

**Source: SA1**

**Title: CRs to 22.011 R99 and Rel-4 on Background Scanning, Partial PLMN Access and Periodic Network selection**

**Document for: Approval**

**Agenda Item: 7.1.3**

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| Spec   | CR  | Rev | Phase | Cat | Subject  | Version-Current | Version-New | Doc-2nd-Level |
|--------|-----|-----|-------|-----|--|-----------------|-------------|---------------|
| 22.011 | 024 |     | R99   | F   | Partial PLMN access restriction                | 3.4.0           | 3.5.0       | S1-010494     |
| 22.011 | 025 |     | Rel-4 | A   | Partial PLMN access restriction                | 4.3.0           | 4.4.0       | S1-010495     |
| 22.011 | 026 |     | R99   | F   | Periodic Network Selection Attempt improvement | 3.4.0           | 3.5.0       | S1-010513     |
| 22.011 | 027 |     | Rel-4 | A   | Periodic Network Selection Attempt improvement | 4.3.0           | 4.4.0       | S1-010514     |
| 22.011 | 028 |     | R99   | F   | Default value for background scanning timer    | 3.4.0           | 3.5.0       | S1-010516     |
| 22.011 | 029 |     | Rel-4 | A   | Default value for background scanning timer    | 4.3.0           | 4.4.0       | S1-010517     |

CR-Form-v3

## CHANGE REQUEST

⌘ **22.011** CR **024** ⌘ rev **-** ⌘ Current version: **3.4.0** ⌘

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

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

|   |                                   |  |                   |
|---|-----------------------------------|--|-------------------|
| <b>Title:</b>   | ⌘ Partial PLMN access restriction |  |                   |
| <b>Source:</b>  | ⌘ SA1                             |  |                   |
| <b>Work item code:</b>  | ⌘                                 | <b>Date:</b>   | ⌘ 11 – May – 2001 |
| <b>Category:</b>  | ⌘ <b>F</b>                        | <b>Release:</b>  | ⌘ R99             |
| <p>Use <u>one</u> of the following categories:</p> <p><b>F</b> (essential 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)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p> |                                   | <p>Use <u>one</u> of the following releases:</p> <p><b>2</b> (GSM Phase 2)<br/> <b>R96</b> (Release 1996)<br/> <b>R97</b> (Release 1997)<br/> <b>R98</b> (Release 1998)<br/> <b>R99</b> (Release 1999)<br/> <b>REL-4</b> (Release 4)<br/> <b>REL-5</b> (Release 5)</p> |                   |

|                                      |   |
|--------------------------------------|---|
| <b>Reason for change:</b>            | ⌘ In order to perform a selective registration in a dual mode network, the UE can be sent a new rejection code as a response to a location update attempt. In this case the UE writes the LA in the list of "forbidden LAs for roaming" and searches for a suitable cell in the same PLMN |
| <b>Summary of change:</b>            | ⌘ New behaviour has been defined for the UE to respond to a new rejection cause in case of failed location update. The UE shall in this case search for a different suitable cell in the same PLMN instead of performing a PLMN search.   |
| <b>Consequences if not approved:</b> | ⌘ It will not be possible to permit partial access to a PLMN using the same PLMN identity for the different radio access technologies.  |

|                              |  |   |  |
|------------------------------|--|---|--|
| <b>Clauses affected:</b>     | ⌘ 3.2.2.4.2  |   |  |
| <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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- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.

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

#### 3.2.2.4.2 "Partial" and "temporary" PLMN restrictions

When a registration attempt by the UE is rejected by a network due to a "partial" or a "temporary" PLMN restriction, the UE shall perform one of the following procedures determined by the indication in the location update reject cause sent by the network (see TS 23.122 [3]):

- i) The UE shall store the location area identity in the list of "forbidden LAs for regional provision of service" and shall enter the limited service state and remain in that state until it moves to a cell in a location area where service is allowed.
- ii) The UE shall store the location area identity in the list of "forbidden LAs for roaming" and shall use one of the following procedures according to the PLMN selection Mode:

A) Automatic network selection mode:

The procedure of 3.2.2.2. A).

B) Manual network selection mode:

The procedure of 3.2.2.2.B).

- iii) The UE shall store the location area identity in the list of "forbidden LAs for roaming" and shall search for a suitable cell in the same PLMN. (Note: A suitable cell will belong to a different LA which is not in the "forbidden LAs for roaming").

