TSG-RAN Meeting #14
Kyoto, Japan, 11 - 14, December, 2001

TSGRP#14(01) 0874

Title: **Agreed CRs to TS 25.433**

Source: **TSG-RAN WG3**

Agenda item: **8.3.3/8.3.4/9.4.3**

RP Tdoc	R3 Tdoc	Spec	CR_Num	Rev	Release	CR_Subject	Cat	Cur_Ver	New_Ver	Workitem
RP-010874	R3-013696	25.433	580	2	Rel-4	SFN-SFN quality indication	F	4.2.1	4.3.0	LCS1-UEpos-Iublur
RP-010874	R3-013170	25.433	547		Rel-4	Cell Parameter ID IE definition for 1.28Mcps TDD	F	4.2.1	4.3.0	LCRTDD-Iublur
RP-010874	R3-013677	25.433	546	1	Rel-4	Correction of drift rate resolution	F	4.2.1	4.3.0	LCS1-Uepos-Iublur
RP-010874	R3-013173	25.433	548		Rel-4	Amendment of the RADIO LINK ADDITION RESPONSE TDD message for LCR TDD	F	4.2.1	4.3.0	TEI

CR-Form-v4

CHANGE REQUEST

⌘ **25.433** **CR** **546** ⌘ rev **1** ⌘ Current version: **4.2.1** ⌘

*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 ☐ Radio Access Network ☒ Core Network ☐

Title:	⌘	Correction of drift rate resolution
Source:	⌘	R-WG3
Work item code:	⌘	LCS1-Uepos-Iublur
Date:	⌘	November 2001
Category:	⌘	**F**
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: ⌘

R1:
The range of the following IE were changed:

- SFN-SFN Drift Rate IE is limited to (-100..100)
- SFN-SFN Drift Rate Quality IE is limited to (0..100)
- $T_{UTRAN-GPS}$ Drift Rate IE is limited to (-50..50)
- $T_{UTRAN-GPS}$ Drift Rate IE is limited to (0..50)

R0:
Currently, the drift rate of the SFN-SFN and $T_{UTRAN-GPS}$ drift rate measurements has a resolution of the 1/16 chip, or 16 ns/s. This is very close to the absolute frequency requirement of the Node B [ref. 25.104] which is 0.05 ppm, or 50 ns/s. In addition the RRC SFN-SFN drift measurement has a resolution of the 1.1 ns/s (smallest).
It is therefore proposed to change the resolution to 1/256 chip (appr. 1 ns/s).

The range of the IE has been changed to a range corresponding to drift rate of approximately 100 ns/s for the $T_{UTRAN-GPS}$. The range of the SFN-SFN drift rate measurement is changed to twice the $T_{UTRAN-GPS}$ drift rate measurement. The drift rate quality measurements have been adjusted accordingly.

Summary of change: ⌘

The drift rate resolution has been change to 1/256 chip in the semantic description of the following IEs:

- SFN-SFN Drift Rate IE in the SFN-SFN Measurement Value Information IE.
- $T_{UTRAN-GPS}$ Drift Rate IE in the $T_{UTRAN-GPS}$ Measurement Value Information IE.

Also, The value range for these measurements and the corresponding quality measurements have been changed.

Impact analysis:

Impact assessment towards the previous version of the specification (same

		release): There is an impact. The range and resolution of the measurements have been changed. Compatibility Analysis towards previous release: No impact.
Consequences if not approved:	⌘	The resolution of the drift rate will not be enough as it is very close to the Node B drift rate requirement.

Clauses affected:	⌘	9.2.1.53E, 9.2.1.64A and 9.3.4.			
Other specs affected:	⌘	[X]	Other core specifications	⌘	25.423 4.2.0: CR 486
		[ ]	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.

