

**TSG-RAN Meeting #13**  
**Beijing, China, 18 - 21, September, 2001**

**TSGRP#13(01) 0575**

**Title:** Agreed CRs to TS 25.401

**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-010575	R3-012194	25.401	033		Rel-5	Uplink power control for LCR TDD	A	5.0.0	5.1.0	LCRTDD-lublur
RP-010575	R3-012193	25.401	034		Rel-4	Uplink power control for LCR TDD	A	4.1.0	4.2.0	LCRTDD-lublur
RP-010575	R3-012409	25.401	035		R99	Power control description for TDD	F	3.7.0	3.8.0	TEI
RP-010575	R3-012707	25.401	036	2	R99	Clarification of coordinated DCHs	F	3.7.0	3.8.0	TEI
RP-010575	R3-012708	25.401	037	2	Rel-4	Clarification of coordinated DCHs	A	4.1.0	4.2.0	TEI
RP-010575	R3-012709	25.401	038	2	Rel-5	Clarification of coordinated DCHs	A	5.0.0	5.1.0	TEI

CR-Form-v3

## CHANGE REQUEST

⌘ **25.401 CR 033** ⌘ 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  Radio Access Network  Core Network

<b>Title:</b>	⌘ Uplink power control for LCR TDD		
<b>Source:</b>	⌘ R-WG3		
<b>Work item code:</b>	⌘ TEI	<b>Date:</b>	⌘ August 2001
<b>Category:</b>	⌘ <b>A</b>	<b>Release:</b>	⌘ Rel-5
<p>Use <u>one</u> of the following categories:</p> <p><b>F</b> (essential correction)  <b>A</b> (corresponds to a correction in an earlier release)  <b>B</b> (Addition of feature),  <b>C</b> (Functional modification of feature)  <b>D</b> (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p><b>2</b> (GSM Phase 2)  <b>R96</b> (Release 1996)  <b>R97</b> (Release 1997)  <b>R98</b> (Release 1998)  <b>R99</b> (Release 1999)  <b>REL-4</b> (Release 4)  <b>REL-5</b> (Release 5)</p>	

<b>Reason for change:</b>	⌘ The power control function description is not complete with respect to the TDD mode.
<b>Summary of change:</b>	⌘ The text is updated.
<b>Consequences if not approved:</b>	⌘ If this CR is not approved, the power control description in 25.401 is incorrect.  The CR is backward compatible to the current version of R99.  This CR has only isolated impact to the current version of R99. (A potential impact could only occur in case of incorrect implementations due to misinterpretation of the description.)

<b>Clauses affected:</b>	⌘ 7.2.4.8.1, 7.2.4.8.3, 7.2.4.8.4		
<b>Other specs affected:</b>	⌘ <input checked="" type="checkbox"/> Other core specifications	⌘ 25.401v3.7.0 CR 035, 25.401v4.1.0 CR 034	
	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
<b>Other comments:</b>	⌘ This CR is based on the "in principle agreed" CR of R3#22 in R3-011997.		

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Comprehensive information and tips about how to create CRs can be found at: [http://www.3gpp.org/3G\\_Specs/CRs.htm](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.

## 7.2.4.8 RF power control

This group of functions controls the level of the transmitted power in order to minimise interference and keep the quality of the connections. It consists of the following functions: UL Outer Loop Power Control, DL Outer Loop Power Control, UL Inner Loop Power Control, DL Inner Loop Power Control, UL Open Loop Power Control and DL Open Loop Power Control.

### 7.2.4.8.1 UL OUTER LOOP POWER CONTROL

The UL Outer Loop Power Control located in the SRNC [TDD – except for uplink shared channels where it is located in the CRNC] sets the target quality value for the UL Inner Loop Power Control which is located in Node B for FDD and 1.28 Mcps TDD and is located in the UE for 3.84 Mcps TDD. It receives input from quality estimates of the transport channel. The UL outer loop power control is mainly used for a long-term quality control of the radio channel.

