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**Source:** SA1  
**Title:** CRs to 21.905 on definitions and abbreviations  
**Document for:** Approval  
**Agenda Item:** 7.1.3

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| SA Doc    | Spec   | CR  | Rev | Phase | Cat | Subject   | Old Vers | New Vers | SA1 Doc   |
|-----------|--------|-----|-----|-------|-----|---|----------|----------|-----------|
| SP-020046 | 21.905 | 030 |     | Rel-5 | B   | CR to 21.905: new definition of the term 'service'                                    | 5.2.0    | 5.3.0    | S1-020393 |
| SP-020046 | 21.905 | 032 |     | Rel-5 | B   | CR 21.905 Rel.5 B Introduction of the definitions of "pre-pay" and "post-pay" billing | 5.2.0    | 5.3.0    | S1-020452 |
| SP-020046 | 21.905 | 033 |     | Rel-5 | F   | CR to 21.905: Replacement of the term UMTS with 3GPP system                           | 5.2.0    | 5.3.0    | S1-020526 |
| SP-020046 | 21.905 | 034 |     | Rel-5 | B   | CR to 21.905: missing abbreviations   | 5.2.0    | 5.3.0    | S1-020527 |
| SP-020046 | 21.905 | 035 |     | Rel-5 | B   | CR to 21.905: new definition of the term 'application'                                | 5.2.0    | 5.3.0    | S1-020528 |
| SP-020046 | 21.905 | 036 |     | Rel-5 | B   | CR to 21905: definitions of online and offline charging                               | 5.2.0    | 5.3.0    | S1-020617 |
| SP-020046 | 21.905 | 037 |     | Rel-5 | B   | CR to 21.905: Improved definition of the term "application"                           | 5.2.0    | 5.3.0    | S1-020620 |

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|--|--|
| CR-Form-v4   |  |
| <b>CHANGE REQUEST</b>  |  |
| ⌘ <b>21.905 CR 030</b> ⌘ ev <b>-</b> ⌘ Current version: <b>5.2.0</b> ⌘ |  |
| <b>Spec Title:</b> Vocabulary for 3GPP specifications ⌘                |  |

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>          | ⌘ Improved definition of the term "service"  |                 |  |
| <b>Source:</b>         | ⌘ SA1  |                 |  |
| <b>Work item code:</b> | ⌘ TEI  | <b>Date:</b>    | ⌘ 04 – Feb – 2002  |
| <b>Category:</b>       | ⌘ <b>B</b>   | <b>Release:</b> | ⌘ <b>REL-5</b>   |
|                        | Use <u>one</u> of the following categories:<br><b>F</b> (correction)<br><b>A</b> (corresponds to a correction in an earlier release)<br><b>B</b> (addition of feature),<br><b>C</b> (functional modification of feature)<br><b>D</b> (editorial modification)<br>Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u> . |                 | Use <u>one</u> of the following releases:<br>2 (GSM Phase 2)<br>R96 (Release 1996)<br>R97 (Release 1997)<br>R98 (Release 1998)<br>R99 (Release 1999)<br>REL-4 (Release 4)<br>REL-5 (Release 5) |

|                                      |  |
|--------------------------------------|--|
| <b>Reason for change:</b>            | ⌘ The current definition of service is not accurate and a new one is proposed. Note that the new definition has been agreed with experts from the UMTS Forum |
| <b>Summary of change:</b>            | ⌘ New definition of the term Service   |
| <b>Consequences if not approved:</b> | ⌘ Obsolete definition of a term widely used in 3GPP, misalignment with the term as used by one of the 3GPP MRP.  |

|                              |   |   |  |
|------------------------------|---|---|--|
| <b>Clauses affected:</b>     | ⌘ 3.S   |   |  |
| <b>Other specs affected:</b> | ⌘ <input type="checkbox"/> Other core specifications<br><input type="checkbox"/> Test specifications<br><input type="checkbox"/> O&M Specifications | ⌘ |  |
| <b>Other comments:</b>       | ⌘   |   |  |

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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.

## S

**SDU error probability:** The ratio of total incorrect service data units (SDUs) to total successfully transferred service data units plus incorrect service data units in a specified sample (source: ITU-T X.140).

NOTE: the source document term "user information unit" has been replaced by the term "service data unit".

**SDU loss probability:** The ratio of total lost service data units (SDUs) to total transmitted service data units in a specified sample (source: ITU-T X.140).

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**SDU transfer delay:** The value of elapsed time between the start of transfer and successful transfer of a specified service data unit (SDU) (source: ITU-T X.140).

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**SDU transfer rate:** The total number of successfully transferred service data units (SDUs) in a transfer sample divided by the input/output time for that sample. The input/output time is the larger of the input time or the output time for the sample (source: ITU-T X.140).

NOTE: the source document term "user information unit" has been replaced by the term "service data unit".

**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.

**Security:** The ability to prevent fraud as well as the protection of information availability, integrity and confidentiality.

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

**Selected PLMN:** This is the PLMN that has been selected by the non-access stratum, either manually or automatically.

**Service:** a component of the portfolio of choices offered by service providers to a user, a functionality offered to a user.

~~Service: Set of functions offered to a user by an organisation.~~

**Service-less UE:** A UE that has only the Baseline capabilities.

**Service Access Point:** A conceptual point where a protocol layer offers access to its services to upper layer.

**Service Area:** The Service Area is defined in the same way as the Service Area according to ITU-T Recommendation Q.1001 [4]. In contrast to the PLMN area it is not based on the coverage of a PLMN. Instead it is based on the area in which a fixed network user can call a mobile user without knowing his location. The Service Area can therefore change when the signalling system is being extended, for example.

**Service attribute:** A specified characteristic of a telecommunication service (source: ITU-T I.112).

NOTE: the value(s) assigned to one or more service attributes may be used to distinguish that telecommunications service from others.

**Service bit rate:** The bit rate that is available to a user for the transfer of user information (source: ITU-T I.113).

**Service Capabilities:** Bearers defined by parameters, and/or mechanisms needed to realise services. These are within networks and under network control.

**Service Capability Feature:** Functionality offered by service capabilities that are accessible via the standardised application interface

**Service Capability Server:** Network functionality providing open interfaces towards the functionality offered by UMTS service capabilities.

**Service category or service class:** A service offered to the users described by a set of performance parameters and their specified values, limits or ranges. The set of parameters provides a comprehensive description of the service capability.

**Service Control:** The ability of the user, home environment or serving environment to determine what a particular service does, for a specific invocation of that service, within the limitations of that service.

**Service Data Unit (SDU):** In the reference model for OSI, an amount of information whose identity is preserved when transferred between peer (N+1)-layer entities and which is not interpreted by the supporting (N)-layer entities (source: ITU-T X.200 / ISO-IEC 7498-1).

**Service delay:** The time elapsed from the invocation of the service request, to the corresponding service request indication at the Service Receiver, indicating the arrival of application data.

**Service Execution Environment:** A platform on which an application or programme is authorised to perform a number of functionalities; examples of service execution environments are the user equipment, integrated circuit card and a network platform or any other server.

**Service Feature:** Functionality that a UMTS system shall offer to enable provision of services. Services, are made up of different service features.

**Service Implementation Capabilities:** Set of implementation capabilities, in each technical domain, required to enable a UE to support a set of UE Service Capabilities.

**Service model:** A general characterisation of services based upon a QoS paradigm, without specifying the actual performance targets.

**Service Provider:** A Service Provider is either a network operator or an other entity that provides services to a subscriber (e.g. a MVNO)

**Service receiver:** The entity which receives the service request indication primitive, containing the SDU.

**Service relationship:** The association between two or more entities engaged in the provision of services.

**Service request:** This is defined as being one invocation of the service through a service request primitive.

**Service requester:** The entity which requests the initiation of a GPRS operation, through a service request.

**Service subscriber:** Entity which subscribes to the General Packet Radio Service (GPRS) service.

**Services (of a mobile cellular system):** The set of unctions that the mobile cellular system can make available to the user.

**Serving Network:** The serving network provides the user with access to the services of home environment.

**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 RRC connection between a UE and the UTRAN. The Serving RNS terminates the Iu for this.

**Settlement:** Payment of amounts resulting from the accounting process.

**Shared Channel:** A radio resource (transport channel or physical channel) that can be shared dynamically between several UEs.

**Short time:** Time, typically in number of minutes, to perform the off-line mechanism used for accounting.

**Signalling:** The exchange of information specifically concerned with the establishment and control of connections, and with management, in a telecommunications network (source: ITU-T I.112).

**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 UE-UTRAN signalling messages as well as UE - Core Network signalling messages (using the signalling connection).

**SIM application toolkit procedures:** Defined in GSM 11.14 [27].

**SIM code:** Code which when combined with the network and NS codes refers to a unique SIM. The code is provided by the digits 8 to 15 of the IMSI

**SIM code group:** Combination of the SIM code and the associated network subset and network codes (it is equivalent to the IMSI).

**SIM personalisation:** Enables a user to personalise a ME so that it may only be used with particular SIM(s).

**Simultaneous use of services:** The concurrent use of a circuit-mode service (voice or data) and packet-mode services (GPRS) by a single mobile station.

**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.

**SP code:** code which when combined with the network code refers to a unique SP. The code is provided in the GID1 file on the SIM (see Annex A.1.) and is correspondingly stored on the ME.

**SP code group:** Combination of the SP code and the associated network code.

**SP personalisation:** Allows the service provider to personalise a ME so that it can only be used with that particular service provider's SIMs.

**Speed:** A performance criterion that describes the time interval required to perform a function or the rate at which the function is performed. (The function may or may not be performed with the desired accuracy.) (source: ITU-T I.350).

**SRNC Radio Network Temporary Identifier (S-RNTI):** S-RNTI is UE identifier which is allocated by the Serving RNC and unique within this SRNC. It is allocated for all UEs having a RRC connection. S-RNTI is reallocated always when the Serving RNC for the RRC connection is changed and deallocated when the RRC connection is released.

**SRNS Relocation:** The change of Iu instance and transfer of the SRNS role to another RNS.

**Stratum:** Grouping of protocols related to one aspect of the services provided by one or several domains.

**Sub Network Management Functions:** Set of functions that are related to a network model for a set of network elements constituting a clearly defined sub-network, which may include relations between the network elements. This model enables additional functions on the sub-network level (typically in the areas of network topology presentation, alarm correlation, service impact analysis and circuit provisioning).

**Subscribed QoS:** The network will not grant a QoS greater than the subscribed. The QoS profile subscription parameters are held in the HLR. An end user may have several QoS subscriptions. For security and the prevention of damage to the network, the end user cannot directly modify the QoS subscription profile data.

