Source: **SA1**

Title: **CRs to 22.011 'Editorial improvements for R99 and Rel-4**

Document for: **Approval**

Agenda Item: **7.1.3**

Doc-1st-Level	Spec	CR	Rev	Phase	Cat	Subject	Vers	Vers New	Doc-2nd-Level
SP-010664	22.011	034		R99	F	CR to 22.011 R99 'Editorial improvements	3.5.0	3.6.0	1333
SP-010664	22.011	035		Rel-4	A	CR to 22.011 R4 'Editorial improvements'	4.4.0	4.5.0	1334

CR-Form-v4

CHANGE REQUEST

| ⌘ | **22.011 CR** | **034** | ⌘ ev | **-** | ⌘ | Current version: | **3.5.0** | ⌘ |

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

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

Title: ⌘	Editorial corrections	
Source: ⌘	One 2 One Personal Communications Limited	
Work item code: ⌘		***Date:*** ⌘ 09 – 11 – 2001
Category: ⌘ **F**		***Release:*** ⌘ R99

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

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

Reason for change: ⌘	Editorial improvement and additional clarity
Summary of change: ⌘	Removed some duplicated text in 3.2.2.2
Consequences if not approved: ⌘	Confusing text

Clauses affected: ⌘	3.2.2.2, 3.2.2.3

Other specs Affected: ⌘	☐ Other core specifications ⌘	
	☐ Test specifications	
	☐ O&M Specifications	

Other comments: ⌘	

How to create CRs using this form:

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

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

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

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

3.2.2.2 At switch-on or recovery from lack of coverage

If the UE is within coverage (at switch-on) or returns to coverage of the PLMN on which it is already registered (as indicated by the registered PLMN stored in the SIM/USIM), the UE shall perform a location update to a new location area if necessary.

If there is no registered PLMN stored in the SIM/USIM, or if this PLMN is unavailable and no equivalent PLMN is available, or the attempted registration fails, the UE shall follow one of the following procedures for network selection:

A) Automatic network selection mode

The UE shall select and attempt registration on other PLMNs, if available and allowable and the location area is not in the list of "forbidden ~~LSs~~ LAs for roaming" (see TS 23.122 [3]), in the following order:

   i) HPLMN for preferred access technologies in the order specified. It shall be possible to configure a voice capable UE so that it shall not attempt registration on a PLMN if all cells identified as belonging to the PLMN do not support the corresponding voice service;

   ii) each PLMN in the " User Controlled PLMN Selector" data field in the USIM (in priority order) . It shall be possible to configure a voice capable UE so that it shall not attempt registration on a PLMN if all cells identified as belonging to the PLMN do not support the corresponding voice service;

   iii) each PLMN in the "Operator Controlled PLMN Selector" data field in the SIM/USIM (in priority order). It shall be possible to configure a voice capable UE so that it shall not attempt registration on a PLMN if all cells identified as belonging to the PLMN do not support the corresponding voice service;~~ii) other PLMNs with sufficient received signal level (see TS 23.122 [3]) in random order;~~

   iv) other PLMN/access technology combinations with sufficient received signal quality (see TS 23.122 [3]) in random order. It shall be possible to configure a voice capable UE so that it shall not attempt registration on a PLMN if all cells identified as belonging to the PLMN do not support the corresponding voice service;

   v) all other PLMN/access technology combinations in order of decreasing signal quality. It shall be possible to configure a voice capable UE so that it shall not attempt registration on a PLMN if all cells identified as belonging to the PLMN do not support the corresponding voice service.

In the case of a UE operating in UE operation mode A or B, an allowable PLMN is one which is not in the "Forbidden PLMN" data field in the SIM/USIM . This data field may be extended in the ME memory.(see subclause 3.2.2.4). In the case of a UE operating in UE operation mode C, an allowable PLMN is one which is not in the "Forbidden PLMN" data field in the SIM or in the list of "forbidden PLMNs for GPRS service" in the ME.

If successful registration is achieved, the UE shall indicate the selected PLMN.

If registration cannot be achieved on any PLMN, the UE shall indicate "no service" to the user, wait until a new PLMN is detected, or new location areas of an allowed PLMN are found which are not in the forbidden LA list(s), and then repeat the procedure. When registration cannot be achieved, different (discontinuous) PLMN search schemes may be used in order to minimize the access time while maintaining battery life, e.g. by prioriti~~s~~zing the search in favour of BCCH carriers which have a high probability of belonging to an available and allowable PLMN.