In FDD and 1.28 Mcps TDD this function is located in the UTRAN, in 3.84 Mcps TDD the function is performed in UTRAN and the target quality value is sent to the UE by the SRNC or the CRNC, respectively.

In FDD and 1.28 Mcps TDD, if the connection involves both a SRNS and a DRNS the function UL Outer Loop Power Control (located in the SRNC [1.28 Mcps TDD – or in the CRNC, respectively]) sets the target quality for the UL Inner Loop Power Control function (located in Node B).

### 7.2.4.8.2 DL OUTER LOOP POWER CONTROL

The DL Outer Loop Power Control sets the target quality value for the DL inner loop power control. It receives input from quality estimates of the transport channel, measured in the UE. The DL outer loop power control is mainly used for a long-term quality control of the radio channel.

This function is located mainly in the UE, but some control parameters are set by the UTRAN.

The SRNC, regularly (or under some algorithms), sends the target down link power range based on the measurement report from UE.

### 7.2.4.8.3 UL INNER LOOP POWER CONTROL

The UL Inner Loop Power Control sets the power of the uplink dedicated [TDD – and shared] physical channels.

In FDD, it is a closed loop process. It receives the quality target from UL Outer Loop Power Control and quality estimates of the uplink dedicated physical control channel. The power control commands are sent on the downlink dedicated physical control channel to the UE. This function is located in both the UTRAN and the UE.

In 3.84 Mcps TDD it is an open loop process, it receives the quality target from the UL Outer Loop Power Control and uses the quality target and quality estimates of downlink channels to set the transmit power. This function is located in the UE.

In 1.28 Mcps TDD, it is a closed loop process. It receives the quality target from UL Outer Loop Power Control, and quality estimates of the uplink dedicated physical channels as well as physical uplink shared channels, if any. The power control commands are sent on the downlink dedicated physical channels and physical downlink shared channels, if any, to the UE. This function is located in both the UTRAN and the UE.

### 7.2.4.8.4 DL INNER LOOP POWER CONTROL

The DL Inner Loop Power Control sets the power of the downlink dedicated [TDD – and shared] physical channels. It receives the quality target from DL Outer Loop Power Control and quality estimates of the [FDD - downlink dedicated physical control channel] [TDD – downlink dedicated physical channels and physical downlink shared channels if any]. The power control commands are sent on the [FDD - uplink dedicated physical control channel] [TDD – downlink dedicated physical channels and physical downlink shared channels if any] to the UTRAN.

This function is located in both the UTRAN and the UE.

#### 7.2.4.8.5 UL OPEN LOOP POWER CONTROL

The UL Open Loop Power Control sets the initial power of the UE, i.e. at random access. The function uses UE measurements and broadcasted cell/system parameters as input.

This function is located in both the UTRAN and the UE.

#### 7.2.4.8.6 DL OPEN LOOP POWER CONTROL

The DL Open Loop Power Control sets the initial power of downlink channels. It receives downlink measurement reports from the UE.

This function is located in both the UTRAN and the UE.

## CHANGE REQUEST

⌘ **25.401** **CR** **034** ⌘ rev **-** ⌘ Current version: **4.1.0** ⌘

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  Radio Access Network  Core Network

<b>Title:</b>	⌘ Uplink power control for LCR TDD		
<b>Source:</b>	⌘ R-WG3		
<b>Work item code:</b>	⌘ TEI	<b>Date:</b>	⌘ August 2001
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ Rel-4
<p>Use <u>one</u> of the following categories:</p> <p><b>F</b> (essential correction)  <b>A</b> (corresponds to a correction in an earlier release)  <b>B</b> (Addition of feature),  <b>C</b> (Functional modification of feature)  <b>D</b> (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2)  R96 (Release 1996)  R97 (Release 1997)  R98 (Release 1998)  R99 (Release 1999)  REL-4 (Release 4)  REL-5 (Release 5)</p>	

<b>Reason for change:</b>	⌘ The power control function description is not complete with respect to the TDD mode.
<b>Summary of change:</b>	⌘ The text is updated.
<b>Consequences if not approved:</b>	⌘ If this CR is not approved, the power control description in 25.401 is incorrect.  The CR is backward compatible to the current version of R99. This CR has only isolated impact to the current version of R99. (A potential impact could only occur in case of incorrect implementations due to misinterpretation of the description.)

