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	A	4.4.0	4.5.0
R2-021249	agreed	25.331	1373		Rel-5	ASN.1 Corrections	A	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	A	4.4.0	4.5.0
R2-021260	agreed	25.331	1379		Rel-5	Correction on SIB type	A	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	A	4.4.0	4.5.0
R2-021365	agreed	25.331	1385	1	Rel-5	Correction to Cell Update procedure	A	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

CR-Form-v5

CHANGE REQUEST

| ⌘ | **25.331** CR **1371** | ⌘**rev** | **-** | ⌘ | Current version: | **3.10.0** ⌘ |

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

Proposed change affects: ⌘ (U)SIM ☐ ME/UE **X** Radio Access Network **X** Core Network ☐

Title:	⌘	ASN.1 Corrections
Source:	⌘	TSG-RAN WG2

Work item code: ⌘	TEI		***Date:*** ⌘	07.05.2002	

Category:	⌘ **F**	***Release:*** ⌘	R99

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

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
REL-4 (Release 4)
REL-5 (Release 5)

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.

<u>Comment placement corrected</u>

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.

<u>Multiplier corrected</u>

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:	⌘	Possibility to interpret the ASN.1 definitions inconsistently.

Clauses affected:	⌘	11.3		
Other specs affected:	⌘	☐ Other core specifications	⌘	25.331 v4.4.0, CR 1372 25.331 v5.0.0, CR 1373
		☐ Test specifications		
		☐ O&M Specifications		
Other comments:	⌘			

How to create CRs using this form:

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

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

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

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

11.3   Information element definitions

```
UE-ConnTimersAndConstants ::=        SEQUENCE {
-- 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
    t-301                            T-301                          DEFAULT ms2000,
    n-301                            N-301                          DEFAULT 2,
    t-302                            T-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-310                            T-310                          DEFAULT ms160,
    n-310                            N-310                          DEFAULT 4,
    t-311                            T-311                          DEFAULT ms2000,
    t-312                            T-312                          DEFAULT 1,
    -- 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                            T-313                          DEFAULT 3,
    n-313                            N-313                          DEFAULT s20,
    t-314                            T-314                          DEFAULT s12,
    t-315                            T-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                            T-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                            T-312,
    -- n-312 shall be ignored if n-312 in UE-IdleTimersAndConstants-v3a0ext is present, and the
    -- value of that element shall be used instead.
    n-312                            N-312
}

UE-IdleTimersAndConstants-v3a0ext ::=        SEQUENCE {
    n-312                            N-312ext                       OPTIONAL
}

BitModeRLC-SizeInfo ::=              CHOICE {
    sizeType1                        INTEGER (0..127),
    -- Actual value sizeType2 = (part1 * 8) + 128 + part2
    sizeType2                        SEQUENCE {
        -- Actual value sizeType2 = (part1 * 8) + 128 + part2
        part1                        INTEGER (0..15),
        part2                        INTEGER (1..7)                 OPTIONAL
    },
    -- Actual value sizeType3 = (part1 * 16) + 256 + part2
    sizeType3                        SEQUENCE {
        -- Actual value sizeType3 = (part1 * 16) + 256 + part2
        part1                        INTEGER (0..47),
        part2                        INTEGER (1..15)                OPTIONAL
    },
    -- Actual value sizeType4 = (part1 * 64) + 1024 + part2
    sizeType4                        SEQUENCE {
        -- Actual value sizeType4 = (part1 * 64) + 1024 + part2
        part1                        INTEGER (0..62),
```

```
          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
    utran-GPSTimingOfCell           SEQUENCE {
        ms-part                         INTEGER (0..1023),
        ls-part                         INTEGER (0..4294967295)
    },
    modeSpecificInfo                CHOICE {
        fdd                             SEQUENCE {
            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 * 42949672956) + ls-part
    ue-GPSTimingOfCell          SEQUENCE {
        ms-part                         INTEGER (0..16383),
        ls-part                         INTEGER (0..4294967295)
    },
    modeSpecificInfo                CHOICE {
        fdd                             SEQUENCE {
            referenceIdentity               PrimaryCPICH-Info
        },
        tdd                             SEQUENCE {
            referenceIdentity               CellParametersID
        }
    },
    sfn                         INTEGER (0..4095)
}
```

CR-Form-v5

CHANGE REQUEST

⌘   **25.331** CR **1372**   ⌘ **rev**   **-**   ⌘   Current version: **4.4.0**   ⌘

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

Proposed change affects: ⌘   (U)SIM ☐   ME/UE **X**   Radio Access Network **X**   Core Network ☐

Title:	⌘	ASN.1 Corrections
Source:	⌘	TSG-RAN WG2
Work item code: ⌘	TEI	***Date:*** ⌘ 07.05.2002

Category: ⌘ **A**   ***Release:*** ⌘ REL-4

Use <u>one</u> of the following categories:	*Use <u>one</u> of the following releases:*
F *(correction)*	*2 (GSM Phase 2)*
A *(corresponds to a correction in an earlier release)*	*R96 (Release 1996)*
B *(addition of feature),*	*R97 (Release 1997)*
C *(functional modification of feature)*	*R98 (Release 1998)*
D *(editorial modification)*	*R99 (Release 1999)*
Detailed explanations of the above categories can	*REL-4 (Release 4)*
be found in 3GPP <u>TR 21.900</u>.	*REL-5 (Release 5)*

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.
		<u>Comment placement corrected</u>
		UTRAN-GPSReferenceTime->utran-GPSTimingOfCell
		UTRAN-GPSReferenceTimeResult ->ue-GPSTimingOfCell
		Added the required "Actual value…" comment.
		<u>Multiplier corrected</u>

Consequences if	⌘	Possibility to interpret the ASN.1 definitions inconsistently.
not approved:		

Clauses affected:	⌘	11.3

Other specs	⌘ ☐	Other core specifications	⌘ 25.331 v3.10.0, CR 1371
			25.331 v5.0.0, CR 1373
affected:	☐	Test specifications	
	☐	O&M Specifications	

Other comments:	⌘	

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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

```
BitModeRLC-SizeInfo ::=               CHOICE {
    sizeType1                         INTEGER (0..127),
    -- Actual value sizeType2 = (part1 * 8) + 128 + part2
    sizeType2                         SEQUENCE {
        Actual value sizeType2 = (part1 * 8) + 128 + part2
        part1                         INTEGER (0..15),
        part2                         INTEGER (1..7)                 OPTIONAL
    },
    -- Actual value sizeType3 = (part1 * 16) + 256 + part2
    sizeType3                         SEQUENCE {
        Actual value sizeType3 = (part1 * 16) + 256 + part2
        part1                         INTEGER (0..47),
        part2                         INTEGER (1..15)                OPTIONAL
    },
    -- Actual value sizeType4 = (part1 * 64) + 1024 + part2
    sizeType4                         SEQUENCE {
        Actual value sizeType4 = (part1 * 64) + 1024 + part2
        part1                         INTEGER (0..62),
        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 * 4294967296) + ls-part
    utran-GPSTimingOfCell         SEQUENCE {
        ms-part                       INTEGER (0..1023),
        ls-part                       INTEGER (0..4294967295)
    },
    modeSpecificInfo              CHOICE {
        fdd                           SEQUENCE {
            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 * 4294967296) + ls-part
    ue-GPSTimingOfCell         SEQUENCE {
        ms-part                       INTEGER (0.. 16383),
        ls-part                       INTEGER (0..4294967295)
    },
    modeSpecificInfo              CHOICE {
        fdd                           SEQUENCE {
            referenceIdentity         PrimaryCPICH-Info
        },
        tdd                           SEQUENCE {
            referenceIdentity         CellParametersID
        }
    },
    sfn                               INTEGER (0..4095)
}
```

