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Technical Report

UMTS Terrestrial Radio Access Network (UTRAN); Vocabulary for the UTRAN (UMTS 25.xx version 1.0.0)



Universal Mobile
Telecommunications System



Reference

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Foreword

This ETSI Technical Report (TR) has been produced by the Special Mobile Group (SMG) of the European Telecommunications Standards Institute (ETSI).

This TR is a collection of terms, definitions and abbreviations related to the Universal Mobile Telecommunications System (UMTS).

1 Scope

This ETSI Technical Report (TR) is a collection of terms, definitions and abbreviations related to the baseline documents defining Universal Mobile Telecommunications System (UMTS) objectives and systems framework. This ETR provides a tool for further work on UMTS technical documentation and facilitates their understanding. The terms, definitions and abbreviations as given in this TR are either imported from existing documentation (ETSI, ITU or elsewhere) or newly created by UMTS experts whenever the need for precise vocabulary was identified.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.
- [1] ETR 309: "Vocabulary of terms for UMTS".
- [2] UMTS 30.03 "Quality of service and dependability vocabulary".
- [3] ETSI SMG2 UMTS L2&L3 Expert Group, Tdoc SMG2 UMTS-L23 033/98: "Vocabulary Used in Radio Interface Protocol Specifications".

3 Terms and definitions related to UMTS Radio aspects

Streamlining: Process which changes the role of an RNS (serving and drift) when one or multiple drift RNSs are involved in a connection.

Common Channel

Dedicated Channel

Shared Channel

Non-Access Stratum

Access Stratum

Access Stratum SDU (Service Data Unit): Unit of data transferred over the access stratum SAP (Service Access Point) in the Core Network or in the User Equipment.

Active mode: "Active mode" is the state of a User Equipment when processing a call.

Active Set: Set of radio links simultaneously involved in a specific communication service between an User Equipment and a UTRAN access point.

Adaptive terminal: An "adaptive terminal" is terminal equipment with the capability of adapting to more than one type or variation of network.

Average Transmitter Power Per Traffic Channel (dBm): the mean of the total transmitted power over an entire transmission period.

Cable, Connector, and Combiner Losses (Transmitter) (dB): the combined losses of all transmission system components between the transmitter output and the antenna input (all losses in positive dB values).

Cable, Connector, and Splitter Losses (Receiver) (dB): These are the combined losses of all transmission system components between the receiving antenna output and the receiver input (all losses in positive dB values).

Cell: A cell is a geographical area that can be identified by a User Equipment from a (cell) identification that is broadcast from one *UTRAN Access Point*

Coded Composite Transport Channel (CCTrCH): A data stream resulting from encoding and multiplexing of one or several *transport channels*. The data stream of the CCTrCH is fed to a data splitter unit that splits the CCTrCH's data stream onto one or several *Physical Channel Data Streams*.

Commonality: "Commonality" is a measure of the degree to which two radio transmission technologies serving different test environments share the same attributes. These attributes include: access method, modulation scheme, duplexing method, equalization strategy, FEC, bit interleaving etc.

Contiguous coverage: "Contiguous coverage" is a characteristic of a geographical zone in which UMTS service is

uniformly provided and the service probability is above a certain threshold.

Control channel: A "control channel" is a logical channel that carries system control information.

Controlling RNC: A role an RNC can take with respect to a specific set of **UTRAN access points**. There is only one Controlling RNC for any **UTRAN access point**. The Controlling RNC has the overall control of the logical resources of its **UTRAN access point's**. (Check with SMG2 ARC same as serving RNC?)

Coverage area: The "coverage area" is the area over which a UMTS service is provided with the service probability above a certain threshold.

Deployment scenario: The "deployment scenario" is a description of assumed user density and traffic to be served by a system in simulations. In the radio transmission technology selection process, the deployment scenario serves as a representation of the ultimate UMTS deployment.

Downlink: A "downlink" is a unidirectional radio link for the transmission of signals from a **UTRAN access point** to a User Equipment.

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

Equivalent Telephony Erlang: "Equivalent Telephony Erlang" (ETE) is a comparative measure of traffic which no longer refers to a particular service type like voice or data.

Evaluation criteria: "Evaluation criteria" are a set of capabilities and characteristics of radio transmission technology which may be supported or exhibited by a candidate technology. These criteria form the comparative basis of the radio transmission technology selection process.

Explicit Diversity Gain (dB): This is the effective gain achieved using diversity techniques.