#### 3.2.2.4.3 PLMN restrictions for PS services

CR-Form-v3

## CHANGE REQUEST

⌘ **22.011** CR **025** ⌘ rev **-** ⌘ Current version: **4.3.0** ⌘

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

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

|   |                                   |  |                   |
|---|-----------------------------------|--|-------------------|
| <b>Title:</b>   | ⌘ Partial PLMN access restriction |  |                   |
| <b>Source:</b>  | ⌘ SA1                             |  |                   |
| <b>Work item code:</b>  | ⌘                                 | <b>Date:</b>   | ⌘ 08 – May – 2001 |
| <b>Category:</b>  | ⌘ <b>A</b>                        | <b>Release:</b>  | ⌘ Rel-4           |
| <p>Use <u>one</u> of the following categories:</p> <p><b>F</b> (essential 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)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p> |                                   | <p>Use <u>one</u> of the following releases:</p> <p><b>2</b> (GSM Phase 2)<br/> <b>R96</b> (Release 1996)<br/> <b>R97</b> (Release 1997)<br/> <b>R98</b> (Release 1998)<br/> <b>R99</b> (Release 1999)<br/> <b>REL-4</b> (Release 4)<br/> <b>REL-5</b> (Release 5)</p> |                   |

|                                      |   |
|--------------------------------------|---|
| <b>Reason for change:</b>            | ⌘ In order to perform a selective registration in a dual mode network, the UE can be sent a new rejection code as a response to a location update attempt. In this case the UE writes the LA in the list of "forbidden LAs for roaming" and searches for a suitable cell in the same PLMN |
| <b>Summary of change:</b>            | ⌘ New behaviour has been defined for the UE to respond to a new rejection cause in case of failed location update. The UE shall in this case search for a different suitable cell in the same PLMN instead of performing a PLMN search.   |
| <b>Consequences if not approved:</b> | ⌘ It will not be possible to permit partial access to a PLMN using the same PLMN identity for the different radio access technologies.  |

|                              |  |   |  |
|------------------------------|--|---|--|
| <b>Clauses affected:</b>     | ⌘ 3.2.2.4.2  |   |  |
| <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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- 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.

#### 3.2.2.4.2 "Partial" and "temporary" PLMN restrictions

When a registration attempt by the UE is rejected by a network due to a "partial" or a "temporary" PLMN restriction, the UE shall perform one of the following procedures determined by the indication in the location update reject cause sent by the network (see TS 23.122 [3]):

- i) The UE shall store the location area identity in the list of "forbidden LAs for regional provision of service" and shall enter the limited service state and remain in that state until it moves to a cell in a location area where service is allowed.
- ii) The UE shall store the location area identity in the list of "forbidden LAs for roaming" and shall use one of the following procedures according to the PLMN selection Mode:

A) Automatic network selection mode:

The procedure of 3.2.2.2. A).

B) Manual network selection mode:

The procedure of 3.2.2.2.B).

- iii) The UE shall store the location area identity in the list of "forbidden LAs for roaming" and shall search for a suitable cell in the same PLMN. (Note: A suitable cell will belong to a different LA which is not in the "forbidden LAs for roaming").

#### 3.2.2.4.3 PLMN restrictions for PS services

CR-Form-v3

## CHANGE REQUEST

⌘ **22.011** CR **026** ⌘ rev **-** ⌘ Current version: **3.4.0** ⌘

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

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

|                        |   |   |  |
|------------------------|---|---|--|
| <b>Title:</b>          | ⌘ | Periodic Network Selection Attempt improvement  |  |
| <b>Source:</b>         | ⌘ | SA1   |  |
| <b>Work item code:</b> | ⌘ |   | <b>Date:</b> ⌘ 11 – May – 2001   |
| <b>Category:</b>       | ⌘ | <b>F</b>  | <b>Release:</b> ⌘ R99  |
|                        |   | <p><i>Use one of the following categories:</i></p> <p><b>F</b> (essential 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)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p> | <p><i>Use one of the following releases:</i></p> <p><b>2</b> (GSM Phase 2)<br/> <b>R96</b> (Release 1996)<br/> <b>R97</b> (Release 1997)<br/> <b>R98</b> (Release 1998)<br/> <b>R99</b> (Release 1999)<br/> <b>REL-4</b> (Release 4)<br/> <b>REL-5</b> (Release 5)</p> |