9.2.1.53E SFN-SFN Measurement Value Information

The SFN-SFN Measurement Value Information IE indicates the measurement result related to SFN-SFN Observed Time Difference measurements.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information		1..<maxnoMeasNCell>		
>UC-Id	M		9.2.1.65B	
>SFN-SFN	M		INTEGER(0. . 40961)	According to mapping in [22]. TBD by RAN4.
>SFN-SFN Quality	M		INTEGER(0. .16383)	Indicates the standard deviation of the SFN-SFN measurements.
>SFN-SFN Drift Rate	M		INTEGER(-~~16383~~100..+ ~~16383~~100)	Indicates the SFN-SFN drift rate in ~~1/16~~1/256 chip per second. A positive value indicates that the Referece cell clock is running at a greater frequency than the measured neighbouring cell.
>SFN-SFN Drift Rate Quality	M		INTEGER(0. . ~~16383~~100)	Indicates the standard deviation of the SFN-SFN drift rate measurements.
>SFN-SFN Measurement Time Stamp	M		9.2.1.53D	
Unsuccessful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information		0..<maxnoMeasNCell-1>		
>UC-Id	M		9.2.1.65B	

Range bound	Explanation
maxnoMeasNCell	Maximum number of neighbouring cells that can be measured on.

9.2.1.64A $T_{UTRAN-GPS}$ Measurement Value Information

The $T_{UTRAN-GPS}$ *Measurement Value Information* IE indicates the measurement results related to the UTRAN GPS Timing of Cell Frame for LCS measurements.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
$T_{UTRAN-GPS}$	M		INTEGER(0..3715891199 9999)	Indicates the UTRAN GPS Timing of Cell Frame for LCS. According to mapping in [22].
$T_{UTRAN-GPS}$ Quality	M		INTEGER(0..2^20-1)	Indicates the standard deviation of the $T_{UTRAN-GPS}$ measurements.
$T_{UTRAN-GPS}$ Drift Rate	M		INTEGER(-~~2^14+1~~50..+~~2^14-1~~50)	Indicates the $T_{UTRAN-GPS}$ drift rate in ~~1/16~~ 1/256 chip per second. A positive value indicates that the UTRAN clock is running at a lower frequency than GPS clock.
$T_{UTRAN-GPS}$ Drift Rate Quality	M		INTEGER(0..~~2^14-1~~50)	Indicates the standard deviation of the $T_{UTRAN-GPS}$ drift rate measurements.

9.3.4 Information Element Definitions

```
-- /Unaffceted parats are not included/

SFNSFNChangeLimit ::= INTEGER (0..16384)

SFNSFNDriftRate ::= INTEGER (-16384100..16384100)

SFNSFNDriftRateQuality ::= INTEGER (0..16384100)

SFNSFNMeasurementThresholdInformation::= SEQUENCE {
    sFNSFNChangeLimit                   SFNSFNChangeLimit                   OPTIONAL,
    predictedSFNSFNDeviationLimit       PredictedSFNSFNDeviationLimit       OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { { SFNSFNMeasurementThresholdInformation-ExtIEs} }    OPTIONAL,
    ...
}

-- /Unaffceted parats are not included/

TUTRANGPSChangeLimit ::= INTEGER (0..1048575)

TUTRANGPSDriftRate ::= INTEGER (-1638550..1638450)
TUTRANGPSDriftRateQuality ::= INTEGER (0..1638350)

TUTRANGPSAccuracyClass ::= ENUMERATED {
    accuracy-class-A,
    accuracy-class-B,
    accuracy-class-C,
    ...
}
```

3GPP TSG-RAN WG3 Meeting #25 ***R3-013170***
Makuhari, Japan, 26th – 30th November 2001

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **547** ⌘ rev **-** ⌘ Current version: **4.2.1** ⌘

*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 ☐ Radio Access Network **X** Core Network ☐

Title:	⌘	Cell Parameter ID IE definition for 1.28Mcps TDD
Source:	⌘	R-WG3
Work item code:	⌘	LCRTDD-IublIur
Date:	⌘	November 2001
Category:	⌘	**F**
Release:	⌘	REL-4

Use one of the following categories:
F *(essential 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:	⌘	In the current definition of the Cell Parameter ID IE the identifiers are only for 3.84Mcps TDD explained. Other identifiers are required for 1.28Mcps TDD as described in TS 25.223
Summary of change:	⌘	The identifiers of the Cell Parameter ID IE for 1.28Mcps TDD are explained. These are: SYNC-DL and SYNC-UL sequences, the scrambling codes and the midamble codes. Impact Analysis: Impact assessment towards the previous version of the specification (same release): This CR has no impact with the previous version of the specification (same release) because the clarification does not affect the implementation.
Consequences if not approved:	⌘	If these CR is not approved, the explanation of the identifiers of the Cell Parameter ID IE for 1.28Mcps TDD are incorrect.