Hand-off Gain/Loss (dB): This is the gain/loss factor (+ or -) brought by hand-off to maintain specified reliability at the boundary. (Editors note: Boundry of what ?)

Handover: Handover is a family of procedures that adds or removes one or several radio links between one User Equipment and UTRAN when a RRC connection exists and the position of the User Equipment is known on cell level in the UTRAN

Hard Handover: Hard handover is a category of handover procedures where all the old radio links in the UE are abandoned before the new radio links are established.

Hot Spot Capacity: Number of users who may be instantaneously supported per isolated cell (or satellite spot beam) per unit spectrum. This must be specified at a stated spectrum allocation, quality and grade of service.

Idle mode: "Idle mode" is the state of a User Equipment switched on but not actively processing a call.

Information Capacity: (Mbits/cell (or Mbits/satellite spot beam)) this is the total number of user-channel information bits that can be supported by a single cell (or spot beam) which is part of an infinite set of cells (or large number of spot beams) in a uniform two-dimensional (or three dimensional) pattern. The information capacity must be specified at a stated spectrum allocation, quality and grade of service, assuming an appropriate propagation model. This metric is valuable for comparing systems with identical user channel requirements.

Information Rate (10Log(Rb)) (dBHz): Information rate is the channel bit rate in (dBHz).

Inter-cell handover: An "inter-cell handover" is a handover between different cells. An inter-cell handover requires network connections to be altered. (Editors note: Is this terms used ??)

Intra-cell handover: An "intra-cell handover" is a handover within one sector or between different sectors of the same cell. An intra-cell handover does not require network connections to be altered. (Editors note: Is this terms used ??) **Island coverage:** "Island coverage" is a characteristic of a geographical zone in which UMTS service is provided in a number of separate isolated areas ("islands").

Iu: Interconnection point between an RNS and a Core Network. It is also considered as a reference point. **Iub:** Interface between an RNC and a Node B.

Iur: A logical interface between two RNS. Whilst logically representing a point to point link between RNSs, the physical realisation may not be a point to point link. (Editors note: are Iu and Iub also logical interfaces)

Logical Channel: A logical channel is an information stream dedicated to the transfer of a specific type of information over the radio interface.

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.

Macro cells: "Macro cells" are outdoor cells with a large cell radius, typically a few tens of km. However, the range can be extended by the use of directional antennas or repeaters.

Macro diversity: "Macro diversity" is a operation state in which a User Equipment simultaneously has radio links with

two or more UTRAN access points for the sole aim of improving quality of the radio connection or providing seamless handover.

Maximum Path Loss (dB): This is the maximum loss that permits minimum SRTT performance at the cell boundary.

Maximum Range (km): Maximum range, R_{max}, is given by the range associated with the maximum path loss.

Maximum Total Transmitter Power (dBm): the aggregate maximum transmit power of all channels.

Maximum Transmitter Power Per Traffic Channel (dBm): the maximum power at the transmitter output for a single traffic channel.

Mega cells / satellite cells: "Mega or satellite cells" are outdoor cells served by a satellite. The individual sectors of a satellite cell may have radii of 500 to 1 500 km.

Micro cells: "Micro cells" are small outdoor cells with radii of up to 1 km.

Mobile base station: A "mobile base station" is a base station which is not located at a given fixed site. Such a base station could be located within a bus, train or aircraft for example. A mobile base station has two kinds of radio connections: one to the fixed part of UMTS, the other to the Mobile Stations.

Mobile evaluated handover: Mobile evaluated handover (MEHO) is a type of handover triggered by an evaluation made in the mobile. The mobile evaluates the necessity of handover based on the measured radio environment and based on criteria defined by the network. When the evaluation meets the hand-off criteria the necessary information is sent from the mobile to the network. The network then decides on the necessity of the handover based on the reported evaluation result and other conditions, eg. uplink radio environment and/or availability of network resources, the network may then execute the handover.

Mobile Station: A "Mobile Station" (MS) is an entity capable of accessing a set of UMTS services via one or more radio interfaces. This entity may be stationary or in motion within the UMTS service area while accessing the UMTS services, and may simultaneously serve one or more users. A user of a Mobile Station may also have several simultaneous connections with the network. (Editors Note: This is not clear.)

Mobile Termination: The "Mobile Termination" (MT) is the part of the Mobile Station which terminates the radio path at the mobile side and adapts the capabilities of the radio path to the capabilities of the terminal equipment. (Editors note: Is this terms used ??)