<b>Clauses affected:</b>	⌘ 7.2.4.8.1, 7.2.4.8.3, 7.2.4.8.4		
<b>Other specs affected:</b>	<input checked="" type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘	25.401v3.7.0 CR 035 25.401v5.0.0 CR 033
<b>Other comments:</b>	⌘ This CR is based on the "in principle agreed" CR of R3#22 in R3-011997.		

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## 7.2.4.8 RF power control

This group of functions controls the level of the transmitted power in order to minimise interference and keep the quality of the connections. It consists of the following functions: UL Outer Loop Power Control, DL Outer Loop Power Control, UL Inner Loop Power Control, DL Inner Loop Power Control, UL Open Loop Power Control and DL Open Loop Power Control.

### 7.2.4.8.1 UL OUTER LOOP POWER CONTROL

The UL Outer Loop Power Control located in the SRNC [TDD – except for uplink shared channels where it is located in the CRNC] sets the target quality value for the UL Inner Loop Power Control which is located in Node B for FDD and 1.28 Mcps TDD and is located in the UE for 3.84 Mcps TDD. It receives input from quality estimates of the transport channel. The UL outer loop power control is mainly used for a long-term quality control of the radio channel.

In FDD and 1.28 Mcps TDD this function is located in the UTRAN, in 3.84 Mcps TDD the function is performed in UTRAN and the target quality value is sent to the UE by the SRNC or the CRNC, respectively.

In FDD and 1.28 Mcps TDD, if the connection involves both a SRNS and a DRNS the function UL Outer Loop Power Control (located in the SRNC [1.28 Mcps TDD – or in the CRNC, respectively]) sets the target quality for the UL Inner Loop Power Control function (located in Node B).

### 7.2.4.8.2 DL OUTER LOOP POWER CONTROL

The DL Outer Loop Power Control sets the target quality value for the DL inner loop power control. It receives input from quality estimates of the transport channel, measured in the UE. The DL outer loop power control is mainly used for a long-term quality control of the radio channel.

This function is located mainly in the UE, but some control parameters are set by the UTRAN.

The SRNC, regularly (or under some algorithms), sends the target down link power range based on the measurement report from UE.

### 7.2.4.8.3 UL INNER LOOP POWER CONTROL

The UL Inner Loop Power Control sets the power of the uplink dedicated [TDD – and shared] physical channels.

In FDD, it is a closed loop process. It receives the quality target from UL Outer Loop Power Control and quality estimates of the uplink dedicated physical control channel. The power control commands are sent on the downlink dedicated physical control channel to the UE. This function is located in both the UTRAN and the UE.

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### 7.2.4.8.4 DL INNER LOOP POWER CONTROL

The DL Inner Loop Power Control sets the power of the downlink dedicated [TDD – and shared] physical channels. It receives the quality target from DL Outer Loop Power Control and quality estimates of the [FDD - downlink dedicated physical control channel] [TDD – downlink dedicated physical channels and physical downlink shared channels if any]. The power control commands are sent on the [FDD - uplink dedicated physical control channel] [TDD – uplink dedicated physical channels and physical uplink shared channels if any] to the UTRAN.

This function is located in both the UTRAN and the UE.

#### 7.2.4.8.5 UL OPEN LOOP POWER CONTROL

The UL Open Loop Power Control sets the initial power of the UE, i.e. at random access. The function uses UE measurements and broadcasted cell/system parameters as input.