|                                      |   |   |
|--------------------------------------|---|---|
| <b>Reason for change:</b>            | ⌘ | The current methods for ensuring a subscriber attains service with a preferred PLMN as determined by the subscriber or the home operator if such service is available are not very effective. It is proposed that the periodic search procedures for the HPLMN, which occur when the UE is in idle mode on a VPLMN in the home country, should be modified so that a periodic search for a higher priority PLMN can be performed instead. |
| <b>Summary of change:</b>            | ⌘ | In automatic mode the UE shall periodically scan for PLMNs of a higher priority than the serving PLMN.  |
| <b>Consequences if not approved:</b> | ⌘ | Subscribers will continue to receive a degraded service.  |

|                              |   |  |
|------------------------------|---|--|
| <b>Clauses affected:</b>     | ⌘ | Section 3.2.2.5                                    |
| <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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- 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.

### 3.2.2.5 Periodic Network selection attempt

If the UE in Automatic Mode has selected and registered on a VPLMN of its home country and the HPLMN is not included in the group of equivalent PLMNs, it shall make periodic attempts to return to its HPLMN. A UE in Automatic Mode shall make periodic attempts to look for a higher priority PLMN of the same country as the currently registered PLMN.

The UE shall only select a PLMN if it has a higher priority than any of the PLMNs, in the list of equivalent PLMNs, which are of the same country as the currently registered ~~received~~ PLMN. For the ranking of PLMNs the UE shall use the order used in subclause 3.2.2.2 (i.e. HPLMN, followed by PLMNs in the “User Controlled PLMN Selector”, followed by PLMNs in the “Operator Controlled PLMN Selector”).

The interval between attempts shall be stored in the SIM/USIM. Only the service provider shall be able to set the timer value. The timer shall have a value between 6 minutes and 8 hours, with a step size of 6 minutes. One value shall be designated to indicate that no periodic attempts shall be made.

In the absence of a permitted value in the SIM/USIM, or the SIM/USIM is phase 1 and therefore does not contain the datafield, then a default value of 30 minutes, shall be used by the UE.

NOTE: Use of values less than 30 minutes may result in excessive ME battery drain.

### 3.2.2.6 Investigation PLMN Scan

CR-Form-v3

## CHANGE REQUEST

⌘ **22.011** CR **027** ⌘ rev **-** ⌘ Current version: **4.3.0** ⌘

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

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

|   |  |  |                   |
|---|--|--|-------------------|
| <b>Title:</b>   | ⌘ Periodic Network Selection Attempt improvement |  |                   |
| <b>Source:</b>  | ⌘ Motorola                                       |  |                   |
| <b>Work item code:</b>  | ⌘  | <b>Date:</b>   | ⌘ 08 – May – 2001 |
| <b>Category:</b>  | ⌘ <b>A</b>                                       | <b>Release:</b>  | ⌘ Rel-4           |
| <p>Use <u>one</u> of the following categories:</p> <p><b>F</b> (essential 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)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p> |  | <p>Use <u>one</u> of the following releases:</p> <p><b>2</b> (GSM Phase 2)<br/> <b>R96</b> (Release 1996)<br/> <b>R97</b> (Release 1997)<br/> <b>R98</b> (Release 1998)<br/> <b>R99</b> (Release 1999)<br/> <b>REL-4</b> (Release 4)<br/> <b>REL-5</b> (Release 5)</p> |                   |

|                                      |   |
|--------------------------------------|---|
| <b>Reason for change:</b>            | ⌘ The current methods for ensuring a subscriber attains service with a preferred PLMN as determined by the subscriber or the home operator if such service is available are not very effective. It is proposed that the periodic search procedures for the HPLMN, which occur when the UE is in idle mode on a VPLMN in the home country, should be modified so that a periodic search for a higher priority PLMN can be performed instead. |
| <b>Summary of change:</b>            | ⌘ In automatic mode the UE shall periodically scan for PLMNs of a higher priority than the serving PLMN.  |
| <b>Consequences if not approved:</b> | ⌘ Subscribers will continue to receive a degraded service.  |

|                              |  |   |  |
|------------------------------|--|---|--|
| <b>Clauses affected:</b>     | ⌘ Section 3.2.2.5                                    |   |  |
| <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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- 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.