CR-Form-v5

CHANGE REQUEST

⌘   **25.331 CR 1373**   ⌘ **rev**   **-**   ⌘ Current version: **5.0.0** ⌘

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

Proposed change affects: ⌘   (U)SIM ☐   ME/UE **X**   Radio Access Network **X**   Core Network ☐

Title:	⌘	ASN.1 Corrections
Source:	⌘	TSG-RAN WG2

Work item code: ⌘	TEI		***Date:*** ⌘	07.05.2002

Category: ⌘ **A**   ***Release:*** ⌘ REL-5

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

Use one of the following releases:
   2   (GSM Phase 2)
   R96 (Release 1996)
   R97 (Release 1997)
   R98 (Release 1998)
   R99 (Release 1999)
   REL-4 (Release 4)
   REL-5 (Release 5)

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

UTRAN-GPSReferenceTimeResult ->ue-GPSTimingOfCell

Added the required "Actual value…" comment.

Multiplier corrected

Consequences if not approved:	⌘	Possibility to interpret the ASN.1 definitions inconsistently.

Clauses affected:	⌘	11.3

Other specs affected:	⌘	☐ Other core specifications	⌘ 25.331 v3.10.0, CR 1371 25.331 v4.4.0, CR 1372
		☐ Test specifications	
		☐ O&M Specifications	

Other comments:	⌘	

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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

```
BitModeRLC-SizeInfo ::=              CHOICE {
    sizeType1                           INTEGER (0..127),
    -- Actual value sizeType2 = (part1 * 8) + 128 + part2
    sizeType2                           SEQUENCE {
        Actual value sizeType2 = (part1 * 8) + 128 + part2
        part1                           INTEGER (0..15),
        part2                           INTEGER (1..7)                OPTIONAL
    },
    -- Actual value sizeType3 = (part1 * 16) + 256 + part2
    sizeType3                           SEQUENCE {
        Actual value sizeType3 = (part1 * 16) + 256 + part2
        part1                           INTEGER (0..47),
        part2                           INTEGER (1..15)               OPTIONAL
    },
    -- Actual value sizeType4 = (part1 * 64) + 1024 + part2
    sizeType4                           SEQUENCE {
        Actual value sizeType4 = (part1 * 64) + 1024 + part2
        part1                           INTEGER (0..62),
        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 * 4294967256) + ls-part
    utran-GPSTimingOfCell       SEQUENCE {
        ms-part                         INTEGER (0..1023),
        ls-part                         INTEGER (0..4294967295)
    },
    modeSpecificInfo            CHOICE {
        fdd                             SEQUENCE {
            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 * 4294967256) + ls-part
    ue-GPSTimingOfCell          SEQUENCE {
        ms-part                         INTEGER (0.. 16383),
        ls-part                         INTEGER (0..4294967295)
    },
    modeSpecificInfo            CHOICE {
        fdd                             SEQUENCE {
            referenceIdentity               PrimaryCPICH-Info
        },
        tdd                             SEQUENCE {
            referenceIdentity               CellParametersID
        }
    },
    sfn                             INTEGER (0..4095)
}
```

CR-Form-v5

CHANGE REQUEST

| ⌘ | **25.331** CR **1374** | ⌘**rev** | **-** | ⌘ | Current version: | **3.10.0** | ⌘ |

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

Proposed change affects: ⌘   (U)SIM ☐   ME/UE **X**   Radio Access Network **X**   Core Network ☐

Title:	⌘	Clarification of unnecessary MP IEs in RADIO BEARER RECONFIGURATION
Source:	⌘	TSG-RAN WG2
Work item code:⌘	TEI	***Date:*** ⌘ 07.05.2002
Category:	⌘ **F**	***Release:*** ⌘ R99

Use one of the following categories:	*Use one of the following releases:*
F (correction)	*2 (GSM Phase 2)*
A (corresponds to a correction in an earlier release)	*R96 (Release 1996)*
B (addition of feature),	*R97 (Release 1997)*
C (functional modification of feature)	*R98 (Release 1998)*
D (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)*

Reason for change:	⌘	Currently there is a "Note" included that mentions what the UTRAN may do to overcome the Mandatory inclusion of "Downlink information per radio link list" in RADIO BEARER RECONFIGURATION even when no reconfiguration is desired. This information is only "Informative", but it is essential information for the UE and the exact conditions under which the IE 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 covering two distinct cases.
		Section 8.2.2.3
		Note relating to IE "RB information to reconfigure" modified.
		<u>Note restored to it's original text.</u>
		New check added in CELL_DCH->CELL_DCH section to clarify the exact conditions that indicate that the IE "Downlink information per radio link list" can be ignored. Also Note added to explain why this check is present.
		<u>The new check and Note have been removed. A new Note has been added to clarify which IE contents would lead to the UE behaviour being undefined, and clarifies the problem relating to the R99 message.</u>
		Impact Analysis:
		This is an isolated impact correction to the handling of the IE "Downlink information per radio link list" when received in RADIO BEARER RECONFIGURATION.
		It is a correction to a function where the specification was ambiguous or not sufficiently explicit. It would not affect implementations behaving like indicated in the CR, but would affect implementations supporting the corrected functionality

	⌘	otherwise.
Consequences if not approved:	⌘	Information essential for interoperability incpomplete and only contained in Informative Note.

Clauses affected:	⌘	8.2.2.2, 8.2.2.3

Other specs affected:	⌘	☐ Other core specifications	⌘	25.331 v4.4.0, CR 1375 25.331 v5.0.0, CR 1376
		☐ Test specifications		
		☐ O&M Specifications		

Other comments:	⌘	

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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 ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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