**Subscriber:** A Subscriber is an entity (e.g. a user) that is engaged in a Subscription with a service provider.

**Subscription:** A subscription describes the commercial relationship between the subscriber and the service provider.

**Suitable Cell:** This is a cell on which an UE may camp. It must satisfy certain conditions.

**Supplementary service:** A service which modifies or supplements a basic telecommunication service. Consequently, it cannot be offered to a user as a standalone service. It must be offered together with or in association with a basic telecommunication service. The same supplementary service may be common to a number of basic telecommunication services.

**System Area:** The System Area is defined as the group of PLMN areas accessible by MSs. Interworking of several PLMNs and interworking between PLMNs and fixed network(s) permit public land mobile communication services at international level.

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| CR-Form-v4   |  |
| <b>CHANGE REQUEST</b>  |  |
| ⌘ <b>21.905 CR 037</b> ⌘ ev <b>-</b> ⌘ Current version: <b>5.2.0</b> ⌘ |  |
| Spec Title: Vocabulary for 3GPP specifications ⌘                       |  |

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>          | ⌘ Improved definition of the term "application"  |                 |   |
| <b>Source:</b>         | ⌘ SA1  |                 |   |
| <b>Work item code:</b> | ⌘ TEI  | <b>Date:</b>    | ⌘ 04 – Feb – 2002                         |
| <b>Category:</b>       | ⌘ <b>B</b>   | <b>Release:</b> | ⌘ <b>REL-5</b>                            |
|                        | Use <u>one</u> of the following categories:  |                 | Use <u>one</u> of the following releases: |
|                        | <b>F</b> (correction)  | <b>2</b>        | (GSM Phase 2)                             |
|                        | <b>A</b> (corresponds to a correction in an earlier release)                                   | <b>R96</b>      | (Release 1996)                            |
|                        | <b>B</b> (addition of feature),  | <b>R97</b>      | (Release 1997)                            |
|                        | <b>C</b> (functional modification of feature)  | <b>R98</b>      | (Release 1998)                            |
|                        | <b>D</b> (editorial modification)  | <b>R99</b>      | (Release 1999)                            |
|                        | Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> . |                 | <b>REL-4</b> (Release 4)                  |
|                        |  |                 | <b>REL-5</b> (Release 5)                  |

|                                      |  |
|--------------------------------------|--|
| <b>Reason for change:</b>            | ⌘ The definition of application currently in the vocabulary document leaves room to interpretation. Based on the definitions given by other for a (in particular by the UMTS Forum) a new definition is proposed |
| <b>Summary of change:</b>            | ⌘ Modification of the definition of the term Application<br>Introduction of companion definition of the term service enabler<br>Introduction of reference to UMTS Forum report 2                                 |
| <b>Consequences if not approved:</b> | ⌘ Definition of application out of date and not aligned with the one of given by one of the MRP.   |

|                              |  |   |  |
|------------------------------|--|---|--|
| <b>Clauses affected:</b>     | ⌘ 2; 3.A, 3.S  |   |  |
| <b>Other specs affected:</b> | ⌘ <input type="checkbox"/> Other core specifications | ⌘ |  |
|                              | <input type="checkbox"/> Test specifications         |   |  |
|                              | <input type="checkbox"/> O&M Specifications          |   |  |
| <b>Other comments:</b>       | ⌘  |   |  |

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## 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. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] GSM 01.04: "Digital cellular telecommunication system (Phase 2+); Abbreviations and acronyms".
- [2] TS 25.990: "Technical Specification Group (TSG) RAN; Vocabulary".
- [3] "The Path towards UMTS - Technologies for the Information Society" – Report #2, UMTS Forum
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\*\*\*\*\* Next modified Section \*\*\*\*\*

### A

**Acceptable Cell:** A cell that the UE may camp on to make emergency calls. It must satisfy certain conditions.

**Access conditions:** A set of security attributes associated with a file.

**Access delay:** The value of elapsed time between an access request and a successful access (source: ITU-T X.140).

**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.

**Access protocol:** A defined set of procedures that is adopted at an interface at a specified reference point between a user and a network to enable the user to employ the services and/or facilities of that network (source: ITU-T I.112).

**Accounting:** The process of apportioning charges between the Home Environment, Serving Network and User.

**Accuracy:** A performance criterion that describes the degree of correctness with which a function is performed. (The function may or may not be performed with the desired speed.) (source: ITU-T I.350).

**Active communication:** a UE is in active communication when it has a CS connection established. For PS active communication is defined by the existence of one or more Activated PDP contexts. Either one or both of the mentioned active communications may occur in the UE.

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

**Adjacent Channel Leakage power Ratio (ACLR):** The ratio of the average power centered on the assigned channel frequency to the average power centered on an adjacent channel frequency. In both cases the average power is measured with a filter that has Root Raised Cosine (RRC) filter response with roll-off  $\alpha = 0.22$  and a bandwidth equal to the chip rate.

**Air Interface User Rate:** The user rate between Mobile Termination and IWF. For T services it is the maximum possible AIUR not including padding. For NT services it is the maximum possible AIUR.

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

**Allowable PLMN:** A PLMN which is not in the list of forbidden PLMN in the UE.

**Applet:** A small program that is intended not to be run on its own, but rather to be embedded inside another application

**Application:** an application is a service enabler deployed by service providers, manufacturers or users. Individual applications will often be enablers for a wide range of services. (UMTS Forum report #2) [3]

~~**Application:** An application consists of a set of security mechanisms, files, data and protocols (excluding transmission protocols).~~

**Applications / Clients:** These are services, which are designed using service capability features.

**Application Interface:** Standardised Interface used by application/clients to access service capability features.

**Application protocol:** The set of procedures required by the application.

**ASCI** Generic name to identify the services VGCS, VBS and eMLPP.

**Authentication:** A property by which the correct identity of an entity or party is established with a required assurance. The party being authenticated could be a user, subscriber, home environment or serving network.

**Available PLMN:** A PLMN where the UE has found a cell that satisfies certain conditions.

**Average power:** The thermal power as measured through a root raised cosine filter with roll-off  $\alpha = 0.22$  and a bandwidth equal to the chip rate of the radio access mode. The period of measurement shall be one power control group (timeslot) unless otherwise stated.

\*\*\*\*\* Next modified Section \*\*\*\*\*

## S

**SDU error probability:** The ratio of total incorrect service data units (SDUs) to total successfully transferred service data units plus incorrect service data units in a specified sample (source: ITU-T X.140).

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**Service delay:** The time elapsed from the invocation of the service request, to the corresponding service request indication at the Service Receiver, indicating the arrival of application data.

**Service Enabler:** a capability which may be used, either by itself or in conjunction with other service enablers, to provide a service to the end user.

**Service Execution Environment:** A platform on which an application or programme is authorised to perform a number of functionalities; examples of service execution environments are the user equipment, integrated circuit card and a network platform or any other server.

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**SIM code group:** Combination of the SIM code and the associated network subset and network codes (it is equivalent to the IMSI).

**SIM personalisation:** Enables a user to personalise a ME so that it may only be used with particular SIM(s).

**Simultaneous use of services:** The concurrent use of a circuit-mode service (voice or data) and packet-mode services (GPRS) by a single mobile station.

**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.

**SP code:** code which when combined with the network code refers to a unique SP. The code is provided in the GID1 file on the SIM (see Annex A.1.) and is correspondingly stored on the ME.

**SP code group:** Combination of the SP code and the associated network code.

**SP personalisation:** Allows the service provider to personalise a ME so that it can only be used with that particular service provider's SIMs.

**Speed:** A performance criterion that describes the time interval required to perform a function or the rate at which the function is performed. (The function may or may not be performed with the desired accuracy.) (source: ITU-T I.350).

**SRNC Radio Network Temporary Identifier (S-RNTI):** S-RNTI is UE identifier which is allocated by the Serving RNC and unique within this SRNC. It is allocated for all UEs having a RRC connection. S-RNTI is reallocated always when the Serving RNC for the RRC connection is changed and deallocated when the RRC connection is released.

**SRNS Relocation:** The change of Iu instance and transfer of the SRNS role to another RNS.

**Stratum:** Grouping of protocols related to one aspect of the services provided by one or several domains.

**Sub Network Management Functions:** Set of functions that are related to a network model for a set of network elements constituting a clearly defined sub-network, which may include relations between the network elements. This model enables additional functions on the sub-network level (typically in the areas of network topology presentation, alarm correlation, service impact analysis and circuit provisioning).

**Subscribed QoS:** The network will not grant a QoS greater than the subscribed. The QoS profile subscription parameters are held in the HLR. An end user may have several QoS subscriptions. For security and the prevention of damage to the network, the end user cannot directly modify the QoS subscription profile data.

**Subscriber:** A Subscriber is an entity (e.g. a user) that is engaged in a Subscription with a service provider.

**Subscription:** A subscription describes the commercial relationship between the subscriber and the service provider.

**Suitable Cell:** This is a cell on which an UE may camp. It must satisfy certain conditions.

**Supplementary service:** A service which modifies or supplements a basic telecommunication service. Consequently, it cannot be offered to a user as a standalone service. It must be offered together with or in association with a basic telecommunication service. The same supplementary service may be common to a number of basic telecommunication services.

**System Area:** The System Area is defined as the group of PLMN areas accessible by MSs. Interworking of several PLMNs and interworking between PLMNs and fixed network(s) permit public land mobile communication services at international level.

|  |  |
|--|--|
| CR-Form-v4   |  |
| <b>CHANGE REQUEST</b>  |  |
| ⌘ <b>21.905 CR 036</b> ⌘ ev <b>-</b> ⌘ Current version: <b>5.2.0</b> ⌘<br>Spec Title: Vocabulary for 3GPP specifications ⌘ |  |

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>          | ⌘ Introduction of definition of on-line and off-line charging   |  |
| <b>Source:</b>         | ⌘ SA1   |  |
| <b>Work item code:</b> | ⌘ TEI   | <b>Date:</b> ⌘ 04 – Feb – 2002   |
| <b>Category:</b>       | ⌘ <b>B</b><br>Use <u>one</u> of the following categories:<br><b>F</b> (correction)<br><b>A</b> (corresponds to a correction in an earlier release)<br><b>B</b> (addition of feature),<br><b>C</b> (functional modification of feature)<br><b>D</b> (editorial modification)<br>Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> . | <b>Release:</b> ⌘ <b>REL-5</b><br>Use <u>one</u> of the following releases:<br>2 (GSM Phase 2)<br>R96 (Release 1996)<br>R97 (Release 1997)<br>R98 (Release 1998)<br>R99 (Release 1999)<br>REL-4 (Release 4)<br>REL-5 (Release 5) |

|                                      |   |
|--------------------------------------|---|
| <b>Reason for change:</b>            | ⌘ Introduction of new terms in the vocabulary from TR 23.852 and TS 22.141    |
| <b>Summary of change:</b>            | ⌘ The definition of on-line and off-line charging have been added             |
| <b>Consequences if not approved:</b> | ⌘ Commonly used terms could be inappropriately employed in the specifications |

|                              |   |  |
|------------------------------|---|--|
| <b>Clauses affected:</b>     | ⌘ 3, O  |  |
| <b>Other specs affected:</b> | ⌘ <input type="checkbox"/> Other core specifications ⌘<br><input type="checkbox"/> Test specifications<br><input type="checkbox"/> O&M Specifications |  |
| <b>Other comments:</b>       | ⌘   |  |

**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.
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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.