This function is located in both the UTRAN and the UE.

#### 7.2.4.8.6 DL OPEN LOOP POWER CONTROL

The DL Open Loop Power Control sets the initial power of downlink channels. It receives downlink measurement reports from the UE.

This function is located in both the UTRAN and the UE.



CR-Form-v3

## CHANGE REQUEST

⌘ **25.401 CR 035** ⌘ rev **-** ⌘ Current version: **3.7.0** ⌘

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

<b>Title:</b>	⌘ Power control description for TDD		
<b>Source:</b>	⌘ R-WG3		
<b>Work item code:</b>	⌘ TEI	<b>Date:</b>	⌘ August 2001
<b>Category:</b>	⌘ F	<b>Release:</b>	⌘ R99
	<i>Use one of the following categories:</i> <b>F</b> (essential correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (Addition of feature), <b>C</b> (Functional modification of feature) <b>D</b> (Editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.		<i>Use one of the following releases:</i> <b>2</b> (GSM Phase 2) <b>R96</b> (Release 1996) <b>R97</b> (Release 1997) <b>R98</b> (Release 1998) <b>R99</b> (Release 1999) <b>REL-4</b> (Release 4) <b>REL-5</b> (Release 5)

<b>Reason for change:</b>	⌘ The power control function description is not complete with respect to the TDD mode.
<b>Summary of change:</b>	⌘ The text is updated.
<b>Consequences if not approved:</b>	⌘ If this CR is not approved, the power control description in 25.401 is incorrect.  The CR is backward compatible to the current version of R99.  This CR has only isolated impact to the current version of R99. (A potential impact could only occur in case of incorrect implementations due to misinterpretation of the description.)

<b>Clauses affected:</b>	⌘ 7.2.4.8.1, 7.2.4.8.3, 7.2.4.8.4	
<b>Other specs affected:</b>	⌘ <input checked="" type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘ 25.401v4.1.0 CR 034, 25.401v5.0.0 CR 033
<b>Other comments:</b>	⌘ This CR is based on the "in principle agreed" CR of R3#22 in R3-011997.	

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## 7.2.4.8 RF power control

This group of functions controls the level of the transmitted power in order to minimise interference and keep the quality of the connections. It consists of the following functions: UL Outer Loop Power Control, DL Outer Loop Power Control, UL Inner Loop Power Control, DL Inner Loop Power Control, UL Open Loop Power Control and DL Open Loop Power Control.

### 7.2.4.8.1 UL OUTER LOOP POWER CONTROL

The UL Outer Loop Power Control located in the SRNC [\[TDD – except for uplink shared channels where it is located in the CRNC\]](#) sets the target quality value for the UL Inner Loop Power Control which is located in Node B for FDD and is located in the UE for TDD. It receives input from quality estimates of the transport channel. The UL outer loop power control is mainly used for a long-term quality control of the radio channel.

In FDD this function is located in the UTRAN, in TDD the function is performed in UTRAN and the target quality value is sent to the UE by the SRNC [or the CRNC, respectively](#).

In FDD, if the connection involves both a SRNS and a DRNS the function UL Outer Loop Power Control (located in the SRNC) sets the target quality for the UL Inner Loop Power Control function (located in Node B).

### 7.2.4.8.2 DL OUTER LOOP POWER CONTROL

The DL Outer Loop Power Control sets the target quality value for the DL inner loop power control. It receives input from quality estimates of the transport channel, measured in the UE. The DL outer loop power control is mainly used for a long-term quality control of the radio channel.

This function is located mainly in the UE, but some control parameters are set by the UTRAN.

The SRNC, regularly (or under some algorithms), sends the target down link power range based on the measurement report from UE.

### 7.2.4.8.3 UL INNER LOOP POWER CONTROL

The UL Inner Loop Power Control sets the power of the uplink dedicated [\[TDD – and shared\]](#) physical channels.

