System Information Block and ignore the value obtained from System Information Block type 3 or System Information Block type 4.

If in idle mode, the UE shall not use the values of the IEs in this system information block.

CHANGE REQUEST							
ж	25.331	CR 1387	жrev	<b>-</b> #	Current vers	<sup>sion:</sup> <b>4.4.0</b>	ж
For <u>HELP</u> on us	sing this fo	orm, see bottom	of this page or	look at th	e pop-up text	over the # sy	mbols.
Proposed change a	affects: ៖	3 (U)SIM	ME/UE X	Radio Ac	ccess Network	k Core N	etwork
Title: #	Correction	on to handling of	FACH measu	rement oc	casion info in	SIB12	
Source: #	TSG-RA	NWG2					
Work item code: ℜ	TEI				Date: ೫	02/05/2002	
Category: ₩	A Use <u>one</u> o F (cc A (cc B (ac C (fu D (cc Detailed e be found in	f the following cate rrection) presponds to a con Idition of feature), nctional modification kplanations of the 3 GPP <u>TR 21.900</u>	egories: rrection in an ea on of feature) n) above categorie ).	<i>rlier releas</i> e s can	Release: ₩ Use <u>one</u> of 2 e) R96 R97 R98 R99 REL-4 REL-5	REL-4 the following re (GSM Phase 2 (Release 1996 (Release 1997 (Release 1998 (Release 1999 (Release 4) (Release 5)	leases: ) ) ) )
Reason for change	:	handling of the	absence of the	E 'FACH	I measureme	nt occasion in	fo' is
Summary of chang	"UE frec suc cell For "UE frec me in C the in C suc cell For suc frec frec frec frec frec frec frec fre	SIB12 the spec shall perform in puency/inter-RAT h measurements SIB12 the spec shall perform no puency/inter-RAT asurement capat difference in ha R826r4 which cl handling of SIB abilities to perfor election even if F lated Impact An inctionality correct election in CELL	ter-frequency/i cell re-selecti s while simultate currently state either inter-free cell re-selecti bilities" ndling of SIB1 hanged the ha 12 is aligned w m measureme ACH measure alysis ted: Inter-free FACH. The c	2. For SIB nter-RAT on evalua neously re s: quency/int on evalua 2 compare ndling in S vith SIB11 ents for int ment occa	er-RAT measurement tion, if the UE eceiving the Seceiving	ts or inter- capabilities p -CCPCH of th ourements nor dent of UE eems to be an IE with approp and inter-RAT t provided.	ermit e serving inter- oversight riate
	that Isol inco woo If a free	support the app ated impact state onsistent. Would uld affect implem UE does not imp uency and inter-	ropriate meas ement: Correct not affect impl entations supp plement this CI RAT measure	urement c ion to a fu ementatio porting the R, it will be ments for	apabilities. Inction where ons behaving I corrected fur e forbidden fro cell reselectio	specification like indicated in actionality other om perform int on in CELL_FA	was n the CR, erwise. er- ACH even

	if they have capabilities to perform such measurements without measurement occasions. Such UEs will have to go out of coverage before being able to select an inter-frequency or inter-RAT cell.
	This CR should not have any implementation implications for the UTRAN.
	Impact on test specifications No impact. 34.123 does not currently contain any tests for inter-frequency or inter-RAT reselection in CELL_FACH. 34.123 does not currently contain any tests for inter-frequency or inter-RAT reselection in CELL_FACH for which measurement occasions are not provided.
Consequences if % not approved:	UEs will be forbidden from performing inter-frequency and inter-RAT measurements for cell reselection in CELL_FACH even if they have capabilities to perform such measurements without measurement occasions. Such UEs will have to go out of coverage before being able to select an inter-frequency or inter- RAT cell.
Clauses affected: #	8.1.1.6.12

Clauses affected:	<b>#</b> 8.1.1.6.12						
Other specs affected:	<ul> <li>Contractions</li> <li>Contractions</li> <li>Test specifications</li> </ul>		ж	25.331 v3.10.0, CR 1386 25.331 v5.0.0, CR 1388			
		O&M Specifications					
Other comments:	Ж						

#### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

#### 8.1.1.6.11 System Information Block type 11

The UE should store all relevant IEs included in this system information block. The UE shall:

- 1> if IE "FACH measurement occasion info" is included:
  - 2> act as specified in subclause 8.6.7.
- 1> else:
  - 2> may perform inter-frequency/inter-RAT measurements or inter-frequency/inter-RAT cell re-selection evaluation, if the UE capabilities permit such measurements while simultaneously receiving the S-CCPCH of the serving cell.
- 1> clear the variable CELL\_INFO\_LIST;
- 1> act upon the received IE "Intra-frequency cell info list"/"Inter-frequency cell info list"/"Inter-RAT cell info list" as described in subclause 8.6.7.3;
- 1> if in idle mode; or
- 1> if in connected mode and if System Information Block type 12 is not broadcast in the cell:
  - 2> if included, store the IE "Intra-frequency reporting quantity" and the IE "Intra-frequency measurement reporting criteria" or "Periodical reporting criteria" in order to activate reporting when state CELL\_DCH is entered;
- 1> if in connected mode and if System Information Block type 12 is not broadcast in the cell:
  - 2> read the IE "Traffic volume measurement information";
  - 2> if no traffic volume measurement with the measurement identity indicated in the IE "Traffic volume measurement" was set up or modified through a MEASUREMENT CONTROL message:

3> update the variable MEASUREMENT\_IDENTITY with the measurement information received in that IE.

- 1> if IE "Use of HCS" is set to "used", indicating that HCS is used, do the following:
  - 2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Intra-frequency cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

- 2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Intra-frequency cell info list":
  - 3> for that cell use the same parameter values as used for the preceding IE "Intra-frequency cell info list".
- 2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Inter-frequency cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Inter-frequency cell info list":

3> for that cell use the same parameter values as used for the preceding IE "Inter-frequency cell info list".

2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Inter-RAT Cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Inter-RAT cell info list": 3> for that cell use the same parameter values as used for the preceding IE "Inter-RAT cell info list".

- 1> if the value of the IE "Cell selection and reselection quality measure" is different from the value of the IE "Cell selection and reselection quality measure" obtained from System Information Block type 3 or System Information Block type 4:
  - 2> use the value of the IE from this System Information Block and ignore the value obtained from System Information Block type 3 or System Information Block type 4.
- 1> if in connected mode, and System Information Block type 12 is indicated as used in the cell:

2> read and act on information sent in System Information Block type 12 as indicated in subclause 8.1.1.6.12.

### 8.1.1.6.12 System Information Block type 12

If in connected mode, the UE should store all relevant IEs included in this system information block. The UE shall:

- 1> if IE "FACH measurement occasion info" is included:
  - 2> act as specified in subclause 8.6.7.
- 1> else:
  - 2> may perform inter-frequency/inter-RAT measurements or inter-frequency/inter-RAT cell re-selection evaluation, if the UE capabilities permit such measurements while simultaneously receiving the S-CCPCH of the serving cell.
  - 2> perform neither inter frequency/inter RAT measurements nor inter frequency/inter RAT cell re selection evaluation, independent of UE measurement capabilities.
- 1> act upon the received IE "Intra-frequency cell info list"/"Inter-frequency cell info list"/"Inter-RAT cell info list" as described in subclause 8.6.7.3;
- 1> if any of the IEs "Intra-frequency measurement quantity", "Intra-frequency reporting quantity for RACH reporting", "Maximum number of reported cells on RACH" or "Reporting information for state CELL\_DCH" are not included in the system information block:
  - 2> read the corresponding IE(s) in system information block type 11 and use that information for the intrafrequency measurement.
- 1> if included in this system information block or in System Information Block type 11:
  - 2> store the IE "Intra-frequency reporting quantity" and the IE "Intra-frequency measurement reporting criteria" or "Periodical reporting criteria" in order to activate reporting when state CELL\_DCH is entered.
- 1> if the IE "Traffic volume measurement information" is not included in this system information block:

2> read the corresponding IE in System Information Block type 11.

- 1> if the IE "Traffic volume measurement information" was received either in this system information block or in System Information Block type 11:
  - 2> if no traffic volume measurement with the measurement identity indicated in the IE "Traffic volume measurement" was set up or modified through a MEASUREMENT CONTROL message:
    - 3> update the variable MEASUREMENT\_IDENTITY with the measurement information received in that IE.

1> if in CELL\_FACH state:

- 2> start or continue the traffic volume measurements stored in the variable MEASUREMENT\_IDENTITY that are valid in CELL\_FACH state.
- 1> if IE "Use of HCS" is set to "used", indicating that HCS is used, do the following:

2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Intra-frequency cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Intra-frequency cell info list":

3> for that cell use the same parameter values as used for the preceding IE "Intra-frequency cell info list".

2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Inter-frequency cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

- 2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Inter-frequency cell info list":
  - 3> for that cell use the same parameter values as used for the preceding IE "Inter-frequency cell info list".
- 2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Inter-RAT cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Inter-RAT cell info list":

3> for that cell use the same parameter values as used for the preceding IE "Inter-RAT cell info list".

- 1> if the value of the IE "Cell selection and reselection quality measure" is different from the value of the IE "Cell selection and reselection quality measure" obtained from System Information Block type 3 or System Information Block type 4:
  - 2> use the value of the IE from this System Information Block and ignore the value obtained from System Information Block type 3 or System Information Block type 4.