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## 3 Terms and definitions

### O

**Off-Line charging:** A charging process where charging information does not affect, in real time, the service rendered.

**On-Line Charging:** A charging process where charging information can affect, in real time, the service rendered and therefore directly interacts with the session/service control.

**One Stop Billing:** One bill for all charges incurred using UMTS.

**Open group:** A group that does not have a pre-defined set of members. Any user may participate in an open group.

**Open Service Architecture:** Concept for introducing a vendor independent means for introduction of new services.

**Operations System:** This abbreviation indicates a generic management system, independent of its location level within the management hierarchy.

**Optional UE Requirement:** Any other requirements than mandatory UE requirement, essential UE requirement (conditional), essential UE requirement (unconditional). It is totally up to individual manufacturer to decide whether it should be implemented or not (e.g. Network initiated MM connection establishment).

**Originating network:** The network where the calling party is located.

**Orthogonal Channel Noise Simulator** a mechanism used to simulate the users or control signals on the other orthogonal channels of a downlink

**OSA Interface:** Standardised Interface used by application/clients to access service capability features.



CR-Form-v4

## CHANGE REQUEST

⌘ **21.905 CR 035** ⌘ ev **-** ⌘ Current version: **5.2.0** ⌘  
**Spec Title:** Vocabulary for 3GPP specifications ⌘

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>          | ⌘ Missing abbreviation and editorial corrections   |                 |  |
| <b>Source:</b>         | ⌘ SA1  |                 |  |
| <b>Work item code:</b> | ⌘ TEI  | <b>Date:</b>    | ⌘ 04 – Feb – 2002  |
| <b>Category:</b>       | ⌘ <b>B</b>   | <b>Release:</b> | ⌘ <b>REL-5</b>   |
|                        | Use <u>one</u> of the following categories:<br><b>F</b> (correction)<br><b>A</b> (corresponds to a correction in an earlier release)<br><b>B</b> (addition of feature),<br><b>C</b> (functional modification of feature)<br><b>D</b> (editorial modification)<br>Detailed explanations of the above categories can be found in 3GPP <u>IR.21.900</u> . |                 | Use <u>one</u> of the following releases:<br>2 (GSM Phase 2)<br>R96 (Release 1996)<br>R97 (Release 1997)<br>R98 (Release 1998)<br>R99 (Release 1999)<br>REL-4 (Release 4)<br>REL-5 (Release 5) |

|                                      |   |
|--------------------------------------|---|
| <b>Reason for change:</b>            | ⌘ Introduction in the vocabulary of missing abbreviation of AMR-WB and correction of duplicated definitions and editorial mistakes  |
| <b>Summary of change:</b>            | ⌘ Introduced definitions for AMR-WB.<br>Modified definition of R99, removed one definition of user, removed one definition of coverage, modification to telecommunications service. |
| <b>Consequences if not approved:</b> | ⌘ Missing abbreviation and mistakes in the document.  |

|                              |   |  |  |
|------------------------------|---|--|--|
| <b>Clauses affected:</b>     | ⌘ 3.R, 3.T, 3.U, 4.A  |  |  |
| <b>Other specs affected:</b> | ⌘ <input type="checkbox"/> Other core specifications ⌘<br><input type="checkbox"/> Test specifications<br><input type="checkbox"/> O&M Specifications |  |  |
| <b>Other comments:</b>       | ⌘   |  |  |

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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.

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## 3 Terms and definitions

### R

**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 Mode:** Mode of the cell, FDD or TDD.

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

**Radio Access Technology:** UTRA, GERAN etc.

**Radio Bearer:** The service provided by the Layer 2 for transfer of user data between User Equipment and UTRAN.

**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 15 time slots of 0.666 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.

**Radio interface:** The "radio interface" is the tetherless interface between 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 single User Equipment and a single UTRAN access point. Its physical realisation comprises one or more radio bearer transmissions.

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

**Radio Link Control:** A sublayer of radio interface layer 2 providing transparent, unacknowledged and acknowledged data transfer service.

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

**Radio Link Set:** A set of one or more Radio Links that has a common generation of Transmit Power Control (TPC) commands in the DL

**Radio Network Controller:** This equipment in the RNS is in charge of controlling the use and the integrity of the radio resources.

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

**Radio Network Subsystem:** Either a full network or only the access part of a UTRAN 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.

**Radio Network Temporary Identifier:** A Radio Network Temporary Identifier is a generic term of an identifier for a UE when an RRC connection exists. Following types of RNTI are defined: Cell RNTI (C-RNTI), Serving RNC RNTI (S-RNTI) and UTRAN RNTI (U-RNTI).

**Radio Resource Control:** A sublayer of radio interface Layer 3 existing in the control plane only which provides information transfer service to the non-access stratum. RRC is responsible for controlling the configuration of radio interface Layers 1 and 2.

**Radio system:** the selected 2<sup>nd</sup> or 3<sup>rd</sup> generation radio access technology, eg UTRAN or GERAN.

**Rated Output Power:** For FDD BS, rated output power is the mean power level per carrier that the manufacturer has declared to be available at the antenna connector. For TDD BS rated output power is the mean power level per carrier over an active timeslot that the manufacturer has declared to be available at the antenna connector.

**Real time:** Time, typically in number of seconds, to perform the on-line mechanism used for fraud control and cost control.

**Received Signal Code Power:** Given only signal power is received, the average power of the received signal after despreading and combining.

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

**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  $E_b/(N_o+I_o)$ .

**Recipient network:** The network which receives the number in the porting process. This network becomes the subscription network when the porting process is complete.

**Record:** A string of bytes within an EF handled as a single entity (see clause 6).

**Record number:** The number, which identifies a record within an EF.

**Record pointer:** The pointer, which addresses one record in an EF.

**Reference configuration:** A combination of functional groups and reference points that shows possible network arrangements (source: GSM 01.04, ITU-T I.112).

**Reference point:** A conceptual point at the conjunction of two non-overlapping functional groups (source: GSM 01.04, ITU-T I.112).

**Regionally Provided Service:** A service entitlement to only certain geographical part(s) of a PLMN, as controlled by the network operator.

**Registration:** This is the process of camping on a cell of the PLMN and doing any necessary LRs.

**Registered PLMN (RPLMN):** This is the PLMN on which the UE has performed a location registration successfully.

**Registration Area:** A (NAS) registration area is an area in which the UE may roam without a need to perform location registration, which is a NAS procedure.

**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.

**Release 99:** A particular version of the UMTS standards produced by the 3GPP project. Also: ~~Release 400~~, ~~Release 504~~, ~~Release 602~~ etc.

**Repeater:** A "repeater" is a radio transceiver used to extend the transmission of a base station beyond its normal range.

**Requested QoS:** a QoS profile is requested at the beginning of a QoS session. QoS modification requests are also possible during the lifetime of a QoS session.

**Required  $E_b/(N_o+I_o)$  (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.

**Residual error rate:** A parameter describing service accuracy. The frequency of lost SDUs, and of corrupted or duplicated network SDUs delivered at the user-network interface.

**Retrieval service:** An interactive service which provides the capability of accessing information stored in data base centres. The information will be sent to the user on demand only. The information is retrieved on an individual basis, i.e., the time at which an information sequence is to start is under the control of the user (source ITU-T I.113).

**Roaming:** The ability for a user to function in a serving network different from the home network.

**Root directory:** Obsolete term for Master File.

**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.

## T

**Telection service:** A type of telecommunication service that uses short messages, requiring a low transmission rate, between the user and the network (source: ITU-T I.112).

**Telecommunication service:** ~~That which~~ What is offered by a PLMN operator or service provider to -its customers in order to satisfy a specific telecommunication requirement. (source: GSM 01.04, ITU-T I.112). Telecommunication services are divided into two broad families: bearer services and teleservices (source: ITU-T I.210).

**Teleservice:** Is a type of telecommunication service that provides the complete capability, including terminal equipment functions, for communication between users according to standardised protocols and transmission capabilities established by agreement between operators.

**Terminal:** A device into which a UICC can be inserted and which is capable of providing access to UMTS services to users, either alone or in conjunction with a UICC.

**Terminal equipment:** Equipment that provides the functions necessary for the operation of the access protocols by the user (source: GSM 01.04). A functional group on the user side of a user-network interface (source: ITU-T I.112).

**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.

**Text conversation:** Real time transfer of text between users in at least two locations.

**Text Telephony:** An audiovisual conversation service providing bi-directional real time transfer of text and optionally audio between users in two locations. Audio may be transmitted alternating with text or simultaneously with text. (Source ITU-T F.703)

**Throughput:** A parameter describing service speed. The number of data bits successfully transferred in one direction between specified reference points per unit time (source: ITU-T I.113).

**Total Conversation:** An audiovisual conversation service providing bi-directional symmetric real-time transfer of motion video, text and voice between users in two or more locations. (source ITU-T F.703)

**Total power dynamic range:** The difference between the maximum and the minimum total transmit output power for a specified reference condition (TS25.104).

**Traffic channel:** A "traffic channel" is a logical channel which carries user information.

**Transit delay:** A parameter describing service speed. The time difference between the instant at which the first bit of a protocol data unit (PDU) crosses one designated boundary (reference point), and the instant at which the last bit of the PDU crosses a second designated boundary (source: ITU-T I.113).

**Transmission Time Interval:** Transmission Time Interval is defined as the inter-arrival time of Transport Block Sets, i.e. the time it shall take to transmit a Transport Block Set.

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

**Transport Block:** Transport Block is defined as the basic data unit exchanged between L1 and MAC. An equivalent term for Transport Block is "MAC PDU".

**Transport Block Set:** Transport Block Set is defined as a set of Transport Blocks that is exchanged between L1 and 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.