8.2.2   Reconfiguration procedures
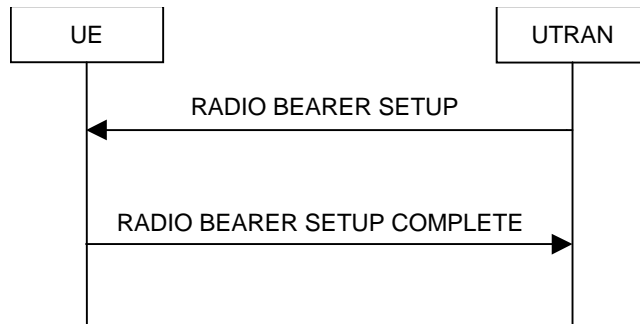
Figure 8.2.2-1: Radio Bearer Establishment, normal case
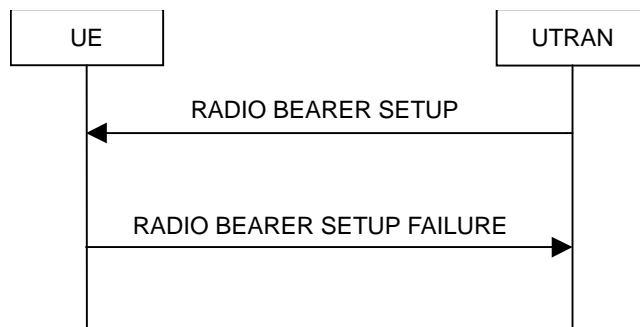
Figure 8.2.2-2: Radio Bearer Establishment, failure case
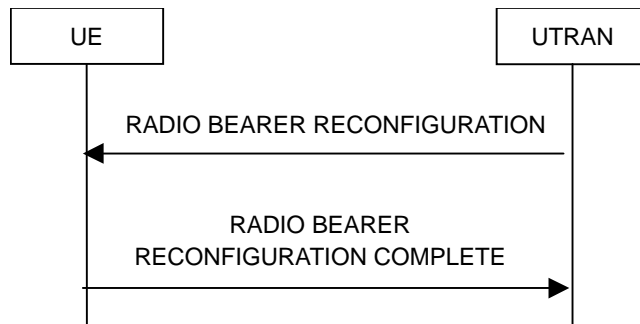
Figure 8.2.2-3: Radio bearer reconfiguration, normal flow
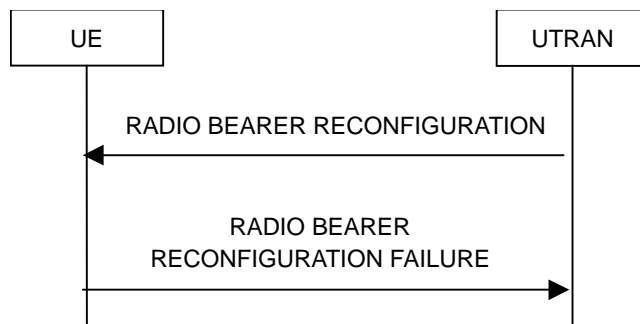
Figure 8.2.2-4: Radio bearer reconfiguration, failure case
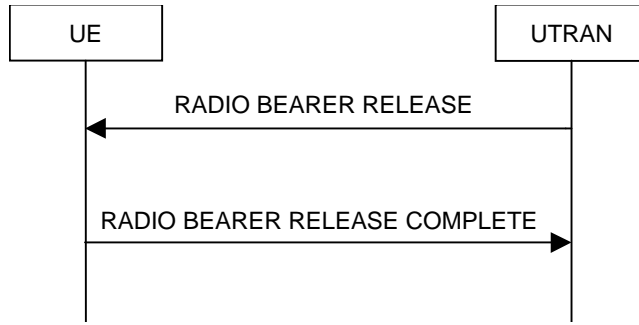
Figure 8.2.2-5: Radio Bearer Release, normal case
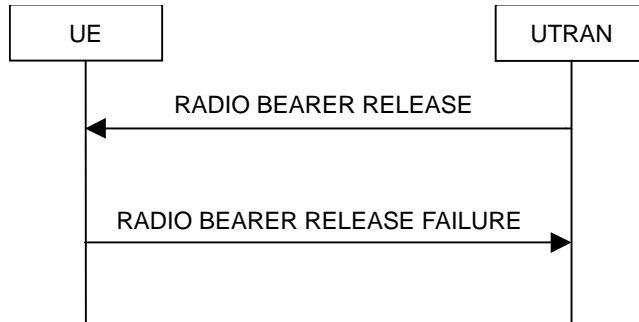
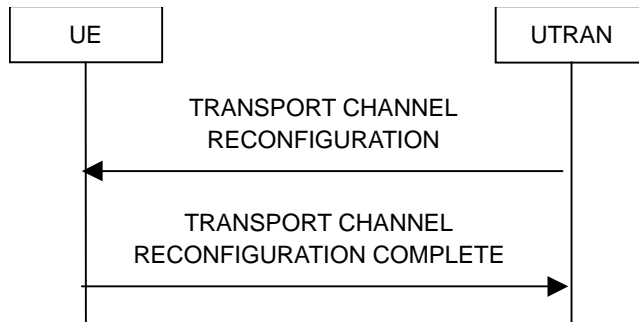**Figure 8.2.2-6: Radio Bearer Release, failure case**
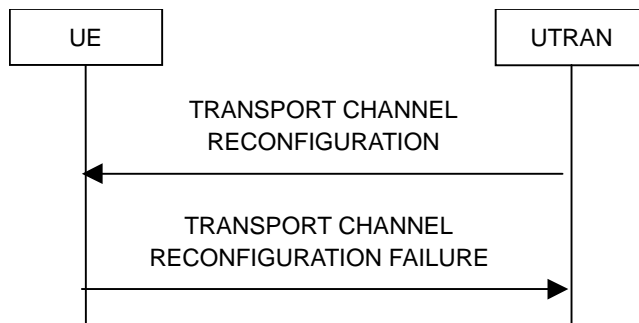

Figure 8.2.2-7: Transport channel reconfiguration, normal flow

Figure 8.2.2-8: Transport channel reconfiguration, failure case
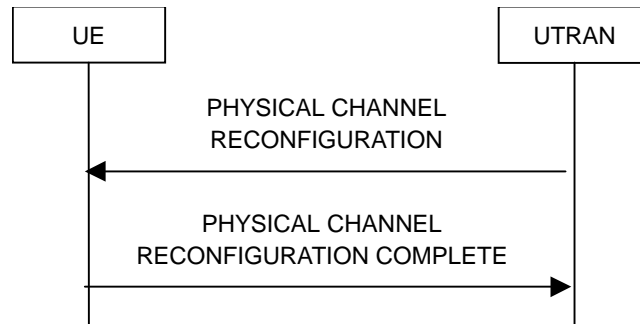
Figure 8.2.2-9: Physical channel reconfiguration, normal flow
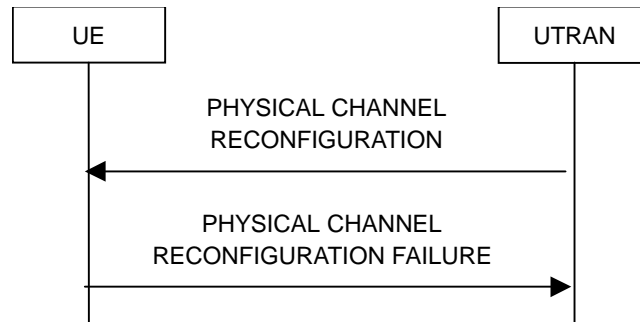
Figure 8.2.2-10: Physical channel reconfiguration, failure case

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 ".

NOTE 3: ~~Moreover, t~~The 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 list". 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 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.

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.

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.