If in idle mode, the UE shall not use the values of the IEs in this system information block.
CHANGE REQUEST									
ж;	<mark>25.331</mark>	CR 1388	жrev	<b>-</b> <sup>#</sup>	Current vers	ion: <b>5.0.0</b>	ж		
For <u><b>HELP</b></u> on using this form, see bottom of this page or look at the pop-up text over the $\Re$ symbols.									
Proposed change affects: # (U)SIM ME/UE X Radio Access Network Core Network									
Title: ж	Correctio	n to handling of	FACH measu	rement oc	casion info in	SIB12			
Source: ೫	TSG-RAN	WG2							
Work item code: ೫	TEI				Date: ೫	02/05/2002			
Category: ະ	A Jse <u>one</u> of F (cor. A (cor B (add C (fun D (edi Detailed exj e found in	the following cate rection) responds to a con dition of feature), ctional modification torial modification blanations of the 3GPP <u>TR 21.900</u>	egories: rrection in an ea on of feature) ) above categorie	<i>rlier releas</i> e s can	Release: ¥ Use <u>one</u> of 2 e) R96 R97 R98 R99 REL-4 REL-5	REL-5 the following rel (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5)	eases:		
Reason for change:	策 The	handling of the	absence of the	E IE 'FACH	l measureme	nt occasion inf	o' is		
	"UE frequ such cell" For S "UE frequ mea	may perform in uency/inter-RAT measurements SIB12 the spec shall perform no uency/inter-RAT surement capat	cell re-selecti while simulta currently state either inter-free cell re-selecti pilities"	2. For SIB nter-RAT on evalua neously re s: quency/int on evalua 2 compare	er-RAT measurement tion, if the UE eceiving the Seceiving the Seceiving the Seceiving the Seceiving the Secence of the secence of the second s	s or inter- capabilities pe -CCPCH of the urements nor i dent of UE	ermit e serving nter- oversight		
Summary of change	In Ch capa rese isola Func rese that incon woul	R826r4 which cl handling of SIB ibilities to perfor lection even if F ated Impact An ctionality correct lection in CELL support the app ted impact state hisistent. Would d affect implem	anged the ha 12 is aligned v m measureme ACH measure alysis red: Inter-freq a _FACH. The c ropriate meas ement: Correct not affect implentations supp plement this CI RAT measure	vith SIB11 ents for int ement occa and inter-F porrected fu urement c cion to a fu ementatio porting the R, it will be ments for	Allowing a U er-frequency a asions are not RAT measured unctionality on apabilities. Inction where ons behaving I corrected fun e forbidden fro	E with appropriand inter-RAT provided. ments for cell ly impacts terr specification v ike indicated in actionality othe	riate minals vas n the CR, rwise. er- CH even		

	if they have capabilities to perform such measurements without measurement occasions. Such UEs will have to go out of coverage before being able to select an inter-frequency or inter-RAT cell.					
	This CR should not have any implementation implications for the UTRAN.					
	Impact on test specifications No impact. 34.123 does not currently contain any tests for inter-frequency or inter-RAT reselection in CELL_FACH. 34.123 does not currently contain any tests for inter-frequency or inter-RAT reselection in CELL_FACH for which measurement occasions are not provided.					
Consequences if % not approved:	UEs will be forbidden from performing inter-frequency and inter-RAT measurements for cell reselection in CELL_FACH even if they have capabilities to perform such measurements without measurement occasions. Such UEs will have to go out of coverage before being able to select an inter-frequency or inter- RAT cell.					
Clauses affected: %	8.1.1.6.12					

Clauses affected:	ж <u>8.1.1.6.12</u>						
Other specs	ж	Other core specifications	Ħ	25.331 v3.10.0, CR 1386 25.331 v4.4.0, CR 1387			
affected: Test specifications O&M Specifications		Test specifications O&M Specifications					
Other comments:	ж						

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- 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

## 8.1.1.6.11 System Information Block type 11

The UE should store all relevant IEs included in this system information block. The UE shall:

- 1> if IE "FACH measurement occasion info" is included:
  - 2> act as specified in subclause 8.6.7.
- 1> else:
  - 2> may perform inter-frequency/inter-RAT measurements or inter-frequency/inter-RAT cell re-selection evaluation, if the UE capabilities permit such measurements while simultaneously receiving the S-CCPCH of the serving cell.
- 1> clear the variable CELL\_INFO\_LIST;
- 1> act upon the received IE "Intra-frequency cell info list"/"Inter-frequency cell info list"/"Inter-RAT cell info list" as described in subclause 8.6.7.3;
- 1> if in idle mode; or
- 1> if in connected mode and if System Information Block type 12 is not broadcast in the cell:
  - 2> if included, store the IE "Intra-frequency reporting quantity" and the IE "Intra-frequency measurement reporting criteria" or "Periodical reporting criteria" in order to activate reporting when state CELL\_DCH is entered;
- 1> if in connected mode and if System Information Block type 12 is not broadcast in the cell:
  - 2> read the IE "Traffic volume measurement information";
  - 2> if no traffic volume measurement with the measurement identity indicated in the IE "Traffic volume measurement" was set up or modified through a MEASUREMENT CONTROL message:

3> update the variable MEASUREMENT\_IDENTITY with the measurement information received in that IE.