Clauses affected:	⌘	9.2.3.4		
Other specs affected:	⌘	**X** Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	25.423 v4.2.0 CR 487, REL-4
Other comments:	⌘	This CR was in principle agreed at R3#24 meeting (R3-012924).		

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://www.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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.

9.2.3.4 Cell Parameter ID

The Cell Parameter ID identifies unambiguously the [3.84 Mcps TDD - Code Groups, Scrambling Codes, Midambles and Toffset] [1.28 Mcps TDD - SYNC-DL and SYNC-UL sequences, the scrambling codes and the midamble codes] (see ref. [20]).

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell Parameter ID			INTEGER (0..127,…)	

3GPP TSG-RAN3 Meeting #24
Makuhari, Japan, 26th –30th November 2001

Tdoc R3-013173

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **548** ⌘ rev **-** ⌘ Current version: **4.2.1** ⌘

*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 ☐ Radio Access Network ☒ Core Network ☐

Title:	⌘	Amendment of the RADIO LINK ADDITION RESPONSE TDD message for LCR TDD
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	November 2001
Category:	⌘	**F**
Release:	⌘	REL-4

Use one of the following categories:
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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 COMMON MEASUREMENT INITIATION REQUEST TDD message does not fully support 1.28Mcps TDD, because the “UL Time Slot ISCP Info” IE is for HCR TDD only, and for LCR TDD as “UL Time Slot ISCP Info LCR” IE is existing therefore introduction of “RL Information response LCR” IEgroup is required to fully support the COMMON MEASUREMENT INITIATION REQUEST TDD message for 1.28Mcps TDD.
Summary of change:	⌘	Modification of the “COMMON MEASUREMENT INITIATION REQUEST TDD message” in the tabular format and ASN.1 for introduction of “UL Time Slot ISCP Info LCR” IE in the “RL Information response LCR” IEgroup. Impact Analysis: Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release) because it affects the RADIO LINK ADDITION procedure for LCR TDD only. The impact can be considered isolated because the changes affects one function. If only NodeB or RNC implement this CR then the affected procedure will not work however all other procedures are not affected.
Consequences if not approved:	⌘	If this CR is not approved, the COMMON MEASUREMENT INITIATION REQUEST TDD message is not fully supported for LCR TDD.

Clauses affected:	⌘	9.1.40.2, 9.3.3, 9.3.6
Other specs affected:	⌘	☐ Other core specifications ⌘ ☐ Test specifications ☐ O&M Specifications

Other comments: ⌘ This CR was in principle agreed at R3#24 meeting (R3-012927).

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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.

9.1.40 RADIO LINK ADDITION RESPONSE

9.1.40.1 FDD message

9.1.40.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		–	
RL Information response		0..1		Mandatory for 3.84Mcps TDD only	YES	ignore
>RL ID	M		9.2.1.53		–	
> UL Time Slot ISCP Info	M		9.2.3.26D		–	
>UL PhysCH SF Variation	M		9.2.3.26B		–	
>DCH Information		0..1			–	
>>Diversity Indication	M		9.2.1.26		–	
>>CHOICE *diversity indication*	M				–	
>>>*Combining*				In TDD it indicates whether the old Transport Bearer shall be reused or not	–	
>>>>RL ID	M		9.2.1.53	Reference RL	–	
>>>*Non combining*					–	
>>>>DCH Information Response	M		9.2.1.20C		–	
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore
RL Information response LCR		0..1		Mandatory for 1.28Mcps TDD only	YES	ignore
>RL ID	M		9.2.1.53		–	
> UL Time Slot ISCP Info LCR	M		9.2.3.26F		–	
>UL PhysCH SF Variation	M		9.2.3.26B		–	
>DCH Information		0..1			–	
>>Diversity Indication	M		9.2.1.26		–	
>>CHOICE *diversity indication*	M				–	
>>>*Combining*				In TDD it indicates whether the old Transport Bearer shall be reused or not	–	
>>>>RL ID	M		9.2.1.53	Reference RL	–	