**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 UE, 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 UE.

**Transport Format Combination Indicator (TFCD):** 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.

## U

**UE Service Capabilities:** Capabilities that can be used either singly or in combination to deliver services to the user. The characteristic of UE Service Capabilities is that their logical function can be defined in a way that is independent of the implementation of the UMTS system (although all UE Service Capabilities are of course constrained by the implementation of UMTS). Examples: a data bearer of 144 kbps; a high quality speech teleservice; an IP teleservice; a capability to forward a speech call.

**UMTS core network:** refers in this specification to an evolved GSM core network infrastructure or any new UMTS core network infrastructures, integrating circuit and packet switched traffic..

~~**UMTS coverage:** an area where mobile cellular services are provided in accordance with UMTS standards.~~

**UMTS IC Card:** An IC card (or 'smartcard') of defined electromechanical specification which contains at least one USIM.

**UMTS mobile termination:** part of the UMTS Mobile Station which provides functions specific to the management of the radio interface (Um).

**UMTS network:** Network operated by a single network operator and consisting of UTRAN access networks (WCDMA and/or TD-CDMA), optionally GSM BSS access networks, an UMTS core network.

**Universal Mobile Telecommunications System (UMTS):** The telecommunications system, incorporating mobile cellular and other functionality, that is the subject of standards produced by 3GPP.

**Universal Subscriber Identity Module (USIM):** An application residing on the UICC used for accessing services provided by mobile networks, which the application is able to register on with the appropriate security.

**Universal Terrestrial Radio Access Network:** UTRAN is a conceptual term identifying that part of the network which consists of RNCs and Node Bs between Iu and Uu interfaces.

**UPC (Usage Parameter Control):** Set of actions taken by the network to monitor and control the offered traffic and the validity of the connection with respect to the traffic contract negotiated between the user and the network.

**Uplink:** An "uplink" is a unidirectional radio link for the transmission of signals from a UE 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:** An entity, not part of UMTS, which uses UMTS services. Example: a person using a UMTS mobile station as a portable telephone.

**User-network interface:** The interface between the terminal equipment and a network termination at which interface the access protocols apply (source: ITU-T I.112).

**User-user protocol:** A protocol that is adopted between two or more users in order to ensure communication between them (source: ITU-T I.112).

**User access or user network access:** The means by which a user is connected to a telecommunication network in order to use the services and/or facilities of that network (source: GSM 01.04, ITU-T I.112).

**User Equipment:** A device allowing a user access to network services. For the purpose of 3GPP specifications the interface between the UE and the network is the radio interface. A User Equipment can be subdivided into a number of domains, the domains being separated by reference points. Currently defined domains are the USIM and ME Domains. The ME Domain can further be subdivided into several components showing the connectivity between multiple functional groups. These groups can be implemented in one or more hardware devices. An example of such a connectivity is the TE – MT interface. Further, an occurrence of a User Equipment is an MS for GSM as defined in GSM TS 04.02.

**User Interface Profile:** Contains information to present the personalised user interface within the capabilities of the terminal and serving network.

**User Services Profile:** Contains identification of subscriber services, their status and reference to service preferences.

**UTRA Radio access mode:** the selected UTRA radio access mode ie UTRA-FDD;UTRA-TDD.

**UTRA-NTDD:** Time Division Duplex UTRA access mode 1.28 Mcps option

**UTRA-TDD:** Time Division Duplex UTRA Radio access mode (Includes UTRA-NTDD and UTRA-WTDD)

**UTRA-WTDD:** Time Division Duplex UTRA access mode 3.84 Mcps option

**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.

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

**UTRAN Radio Network Temporary Identifier:** The U-RNTI is a unique UE identifier that consists of two parts, an SRNC identifier and a C-RNTI. U-RNTI is allocated to an UE having a RRC connection. It identifies the UE within UTRAN and is used as an UE identifier in cell update, URA update, RRC connection reestablishment and (UTRAN originated) paging messages and associated responses on the radio interface.

**User Profile:** Is the set of information necessary to provide a user with a consistent, personalised service environment, irrespective of the user's location or the terminal used (within the limitations of the terminal and the serving network).

~~**User:** An entity, not part of UMTS, which uses UMTS services. Example: a person using a UMTS mobile station as a portable telephone.~~

**Uu:** The Radio interface between UTRAN and the User Equipment.

## 4 Abbreviations

### A

|       |  |
|-------|--|
| A-SGW | Access Signalling Gateway                                |
| A3    | Authentication algorithm A3                              |
| A38   | A single algorithm performing the functions of A3 and A8 |
| A5/1  | Encryption algorithm A5/1                                |
| A5/2  | Encryption algorithm A5/2                                |
| A5/X  | Encryption algorithm A5/0-7                              |
| A8    | Ciphering key generating algorithm A8                    |

|               |   |
|---------------|---|
| AAL           | ATM Adaptation Layer  |
| AAL2          | ATM Adaptation Layer type 2   |
| AAL5          | ATM Adaptation Layer type 5   |
| AB            | Access Burst  |
| AC            | Access Class (C0 to C15)  |
|               | Access Condition  |
|               | Application Context   |
|               | Authentication Centre   |
| ACC           | Automatic Congestion Control  |
| ACCH          | Associated Control Channel  |
| ACIR          | Adjacent Channel Interference Ratio   |
| ACK           | Acknowledgement   |
| ACLR          | Adjacent Channel Leakage Power Ratio  |
| ACM           | Accumulated Call Meter  |
|               | Address Complete Message  |
| ACS           | Adjacent Channel Selectivity  |
| ACU           | Antenna Combining Unit  |
| ADC           | Administration Centre   |
|               | Analogue to Digital Converter   |
| ADF           | Application Dedicated File  |
| ADM           | Access condition to an EF which is under the control of the authority which creates this file |
| ADN           | Abbreviated Dialling Numbers  |
| ADPCM         | Adaptive Differential Pulse Code Modulation   |
| AE            | Application Entity  |
| AEC           | Acoustic Echo Control   |
| AEF           | Additional Elementary Functions   |
| AESA          | ATM End System Address  |
| AFC           | Automatic Frequency Control   |
| AGCH          | Access Grant CHannel  |
| Ai            | Action indicator  |
| AI            | Acquisition Indicator   |
| AICH          | Acquisition Indicator Channel   |
| AID           | Application IDentifier  |
| AIUR          | Air Interface User Rate   |
| AK            | Anonymity key   |
| ALCAP         | Access Link Control Application Protocol  |
| ALSI          | Application Level Subscriber Identity   |
| ALW           | ALWays  |
| AM            | Acknowledged Mode   |
| AMF           | Authentication Management Field   |
| AMR           | Adaptive Multi Rate   |
| <u>AMR-WB</u> | <u>Adaptive Multi Rate Wide Band</u>  |
| AN            | Access Network  |
| A AoC         | Advice of Charge  |
| AoCC          | Advice of Charge Charging   |
| AoCI          | Advice of Charge Information  |
| AP            | Access preamble   |
| APDU          | Application Protocol Data Unit  |
| API           | Application Programming Interface   |
| APN           | Access Point Name   |
| ARFCN         | Absolute Radio Frequency Channel Number   |
| ARP           | Address Resolution Protocol   |
| ARQ           | Automatic Repeat Request  |
| AS            | Access Stratum  |
| ASC           | Access Service Class  |
| ASCI          | Advanced Speech Call Items  |
| ASE           | Application Service Element   |
| ASN.1         | Abstract Syntax Notation One  |
| AT command    | ATtention Command   |
| ATM           | Asynchronous Transfer Mode  |
| ATR           | Answer To Reset   |
| ATT (flag)    | Attach  |



|        |                               |
|--------|-------------------------------|
| AU     | Access Unit                   |
| AuC    | Authentication Centre         |
| AUT(H) | Authentication                |
| AUTN   | Authentication token          |
| AWGN   | Additive White Gaussian Noise |

|  |  |
|--|--|
| CR-Form-v4   |  |
| <b>CHANGE REQUEST</b>  |  |
| ⌘ <b>21.905 CR 034</b> ⌘ ev <b>-</b> ⌘ Current version: <b>5.2.0</b> ⌘ |  |
| <b>Spec Title:</b> Vocabulary for 3GPP specifications ⌘                |  |

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>          | ⌘ Replacement of the term "UMTS" with "3GPP system"                                   |                 |   |
| <b>Source:</b>         | ⌘ One 2 One Personal Communications Limited   |                 |   |
| <b>Work item code:</b> | ⌘ TEI   | <b>Date:</b>    | ⌘ 04 – Feb – 2002                         |
| <b>Category:</b>       | ⌘ <b>B</b>  | <b>Release:</b> | ⌘ <b>REL-5</b>                            |
|                        | Use <u>one</u> of the following categories:   |                 | Use <u>one</u> of the following releases: |
|                        | <b>F</b> (correction)   | <b>2</b>        | (GSM Phase 2)                             |
|                        | <b>A</b> (corresponds to a correction in an earlier release)                          | <b>R96</b>      | (Release 1996)                            |
|                        | <b>B</b> (addition of feature),   | <b>R97</b>      | (Release 1997)                            |
|                        | <b>C</b> (functional modification of feature)   | <b>R98</b>      | (Release 1998)                            |
|                        | <b>D</b> (editorial modification)   | <b>R99</b>      | (Release 1999)                            |
|                        | Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u> . |                 | <b>REL-4</b> (Release 4)                  |
|                        |   |                 | <b>REL-5</b> (Release 5)                  |

|                                      |  |
|--------------------------------------|--|
| <b>Reason for change:</b>            | ⌘ Currently the term UMTS is used in the vocabulary and in several technical specifications, however such term is not recognised by 3GPP. This CR aims to substitute such term with the more broadly accepted "3GPP system" which is also defined in this document |
| <b>Summary of change:</b>            | ⌘ - Replacement of the term UMTS with 3GPP system where appropriate<br>- Introduction of the definition of 3GPP system   |
| <b>Consequences if not approved:</b> | ⌘ Use of incorrect term in the vocabulary with possible misinterpretation  |

|                              |  |   |  |
|------------------------------|--|---|--|
| <b>Clauses affected:</b>     | ⌘ 0-9, C, I, M, O, R, S, T, U                        |   |  |
| <b>Other specs affected:</b> | ⌘ <input type="checkbox"/> Other core specifications | ⌘ |  |
|                              | <input type="checkbox"/> Test specifications         |   |  |
|                              | <input type="checkbox"/> O&M Specifications          |   |  |
| <b>Other comments:</b>       | ⌘  |   |  |

**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](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.

## 3 Terms and definitions

### 0-9

**3GPP system:** the telecommunication system standardised by the 3GPP consisting of a core network and a radio access network that may be either GERAN or UTRAN, or both.