MS-UTRAN connection: A relation between the mobile station and the UTRAN that is used to set-up, maintain and release the various *physical channels*. (Editors note: Is this terms used ??)

Network evaluated handover: Network evaluated handover (NEHO) is a type of handover triggered by an evaluation made in the network. There are three cases. The first case is that the mobile measures and reports the measurement to the network upon request from the network either periodically or on demand, and the network then evaluates the necessity of handover. The second case is that the network measures and evaluates the necessity of handover. In the third case measurements are made in both the mobile and in the network. In all cases, the network decides the necessity of handover based on the measurements and other conditions, eg availability of network resources. The network always executes any handover.

Node B: A logical node responsible for radio transmission / reception in one or more cells to/from the User Equipment. Terminates the Iub interface towards the RNC.

Paging area: A "paging area" is the geographical region in which a User Equipment will be paged as a part of incoming call establishment. A paging area may comprise one or more cells or sectors.

Paging: Paging is the act of seeking a User Equipment (Editors note: this needs further clarification)

Physical channel data stream: In the uplink, a data stream that is transmitted on one *physical channel*. In the downlink, a data stream that is transmitted on one *physical channel* in each cell of the *active set*.

Physical Channel: In FDD mode, a physical channel is defined by code, frequency and, in the uplink, relative phase (I/Q). In TDD mode, a physical channel is defined by code, frequency, and time-slot.

Pico cells: "Pico cells" are cells, mainly indoor cells, with a radius typically less than 50 metres.

Preselection criteria: "Preselection criteria" are a set of capabilities and characteristics of a radio transmission technology, indispensable for UMTS. For a candidate technology, failure to meet the preselection criteria will result in elimination from the radio transmission technology selection process.

Radio access bearer: The service that the access stratum provides to the non-access stratum for transfer of user data between User Equipment and CN.

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

Radio connection: A "radio connection" is a logical association between one or more User Equipments and one or more UTRAN access points to establish point-to-point, point-to-multipoint, broadcasting communications or even macro diversity. A radio connection comprises one or more radio links.

Radio frame: A radio frame is a numbered time interval of 10 ms duration used for data transmission on the radio physical channel. A radio frame is divided into 16 time slots of 0.625 ms duration. The unit of data that is mapped to a radio frame (10 ms time interval) may also be referred to as radio frame.

[Editor's note: This definition shall reflect present usage of this term in both the L1 and L23 expert groups. It needs to

be checked and approved by both groups.]

Radio interface: The "radio interface" is the tetherless interface between a User Equipment and a UTRAN access point. This term encompasses all the functionality required to maintain such interfaces.

Radio link: A "radio link" is a logical association between a single User Equipment and a single UTRAN access point. Its physical realization comprises one or more radio bearer transmissions. (Editor's note: Is this not the same as a radio connection? What is a radio bearer transmissions?)

Radio link addition The procedure where a new radio link is added to the active set.

Radio link removal: The procedure where a radio link is removed from the active set.

Radio Network Controller: This equipment in the RNS is in charge of controlling the use and the integrity of the radio resources. (SMG2 ARC)

Radio Network Subsystem Application Part: Radio Network Signalling over the Iur. (SMG2 ARC)

Radio Network Subsystem: Either a full network or only the access part of a UMTS network offering the allocation and the release of specific radio resources to establish means of connection in between an UE and the UTRAN. A Radio Network Subsystem is responsible for the resources and transmission/reception in a set of cells. (SMG2 ARC)

Radio Network Temporary Identifier (RNTI): A Radio Network Temporary Identifier is an identifier for a UE when an *RRC connection* exists. It is e.g. used by the MAC protocol on common *Transport Channels* (RACH, FACH, PCH).

Radio operating environment: A "radio operating environment" is a classification for the UMTS operating regime, referring to differing radio related characteristics which affect the design of the radio interface necessary to provide service in that environment.

Radio resource unit: A "radio resource unit" is a single controllable resource employable for unidirectional information transfer over the radio interface. Typical examples for radio bearers are a time and frequency slot in a TDMA transmission scheme with frequency hopping, or the portion of radio resources characterized by a code sequence in a CDMA transmission scheme.

Receiver Antenna Gain (dBi): the maximum gain of the receiver antenna in the horizontal plane (specified as dB relative to an isotropic radiator).

Receiver Interference Density (**Io** (**dBm/Hz**)): Receiver interference density is the interference power per Hertz at the receiver front end. This is the in-band interference power divided by the system bandwidth. The in-band interference power consists of both co-channel interference as well as adjacent channel interference.