>>>Non combining					–	
>>>>DCH Information Response	M		9.2.1.20C		–	
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29		YES	ignore

/* partly omitted */

9.3.3 PDU Definitions

/* partly omitted */

```
    id-DwPCH-LCR-Information-Cell-ReconfRqstTDD,
    id-DwPCH-LCR-Information-ResourceStatusInd,
    id-maxFACH-Power-LCR-CTCH-SetupRqstTDD,
    id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD,
    id-FPACH-LCR-Information,
    id-FPACH-LCR-Information-AuditRsp,
    id-FPACH-LCR-InformationList-AuditRsp,
    id-FPACH-LCR-InformationList-ResourceStatusInd,
    id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD,
    id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD,
    id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD,
    id-PCCPCH-LCR-Information-Cell-SetupRqstTDD,
    id-PCH-Power-LCR-CTCH-SetupRqstTDD,
    id-PCH-Power-LCR-CTCH-ReconfRqstTDD,
    id-PICH-LCR-Parameters-CTCH-SetupRqstTDD,
    id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD,
    id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD,
    id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD,
    id-RL-InformationResponse-LCR-RL-SetupRspTDD,
    id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD,
    id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD,
    id-TimeSlot,
    id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD,
    id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD,
    id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD,
    id-TimeSlotLCR-CM-Rqst,
    id-UL-DPCH-LCR-Information-RL-SetupRqstTDD,
    id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD,
    id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
    id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
    id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD,
    id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD,
    id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
    id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
    id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,
    id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD,
    id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD,
    id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
    id-UL-DPCH-LCR-InformationModify-AddList,
    id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,
    id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD,
    id-UL-SIRTarget,
    id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst,
    id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
    id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
```

```
    id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
    id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst,
    id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
    id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
    id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
    id-PUSCH-Info-DM-Rqst,
    id-PUSCH-Info-DM-Rsp,
    id-PUSCH-Info-DM-Rprt,
    id-RL-InformationResponse-LCR-RL-AdditionRspTDD,
```