**3GPP System core network:** refers in this specification to an evolved GSM core network infrastructure.

**3GPP System coverage:** see coverage area.

**3GPP System IC Card:** An IC card (or 'smartcard') of defined electromechanical specification which contains at least one USIM.

**3GPP System mobile termination:** part of the 3GPP System Mobile Station which provides functions specific to the management of the radio interface (Um).

**3V technology Smart Card:** A Smart Card operating at  $3V \pm 10\%$  and  $5V \pm 10\%$ .

**1.8V technology Smart Card:** A Smart Card operating at  $1.8V \pm 10\%$  and  $3V \pm 10\%$ .

**3V technology Terminal:** A terminal operating the Smart Card - Terminal interface at  $3V \pm 10\%$  and  $5V \pm 10\%$ .

**1.8V technology Terminal:** A terminal operating the Smart Card - Terminal interface at  $1.8V \pm 10\%$  and  $3V \pm 10\%$ .

### C

**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):** The combined losses of all transmission system components between the receiving antenna output and the receiver input.

**CAC (Connection Admission Control):** A set of measures taken by the network to balance between the QoS requirements of new connections request and the current network utilisation without affecting the grade of service of existing/already established connections.

**Call:** a logical association between several users (this could be connection oriented or connection less).

**Call Detail Record (CDR):** A formatted collection of information about a chargeable event (e.g. time of call set-up, duration of the call, amount of data transferred, etc) for use in billing and accounting. For each party to be charged for parts of or all charges of a chargeable event a separate CDR shall be generated, i.e more than one CDR may be generated for a single chargeable event, e.g. because of its long duration, or because more than one charged party is to be charged.

**Camped on a cell:** The UE is in idle mode and has completed the cell selection/reselection process and has chosen a cell. The UE monitors system information and (in most cases) paging information. Note that the services may be limited, and that the PLMN may not be aware of the existence of the UE within the chosen cell.

**Capability Class:** A piece of information which indicates general UMTS-3GPP System mobile station characteristics (e.g. supported radio interfaces,...) for the interest of the network.

**Card session:** A link between the card and the external world starting with the ATR and ending with a subsequent reset or a deactivation of the card.

**CBS DRX cycle:** The time interval between successive readings of BMC messages.

**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.

**Cell Radio Network Temporary Identifier (C-RNTI):** The C-RNTI is a UE identifier allocated by a controlling RNC and it is unique within one cell controlled by the allocating CRNC. C-RNTI can be reallocated when a UE accesses a new cell with the cell update procedure.

**Cellular Text telephone Modem (CTM):** A modulation and coding method intended for transmission of text in voice channels for the application of real time text conversation.

**Chargeable Event:** An activity utilising telecommunications network infrastructure and related services for user to user communication (e.g. a single call, a data communication session or a short message), or for user to network communication (e.g. service profile administration), or for inter-network communication (e.g. transferring calls, signalling, or short messages), or for mobility (e.g. roaming or inter-system handover), which the network operator wants to charge for. The cost of a chargeable event may cover the cost of sending, transporting, delivery and storage. The cost of call related signalling may also be included.

**Charged Party:** A user involved in a chargeable event who has to pay parts or the whole charges of the chargeable event, or a third party paying the charges caused by one or all users involved in the chargeable event, or a network operator.

**Charging:** A function whereby information related to a chargeable event is formatted and transferred in order to make it possible to determine usage for which the charged party may be billed.

**Cipher key:** A code used in conjunction with a security algorithm to encode and decode user and/or signalling data.

**Closed group:** A group with a pre-defined set of members. Only defined members may participate in a closed group.

**Coded Composite Transport Channel:** A data stream resulting from encoding and multiplexing of one or several transport channels.

**Common Channel:** A Channel not dedicated to a specific UE.

**Confidentiality:** The avoidance of disclosure of information without the permission of its owner.

**Connected Mode:** Connected mode is the state of User Equipment switched on and an RRC connection established.

**Connection:** A communication channel between two or more end-points (e.g. terminal, server etc.).

**Connection mode:** The type of association between two points as required by the bearer service for the transfer of information. A bearer service is either connection-oriented or connectionless. In a connection oriented mode, a logical association called *connection* needs to be established between the source and the destination entities before information can be exchanged between them. Connection oriented bearer services lifetime is the period of time between the establishment and the release of the connection. In a connectionless mode, no connection is established beforehand between the source and the destination entities; the source and destination network addresses need to be specified in each message. Transferred information cannot be guaranteed of ordered delivery. Connectionless bearer services lifetime is reduced to the transport of one message.

**Connectionless (for a bearer service):** In a connectionless bearer, no connection is established beforehand between the source and the destination entities ; the source and destination network addresses need to be specified in each message. Transferred information cannot be guaranteed of ordered delivery. Connectionless bearer services lifetime is reduced to the transport of one message.

**Connectionless service:** A service which allows the transfer of information among service users without the need for end-to-end call establishment procedures (source: ITU-T I.113).

**Control channel:** 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.

**Conversational service:** An interactive service which provides for bi-directional communication by means of real-time (no store-and-forward) end-to-end information transfer from user to user (source: ITU-T I.113).

**Core network:** An architectural term relating to the part of 3GPP SystemUMTS which is independent of the connection technology of the terminal (eg radio, wired).

**Corporate code:** Code which when combined with the network and SP codes refers to a unique Corporate. The code is provided in the GID2 file on the SIM (see Annex A.1.) and is correspondingly stored on the ME.

**Corporate code group** combination of the Corporate code and the associated SP and network codes.

**Corporate personalisation:** Allows a corporate customer to personalise MEs that he provides for his employees or customers use so that they can only be used with the company's own SIMs.

**Coverage area (of a mobile cellular system):** An area where mobile cellular services are provided by that mobile cellular system to the level required of that system.

**Coverage area:** Area over which a UMTS/3GPP System service is provided with the service probability above a certain threshold.

**Current directory:** The latest MF or DF selected.

**Current EF:** The latest EF selected.

**Current serving cell:** This is the cell on which the MS is camped.

**IC Card:** A card holding an Integrated Circuit containing subscriber, end user, authentication and/or application data for one or more applications.

**IC card SIM:** Obsolete term for ID-1 SIM.

**ID-1 SIM:** The SIM having the format of an ID-1 card (see ISO 7816-1 [24]).

**Idle mode:** The state of UE switched on but which does not have any established RRC connection.

**Implementation capability:** A capability that relates to a particular technical domain. Examples: a spreading factor of 128 (in the domain of the physical layer); the A5 algorithm; a 64 bit key length (in the domain of security); a power output of 21 dBm (in the domain of transmitter performance); support of AMR Codec (in the domain of the Codec); support of CHV1 (in the domain of the USIM).

**Information Data Rate:** Rate of the user information, which must be transmitted over the Air Interface. For example, output rate of the voice codec.

**Initial paging information:** This information indicates if the UE needs to continue to read more paging information and eventually receive a page message.

**Initial paging occasion:** The paging occasion the UE uses as starting point for its paging DRX cycle.

**Integrity:** (in the context of security) The avoidance of unauthorised modification of information.

**Inter-cell handover:** A handover between different cells. An inter-cell handover requires network connections to be altered.

**Inter PLMN handover:** Handover between different PLMNs, ie having different MCC-MNC.

**Inter system handover:** Handover between networks using different radiosystems , e.g. UMTS – GSM.

**Interactive service:** A service which provides the means for bi-directional exchange of information between users. Interactive services are divided into three classes of services: conversational services, messaging services and retrieval services (source: ITU-T I.113).

**Interface:** The common boundary between two associated systems (source: GSM 01.04, ITU-T I.112).

**International Mobile Station Equipment Identity (IMEI):** An "International Mobile Station Equipment Identity" is a unique number which shall be allocated to each individual mobile station equipment in the PLMN and shall be unconditionally implemented by the MS manufacturer.

**International mobile user number (IMUN):** The International Mobile User Number is a diallable number allocated to a 3GPP SystemUMTS user.

**Interference Signal Code Power (ISCP):** Given only interference power is received, the average power of the received signal after despreading and combining.

**Intra-cell handover:** 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.

**Intra PLMN handover:** Handover within the same network, ie having the same MCC-MNC regardless of radio access system. Note: this includes the case of UMTS <>GSM handover where MCC-MNC are the same in both cases.

**IRP Information Model:** An IRP Information Model consists of an IRP Information Service and a Network Resource Model (see below for definitions of IRP Information Service and Network Resource Model).

**IRP Information Service:** An IRP Information Service describes the information flow and support objects for a certain functional area, e.g. the alarm information service in the fault management area. As an example of support objects, for the Alarm IRP there is the alarm record and alarm list.

**IRP Solution Set:** An IRP Solution Set is a mapping of the IRP Information Service to one of several technologies (CORBA/IDL, SNMP/SMI, CMIP/GDMO, etc.). An IRP Information Service can be mapped to several different IRP Solution Sets. Different technology selections may be done for different IRPs.

**Inter System Change:** a change of radio access between different radio access technologies such as GSM and UMTS.

**Iu:** Interconnection point between an RNC 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 RNC. Whilst logically representing a point to point link between RNC, the physical realisation may not be a point to point link.

## M

**Macro cells:** "Macro cells" are outdoor cells with a large cell radius.

**Macro diversity handover:** "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.

**Management Infrastructure:** The collection of systems (computers and telecommunications) a 3GPP SystemUMTS Organisation has in order to manage a 3GPP SystemUMTS.

**Mandatory UE Requirement:** Regulatory requirement which is applicable to 3G UEs. It is determined by each country/region and beyond the scope of 3GPP specification (e.g. spurious emission in UK).

**Master File (MF):** The unique mandatory file containing access conditions and optionally DFs and/or EFs.

**Maximum output Power:** For UE, this is a measure of the maximum power supported by the UE (i.e. the actual power as would be measured assuming no measurement error) (TS 25.101). For FDD BS, the mean power level per carrier of the base station measured at the antenna connector in a specified reference condition (TS 25.104). For TDD BS this refers to the measure of power when averaged over the transmit timeslot at the maximum power setting (TS 25.105).

**Maximum possible AIUR:** The highest possible AIUR that the multiple TCH/F can provide, e.g. 2 TCH/F using TCH/F9.6 provides a maximum possible AIUR of 19,2 kbit/s.

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

**Mean bit rate:** A measure of throughput. The average (mean) bit rate available to the user for the given period of time (source: ITU-T I.210).