B) Manual network selection mode

The UE shall indicate PLMNs, including "Forbidden PLMNs", which are available. If there are none, this shall also be indicated.

Any available PLMN's shall be presented in the following order:

   i) HPLMN;

   ii) PLMNs contained in the "User Controlled PLMN Selector" data field in the SIM/USIM (in priority order);

   iii) PLMNs contained in the "Operator Controlled PLMN Selector" data field in the SIM/USIM (in priority order);

   iv) other PLMN/access technology combinations with sufficient received signal level (see TS 23.122 [3]) in random order;

    v)   all other PLMN/access technology combinations in order of decreasing signal strength.

If a PLMN does not support voice services then this shall be indicated to the user.

The user may select his desired PLMN and the UE shall attempt registration on this PLMN. (This may take place at any time during the presentation of PLMNs.)

If the registration cannot be achieved on the selected PLMN, the UE shall indicate "No Service". The user may then select and attempt to register on another or the same PLMN following the above procedure. The UE shall not attempt to register on a PLMN which has not been selected by the user.

If a PLMN is selected but the UE cannot register on it because registration is rejected with the cause "PLMN not allowed", the UE shall not re-attempt to register on that network unless the same PLMN is selected again by the user.

If a PLMN is selected but the UE cannot register for PS services on it because registration is rejected with the cause "GPRS services not allowed in this PLMN", the UE shall not re-attempt to register for PS services if this PLMN is contained in the list "Forbidden PLMN's for GPRS services" unless the same PLMN is selected again by the user. The receiption of the cause "GPRS services not allowed in this PLMN", does not affect the CS service.

If a PLMN is selected but the UE cannot register on it for other reasons, the UE shall, upon detection of a new LA (not in a forbidden LA list) of the selected PLMN, attempt to register on the PLMN.

If the UE is registered on a PLMN but loses coverage, different (discontinuous) carrier search schemes may be used to minimize the time to find a new valid BCCH carrier and maintain battery life, e.g. by prioritiszing the search in favour of BCCH carriers of the registered PLMN.

3.2.2.3   User reselection

At any time, the user may request the UE to initiate reselection and registration onto an alternative available PLMN, according to the following procedures, dependent upon the operating mode.

A) Automatic Network Selection Mode

The UE shall select the HPLMN. If the HPLMN is not available, the UE shall follow the procedure defined in clause 3.2.2.2.A) above.

B) Manual Network Selection Mode

The procedure of 3.2.2.2 B) is followed.

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CHANGE REQUEST

⌘	**22.011** CR	**035**	⌘ ev	**-**	⌘	Current version:	**4.4.0**	⌘

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Title: ⌘	Editorial corrections	
Source: ⌘	One 2 One Personal Communications Limited	
Work item code: ⌘		***Date:*** ⌘ 09 – 11 – 2001
Category: ⌘ **A**		***Release:*** ⌘ REL-4

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	☐ O&M Specifications	

Other comments: ⌘	

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  i) HPLMN for preferred access technologies in the order specified. It shall be possible to configure a voice capable UE so that it shall not attempt registration on a PLMN if all cells identified as belonging to the PLMN do not support the corresponding voice service;

  ii) each PLMN in the " User Controlled PLMN Selector" data field in the USIM (in priority order) . It shall be possible to configure a voice capable UE so that it shall not attempt registration on a PLMN if all cells identified as belonging to the PLMN do not support the corresponding voice service;

  iii) each PLMN in the "Operator Controlled PLMN Selector" data field in the SIM/USIM (in priority order). It shall be possible to configure a voice capable UE so that it shall not attempt registration on a PLMN if all cells identified as belonging to the PLMN do not support the corresponding voice service;~~ii)   other PLMNs with sufficient received signal level (see TS 23.122 [3]) in random order;~~

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A) Automatic Network Selection Mode

The UE shall select the HPLMN. If the HPLMN is not available, the UE shall follow the procedure defined in clause 3.2.2.2.A) above.

B) Manual Network Selection Mode

The procedure of 3.2.2.2 B) is followed.