CR-Form-v5

CHANGE REQUEST

| ⌘ | **25.331** CR **1375** | ⌘ **rev** | **-** | ⌘ | Current version: | **4.4.0** | ⌘ |

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

Proposed change affects: ⌘ (U)SIM ☐ ME/UE **X** Radio Access Network **X** Core Network ☐

Title:	⌘	Clarification of unnecessary MP IEs in RADIO BEARER RECONFIGURATION
Source:	⌘	TSG-RAN WG2
Work item code:	⌘ TEI	***Date:*** ⌘ 07.05.2002
Category:	⌘ **A**	***Release:*** ⌘ REL-4

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

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 mentions what the UTRAN may do to overcome the Mandatory inclusion of "Downlink information per radio link list" in RADIO BEARER RECONFIGURATION even when no reconfiguration is desired. This information is only "Informative", but it is essential information for the UE and the exact conditions under which the IE 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 covering two distinct cases. Section 8.2.2.3 Note relating to IE "RB information to reconfigure" modified. New check added in CELL_DCH->CELL_DCH section to clarify the exact conditions that indicate that the IE "Downlink information per radio link list" can be ignored. Also Note added to explain why this check is present. <u>The new check and Note have been removed. A new Note has been added to clarify which IE contents would lead to the UE behaviour being undefined, and clarifies the problem relating to the R99 message.</u>
Consequences if not approved:	⌘	Information essential for interoperability incpomplete and only contained in Informative Note.
Clauses affected:	⌘	8.2.2.2, 8.2.2.3
Other specs	⌘ ☐	Other core specifications ⌘ 25.331 v3.10.0, CR 1374

| affected: | ☐ | Test specifications | 25.331 v5.0.0, CR 1376 |
| | ☐ | O&M Specifications | |

| *Other comments:* | ⌘ | |

How to create CRs using this form:

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

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

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

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

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 R99 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 R99 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 ".

NOTE 3   Moreover, tThe R99 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 list". 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 R99 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.

CR-Form-v5

CHANGE REQUEST

| ⌘ | **25.331** CR **1376** | ⌘ **rev** | **-** | ⌘ | Current version: | **5.0.0** | ⌘ |

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

Proposed change affects: ⌘   (U)SIM ☐   ME/UE **X**   Radio Access Network **X**   Core Network ☐

Title:	⌘	Clarification of unnecessary MP IEs in RADIO BEARER RECONFIGURATION
Source:	⌘	TSG-RAN WG2
Work item code: ⌘		TEI ***Date:*** ⌘ 07.05.2002
Category:	⌘ **A**	***Release:*** ⌘ REL-5

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

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 mentions what the UTRAN may do to overcome the Mandatory inclusion of "Downlink information per radio link list" in RADIO BEARER RECONFIGURATION even when no reconfiguration is desired. This information is only "Informative", but it is essential information for the UE and the exact conditions under which the IE 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 covering two distinct cases.
		Section 8.2.2.3
		Note relating to IE "RB information to reconfigure" modified.
		New check added in CELL_DCH->CELL_DCH section to clarify the exact conditions that indicate that the IE "Downlink information per radio link list" can be ignored. Also Note added to explain why this check is present.
		<u>The new check and Note have been removed. A new Note has been added to clarify which IE contents would lead to the UE behaviour being undefined, and clarifies the problem relating to the R99 message.</u>
Consequences if not approved:	⌘	Information essential for interoperability incpomplete and only contained in Informative Note.
Clauses affected:	⌘	8.2.2.2, 8.2.2.3
Other specs	⌘ ☐	Other core specifications ⌘ 25.331 v3.10.0, CR 1374
		25.331 v4.4.0, CR 1375
affected:	☐	Test specifications
	☐	O&M Specifications

Other comments:	⌘	

How to create CRs using this form:

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

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

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

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

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 ".

NOTE 3:   <s>Moreover, t</s><u>T</u>he <u>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 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 R99 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.

CR-Form-v5.1

CHANGE REQUEST

| ⌘ | **25.331** CR **1377** | ⌘ **rev** | **-** | ⌘ | Current version: | **3.10.0** | ⌘ |

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

Proposed change affects: ⌘ (U)SIM ☐ ME/UE **X** Radio Access Network **X** Core Network ☐

Title:	⌘	Correction on SIB type
Source:	⌘	TSG-RAN WG2
Work item code: ⌘	TEI	***Date:*** ⌘ 2002-05-16

Category: ⌘ **F**   ***Release:*** ⌘ R99

Use <u>one</u> of the following categories:	Use <u>one</u> of the following releases:
F *(correction)*	*2 (GSM Phase 2)*
A *(corresponds to a correction in an earlier release)*	*R96 (Release 1996)*
B *(addition of feature),*	*R97 (Release 1997)*
C *(functional modification of feature)*	*R98 (Release 1998)*
D *(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)*

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. 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.
Summary of change: ⌘		1. In subclause 8.1.1.1.4, the missing "SIB types 15.2 and 15.3" is added. 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 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 v4.4.0, CR 1378
affected:	☐	25.331 v5.0.0, CR 1379
		Test specifications

	O&M Specifications	

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 ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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

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. For 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:

> 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 "IE "BCCH 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".

10.2.48.8.1   Master Information Block

Information Element/Group name	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	

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>		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 and SB type	MP		SIB and SB Type, 10.3.8.21X	

[…]

10.3.8.16 Scheduling information

Information Element/Group name	Need	Multi	Type and reference	Semantics description
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 name	Need	Multi	Type and reference	Semantics description
			step of 2)	SIB_REP IE
>SIB_POS offset info	MD	1..15		see below for default value
>>SIB_OFF	MP		Integer(2..32 by step of 2)	Offset of subsequent 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 name	Need	Multi	Type and reference	Semantics description
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 name	Need	Multi	Type and reference	Semantics description
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,
        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,
        sib-Pos                             CHOICE {
            -- The element name indicates the repetition period and the value
            -- (multiplied by two) indicates the position of the first segment.
            rep4                                INTEGER (0..1),
            rep8                                INTEGER (0..3),
            rep16                               INTEGER (0..7),
            rep32                               INTEGER (0..15),
            rep64                               INTEGER (0..31),
            rep128                              INTEGER (0..63),
            rep256                              INTEGER (0..127),
            rep512                              INTEGER (0..255),
            rep1024                             INTEGER (0..511),
            rep2048                             INTEGER (0..1023),
            rep4096                             INTEGER (0..2047)
        },
        sib-PosOffsetInfo               SibOFF-List                     OPTIONAL
    }
}

SchedulingInformationSIB ::=        SEQUENCE {
    sib-Type                            SIB-TypeAndTag,
    scheduling                          SchedulingInformation
}

SchedulingInformationSIBSb ::=      SEQUENCE {
    sibSb-Type                          SIBSb-TypeAndTag,
    scheduling                          SchedulingInformation
}

SegCount ::=                        INTEGER (1..16)

SegmentIndex ::=                    INTEGER (1..15)

-- 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 ::=    SEQUENCE {
    sibOccurIdentity                    SIBOccurIdentity,
    sibOccurValueTag                    SIBOccurValueTag
}

SIBOccurValueTag ::=                INTEGER (0..15)

SIB-ReferenceList ::=               SEQUENCE (SIZE (1..maxSIB)) OF
```

3GPP

```
                                        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 {
    sysInfoType1                            PLMN-ValueTag,
    sysInfoType2                            CellValueTag,
    sysInfoType3                            CellValueTag,
    sysInfoType4                            CellValueTag,
    sysInfoType5                            CellValueTag,
    sysInfoType6                            CellValueTag,
    sysInfoType7                            NULL,
    sysInfoType8                            CellValueTag,
    sysInfoType9                            NULL,
    sysInfoType10                           NULL,
    sysInfoType11                           CellValueTag,
    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                                  NULL
}

SIBSb-TypeAndTag ::=                    CHOICE {
    sysInfoType1                            PLMN-ValueTag,
```