**Mean transit delay:** The average transit delay experienced by a (typically) large sample of PDUs within the same service category.

**Medium Access Control:** A sub-layer of radio interface layer 2 providing unacknowledged data transfer service on logical channels and access to transport channels.

**Messaging service:** An interactive service which offers user-to-user communication between individual users via storage units with store-and-forward, mailbox and/or message handling, (e.g., information editing, processing and conversion) functions (source: ITU-T I.113).

**MExE Classmark:** A MExE classmark identifies a category of MExE UE supporting MExE functionality with a minimum level of processing, memory, display, and interactive capabilities. Several MExE classmarks may be defined to differentiate between the functionalities offered by different MExE UEs. A MExE application or applet defined as being of a specific MExE Classmark indicates that it is supportable by a MExE UE of that Classmark.

**MExE executable:** An executable is an applet, application, or executable content, which conforms to the MExE specification and may execute on the ME.

**MExE server:** A node supporting MExE services in the MExE service environment.

**MExE service:** a service enhanced (or made possible) by MExE technology.

**MExE service environment:** Depending on the configuration of the PLMN, the operator may be able to offer support to MExE services in various ways. Examples of possible sources are from traditional GSM nodes, IN nodes, operator-specific nodes, operator franchised nodes and services provider nodes, together with access to nodes external (i.e. vendor-specific) to the PLMN depending on the nature of the MExE service. These nodes are considered to constitute the MExE service environment. The MExE service environment shall support direct MExE UE to MExE UE interaction of MExE services.

**MExE service provider:** an organisation which delivers MExE services to the subscriber. This is normally the PLMN operator, but could be an organisation with MExE responsibility (which may have been delegated by the PLMN operator).

**MExE SIM:** A SIM that is capable of storing a security certificate that is accessible using standard mechanisms.

**MExE subscriber:** The owner of a subscription who has entered into an agreement with a MExE service provider for MExE services.

**Micro cells:** "Micro cells" are small cells.

**Minimum transmit power:** The minimum controlled output power of the TDD BS is when the power control setting is set to a minimum value. This is when the power control indicates a minimum transmit output power is required (TS 25.105).

**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, e.g. uplink radio environment and/or availability of network resources, the network may then execute the handover.

**Mobile number portability:** The ability for a mobile subscriber to change subscription network within the same country whilst retaining their original MSISDN(s).

**Mobile termination:** the mobile termination is the component of the mobile station which supports functions specific to management of the radio interface (Um).

**Mobility:** The ability for the user to communicate whilst moving independent of location.

**Mobility Management:** A relation between the mobile station and the UTRAN that is used to set-up, maintain and release the various physical channels.

**Multi mode terminal:** UE that can obtain service from at least one UTRA radio access mode, and one or more different systems such as GSM bands or possibly other radio systems such as IMT-2000 family members.

**Multicast service:** A unidirectional PTM service in which a message is transmitted from a single source entity to all subscribers currently located within a geographical area. The message contains a group identifier indicating whether the message is of interest to all subscribers or to only the subset of subscribers belonging to a specific multicast group.



**Multipoint:** A value of the service attribute "communication configuration", which denotes that the communication involves more than two network terminations (source: ITU-T I.113).

**Multimedia service:** Services that handle several types of media such as audio and video in a synchronised way from the user's point of view. A multimedia service may involve multiple parties, multiple connections, and the addition or deletion of resources and users within a single communication session.

## O

**One Stop Billing:** One bill for all charges incurred using UMTSthe 3GPP System.

**Open group:** A group that does not have a pre-defined set of members. Any user may participate in an open group.

**Open Service Architecture:** Concept for introducing a vendor independent means for introduction of new services.

**Operations System:** This abbreviation indicates a generic management system, independent of its location level within the management hierarchy.

**Optional UE Requirement:** Any other requirements than mandatory UE requirement, essential UE requirement (conditional), essential UE requirement (unconditional). It is totally up to individual manufacturer to decide whether it should be implemented or not (e.g. Network initiated MM connection establishment).

**Originating network:** The network where the calling party is located.

**Orthogonal Channel Noise Simulator** a mechanism used to simulate the users or control signals on the other orthogonal channels of a downlink

**OSA Interface:** Standardised Interface used by application/clients to access service capability features.

## R

**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 Mode:** Mode of the cell, FDD or TDD.

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

**Radio Access Technology:** UTRA, GERAN etc.

**Radio Bearer:** The service provided by the Layer 2 for transfer of user data between User Equipment and UTRAN.

**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 15 time slots of 0.666 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.

**Radio interface:** The "radio interface" is the tetherless interface between 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 single User Equipment and a single UTRAN access point. Its physical realisation comprises one or more radio bearer transmissions.

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

**Radio Link Control:** A sublayer of radio interface layer 2 providing transparent, unacknowledged and acknowledged data transfer service.

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

**Radio Link Set:** A set of one or more Radio Links that has a common generation of Transmit Power Control (TPC) commands in the DL

**Radio Network Controller:** This equipment in the RNS is in charge of controlling the use and the integrity of the radio resources.

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

**Radio Network Subsystem:** Either a full network or only the access part of a UTRAN 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.

**Radio Network Temporary Identifier:** A Radio Network Temporary Identifier is a generic term of an identifier for a UE when an RRC connection exists. Following types of RNTI are defined: Cell RNTI (C-RNTI), Serving RNC RNTI (S-RNTI) and UTRAN RNTI (U-RNTI).

**Radio Resource Control:** A sublayer of radio interface Layer 3 existing in the control plane only which provides information transfer service to the non-access stratum. RRC is responsible for controlling the configuration of radio interface Layers 1 and 2.

**Radio system:** the selected 2<sup>nd</sup> or 3<sup>rd</sup> generation radio access technology, eg UTRAN or GERAN.

**Rated Output Power:** For FDD BS, rated output power is the mean power level per carrier that the manufacturer has declared to be available at the antenna connector. For TDD BS rated output power is the mean power level per carrier over an active timeslot that the manufacturer has declared to be available at the antenna connector.

**Real time:** Time, typically in number of seconds, to perform the on-line mechanism used for fraud control and cost control.

**Received Signal Code Power:** Given only signal power is received, the average power of the received signal after despreading and combining.

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

**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  $E_b/(N_0+I_0)$ .

**Recipient network:** The network which receives the number in the porting process. This network becomes the subscription network when the porting process is complete.

**Record:** A string of bytes within an EF handled as a single entity (see clause 6).

**Record number:** The number, which identifies a record within an EF.

**Record pointer:** The pointer, which addresses one record in an EF.

**Reference configuration:** A combination of functional groups and reference points that shows possible network arrangements (source: GSM 01.04, ITU-T I.112).

**Reference point:** A conceptual point at the conjunction of two non-overlapping functional groups (source: GSM 01.04, ITU-T I.112).

**Regionally Provided Service:** A service entitlement to only certain geographical part(s) of a PLMN, as controlled by the network operator.

**Registration:** This is the process of camping on a cell of the PLMN and doing any necessary LRs.

**Registered PLMN (RPLMN):** This is the PLMN on which the UE has performed a location registration successfully.

**Registration Area:** A (NAS) registration area is an area in which the UE may roam without a need to perform location registration, which is a NAS procedure.

**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.

**Release 99:** A particular version of the 3GPP SystemUMTS standards produced by the 3GPP project. Also: release 00, release 01, release 02 etc.

**Repeater:** A "repeater" is a radio transceiver used to extend the transmission of a base station beyond its normal range.

**Requested QoS:** a QoS profile is requested at the beginning of a QoS session. QoS modification requests are also possible during the lifetime of a QoS session.

**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.

**Residual error rate:** A parameter describing service accuracy. The frequency of lost SDUs, and of corrupted or duplicated network SDUs delivered at the user-network interface.

**Retrieval service:** An interactive service which provides the capability of accessing information stored in data base centres. The information will be sent to the user on demand only. The information is retrieved on an individual basis, i.e., the time at which an information sequence is to start is under the control of the user (source ITU-T I.113).

**Roaming:** The ability for a user to function in a serving network different from the home network.

**Root directory:** Obsolete term for Master File.

**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.

## S

**SDU error probability:** The ratio of total incorrect service data units (SDUs) to total successfully transferred service data units plus incorrect service data units in a specified sample (source: ITU-T X.140).

NOTE: the source document term "user information unit" has been replaced by the term "service data unit".

**SDU loss probability:** The ratio of total lost service data units (SDUs) to total transmitted service data units in a specified sample (source: ITU-T X.140).

NOTE: the source document term "user information unit" has been replaced by the term "service data unit".

**SDU misdelivery probability:** The ratio of total misdelivered service data units (SDUs) to total service data units transferred between a specified source and destination user in a specified sample (source: ITU-T X.140).

NOTE: the source document term "user information unit" has been replaced by the term "service data unit".

**SDU transfer delay:** The value of elapsed time between the start of transfer and successful transfer of a specified service data unit (SDU) (source: ITU-T X.140).

NOTE: the source document term "user information unit" has been replaced by the term "service data unit".

**SDU transfer rate:** The total number of successfully transferred service data units (SDUs) in a transfer sample divided by the input/output time for that sample. The input/output time is the larger of the input time or the output time for the sample (source: ITU-T X.140).

NOTE: the source document term "user information unit" has been replaced by the term "service data unit".

**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.

**Security:** The ability to prevent fraud as well as the protection of information availability, integrity and confidentiality.

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

**Selected PLMN:** This is the PLMN that has been selected by the non-access stratum, either manually or automatically.

**Service:** Set of functions offered to a user by an organisation.

**Service-less UE:** A UE that has only the Baseline capabilities.

**Service Access Point:** A conceptual point where a protocol layer offers access to its services to upper layer.

**Service Area:** The Service Area is defined in the same way as the Service Area according to ITU-T Recommendation Q.1001 [4]. In contrast to the PLMN area it is not based on the coverage of a PLMN. Instead it is based on the area in which a fixed network user can call a mobile user without knowing his location. The Service Area can therefore change when the signalling system is being extended, for example.

**Service attribute:** A specified characteristic of a telecommunication service (source: ITU-T I.112).

NOTE: the value(s) assigned to one or more service attributes may be used to distinguish that telecommunications service from others.

**Service bit rate:** The bit rate that is available to a user for the transfer of user information (source: ITU-T I.113).

**Service Capabilities:** Bearers defined by parameters, and/or mechanisms needed to realise services. These are within networks and under network control.