Receiver Noise Figure (dB): Receiver noise figure is the noise figure of the receiving system referenced to the receiver input.

Receiver Sensitivity (dBm): This is the signal level needed at the receiver input that just satisfies the required Eb/(No+Io).

Relay: Terminal devices capable of ODMA relay communications.

Relay/Seed Gateway: Relay or Seed that communicates with the UTRAN, in either TDD or FDD mode.

Relaylink: Relaylink is a communications link between two ODMA relay nodes.

Repeater: A "repeater" is a radio transceiver used to extend the transmission of a base station beyond its normal range. **Required Eb/(No+Io) (dB):** The ratio between the received energy per information bit to the total effective noise and interference power density needed to satisfy the quality objectives specified in UMTS 30.03 Table 1.0 under condition of section 1.2.2 channel model.

Root Relay: ODMA relay node where communications originate or terminate.

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.

Seamless handover: "Seamless handover" is a handover without perceptible interruption of the radio connection **Sector:** A "sector" is a sub-area of a cell. All sectors within one cell are served by the same base station. A radio link within a sector can be identified by a single logical identification belonging to that sector.

Seed: Deployed ODMA relay node with or without a display/keypad.

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. (SMG2 ARC)

Set of Radio Transmission Technologies: A complete combination of radio transmission technologies that encompass the transmission dependent functions of a radio system, which has potential capabilities to meet UMTS minimum requirements in one or more test environments.

Signalling connection: An acknowledged-mode link between the user equipment and the core network to transfer higher layer information between the entities in the non-access stratum.

Signalling link: Provides an acknowledged-mode link layer to transfer the MS-UTRAN signalling messages as well as MS - Core Network signalling messages (using the *signalling connection*).

Soft Handover: Soft handover is a category of handover procedures where the radio links are added and abandoned in such manner that the UE always keeps at least one radio link to the UTRAN.

Spectrum efficiency: "Spectrum efficiency" is a comparative measure characterizing the extent to which a radio interface is able to support a given number of users of a given UMTS service. Spectrum efficiency can be measured in ETE per cell per MHz or ETE per square kilometre per MHz.

Spot coverage: "Spot coverage" is a characteristic of a geographical zone in which UMTS service is provided only in small, isolated areas, perhaps individual cells.

Test environment: A "test environment" is the combination of a test propagation environment and a deployment scenario which together describe the parameters necessary to perform a detailed analysis of a radio transmission technology. A test environment allows direct comparison of various radio transmission technologies.

Test propagation environment: The "test propagation environment" is a description of the radio channel which will be used in simulations of the operation of radio transmission technologies during the radio transmission technology selection process. The test propagation environment is supposed to represent propagation conditions of the ultimate UMTS deployment.

Thermal Noise Density, No (dBm/Hz): the noise power per Hertz at the receiver input.

Total Effective Noise Plus Interference Density (dBm/Hz): the logarithmic sum of the receiver noise density and the receiver noise figure and the arithmetic sum with the receiver interference density, i.e. $j = 10 \text{ Log } (10^{((g+h)/10)} + I)$

Traffic Capacity: (Erlangs/cell (or Erlangs/satellite spot beam)) this is the total traffic that can be supported by a single cell (or spot beam), which is part of an infinite set of cells (or large number of satellite spot beams) in a uniform two-dimensional (or three dimensional) pattern. The traffic capacity must be specified at a stated spectrum allocation, quality and grade of service, assuming an appropriate propagation model. This metric is valuable for comparing systems with identical user channel requirements.

Traffic channel: A "traffic channel" is a logical channel which carries users information like speech or data.

Transmission Time Interval: Transmission Time Interval is defined as the inter-arrival time of *Transport Block Sets*, i.e. the time it should take to transmit a *Transport Block Set*. It is always a multiple of 10ms (the length of one *Radio Frame*).

Transmitter Antenna Gain (dBi): the maximum gain of the transmitter antenna in the horizontal plane (specified as dB relative to an isotropic radiator).

Transmitter e.i.r.p. (dBm): the summation of the total transmitter power (dBm), transmission system losses (-dB), and the transmitter antenna gain (dBi).