```
    sysInfoType2                        CellValueTag,
    sysInfoType3                        CellValueTag,
    sysInfoType4                        CellValueTag,
    sysInfoType5                        CellValueTag,
    sysInfoType6                        CellValueTag,
    sysInfoType7                        NULL,
    sysInfoType8                        CellValueTag,
    sysInfoType9                        NULL,
    sysInfoType10                       NULL,
    sysInfoType11                       CellValueTag,
    sysInfoType12                       CellValueTag,
    sysInfoType13                       CellValueTag,
    sysInfoType13-1                     CellValueTag,
    sysInfoType13-2                     CellValueTag,
    sysInfoType13-3                     CellValueTag,
    sysInfoType13-4                     CellValueTag,
    sysInfoType14                       NULL,
    sysInfoType15                       CellValueTag,
    sysInfoType16                       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,
    spare1                              NULL
}
```

CR-Form-v5.1

CHANGE REQUEST

| ⌘ | **25.331** CR **1378** | ⌘ **rev** | **-** | ⌘ | Current version: | **4.4.0** | ⌘ |

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

Proposed change affects: ⌘ (U)SIM ☐ ME/UE **X** Radio Access Network **X** Core Network ☐

Title: ⌘	Correction on SIB type	
Source: ⌘	TSG-RAN WG2	
Work item code: ⌘	TEI	*Date:* ⌘ 2002-05-16
Category: ⌘ **A**		*Release:* ⌘ REL-4

Use <u>one</u> of the following categories:	Use <u>one</u> of the following releases:
F *(correction)*	*2*　*(GSM Phase 2)*
A *(corresponds to a correction in an earlier release)*	*R96*　*(Release 1996)*
B *(addition of feature),*	*R97*　*(Release 1997)*
C *(functional modification of feature)*	*R98*　*(Release 1998)*
D *(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)*

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. 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.
Summary of change: ⌘	1. In subclause 8.1.1.1.4, the missing "SIB types 15.2 and 15.3" is added. 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.
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 1377 25.331 v5.0.0, CR 1379
affected:	☐ Test specifications ☐ O&M Specifications		
Other comments: ⌘	No test cases will be affected by implementation of this CR.		

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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.

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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. For 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:

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 "IE "BCCH 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".

10.2.48.8.1 Master Information Block

Information Element/Group name	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	

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\>		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 and SB type	MP		SIB and SB Type, 10.3.8.21X	

[…]

10.3.8.16 Scheduling information

Information Element/Group name	Need	Multi	Type and reference	Semantics description
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 name	Need	Multi	Type and reference	Semantics description
			step of 2)	SIB_REP IE
>SIB_POS offset info	MD	1..15		see below for default value
>>SIB_OFF	MP		Integer(2..32 by step of 2)	Offset of subsequent 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 name	Need	Multi	Type and reference	Semantics description
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 name	Need	Multi	Type and reference	Semantics description
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,
       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,
        sib-Pos                             CHOICE {
            -- The element name indicates the repetition period and the value
            -- (multiplied by two) indicates the position of the first segment.
            rep4                                INTEGER (0..1),
            rep8                                INTEGER (0..3),
            rep16                               INTEGER (0..7),
            rep32                               INTEGER (0..15),
            rep64                               INTEGER (0..31),
            rep128                              INTEGER (0..63),
            rep256                              INTEGER (0..127),
            rep512                              INTEGER (0..255),
            rep1024                             INTEGER (0..511),
            rep2048                             INTEGER (0..1023),
            rep4096                             INTEGER (0..2047)
        },
        sib-PosOffsetInfo                   SibOFF-List                   OPTIONAL
    }
}

SchedulingInformationSIB ::=        SEQUENCE {
    sib-Type                            SIB-TypeAndTag,
    scheduling                          SchedulingInformation
}

SchedulingInformationSIBSb ::=      SEQUENCE {
    sibSb-Type                          SIBSb-TypeAndTag,
    scheduling                          SchedulingInformation
}

SegCount ::=                    INTEGER (1..16)

SegmentIndex ::=                INTEGER (1..15)

-- 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 ::=    SEQUENCE {
    sibOccurIdentity                SIBOccurIdentity,
    sibOccurValueTag                SIBOccurValueTag
}

SIBOccurValueTag ::=            INTEGER (0..15)

SIB-ReferenceList ::=               SEQUENCE (SIZE (1..maxSIB)) OF
```

3GPP

```
                                     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 {
    sysInfoType1                         PLMN-ValueTag,
    sysInfoType2                         CellValueTag,
    sysInfoType3                         CellValueTag,
    sysInfoType4                         CellValueTag,
    sysInfoType5                         CellValueTag,
    sysInfoType6                         CellValueTag,
    sysInfoType7                         NULL,
    sysInfoType8                         CellValueTag,
    sysInfoType9                         NULL,
    sysInfoType10                        NULL,
    sysInfoType11                        CellValueTag,
    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                               NULL
}

SIBSb-TypeAndTag ::=                 CHOICE {
    sysInfoType1                         PLMN-ValueTag,
```

```
    sysInfoType2                      CellValueTag,
    sysInfoType3                      CellValueTag,
    sysInfoType4                      CellValueTag,
    sysInfoType5                      CellValueTag,
    sysInfoType6                      CellValueTag,
    sysInfoType7                      NULL,
    sysInfoType8                      CellValueTag,
    sysInfoType9                      NULL,
    sysInfoType10                     NULL,
    sysInfoType11                     CellValueTag,
    sysInfoType12                     CellValueTag,
    sysInfoType13                     CellValueTag,
    sysInfoType13-1                   CellValueTag,
    sysInfoType13-2                   CellValueTag,
    sysInfoType13-3                   CellValueTag,
    sysInfoType13-4                   CellValueTag,
    sysInfoType14                     NULL,
    sysInfoType15                     CellValueTag,
    sysInfoType16                     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,
    spare1                            NULL
}
```

CR-Form-v5.1

CHANGE REQUEST

⌘   **25.331** CR **1379**   ⌘rev **-** ⌘   Current version: **5.0.0** ⌘

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

Proposed change affects: ⌘   (U)SIM ☐   ME/UE **X**   Radio Access Network **X**   Core Network ☐

Title: ⌘	Correction on SIB type	
Source: ⌘	TSG-RAN WG2	
Work item code:⌘	TEI	***Date:*** ⌘ 2002-05-16

Category: ⌘   **A**   ***Release:*** ⌘   REL-5

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

Use one of the following releases:
    2   (GSM Phase 2)
    R96   (Release 1996)
    R97   (Release 1997)
    R98   (Release 1998)
    R99   (Release 1999)
    REL-4   (Release 4)
    REL-5   (Release 5)

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. 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.
Summary of change: ⌘	1. In subclause 8.1.1.1.4, the missing "SIB types 15.2 and 15.3" is added. 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.
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 1377
affected: ☐ Test specifications ☐ O&M Specifications	25.331 v4.4.0, CR 1378
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 http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

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

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

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

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. For 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:

> 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 "IE "BCCH 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".