**Service Capability Feature:** Functionality offered by service capabilities that are accessible via the standardised application interface

**Service Capability Server:** Network functionality providing open interfaces towards the functionality offered by 3GPP SystemUMTS service capabilities.

**Service category or service class:** A service offered to the users described by a set of performance parameters and their specified values, limits or ranges. The set of parameters provides a comprehensive description of the service capability.

**Service Control:** The ability of the user, home environment or serving environment to determine what a particular service does, for a specific invocation of that service, within the limitations of that service.

**Service Data Unit (SDU):** In the reference model for OSI, an amount of information whose identity is preserved when transferred between peer (N+1)-layer entities and which is not interpreted by the supporting (N)-layer entities (source: ITU-T X.200 / ISO-IEC 7498-1).

**Service delay:** The time elapsed from the invocation of the service request, to the corresponding service request indication at the Service Receiver, indicating the arrival of application data.

**Service Execution Environment:** A platform on which an application or programme is authorised to perform a number of functionalities; examples of service execution environments are the user equipment, integrated circuit card and a network platform or any other server.

**Service Feature:** Functionality that a 3GPP SystemUMTS-system shall offer to enable provision of services. Services, are made up of different service features.

**Service Implementation Capabilities:** Set of implementation capabilities, in each technical domain, required to enable a UE to support a set of UE Service Capabilities.

**Service model:** A general characterisation of services based upon a QoS paradigm, without specifying the actual performance targets.

**Service Provider:** A Service Provider is either a network operator or an other entity that provides services to a subscriber (e.g. a MVNO)

**Service receiver:** The entity which receives the service request indication primitive, containing the SDU.

**Service relationship:** The association between two or more entities engaged in the provision of services.

**Service request:** This is defined as being one invocation of the service through a service request primitive.

**Service requester:** The entity which requests the initiation of a GPRS operation, through a service request.

**Service subscriber:** Entity which subscribes to the General Packet Radio Service (GPRS) service.

**Services (of a mobile cellular system):** The set of unctions that the mobile cellular system can make available to the user.

**Serving Network:** The serving network provides the user with access to the services of home environment.

**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 RRC connection between a UE and the UTRAN. The Serving RNS terminates the Iu for this.

**Settlement:** Payment of amounts resulting from the accounting process.

**Shared Channel:** A radio resource (transport channel or physical channel) that can be shared dynamically between several UEs.

**Short time:** Time, typically in number of minutes, to perform the off-line mechanism used for accounting.

**Signalling:** The exchange of information specifically concerned with the establishment and control of connections, and with management, in a telecommunications network (source: ITU-T I.112).

**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 UE-UTRAN signalling messages as well as UE - Core Network signalling messages (using the signalling connection).

**SIM application toolkit procedures:** Defined in GSM 11.14 [27].

**SIM code:** Code which when combined with the network and NS codes refers to a unique SIM. The code is provided by the digits 8 to 15 of the IMSI

**SIM code group:** Combination of the SIM code and the associated network subset and network codes (it is equivalent to the IMSI).

**SIM personalisation:** Enables a user to personalise a ME so that it may only be used with particular SIM(s).

**Simultaneous use of services:** The concurrent use of a circuit-mode service (voice or data) and packet-mode services (GPRS) by a single mobile station.

**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.

**SP code:** code which when combined with the network code refers to a unique SP. The code is provided in the GID1 file on the SIM (see Annex A.1.) and is correspondingly stored on the ME.

**SP code group:** Combination of the SP code and the associated network code.

**SP personalisation:** Allows the service provider to personalise a ME so that it can only be used with that particular service provider's SIMs.

**Speed:** A performance criterion that describes the time interval required to perform a function or the rate at which the function is performed. (The function may or may not be performed with the desired accuracy.) (source: ITU-T I.350).

**SRNC Radio Network Temporary Identifier (S-RNTI):** S-RNTI is UE identifier which is allocated by the Serving RNC and unique within this SRNC. It is allocated for all UEs having a RRC connection. S-RNTI is reallocated always when the Serving RNC for the RRC connection is changed and deallocated when the RRC connection is released.

**SRNS Relocation:** The change of Iu instance and transfer of the SRNS role to another RNS.

**Stratum:** Grouping of protocols related to one aspect of the services provided by one or several domains.

**Sub Network Management Functions:** Set of functions that are related to a network model for a set of network elements constituting a clearly defined sub-network, which may include relations between the network elements. This model enables additional functions on the sub-network level (typically in the areas of network topology presentation, alarm correlation, service impact analysis and circuit provisioning).

**Subscribed QoS:** The network will not grant a QoS greater than the subscribed. The QoS profile subscription parameters are held in the HLR. An end user may have several QoS subscriptions. For security and the prevention of damage to the network, the end user cannot directly modify the QoS subscription profile data.

**Subscriber:** A Subscriber is an entity (e.g. a user) that is engaged in a Subscription with a service provider.

**Subscription:** A subscription describes the commercial relationship between the subscriber and the service provider.

**Suitable Cell:** This is a cell on which an UE may camp. It must satisfy certain conditions.

**Supplementary service:** A service which modifies or supplements a basic telecommunication service. Consequently, it cannot be offered to a user as a standalone service. It must be offered together with or in association with a basic telecommunication service. The same supplementary service may be common to a number of basic telecommunication services.

**System Area:** The System Area is defined as the group of PLMN areas accessible by MSs. Interworking of several PLMNs and interworking between PLMNs and fixed network(s) permit public land mobile communication services at international level.

## T

**Telection service:** A type of telecommunication service that uses short messages, requiring a low transmission rate, between the user and the network (source: ITU-T I.112).

**Telecommunication service:** That which is offered by a PLMN operator or service provider to its customers in order to satisfy a specific telecommunication requirement. (source: GSM 01.04, ITU-T I.112). Telecommunication services are divided into two broad families: bearer services and teleservices (source: ITU-T I.210).

**Teleservice:** Is a type of telecommunication service that provides the complete capability, including terminal equipment functions, for communication between users according to standardised protocols and transmission capabilities established by agreement between operators.

**Terminal:** A device into which a UICC can be inserted and which is capable of providing access to 3GPP SystemUMTS services to users, either alone or in conjunction with a UICC.

**Terminal equipment:** Equipment that provides the functions necessary for the operation of the access protocols by the user (source: GSM 01.04). A functional group on the user side of a user-network interface (source: ITU-T I.112).

**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.

**Text conversation:** Real time transfer of text between users in at least two locations.

**Text Telephony:** An audiovisual conversation service providing bi-directional real time transfer of text and optionally audio between users in two locations. Audio may be transmitted alternating with text or simultaneously with text. (Source ITU-T F.703)

**Throughput:** A parameter describing service speed. The number of data bits successfully transferred in one direction between specified reference points per unit time (source: ITU-T I.113).

**Total Conversation:** An audiovisual conversation service providing bi-directional symmetric real-time transfer of motion video, text and voice between users in two or more locations. (source ITU-T F.703)

**Total power dynamic range:** The difference between the maximum and the minimum total transmit output power for a specified reference condition (TS25.104).

**Traffic channel:** A "traffic channel" is a logical channel which carries user information.

**Transit delay:** A parameter describing service speed. The time difference between the instant at which the first bit of a protocol data unit (PDU) crosses one designated boundary (reference point), and the instant at which the last bit of the PDU crosses a second designated boundary (source: ITU-T I.113).

**Transmission Time Interval:** Transmission Time Interval is defined as the inter-arrival time of Transport Block Sets, i.e. the time it shall take to transmit a Transport Block Set.

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

**Transport Block:** Transport Block is defined as the basic data unit exchanged between L1 and MAC. An equivalent term for Transport Block is “MAC PDU”.

**Transport Block Set:** Transport Block Set is defined as a set of Transport Blocks that is exchanged between L1 and 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.

**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 UE, 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 UE.

**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.

## U

**UE Service Capabilities:** Capabilities that can be used either singly or in combination to deliver services to the user. The characteristic of UE Service Capabilities is that their logical function can be defined in a way that is independent of the implementation of the ~~3GPP System UMTS system~~ (although all UE Service Capabilities are of course constrained by the implementation of the ~~3GPP System UMTS~~). Examples: a data bearer of 144 kbps; a high quality speech teleservice; an IP teleservice; a capability to forward a speech call.

~~**UMTS core network:** refers in this specification to an evolved GSM core network infrastructure or any new UMTS core network infrastructures, integrating circuit and packet switched traffic.~~

~~**UMTS coverage:** an area where mobile cellular services are provided in accordance with UMTS standards.~~

~~**UMTS IC Card:** An IC card (or 'smartcard') of defined electromechanical specification which contains at least one USIM.~~

~~**UMTS mobile termination:** part of the UMTS Mobile Station which provides functions specific to the management of the radio interface (Um).~~

~~**UMTS network:** Network operated by a single network operator and consisting of UTRAN access networks (WCDMA and/or TD-CDMA), optionally GSM-BSS access networks, an UMTS core network.~~

~~**Universal Mobile Telecommunications System (UMTS):** The telecommunications system, incorporating mobile cellular and other functionality, that is the subject of standards produced by 3GPP.~~

**Universal Subscriber Identity Module (USIM):** An application residing on the UICC used for accessing services provided by mobile networks, which the application is able to register on with the appropriate security.

**Universal Terrestrial Radio Access Network:** UTRAN is a conceptual term identifying that part of the network which consists of RNCs and Node Bs between Iu and Uu interfaces.

**UPC (Usage Parameter Control):** Set of actions taken by the network to monitor and control the offered traffic and the validity of the connection with respect to the traffic contract negotiated between the user and the network.

**Uplink:** An "uplink" is a unidirectional radio link for the transmission of signals from a UE 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:** An entity, not part of the 3GPP System UMTS, which uses 3GPP System UMTS services. Example: a person using a 3GPP System UMTS mobile station as a portable telephone.

**User-network interface:** The interface between the terminal equipment and a network termination at which interface the access protocols apply (source: ITU-T I.112).

**User-user protocol:** A protocol that is adopted between two or more users in order to ensure communication between them (source: ITU-T I.112).

**User access or user network access:** The means by which a user is connected to a telecommunication network in order to use the services and/or facilities of that network (source: GSM 01.04, ITU-T I.112).

**User Equipment:** A device allowing a user access to network services. For the purpose of 3GPP specifications the interface between the UE and the network is the radio interface. A User Equipment can be subdivided into a number of domains, the domains being separated by reference points. Currently defined domains are the USIM and ME Domains. The ME Domain can further be subdivided into several components showing the connectivity between multiple functional groups. These groups can be implemented in one or more hardware devices. An example of such a connectivity is the TE – MT interface. Further, an occurrence of a User Equipment is an MS for GSM as defined in GSM TS 04.02.