 $\label{thm:continuous} \textbf{Transmitter e.i.r.p. Per Traffic Channel (dBm):} \ \ \text{the summation of transmitter power output per traffic channel (dBm), transmission system losses (-dB), and the transmitter antenna gain (dBi), in the direction of maximum radiation.}$

Transport Block : Transport Block is defined as the basic unit passed down to L1 from MAC, for L1 processing. An equivalent term for Transport Block is "MAC PDU".

Transport Block Set: Transport Block Set is defined as a set of *Transport Blocks* which is passed to L1 from MAC at the same time instance using the same *transport channel*. An equivalent term for Transport Block Set is "MAC PDU Set".

Transport Block Set Size: Transport Block Set Size is defined as the number of bits in a *Transport Block Set* **Transport Block Size**: Transport Block Size is defined as the size (number of bits) of a *Transport Block* **Transport channel:** The channels offered by the physical layer to Layer 2 for data transport between peer L1 entities are denoted as Transport Channels. Different types of transport channels are defined by how and with which characteristics data is transferred on the physical layer, e.g. whether using dedicated or common physical channels are employed.

Transport Format: A Transport Format is defined as a format offered by L1 to MAC for the delivery of a *Transport Block Set* during a *Transmission Time Interval* on a *Transport Channel*. The Transport Format constitutes of two parts – one dynamic part and one semi-static part.

Transport Format Combination: A Transport Format Combination is defined as the combination of currently valid *Transport Formats* on all *Transport Channels* of an MS, i.e. containing one *Transport Format* from each *Transport Channel*.

Transport Format Combination Set: A Transport Format Combination Set is defined as a set of *Transport Format Combinations* to be used by an MS.

Transport Format Combination Indicator (TFCI): A Transport Format Combination Indicator is a representation of the current *Transport Format Combination*.

Transport Format Identification (**TFI**): A label for a specific *Transport Format* within a *Transport Format Set*. **Transport Format Set**: A set of *Transport Formats*. For example, a variable rate DCH has a Transport Format Set (one Transport Format for each rate), whereas a fixed rate DCH has a single Transport Format.

UMTS Terrestrial Radio Access Network: UTRAN is a conceptual term identifying that part of the network which consists of RNCs and Node Bs between Iu an Uu. The concept of UTRAN instanciation is currently undefined. (SMG2 ARC)

Uplink: An "uplink" is a unidirectional radio link for the transmission of signals from a Mobile Station to a base station,

from a Mobile Station to a mobile base station or from a mobile base station to a base station.

URA updating: URA updating is a family of procedures that updates the UTRAN registration area of a UE when a

RRC connection exists and the position of the UE is known on URA level in the UTRAN.

User Equipment: A Mobile Station with one or several UMTS Subscriber Identity Module(s).

UTRAN Registration Area (**URA**): The UTRAN Registration Area is an area covered by a number of cells. The URA is only internally known in the UTRAN.

UTRAN access point: A conceptual point within the UTRAN performing radio transmission and reception. A UTRAN access point is associated with one specific *cell*, i.e. there exists one UTRAN access point for each cell. It is the UTRAN-side end point of a *radio link*.

4 Abbreviations

ACP Adjacent Channel Protection
ARQ Automatic Repeat Request
ACCH Associated Control Channel
AWGN Added White Gaussian Noise
BCCH Broadcast Control Channel

BCH Broadcast Channel
BER Bit Error Rate
BLER Block Error Rate

BPSK Binary Phase Shift Keying

BS Base Station

BSC Base Station Controller
BSS Base Station System
BTS Base Transceiver Station

C- Control-

CA Capacity Allocation

CAA Capacity Allocation Acknowledgement

CBR Constant Bit Rate
CC Call Control

CCCH Common Control Channel

CCH Control Channel

CCPCH Common Control Physical Channel CCTrCH Coded Composite Transport Channel

CD Capacity Deallocation

CDA Capacity Deallocation Acknowledgement

CDMA Code Division Multiple Access

CN Core Network CP Chip Period

CRC Cyclic Redundancy Check

CTDMA Code Time Division Multiple Access

DC Dedicated Control (SAP)
DCA Dynamic Channel Allocation
DCCH Dedicated Control Channel

DCH Dedicated Channel DHO Diversity Handover

DL Downlink

DPCCH Dedicated Physical Control Channel
DPCH Dedicated Physical Channel

DPDCH Dedicated Physical Data Channel
DRNC Drift Radio Network Controller

DRNS Drift RNS

DRX Discontinuous Reception

DS-CDMA Direct-Sequence Code Division Multiple Access

DSCH Downlink Shared Channel
DTCH Dedicated Traffic Channel

DTX Discontinuous Transmission

EIRP Equivalent Isotropic Radiated Power

FACH Forward Access Channel
FAUSCH Fast Uplink Signalling Channel
FCS Frame Charles Samuelle