- 1> if IE "Use of HCS" is set to "used", indicating that HCS is used, do the following:
  - 2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Intra-frequency cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

- 2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Intra-frequency cell info list":
  - 3> for that cell use the same parameter values as used for the preceding IE "Intra-frequency cell info list".
- 2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Inter-frequency cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Inter-frequency cell info list":

3> for that cell use the same parameter values as used for the preceding IE "Inter-frequency cell info list".

2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Inter-RAT Cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Inter-RAT cell info list": 3> for that cell use the same parameter values as used for the preceding IE "Inter-RAT cell info list".

- 1> if the value of the IE "Cell selection and reselection quality measure" is different from the value of the IE "Cell selection and reselection quality measure" obtained from System Information Block type 3 or System Information Block type 4:
  - 2> use the value of the IE from this System Information Block and ignore the value obtained from System Information Block type 3 or System Information Block type 4.
- 1> if in connected mode, and System Information Block type 12 is indicated as used in the cell:

2> read and act on information sent in System Information Block type 12 as indicated in subclause 8.1.1.6.12.

## 8.1.1.6.12 System Information Block type 12

If in connected mode, the UE should store all relevant IEs included in this system information block. The UE shall:

- 1> if IE "FACH measurement occasion info" is included:
  - 2> act as specified in subclause 8.6.7.
- 1> else:
  - 2> may perform inter-frequency/inter-RAT measurements or inter-frequency/inter-RAT cell re-selection evaluation, if the UE capabilities permit such measurements while simultaneously receiving the S-CCPCH of the serving cell.
  - 2> perform neither inter frequency/inter RAT measurements nor inter frequency/inter RAT cell re selection evaluation, independent of UE measurement capabilities.
- 1> act upon the received IE "Intra-frequency cell info list"/"Inter-frequency cell info list"/"Inter-RAT cell info list" as described in subclause 8.6.7.3;
- 1> if any of the IEs "Intra-frequency measurement quantity", "Intra-frequency reporting quantity for RACH reporting", "Maximum number of reported cells on RACH" or "Reporting information for state CELL\_DCH" are not included in the system information block:
  - 2> read the corresponding IE(s) in system information block type 11 and use that information for the intrafrequency measurement.
- 1> if included in this system information block or in System Information Block type 11:
  - 2> store the IE "Intra-frequency reporting quantity" and the IE "Intra-frequency measurement reporting criteria" or "Periodical reporting criteria" in order to activate reporting when state CELL\_DCH is entered.
- 1> if the IE "Traffic volume measurement information" is not included in this system information block:

2> read the corresponding IE in System Information Block type 11.

- 1> if the IE "Traffic volume measurement information" was received either in this system information block or in System Information Block type 11:
  - 2> if no traffic volume measurement with the measurement identity indicated in the IE "Traffic volume measurement" was set up or modified through a MEASUREMENT CONTROL message:
    - 3> update the variable MEASUREMENT\_IDENTITY with the measurement information received in that IE.

1> if in CELL\_FACH state:

- 2> start or continue the traffic volume measurements stored in the variable MEASUREMENT\_IDENTITY that are valid in CELL\_FACH state.
- 1> if IE "Use of HCS" is set to "used", indicating that HCS is used, do the following:

2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Intra-frequency cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Intra-frequency cell info list":

3> for that cell use the same parameter values as used for the preceding IE "Intra-frequency cell info list".

2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Inter-frequency cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

- 2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Inter-frequency cell info list":
  - 3> for that cell use the same parameter values as used for the preceding IE "Inter-frequency cell info list".
- 2> if IE "HCS neighbouring cell information" is not included in the first occurrence of IE "Inter-RAT cell info list":

3> use the default values specified for the IE "HCS neighbouring cell information" for that cell.

2> if IE "HCS neighbouring cell information" is not included in other occurrence of IE "Inter-RAT cell info list":

3> for that cell use the same parameter values as used for the preceding IE "Inter-RAT cell info list".

- 1> if the value of the IE "Cell selection and reselection quality measure" is different from the value of the IE "Cell selection and reselection quality measure" obtained from System Information Block type 3 or System Information Block type 4:
  - 2> use the value of the IE from this System Information Block and ignore the value obtained from System Information Block type 3 or System Information Block type 4.

If in idle mode, the UE shall not use the values of the IEs in this system information block.