In FDD, it is a closed loop process. It receives the quality target from UL Outer Loop Power Control and quality estimates of the uplink dedicated physical control channel. The power control commands are sent on the downlink dedicated physical control channel to the UE. This function is located in both the UTRAN and the UE.

In TDD it is an open loop process, it receives the quality target from the UL Outer Loop Power Control and uses the quality target and quality estimates of downlink channels to set the transmit power. This function is located in the UE.

### 7.2.4.8.4 DL INNER LOOP POWER CONTROL

The DL Inner Loop Power Control sets the power of the downlink dedicated [\[TDD – and shared\]](#) physical channels. It receives the quality target from DL Outer Loop Power Control and quality estimates of the [\[FDD - downlink dedicated physical control channel\] \[TDD - downlink dedicated physical channels and physical downlink shared channels if any\]](#). The power control commands are sent on the [\[FDD - uplink dedicated physical control channel\] \[TDD – uplink dedicated physical channels and physical uplink shared channels if any\]](#) to the UTRAN.

This function is located in both the UTRAN and the UE.

### 7.2.4.8.5 UL OPEN LOOP POWER CONTROL

The UL Open Loop Power Control sets the initial power of the UE, i.e. at random access. The function uses UE measurements and broadcasted cell/system parameters as input.

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#### 7.2.4.8.6 DL OPEN LOOP POWER CONTROL

The DL Open Loop Power Control sets the initial power of downlink channels. It receives downlink measurement reports from the UE.

This function is located in both the UTRAN and the UE.

3GPP TSG-RAN WG3 Meeting #23  
Helsinki, Finland, 27-31 August 2001

Tdoc R3-012707

CR-Form-v4	
<b>CHANGE REQUEST</b>	
⌘ <b>25.401 CR 036</b> ⌘ rev <b>2</b> ⌘ Current version: <b>3.7.0</b> ⌘	

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

<b>Title:</b>	⌘ Clarification of coordinated DCHs		
<b>Source:</b>	⌘ R-WG3		
<b>Work item code:</b>	⌘ TEI	<b>Date:</b>	⌘ 28-08-2001
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ R99
	<i>Use one of the following categories:</i> <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.		<i>Use one of the following releases:</i> <b>2</b> (GSM Phase 2) <b>R96</b> (Release 1996) <b>R97</b> (Release 1997) <b>R98</b> (Release 1998) <b>R99</b> (Release 1999) <b>REL-4</b> (Release 4) <b>REL-5</b> (Release 5)

<b>Reason for change:</b>	⌘ It is not clear whether all DCHs in a set of coordinated DCHs must all have the same TTI, as it is suggested in TS 25.427 clause 6.2. It is proposed to remove this ambiguity.
<b>Summary of change:</b>	⌘ R2: ME/UE box unticked  R1: Addition of TTI abbreviation  R0: The modification consists in adding to the definition of a set of coordinated DCHs, that all the DCHs shall have the same TTI.  This change is an “Isolated Impact” change. <u>Isolated Impact Analysis:</u> « Correction to a function where the specification was ambiguous or not sufficiently explicit. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise. »
<b>Consequences if not approved:</b>	⌘ It could be possible to assign different TTI values to DCHs in a set of coordinated DCHs, which is in contradiction with TS 25.427. Furthermore, the way different TTIs are treated is not specified and several possibilities exist.

<b>Clauses affected:</b>	⌘ 3.1, 3.2	
<b>Other specs affected:</b>	⌘ <input checked="" type="checkbox"/> Other core specifications ⌘ <input type="checkbox"/> Test specifications ⌘ <input type="checkbox"/> O&M Specifications	⌘ 25.433 v 4.1.0 CR528, 25.423 v3.6.0 CR474, 25.423 v4.1.0 CR475, 25.401 v3.7.0 CR036, 25.401 v4.1.0 CR037, 25.401 v5.0.0 CR038
<b>Other comments:</b>	⌘	

## 3.1 Definitions

For the purposes of the present document, the following definitions apply:

**ALCAP:** Generic name for the transport signalling protocols used to set-up and tear-down transport bearers.

**Cell:** Radio Network object that can be uniquely identified by a User Equipment from a (cell) identification that is broadcasted over a geographical area from one *UTRAN Access Point*  
A Cell is either FDD or TDD mode.