10.2.48.8.1 Master Information Block

Information Element/Group name	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	

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\>		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 and SB type	MP		SIB and SB Type, 10.3.8.21X	

[…]

10.3.8.16 Scheduling information

Information Element/Group name	Need	Multi	Type and reference	Semantics description
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 name	Need	Multi	Type and reference	Semantics description
			step of 2)	SIB_REP IE
>SIB_POS offset info	MD	1..15		see below for default value
>>SIB_OFF	MP		Integer(2..32 by step of 2)	Offset of subsequent 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 name	Need	Multi	Type and reference	Semantics description
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 name	Need	Multi	Type and reference	Semantics description
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,
        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,
        sib-Pos                             CHOICE {
            -- The element name indicates the repetition period and the value
            -- (multiplied by two) indicates the position of the first segment.
            rep4                                INTEGER (0..1),
            rep8                                INTEGER (0..3),
            rep16                               INTEGER (0..7),
            rep32                               INTEGER (0..15),
            rep64                               INTEGER (0..31),
            rep128                              INTEGER (0..63),
            rep256                              INTEGER (0..127),
            rep512                              INTEGER (0..255),
            rep1024                             INTEGER (0..511),
            rep2048                             INTEGER (0..1023),
            rep4096                             INTEGER (0..2047)
        },
        sib-PosOffsetInfo               SibOFF-List                 OPTIONAL
    }
}

SchedulingInformationSIB ::=        SEQUENCE {
    sib-Type                        SIB-TypeAndTag,
    scheduling                      SchedulingInformation
}

SchedulingInformationSIBSb ::=      SEQUENCE {
    sibSb-Type                      SIBSb-TypeAndTag,
    scheduling                      SchedulingInformation
}

SegCount ::=               INTEGER (1..16)

SegmentIndex ::=           INTEGER (1..15)

-- 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 ::=    SEQUENCE {
    sibOccurIdentity        SIBOccurIdentity,
    sibOccurValueTag        SIBOccurValueTag
}

SIBOccurValueTag ::=       INTEGER (0..15)

SIB-ReferenceList ::=               SEQUENCE (SIZE (1..maxSIB)) OF
```

3GPP

```
                                    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 {
    sysInfoType1                        PLMN-ValueTag,
    sysInfoType2                        CellValueTag,
    sysInfoType3                        CellValueTag,
    sysInfoType4                        CellValueTag,
    sysInfoType5                        CellValueTag,
    sysInfoType6                        CellValueTag,
    sysInfoType7                        NULL,
    sysInfoType8                        CellValueTag,
    sysInfoType9                        NULL,
    sysInfoType10                       NULL,
    sysInfoType11                       CellValueTag,
    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                              NULL
}

SIBSb-TypeAndTag ::=                CHOICE {
    sysInfoType1                        PLMN-ValueTag,
```