FCS Frame Check Sequence FDD Frequency Division Duplex

FDMA Frequency Division Multiple Access

FEC Forward Error Correction FER Frame Erasure Rate GC General Control (SAP)

GMSK Gaussian Minimum Shift Keying

GP Guard Period

GSM Global System for Mobile communications

HCS Hierarchical Cell Structure

HO Handover HHO Hard Handover HO Handover

ITU International Telecommunication Union

JD Joint Detection kbps kilo-bits per second kilo-symbols per second ksps L1 Layer 1 (physical layer) Layer 2 (data link layer) L2 L3 Layer 3 (network layer) LAC Link Access Control **LCD** Low Constrained Delay ??

MA Multiple Access

MAC Medium Access Control
MAHO Mobile Assisted Handover
Mcps Mega-chips per second
ME Mobile Equipment

MEHO Mobile evaluated handover MUI Mobile User Identifier MM Mobility Management MO Mobile Originated

MOHO Mobile Originated HandOver

MS Mobile Station

MSID Mobile Station IDentifier

MSC Mobile Services Switching Center

MT Mobile Terminated

NEHO Network evaluated handover

NRT Non-Real Time Nt Notification (SAP)

OCCCH ODMA Common Control Channel ODCCH ODMA Dedicated Control Channel

ODCH ODMA Dedicated Channel

ODMA Opportunity Driven Multiple Access
ORACH ODMA Random Access Channel
ODTCH ODMA Dedicated Traffic Channel
OVSF Orthogonal Variable Spreading Factor

OoS Ouality of Service

QPSK Quadrature Phase Shift Keying

PC Power Control

PCCH Paging Control Channel

PCH Paging Channel
PDU Protocol Data Unit
PG Processing Gain
PHY Physical layer
PhyCH Physical Channel
PI Paging Indicator

PID Packet Identification PN Pseudo Noise PPM Parts Per Million

PRACH Physical Random Access Channel

PUF Power Up Function
RACH Random Access Channel

RANAP Radio Access Network Application Part

RF Radio Frequency
RLC Radio Link Control

RLCP Radio Link Control Protocol RNC Radio Network Controller

RNS Radio Network Subsystem RNSAPRadio Network Subsystem Application Part

RNTI Radio Network Temporary Identity

RRC Radio Resource Control
RRM Radio Resource Management
RSSI Received Signal Strength Indicator

RT Real Time
RU Resource Unit
RX Receive

SAP Service Access Point

SACCH Slow Associated Control Channel
SCCH Synchronization Control Channel

SCH Synchronization Channel

SDCCH Stand-Alone Dedicated Control Channel

SDU Service Data Unit
SF Spreading Factor
SFN System Frame Number
SIR Signal-to-Interference Ratio

SP Switching Point

SRNC Serving Radio Network Controller

SRNS Serving RNS
TCH Traffic Channel
TDD Time Division Duplex

TFCI Transport Format Combination Indicator

TFI Transport Format Indicator

TN Termination Node
TPC Transmit Power Control
TRX Transmitter/Receiver

TX Transmit U- User-

UARFCN UTRA Absolute Radio Frequency Channel Number

UDD Unconstrained Delay Data

UE User Equipment UL Uplink

UMTS Universal Mobile Telecommunications System

URA User Registration Area

USIM UMTS Subscriber Identity Module UTRA UMTS Terrestrial Radio Access

UTRAN UMTS Terrestrial Radio Access Network

VA Voice Activity Factor VBR Variable Bit Rate

History

| Document history | | | |
|------------------|--|--|--|
| 01 sept 1998 | V 0.1.0 Inclusion of Vocabulary from SMG 2 ARC UTRAN Architecture Description; Stage 2; version 0.0.6 | | |
| 12-Nov-98 | V 0.1.1 New Editor, Howard Benn, Motorola. Included L2/3 Vocabulary Used in Radio Interface Protocol Specifications Version: 0.1.0 | | |
| 8-Dec-98 | V 0.1.2 Changes from Layer 2/3 expert group document S298y476 | | |
| 18-Jan-99 | V 0.1.3 Changes from Layer 2/3 expert group, additional definitions on handover | | |
| Feb 1999 | V1.0.0 Changes for presentation for information at SMG#28 | | |
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