**Iu:** Interface between an RNC and an MSC, SGSN or CBC, providing an interconnection point between the RNS and the Core Network. It is also considered as a reference point.

**Iub:** Interface between the RNC and the Node B.

**Iur:** A logical interface between two RNCs. Whilst logically representing a point to point link between RNCs, the physical realisation need not be a point to point link.

**Logical Model:** A Logical Model defines an abstract view of a network or network element by means of information objects representing network element, aggregations of network elements, the topological relationship between the elements, endpoints of connections (termination points), and transport entities (such as connections) that transport information between two or more termination points.

The information objects defined in the Logical Model are used, among others, by connection management functions. In this way, a physical implementation independent management is achieved.

**Node B:** A logical node in the RNS responsible for radio transmission / reception in one or more cells to/from the UE. The logical node terminates the Iub interface towards the RNC.

**Radio Resources:** Resources that constitute the radio interface in UTRAN, e.g. frequencies, scrambling codes, spreading factors, power for common and dedicated channels.

**Node B Application Part:** Radio Network Signalling over the Iub.

**Radio Network Controller:** A logical node in the RNS in charge of controlling the use and the integrity of the radio resources.

**Controlling RNC:** A role an RNC can take with respect to a specific set of Node B's. There is only one Controlling RNC for any Node B. The Controlling RNC has the overall control of the logical resources of its node B's.

**Radio Network Subsystem:** An RNS can be either a full UTRAN or only a part of a UTRAN. An RNS offers the allocation and release of specific radio resources to establish means of connection in between an UE and the UTRAN. A Radio Network Subsystem contains one RNC and is responsible for the resources and transmission/reception in a set of cells.

**Serving RNS:** A role an RNS can take with respect to a specific connection between an UE and UTRAN. There is one Serving RNS for each UE that has a connection to UTRAN. The Serving RNS is in charge of the radio connection between a UE and the UTRAN. The Serving RNS terminates the Iu for this UE.

**Drift RNS:** The role an RNS can take with respect to a specific connection between an UE and UTRAN. An RNS that supports the Serving RNS with radio resources when the connection between the UTRAN and the UE need to use cell(s) controlled by this RNS is referred to as Drift RNS.

**Radio Access Network Application Part:** Radio Network Signalling over the Iu.

**Radio Network Subsystem Application Part:** Radio Network Signalling over the Iur.

**RRC Connection:** A point-to-point bi-directional connection between RRC peer entities on the UE and the UTRAN sides, respectively. An UE has either zero or one RRC connection.

**User Equipment:** A Mobile Equipment with one or several UMTS Subscriber Identity Module(s). A device allowing a user access to network services via the Uu interface. The UE is defined in ref. [8].

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SAB	Service Area Broadcast
SRNC	Serving Radio Network Controller
SRNS	Serving RNS
TEID	Tunnel Endpoint Identifier
<u>TTI</u>	<u>Transmission Time Interval</u>
UE	User Equipment
UL	Uplink
UMTS	Universal Mobile Telecommunication System
USIM	UMTS Subscriber Identity Module
UTRAN	Universal Terrestrial Radio Access Network



3GPP TSG-RAN WG3 Meeting #23  
Helsinki, Finland, 27-31 August 2001

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CR-Form-v4	
<b>CHANGE REQUEST</b>	
⌘ <b>25.401 CR 037</b> ⌘ rev <b>2</b> ⌘ Current version: <b>4.1.0</b> ⌘	