```
    sysInfoType2                    CellValueTag,
    sysInfoType3                    CellValueTag,
    sysInfoType4                    CellValueTag,
    sysInfoType5                    CellValueTag,
    sysInfoType6                    CellValueTag,
    sysInfoType7                    NULL,
    sysInfoType8                    CellValueTag,
    sysInfoType9                    NULL,
    sysInfoType10                   NULL,
    sysInfoType11                   CellValueTag,
    sysInfoType12                   CellValueTag,
    sysInfoType13                   CellValueTag,
    sysInfoType13-1                 CellValueTag,
    sysInfoType13-2                 CellValueTag,
    sysInfoType13-3                 CellValueTag,
    sysInfoType13-4                 CellValueTag,
    sysInfoType14                   NULL,
    sysInfoType15                   CellValueTag,
    sysInfoType16                   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,
    spare1                          NULL
}
```

CR-Form-v5.1

CHANGE REQUEST

| ⌘ | **25.331** CR **1380** | ⌘**rev** | **-** | ⌘ | Current version: | **3.10.0** | ⌘ |

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

Proposed change affects: ⌘ (U)SIM ☐ ME/UE **X** Radio Access Network **X** Core Network ☐

Title:	⌘	Clarification to the handling of IE "Cells for measurement" received in SIB 11/12
Source:	⌘	TSG-RAN WG2
Work item code:⌘	TEI	***Date:*** ⌘ 2002-05-03
Category:	⌘ **F**	***Release:*** ⌘ R99

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

Use one of the following releases:
2 *(GSM Phase 2)*
R96 *(Release 1996)*
R97 *(Release 1997)*
R98 *(Release 1998)*
R99 *(Release 1999)*
REL-4 *(Release 4)*
REL-5 *(Release 5)*

Reason for change:	⌘	1. According to 25.331 v3.10.0 sections 10.3.7.13 and 10.3.7.33, the IE "Cell for measurement" is not needed (also not present in ASN.1) for IE "Inter-frequency cell info list" and "Intra-frequency cell info list" when sent in SIB11/12. Therefore, it is impossible to receive the IE "Cells for measurement" when the IE "Inter-frequency cell info list" and "Intra-frequency cell info list" are sent in SIB11/12.

Summary of change:	⌘	1. All the impossible bullets regarding "if the IE "Cells for measurement" is received" are removed. **Impact Analysis:** No actual functionalities are affected by this CR. There are no backwards compatibility problems since this CR contains clarifying corrections only.

Consequences if not approved:	⌘	Unnecessary handling of IE "Cells for measurement"

Clauses affected:	⌘	8.6.7.3

Other specs affected:	⌘ ☐	Other core specifications	⌘ 25.331 v4.4.0, CR 1381 25.331 v5.0.0, CR 1382
	☐	Test specifications	
	☐	O&M Specifications	

Other comments:	⌘	

How to create CRs using this form:
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Below is a brief summary:

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

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

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

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".

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

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 "Intra-frequency 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".

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

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 "Inter-frequency 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.

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 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".

    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, 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 .. \<maxCellMeas>		
>>>Inter-frequency cell id	MP		Integer(0 .. \<maxCellMeas>-1)	
>No inter-frequency cells removed				No data
New inter-frequency cells	OP	1 to \<maxCellMeas>		
>Inter-frequency cell id	MD		Integer(0 .. \<maxCellMeas>-1)	
>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 \<maxCellMeas>		
>Inter-frequency cell id	MP		Integer(0 .. \<maxCellMeas>-1)	

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 <maxCellMeas>		
>>>Intra-frequency cell id	MP		Integer(0 .. <maxCellMeas> - 1)	
>Remove no intra-frequency cells				
New intra-frequency cells	OP	1 to <maxCellMeas>		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 .. <maxCellMeas> - 1)	
>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 <maxCellMeas>		
>Intra-frequency cell id	MP		Integer(0 .. <maxCellMeas>-1)	

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

CR-Form-v5.1

CHANGE REQUEST

| ⌘ | **25.331** CR **1381** | ⌘ rev | **-** | ⌘ | Current version: | **4.4.0** | ⌘ |

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

Proposed change affects: ⌘   (U)SIM ☐   ME/UE **X**   Radio Access Network **X**   Core Network ☐

Title:	⌘	Clarification to the handling of IE "Cells for measurement" received in SIB 11/12
Source:	⌘	TSG-RAN WG2
Work item code: ⌘	TEI	*Date:* ⌘ 2002-05-03
Category: ⌘	**A**	*Release:* ⌘ REL-4

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

Use one of the following releases:
  2   *(GSM Phase 2)*
  R96 *(Release 1996)*
  R97 *(Release 1997)*
  R98 *(Release 1998)*
  R99 *(Release 1999)*
  REL-4 *(Release 4)*
  REL-5 *(Release 5)*

Reason for change:	⌘	1. According to 25.331 v3.10.0 sections 10.3.7.13 and 10.3.7.33, the IE "Cell for measurement" is not needed (also not present in ASN.1) for IE "Inter-frequency cell info list" and "Intra-frequency cell info list" when sent in SIB11/12. Therefore, it is impossible to receive the IE "Cells for measurement" when the IE "Inter-frequency cell info list" and "Intra-frequency cell info list" are sent in SIB11/12.
Summary of change: ⌘	1. All the impossible bullets regarding "if the IE "Cells for measurement" is received" are removed.
Consequences if not approved:	⌘	Unnecessary handling of IE "Cells for measurement"

Clauses affected:	⌘	8.6.7.3

Other specs	⌘	☐	Other core specifications	⌘	25.331 v3.10.0, CR 1380
affected:		☐	Test specifications		25.331 v5.0.0, CR 1382
		☐	O&M Specifications		

Other comments:	⌘	

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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".

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

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 "Intra-frequency 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".

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

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 "Inter-frequency 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.

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 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".

    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, 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.

CR-Form-v5.1

CHANGE REQUEST

⌘	**25.331** CR **1382**	⌘ **rev**	**-**	⌘	Current version:	**5.0.0**	⌘

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

Proposed change affects: ⌘ (U)SIM ☐ ME/UE **X** Radio Access Network **X** Core Network ☐

Title: ⌘	Clarification to the handling of IE "Cells for measurement" received in SIB 11/12	
Source: ⌘	TSG-RAN WG2	
Work item code: ⌘	TEI	***Date:*** ⌘ 2002-05-03
Category: ⌘	**A**	***Release:*** ⌘ REL-5

Use one of the following categories:	*Use one of the following releases:*
F *(correction)*	*2 (GSM Phase 2)*
A *(corresponds to a correction in an earlier release)*	*R96 (Release 1996)*
B *(addition of feature),*	*R97 (Release 1997)*
C *(functional modification of feature)*	*R98 (Release 1998)*
D *(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)*

Reason for change: ⌘	1. According to 25.331 v3.10.0 sections 10.3.7.13 and 10.3.7.33, the IE "Cell for measurement" is not needed (also not present in ASN.1) for IE "Inter-frequency cell info list" and "Intra-frequency cell info list" when sent in SIB11/12. Therefore, it is impossible to receive the IE "Cells for measurement" when the IE "Inter-frequency cell info list" and "Intra-frequency cell info list" are sent in SIB11/12.
Summary of change: ⌘	1. All the impossible bullets regarding "if the IE "Cells for measurement" is received" are removed.
Consequences if not approved: ⌘	Unnecessary handling of IE "Cells for measurement"

Clauses affected: ⌘	8.6.7.3

Other specs ⌘	☐	Other core specifications	⌘	25.331 v3.10.0, CR 1380
affected:	☐	Test specifications		25.331 v4.4.0, CR 1381
	☐	O&M Specifications		

Other comments: ⌘	

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

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

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

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

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".
>
> > 1> if the IE "Cells for measurement" is received:
>
> > > 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 "Intra-frequency 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".

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

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 "Inter-frequency 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.

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 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".

    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, 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.

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CHANGE REQUEST

⌘   **25.331 CR 1383**   ⌘ **rev** **r1** ⌘   Current version: **3.10.0** ⌘

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

Proposed change affects: ⌘   (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: ⌘	TSG-RAN WG2
Work item code: ⌘	TEI ***Date:*** ⌘ 2002-05-16
Category: ⌘ **F**	***Release:*** ⌘ R99

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

Use one of the following releases:
   2   *(GSM Phase 2)*
   R96   *(Release 1996)*
   R97   *(Release 1997)*
   R98   *(Release 1998)*
   R99   *(Release 1999)*
   REL-4   *(Release 4)*
   REL-5   *(Release 5)*

Reason for change: ⌘   1. In the following ~~three~~ 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.

~~(a) When T314>0 with no associated RAB is established and T315=0 with associated RABs are established.~~

(a~~b~~) When T315>0 with no associated RAB is established and T314=0 with associated RABs are established.

(b~~c~~) When T315>0 with no associated RAB is established and T314=0 with no associated RAB are established.

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 c~~ mentioned above.

Scenarios if RL failure or RLC unrecoverable error in CELL_DCH occurs
                Actions in current text

T314=0
With no associated RABs   T315=0
 With no associated RABs   Release all its radio resources and enter idle mode
T314=0
With no associated RABs   T315=0
 With associated RABs   Release all its radio resources and enter idle mode
T314=0
With associated RABs   T315=0
 With no associated RABs   Release all its radio resources and enter idle mode
T314=0
With associated RABs   T315=0
 With associated RABs   Release all its radio resources and enter idle mode
T314=0
With no associated RABs   T315>0

With no associated RABs   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

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

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   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

2.   The table 13.1 in 25.331 regarding when to start T314 is not consistent with the procedure text.

Summary of change: ⌘	1. ~~Before performing cell selection procedures, f~~For case (a) ~~start timer T314, for case 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:
	• Corrected functionality: Initiating Cell Update procedure in CELL_DCH state
	• Correction to a function where the specification was:
	o Procedural text or rules were missing.
	• Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.
Consequences if not approved: ⌘	If the UE could not find a suitable cell when RL failure or RLC unrecoverable error in 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	⌘	☐	Other core specifications	⌘	25.331 v4.4.0, CR 1384
affected:		☐	Test specifications		25.331 v5.0.0, CR 1385
		☐	O&M Specifications		

| Other comments: | ⌘ | |

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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 ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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