**User Interface Profile:** Contains information to present the personalised user interface within the capabilities of the terminal and serving network.

**User Services Profile:** Contains identification of subscriber services, their status and reference to service preferences.

**UTRA Radio access mode:** the selected UTRA radio access mode ie UTRA-FDD;UTRA-TDD.

**UTRA-NTDD:** Time Division Duplex UTRA access mode 1.28 Mcps option

**UTRA-TDD:** Time Division Duplex UTRA Radio access mode (Includes UTRA-NTDD and UTRA-WTDD)

**UTRA-WTDD:** Time Division Duplex UTRA access mode 3.84 Mcps option

**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.

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

**UTRAN Radio Network Temporary Identifier:** The U-RNTI is a unique UE identifier that consists of two parts, an SRNC identifier and a C-RNTI. U-RNTI is allocated to an UE having a RRC connection. It identifies the UE within UTRAN and is used as an UE identifier in cell update, URA update, RRC connection reestablishment and (UTRAN originated) paging messages and associated responses on the radio interface.

**User Profile:** Is the set of information necessary to provide a user with a consistent, personalised service environment, irrespective of the user's location or the terminal used (within the limitations of the terminal and the serving network).

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**Uu:** The Radio interface between UTRAN and the User Equipment.



|  |  |
|--|--|
| CR-Form-v4   |  |
| <b>CHANGE REQUEST</b>  |  |
| ⌘ <b>21.905 CR 033</b> ⌘ ev <b>-</b> ⌘ Current version: <b>5.2.0</b> ⌘ |  |
| Spec Title: Vocabulary for 3GPP specifications ⌘                       |  |

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>          | ⌘ Improved definition of the term UICC   |                 |  |
| <b>Source:</b>         | ⌘ SA1  |                 |  |
| <b>Work item code:</b> | ⌘ TEI  | <b>Date:</b>    | ⌘ 04 – Feb – 2002  |
| <b>Category:</b>       | ⌘ <b>F</b><br>Use <u>one</u> of the following categories:<br><b>F</b> (correction)<br><b>A</b> (corresponds to a correction in an earlier release)<br><b>B</b> (addition of feature),<br><b>C</b> (functional modification of feature)<br><b>D</b> (editorial modification)<br>Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u> . | <b>Release:</b> | ⌘ <b>REL-5</b><br>Use <u>one</u> of the following releases:<br>2 (GSM Phase 2)<br>R96 (Release 1996)<br>R97 (Release 1997)<br>R98 (Release 1998)<br>R99 (Release 1999)<br>REL-4 (Release 4)<br>REL-5 (Release 5) |

|                                      |  |
|--------------------------------------|--|
| <b>Reason for change:</b>            | ⌘ In line with document S1-020047, the definition of UICC needed to be redrafted. The new definition is also in line with the understanding of the term UICC in S3 |
| <b>Summary of change:</b>            | ⌘ New definition and abbreviation of the term "UICC"   |
| <b>Consequences if not approved:</b> | ⌘ The definition in the vocabulary document is not in line with the understanding of the term UICC in T3 and S3  |

|                              |  |
|------------------------------|--|
| <b>Clauses affected:</b>     | ⌘ 3.U  |
| <b>Other specs affected:</b> | ⌘ <input type="checkbox"/> Other core specifications ⌘ <input type="checkbox"/> <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications |
| <b>Other comments:</b>       | ⌘  |

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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.

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|---|--|
| <small>CR-Form-v4</small>   |  |
| <b>CHANGE REQUEST</b>   |  |
| ⌘ <b>21.905</b> CR <b>032</b> ⌘ ev <b>-</b> ⌘ Current version: <b>5.2.0</b> ⌘ |  |

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

|                        |   |   |
|------------------------|---|---|
| <b>Title:</b>          | ⌘ | Introduction of the definitions of “pre-pay” and “post-pay” billing |
| <b>Source:</b>         | ⌘ | SA1   |
| <b>Work item code:</b> | ⌘ | TEI   |
|                        |   | <b>Date:</b> ⌘ 06 – Feb – 2002                                      |
| <b>Category:</b>       | ⌘ | <b>B</b>  |
|                        |   | <b>Release:</b> ⌘ REL-5   |
|                        |   | Use <u>one</u> of the following categories:                         |
|                        |   | Use <u>one</u> of the following releases:                           |
|                        |   | <i>F</i> (correction)   |
|                        |   | 2 (GSM Phase 2)   |
|                        |   | <i>A</i> (corresponds to a correction in an earlier release)        |
|                        |   | R96 (Release 1996)  |
|                        |   | <i>B</i> (addition of feature),                                     |
|                        |   | R97 (Release 1997)  |
|                        |   | <i>C</i> (functional modification of feature)                       |
|                        |   | R98 (Release 1998)  |
|                        |   | <i>D</i> (editorial modification)                                   |
|                        |   | R99 (Release 1999)  |
|                        |   | Detailed explanations of the above categories can                   |
|                        |   | REL-4 (Release 4)   |
|                        |   | be found in 3GPP <a href="#">TR 21.900</a> .                        |
|                        |   | REL-5 (Release 5)   |

|                                      |   |   |
|--------------------------------------|---|---|
| <b>Reason for change:</b>            | ⌘ | Introduction of commonly used terms   |
| <b>Summary of change:</b>            | ⌘ | The definition of prepay and postpay billing have been added                |
| <b>Consequences if not approved:</b> | ⌘ | Commonly used terms could be inappropriately employed in the specifications |

|                              |   |  |
|------------------------------|---|--|
| <b>Clauses affected:</b>     | ⌘ | 3, P   |
| <b>Other specs affected:</b> | ⌘ | <input type="checkbox"/> Other core specifications      ⌘<br><input type="checkbox"/> Test specifications<br><input type="checkbox"/> O&M Specifications |
| <b>Other comments:</b>       | ⌘ |  |

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## 3 Terms and definitions

### P

**Packet:** An information unit identified by a label at layer 3 of the OSI reference model (source: ITU-T I.113). A network protocol data unit (NPDU).

**Packet data protocol (PDP):** Any protocol which transmits data as discrete units known as packets, e.g., IP, or X.25.

**Packet transfer mode:** Also known as packet mode. A transfer mode in which the transmission and switching functions are achieved by packet oriented techniques, so as to dynamically share network transmission and switching resources between a multiplicity of connections (source: ITU-T I.113).

**Padding:** One or more bits appended to a message in order to cause the message to contain the required number of bits or bytes.

**Paging:** The act of seeking a User Equipment.

**Paging DRX cycle:** The individual time interval between monitoring Paging Occasion for a specific UE

**Paging Block Periodicity (PBP):** The period of the occurrence of Paging Blocks. (For FDD, PBP = 1).

**Paging Message Receiving Occasion:** The frame where the UE receives actual paging message.

**Paging occasion:** The frame where the UE monitors in FDD or the paging block, which consists of several frames, for TDD. For Paging Blocks, the value of Paging Occasion is equal to the first frame of the Paging Block.

**Peak bit rate:** A measure of throughput. The maximum bit rate offered to the user for a given time period (to be defined) for the transfer of a bursty signal (source: ITU-T I.210). (The maximum user information transfer rate achievable by a user for a single service data unit transfer.)

**Performance:** The ability to track service and resource usage levels and to provide feedback on the responsiveness and reliability of the network.

**Personal Service Environment:** contains personalised information defining how subscribed services are provided and presented towards the user. Each subscriber of the Home Environment has her own Personal Service Environment. The Personal Service Environment is defined in terms of one or more User Profiles.

**Personalisation:** The process of storing information in the ME and activating the procedures which verify this information against the corresponding information stored in the SIM whenever the ME is powered up or a SIM is inserted, in order to limit the SIMs with which the ME will operate.

**Personalisation entity:** Network, network subset, SP, Corporate or SIM to which the ME is personalised

**Phonebook:** A dataset of personal or entity attributes. The simplest form is a set of name-subscriber pairs as supported by GSM SIMs.

**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.

**PICH Monitoring Occasion:** The time instance where the UE monitors PICH within Paging Occasion.

**PLMN Area:** The PLMN area is the geographical area in which a PLMN provides communication services according to the specifications to mobile users. In the PLMN area, the mobile user can set up calls to a user of a terminating network. The terminating network may be a fixed network, the same PLMN, another PLMN or other types of PLMN. Terminating network users can also set up calls to the PLMN. The PLMN area is allocated to a PLMN. It is determined

by the service and network provider in accordance with any provisions laid down under national law. In general the PLMN area is restricted to one country. It can also be determined differently, depending on the different telecommunication services, or type of MS. If there are several PLMNs in one country, their PLMN areas may overlap. In border areas, the PLMN areas of different countries may overlap. Administrations will have to take precautions to ensure that cross border coverage is minimised in adjacent countries unless otherwise agreed.

**PLMN Operator:** Public Land Mobile Network operator. The entity which offers telecommunications services over an air interface..

**Plug-in SIM:** A Second format of SIM (specified in clause 4).

**point-to-multipoint service:** A service type in which data is sent to "all service subscribers or a pre-defined subset of all subscribers" within an area defined by the Service Requester.

**Point-to-point:** A value of the service attribute "communication configuration", which denotes that the communication involves only two network terminations.

**Point-to-point service:** A service type in which data is sent from a single network termination to another network termination.

**Ported number:** A MSISDN that has undergone the porting process.

**Ported subscriber:** The subscriber of a ported number.

**Porting process:** A description of the transfer of a number between network operators.

**Power control dynamic range:** The difference between the maximum and the minimum total transmit output power for a specified reference condition (TS 25.104).

**Predictive service:** A service model which provides reliable performance, but allowing a specified variance in the measured performance criteria.

**Prepay billing:** Billing arrangement between customer and operator/service provider where the customer deposits an amount of money in advance, which is subsequently used to pay for service usage.

**Postpay billing:** Billing arrangement between customer and operator/service provider where the customer periodically receives a bill for service usage in the past period.

**Proactive SIM:** A SIM, which is capable of issuing commands to the Terminal. Part of SIM Application Toolkit (see clause 11).

**Protocol:** A formal set of procedures that are adopted to ensure communication between two or more functions within the within the same layer of a hierarchy of functions (source: ITU-T I.112).

**Protocol data unit:** In the reference model for OSI, a unit of data specified in an (N)-protocol layer and consisting of (N)-protocol control information and possibly (N)-user data (source: ITU-T X.200 / ISO-IEC 7498-1).

**Public land mobile network:** A telecommunications network providing mobile cellular services.