/* partly omitted */

```
-- **************************************************************
--
-- RADIO LINK ADDITION RESPONSE TDD
--
-- **************************************************************

RadioLinkAdditionResponseTDD ::= SEQUENCE {
    protocolIEs             ProtocolIE-Container    {{RadioLinkAdditionResponseTDD-IEs}},
    protocolExtensions      ProtocolExtensionContainer  {{RadioLinkAdditionResponseTDD-Extensions}}                   OPTIONAL,
    ...
}

RadioLinkAdditionResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID                      CRITICALITY ignore          TYPE                    CRNC-CommunicationContextID
                PRESENCE    mandatory   }|
    { ID    id-RL-InformationResponse-RL-AdditionRspTDD         CRITICALITY ignore          TYPE                    RL-InformationResponse-RL-
AdditionRspTDD      PRESENCE    optional    }|      -- Mandatory for 3.84Mcps TDD only
    { ID    id-CriticalityDiagnostics                           CRITICALITY ignore          TYPE                    CriticalityDiagnostics
            PRESENCE    optional    },
    ...
}

RadioLinkAdditionResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-InformationResponse-LCR-RL-AdditionRspTDD        CRITICALITY ignore          EXTENSION               RL-InformationResponse-LCR-RL-
AdditionRspTDD  PRESENCE mandatory },   --Mandatory for 1.28Mcps TDD only
    ...
}

RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                                   RL-ID,
    uL-TimeSlot-ISCP-Info                   UL-TimeSlot-ISCP-Info,
    ul-PhysCH-SF-Variation                  UL-PhysCH-SF-Variation,
    dCH-Information                         DCH-Information-RL-AdditionRspTDD               OPTIONAL,
    dSCH-InformationResponseList            DSCH-InformationResponseList-RL-AdditionRspTDD                  OPTIONAL,
    uSCH-InformationResponseList            USCH-InformationResponseList-RL-AdditionRspTDD                  OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { { RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} }    OPTIONAL,
    ...
}
```

```
RL-InformationResponse-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-Information-RL-AdditionRspTDD ::= SEQUENCE {
    diversityIndication                DiversityIndication-RL-AdditionRspTDD,
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    -- the tabular message format in subclause 9.1.
    iE-Extensions                   ProtocolExtensionContainer { { DCH-Information-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-Information-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-AdditionRspTDD ::= CHOICE {
    combining                                   Combining-RL-AdditionRspTDD,
    non-Combining                               Non-Combining-RL-AdditionRspTDD
}

Combining-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                                       RL-ID,
    iE-Extensions                               ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs} }    OPTIONAL,
    ...
}

CombiningItem-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Non-Combining-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-InformationResponse                DCH-InformationResponse,
    iE-Extensions                               ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspTDD-ExtIEs} }      OPTIONAL,
    ...
}

Non-CombiningItem-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-AdditionRspTDD }}

DSCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationResponse   CRITICALITY ignore   TYPE DSCH-InformationResponse       PRESENCE mandatory }
}

USCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-AdditionRspTDD }}

USCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
    { ID id-USCH-InformationResponse   CRITICALITY ignore   TYPE USCH-InformationResponse       PRESENCE mandatory }
}
```

```
RL-InformationResponse-LCR-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                                   RL-ID,
    uL-TimeSlot-ISCP-InfoLCR                UL-TimeSlot-ISCP-LCR-Info,
    ul-PhysCH-SF-Variation                  UL-PhysCH-SF-Variation,
    dCH-Information                         DCH-Information-RL-AdditionRspTDD               OPTIONAL,
    dSCH-InformationResponseList            DSCH-InformationResponseList-RL-AdditionRspTDD                  OPTIONAL,
    uSCH-InformationResponseList            USCH-InformationResponseList-RL-AdditionRspTDD                  OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { { RL-InformationResponse-LCR-RL-AdditionRspTDD-ExtIEs} }   OPTIONAL,
    ...
}

RL-InformationResponse-LCR-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

/* partly omitted */

9.3.6 Constant Definitions

/* partly omitted */

```
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst                  ProtocolIE-ID ::= 492
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst     ProtocolIE-ID ::= 493
id-timeslotInfo-CellSyncInitiationRqstTDD                       ProtocolIE-ID ::= 496
id-SyncReportType-CellSyncReprtTDD                              ProtocolIE-ID ::= 497
id-PUSCH-Info-DM-Rqst                                           ProtocolIE-ID ::= 505
id-PUSCH-Info-DM-Rsp                                            ProtocolIE-ID ::= 506
id-PUSCH-Info-DM-Rprt                                           ProtocolIE-ID ::= 507
id-InitDL-Power                                                 ProtocolIE-ID ::= 509
id-cellSyncBurstRepetitionPeriod                                ProtocolIE-ID ::= 511
id-ReportCharacteristicsType-OnModification                     ProtocolIE-ID ::= 512
id-SFNSFNMeasurementValueInformation                            ProtocolIE-ID ::= 513
id-SFNSFNMeasurementThresholdInformation                        ProtocolIE-ID ::= 514
id-TUTRANGPSMeasurementValueInformation                         ProtocolIE-ID ::= 515
id-TUTRANGPSMeasurementThresholdInformation                     ProtocolIE-ID ::= 516
id-Rx-Timing-Deviation-Value-LCR                                ProtocolIE-ID ::= 520
id-RL-InformationResponse-LCR-RL-AdditionRspTDD                 ProtocolIE-ID ::= 51