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

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.
T309	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 "*PUSCH allocation*" 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 <u>or if only RRC connection exists</u>.	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-v5.1

CHANGE REQUEST

| ⌘ | **25.331** CR **1384** | ⌘ **rev** | **r1** | ⌘ | Current version: | **4.4.0** | ⌘ |

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

Proposed change affects: ⌘ (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:	⌘	TSG-RAN WG2

Work item code:	⌘	TEI		**Date:** ⌘	2002-05-16

Category:	⌘	**A**		**Release:** ⌘	REL-4

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

Use one of the following releases:
    2   (GSM Phase 2)
    R96   (Release 1996)
    R97   (Release 1997)
    R98   (Release 1998)
    R99   (Release 1999)
    REL-4 (Release 4)
    REL-5 (Release 5)

Reason for change:	⌘	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.

(a) When T315>0 with no associated RAB is established and T314=0 with associated RABs are established.
(b) When T315>0 with no associated RAB is established and T314=0 with no associated RAB are established.

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.

Scenarios if RL failure or RLC unrecoverable error in CELL_DCH occurs

                                 Actions in current text

T314=0
With no associated RABs   T315=0
 With no associated RABs   Release all its radio resources and enter idle mode
T314=0
With no associated RABs   T315=0
 With associated RABs   Release all its radio resources and enter idle mode
T314=0
With associated RABs   T315=0
 With no associated RABs   Release all its radio resources and enter idle mode
T314=0
With associated RABs   T315=0
 With associated RABs   Release all its radio resources and enter idle mode
T314=0
With no associated RABs   T315>0
 With no associated RABs

	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
	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
	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 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
	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 not approved: ⌘	If the UE could not find a suitable cell when RL failure or RLC unrecoverable error in 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 affected:	⌘	☐ Other core specifications	⌘	25.331 v3.10.0, CR 1383 25.331 v5.0.0, CR 1385
		☐ Test specifications		
		☐ O&M Specifications		
Other comments:	⌘			

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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.

8.3.1.2   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

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.
T309	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 "*PUSCH allocation*" 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-v5.1

CHANGE REQUEST

| ⌘ | **25.331 CR 1385** | ⌘**rev** | **r1** | ⌘ | Current version: | **5.0.0** | ⌘ |

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

Proposed change affects: ⌘   (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: ⌘	TSG-RAN WG2	
Work item code: ⌘	TEI	**Date:** ⌘ 2002-05-16
Category: ⌘	**A**	**Release:** ⌘ REL-5

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

Use one of the following releases:
2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
REL-4	*(Release 4)*
REL-5	*(Release 5)*

Reason for change: ⌘ 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.

(a) When T315>0 with no associated RAB is established and T314=0 with associated RABs are established.
(b) When T315>0 with no associated RAB is established and T314=0 with no associated RAB are established.

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.

Scenarios if RL failure or RLC unrecoverable error in CELL_DCH occurs

Actions in current text

T314=0
With no associated RABs   T315=0
 With no associated RABs   Release all its radio resources and enter idle mode
T314=0
With no associated RABs   T315=0
 With associated RABs   Release all its radio resources and enter idle mode
T314=0
With associated RABs   T315=0
 With no associated RABs   Release all its radio resources and enter idle mode
T314=0
With associated RABs   T315=0
 With associated RABs   Release all its radio resources and enter idle mode
T314=0
With no associated RABs   T315>0
 With no associated RABs

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

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

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   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

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 not approved: ⌘	If the UE could not find a suitable cell when RL failure or RLC unrecoverable error in 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 affected:	⌘	☐ Other core specifications	⌘	25.331 v3.10.0, CR 1383 25.331 v4.4.0, CR 1384
		☐ Test specifications		
		☐ O&M Specifications		
Other comments:	⌘			

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 ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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

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

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.
T309	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 "*PUSCH allocation*" 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

CHANGE REQUEST

⌘ **25.331** CR **1386** ⌘ **rev** **-** ⌘ Current version: **3.10.0** ⌘

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

Proposed change affects: ⌘ (U)SIM ☐ ME/UE **X** Radio Access Network ☐ Core Network ☐

Title: ⌘	Correction to handling of FACH measurement occasion info in SIB12	
Source: ⌘	TSG-RAN WG2	
Work item code: ⌘	TEI	***Date:*** ⌘ 02/05/2002
Category: ⌘	**F**	***Release:*** ⌘ R99

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

Use <u>one</u> of the following releases:
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: ⌘	The handling of the absence of the IE 'FACH measurement occasion info' is different between SIB11 and SIB12. For SIB11 the spec currently states: "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 serving cell" For SIB12 the spec currently states: "UE shall perform neither inter-frequency/inter-RAT measurements nor inter-frequency/inter-RAT cell re-selection evaluation, independent of UE measurement capabilities" The difference in handling of SIB12 compared to SIB11 seems to be an oversight in CR826r4 which changed the handling in SIB11.
Summary of change: ⌘	The handling of SIB12 is aligned with SIB11, allowing a UE with appropriate capabilities to perform measurements for inter-frequency and inter-RAT reselection even if FACH measurement occasions are not provided. **Isolated Impact Analysis** 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. Isolated impact statement: Correction to a function where specification was inconsistent. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise. If a UE does not implement this CR, it will be forbidden from perform 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. 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		
Other specs	⌘	☐	Other core specifications	⌘	25.331 v4.4.0, CR 1387 25.331 v5.0.0, CR 1388
affected:		☐	Test specifications		
		☐	O&M Specifications		
Other comments:	⌘			

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 ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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

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 intra-frequency 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.

CR-Form-v5

CHANGE REQUEST

⌘   **25.331** CR **1387**   ⌘ **rev**   **-**   ⌘   Current version: **4.4.0** ⌘

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

Proposed change affects: ⌘   (U)SIM ☐   ME/UE **X**   Radio Access Network ☐   Core Network ☐

Title:	⌘	Correction to handling of FACH measurement occasion info in SIB12
Source:	⌘	TSG-RAN WG2

Work item code:	⌘	TEI	***Date:*** ⌘	02/05/2002

Category:	⌘	**A**	***Release:*** ⌘	REL-4

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

Use one of the following releases:
    2   *(GSM Phase 2)*
    R96   *(Release 1996)*
    R97   *(Release 1997)*
    R98   *(Release 1998)*
    R99   *(Release 1999)*
    REL-4   *(Release 4)*
    REL-5   *(Release 5)*

Reason for change:	⌘	The handling of the absence of the IE 'FACH measurement occasion info' is different between SIB11 and SIB12. For SIB11 the spec currently states: "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 serving cell" For SIB12 the spec currently states: "UE shall perform neither inter-frequency/inter-RAT measurements nor inter-frequency/inter-RAT cell re-selection evaluation, independent of UE measurement capabilities" The difference in handling of SIB12 compared to SIB11 seems to be an oversight in CR826r4 which changed the handling in SIB11.
Summary of change:	⌘	The handling of SIB12 is aligned with SIB11, allowing a UE with appropriate capabilities to perform measurements for inter-frequency and inter-RAT reselection even if FACH measurement occasions are not provided. **Isolated Impact Analysis** 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. Isolated impact statement: Correction to a function where specification was inconsistent. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise. If a UE does not implement this CR, it will be forbidden from perform 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. 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			
Other specs	⌘		Other core specifications	⌘	25.331 v3.10.0, CR 1386
affected:			Test specifications		25.331 v5.0.0, CR 1388
			O&M Specifications		
Other comments:	⌘				

How to create CRs using this form:

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

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

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

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

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 intra-frequency 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.

CR-Form-v5

CHANGE REQUEST

⌘   **25.331** CR **1388** ⌘**rev** **-** ⌘ Current version: **5.0.0** ⌘

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

Proposed change affects: ⌘   (U)SIM ☐   ME/UE **X**   Radio Access Network ☐   Core Network ☐

Title: ⌘	Correction to handling of FACH measurement occasion info in SIB12
Source: ⌘	TSG-RAN WG2
Work item code: ⌘	TEI ***Date:*** ⌘ 02/05/2002

Category: ⌘ **A**   ***Release:*** ⌘ REL-5

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

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
REL-4 (Release 4)
REL-5 (Release 5)

Reason for change: ⌘	The handling of the absence of the IE 'FACH measurement occasion info' is different between SIB11 and SIB12. For SIB11 the spec currently states: "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 serving cell" For SIB12 the spec currently states: "UE shall perform neither inter-frequency/inter-RAT measurements nor inter-frequency/inter-RAT cell re-selection evaluation, independent of UE measurement capabilities" The difference in handling of SIB12 compared to SIB11 seems to be an oversight in CR826r4 which changed the handling in SIB11.
Summary of change: ⌘	The handling of SIB12 is aligned with SIB11, allowing a UE with appropriate capabilities to perform measurements for inter-frequency and inter-RAT reselection even if FACH measurement occasions are not provided. **Isolated Impact Analysis** 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. Isolated impact statement: Correction to a function where specification was inconsistent. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise. If a UE does not implement this CR, it will be forbidden from perform 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. 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

Other specs affected:	⌘	☐ Other core specifications	⌘	25.331 v3.10.0, CR 1386 25.331 v4.4.0, CR 1387
		☐ Test specifications ☐ O&M Specifications		

Other comments:	⌘	

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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.

8.1.1.6.11 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 intra-frequency 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.