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

<b>Title:</b>	⌘ Clarification of coordinated DCHs		
<b>Source:</b>	⌘ R-WG3		
<b>Work item code:</b>	⌘ TEI	<b>Date:</b>	⌘ 28-08-2001
<b>Category:</b>	⌘ <b>A</b>	<b>Release:</b>	⌘ REL-4
	Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (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)

<b>Reason for change:</b>	⌘ It is not clear whether all DCHs in a set of coordinated DCHs must all have the same TTI, as it is suggested in TS 25.427 clause 6.2. It is proposed to remove this ambiguity.
<b>Summary of change:</b>	⌘ R2: ME/UE box unticked  R1: Addition of TTI abbreviation  R0: The modification consists in adding to the definition of a set of coordinated DCHs, that all the DCHs shall have the same TTI.  This change is an “Isolated Impact” change. <u>Isolated Impact Analysis:</u> « Correction to a function where the specification was ambiguous or not sufficiently explicit. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise. »
<b>Consequences if not approved:</b>	⌘ It could be possible to assign different TTI values to DCHs in a set of coordinated DCHs, which is in contradiction with TS 25.427. Furthermore, the way different TTIs are treated is not specified and several possibilities exist.

<b>Clauses affected:</b>	⌘ 3.1, 3.2	
<b>Other specs</b>	⌘ <input checked="" type="checkbox"/> Other core specifications	⌘ 25.433 v 3.6.0 CR527, 25.433 v 4.1.0 CR528, 25.423 v3.6.0 CR474, 25.423 v4.1.0 CR475, 25.401 v3.7.0 CR036, 25.401 v5.0.0 CR038
<b>affected:</b>	<input type="checkbox"/> Test specifications	
	<input type="checkbox"/> O&M Specifications	
<b>Other comments:</b>	⌘	



## 3.1 Definitions

For the purposes of the present document, the following definitions apply:

**ALCAP:** Generic name for the transport signalling protocols used to set-up and tear-down transport bearers.

**Cell:** Radio Network object that can be uniquely identified by a User Equipment from a (cell) identification that is broadcasted over a geographical area from one *UTRAN Access Point*  
A Cell is either FDD or TDD mode.

**Iu:** Interface between an RNC and an MSC, SGSN or CBC, providing an interconnection point between the RNS and the Core Network. It is also considered as a reference point.

**Iub:** Interface between the RNC and the Node B.

**Iur:** A logical interface between two RNCs. Whilst logically representing a point to point link between RNCs, the physical realisation need not be a point to point link.

**Logical Model:** A Logical Model defines an abstract view of a network or network element by means of information objects representing network element, aggregations of network elements, the topological relationship between the elements, endpoints of connections (termination points), and transport entities (such as connections) that transport information between two or more termination points.

The information objects defined in the Logical Model are used, among others, by connection management functions. In this way, a physical implementation independent management is achieved.

**Node B:** A logical node in the RNS responsible for radio transmission / reception in one or more cells to/from the UE. The logical node terminates the Iub interface towards the RNC.

**Radio Resources:** Resources that constitute the radio interface in UTRAN, e.g. frequencies, scrambling codes, spreading factors, power for common and dedicated channels.

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3GPP TSG-RAN WG3 Meeting #23  
Helsinki, Finland, 27-31 August 2001

Tdoc R3-012709

CR-Form-v4	
<b>CHANGE REQUEST</b>	
⌘	⌘
25.401 CR 038	rev 2
⌘	⌘
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  Radio Access Network  Core Network

<b>Title:</b>	⌘ Clarification of coordinated DCHs		
<b>Source:</b>	⌘ R-WG3		
<b>Work item code:</b>	⌘ TEI	<b>Date:</b>	⌘ 28-08-2001
<b>Category:</b>	⌘ <b>A</b>	<b>Release:</b>	⌘ REL-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	<b>F</b> (correction)		2 (GSM Phase 2)
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