END
```

3GPP TSG-RAN3 #25 Meeting ***Tdoc R3-013696***
Makuhari, Japan, 26 – 30 November 2001

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **580** ⌘ rev **2** ⌘ Current version: **4.2.1** ⌘

*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 ☐ Radio Access Network **X** Core Network ☐

Title:	⌘	SFN-SFN quality indication
Source:	⌘	R-WG3
Work item code:	⌘	LCS1-UEpos-IubIur
Date:	⌘	November 2001
Category:	⌘	**F**
Release:	⌘	REL-4

Use one of the following categories:
F *(essential 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:	⌘	As TSG RAN WG4 has defined an accuracy for the SFN-SFN Observed Time Difference UTRAN measurement, there is no need to have a quality indication reported to the RNC: this measurement should be handled as all the other measurements for which an accuracy has been defined by RAN4 are currently handled.
Summary of change:	⌘	R1: The *SFN-SFN Quality* IE are made optional in the *SFN-SFN Measurement Value Information* IE. Impact assessment towards the version 4.2.1 of the NBAP specification (previous version same release): This CR has isolated impact on the functionality. This CR has an impact under protocol point of view (Presence of an IE changed from Mandatory to Optional) and the functional point of view as it is possible now not to report a quality level for the measurement. The impact can be considered isolated as it concerns only the SFN-SFN Observed Time Difference UTRAN measurement.
Consequences if not approved:	⌘	If this CR is not approved, the specification will remain incorrect.

Clauses affected:	⌘	9.2.1.53E, 9.3.4		
Other specs affected:	⌘	**X** Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	25.423 v 4.2.0 CR 530
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://www.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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.

9.2.1.53E SFN-SFN Measurement Value Information

The SFN-SFN Measurement Value Information IE indicates the measurement result related to SFN-SFN Observed Time Difference measurements.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information		1..<maxnoMeasNCell>		
>UC-Id	M		9.2.1.65B	
>SFN-SFN	M		INTEGER(0..40961)	According to mapping in [22]. TBD by RAN4.
>SFN-SFN Quality	~~M~~O		INTEGER(0..16383)	Indicates the standard deviation of the SFN-SFN measurements.
>SFN-SFN Drift Rate	M		INTEGER(-16383..+16383)	Indicates the SFN-SFN drift rate in 1/16 chip per second. A positive value indicates that the Referece cell clock is running at a greater frequency than the measured neighbouring cell.
>SFN-SFN Drift Rate Quality	M		INTEGER(0..16383)	Indicates the standard deviation of the SFN-SFN drift rate measurements.
>SFN-SFN Measurement Time Stamp	M		9.2.1.53D	
Unsuccessful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information		0..<maxnoMeasNCell-1>		
>UC-Id	M		9.2.1.65B	

Range bound	Explanation
maxnoMeasNCell	Maximum number of neighbouring cells that can be measured on.

9.3.4 Information Element Definitions

```
UNCHANGED TEXT IS OMITTED

SFNSFNMeasurementValueInformation ::= SEQUENCE {
    successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation      SEQUENCE (SIZE(1..maxNrOfMeasNCell)) OF
        SEQUENCE {
            uC-Id                       UC-Id,
            sFNSFN      SFNSFN,
            sFNSFNQuality       SFNSFNQuality                                   OPTIONAL,
            sFNSFNDriftRate     SFNSFNDriftRate,
            sFNSFNDriftRateQuality      SFNSFNDriftRateQuality,
            sFNSFNTimeStamp             SFNSFNTimeStamp,
            iE-Extensions       ProtocolExtensionContainer { { SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
ExtIEs} }       OPTIONAL,
            ...
        },
    unsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation     SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
        SEQUENCE {
            uC-Id                       UC-Id,
            iE-Extensions       ProtocolExtensionContainer { { UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
ExtIEs} }       OPTIONAL,
                ...
        },
    iE-Extensions       ProtocolExtensionContainer { { SFNSFNMeasurementValueInformationItem-ExtIEs} }               OPTIONAL,
    ...
}

UNCHANGED TEXT IS OMITTED
```