### 3.2.2.5 Periodic network selection attempts

The UE shall make periodic network selection attempts in one or both of the following situations:

- ~~□ If the UE is in Automatic Mode and has selected and registered on a VPLMN of its home country and the HPLMN is not included in the group of equivalent PLMNs, it shall make periodic attempts to return to its HPLMN.~~
- ~~□ If the UE is in Automatic Mode and has selected and registered on a VPLMN which is neither the HPLMN nor one of the PLMNs contained either in the "Operator Controlled PLMN Selector" data field or in the "User Controlled PLMN Selector", it shall make periodic attempts to return to one of the PLMNs of the same country contained either in the "Operator Controlled PLMN Selector" data field or in the "User Controlled PLMN Selector". In case of GPRS terminals, the UE shall only make reselection attempts while in idle or stand-by mode.~~

A UE in Automatic Mode shall make periodic attempts to look for a higher priority PLMN of the same country as the currently received PLMN.

The UE shall only select a PLMN if it has a higher priority than any of the PLMNs, in the list of equivalent PLMNs, which are of the same country as the currently registered ~~received~~ PLMN. For the ranking of PLMNs the UE shall use the order used in subclause 3.2.2.2 (i.e. HPLMN, followed by PLMNs in the "User Controlled PLMN Selector", followed by PLMNs in the "Operator Controlled PLMN Selector").

The UE shall only make reselection attempts while in idle mode for circuit services.

The interval between attempts shall be stored in the SIM/USIM. Only the service provider shall be able to select for which of the previous situations, periodic network selection shall be attempted and to set the interval, which shall be between 6 minutes and 8 hours, with a step size of 6 minutes. One value shall be designated to indicate that no periodic attempts shall be made.

In the absence of a permitted value in the SIM/USIM, or the SIM/USIM is phase 1 and therefore does not contain the datafield, then a default value of 30 minutes, shall be used by the UE.

NOTE: Use of values less than 30 minutes may result in excessive ME battery drain.

CR-Form-v3

## CHANGE REQUEST

⌘ **22.011 CR 028** ⌘ rev **-** ⌘ Current version: **3.4.0** ⌘

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

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

|                        |   |   |   |
|------------------------|---|---|---|
| <b>Title:</b>          | ⌘ | Default timer value for periodic network selection attempt  |   |
| <b>Source:</b>         | ⌘ | SA1   |   |
| <b>Work item code:</b> | ⌘ |   | <b>Date:</b> ⌘ 11 – May – 2001  |
| <b>Category:</b>       | ⌘ | <b>F</b>  | <b>Release:</b> ⌘ R99   |
|                        |   | <p>Use <u>one</u> of the following categories:</p> <p><b>F</b> (essential correction)</p> <p><b>A</b> (corresponds to a correction in an earlier release)</p> <p><b>B</b> (Addition of feature),</p> <p><b>C</b> (Functional modification of feature)</p> <p><b>D</b> (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p> | <p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>REL-4 (Release 4)</p> <p>REL-5 (Release 5)</p> |

|                                      |   |   |
|--------------------------------------|---|---|
| <b>Reason for change:</b>            | ⌘ | The default value of 30 minutes before triggering a periodic network selection attempt was considered to be acceptable for single mode terminals (i.e. GSM terminals). With multimode terminals, the power necessary to perform a full scan could result in excessive battery drain. The change of this value is also needed for alignment with stage 2 specifications. |
| <b>Summary of change:</b>            | ⌘ | The default value before triggering a periodic network selection attempt is changed from 30 to 60 minutes.  |
| <b>Consequences if not approved:</b> | ⌘ | Frequent periodic network selection attempts may result in an excessive battery drain in the ME   |

|                              |                          |  |   |
|------------------------------|--------------------------|--|---|
| <b>Clauses affected:</b>     | ⌘                        | Section 3.2.2.5                                    |   |
| <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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- 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.

### 3.2.2.5 Periodic network selection attempts

The UE shall make periodic network selection attempts in one or both of the following situations:

- If the UE is in Automatic Mode and has selected and registered on a VPLMN of its home country and the HPLMN is not included in the group of equivalent PLMNs, it shall make periodic attempts to return to its HPLMN.
- If the UE is in Automatic Mode and has selected and registered on a VPLMN which is neither the HPLMN nor one of the PLMNs contained either in the "Operator Controlled PLMN Selector" data field or in the "User Controlled PLMN Selector", it shall make periodic attempts to return to one of the PLMNs of the same country contained either in the "Operator Controlled PLMN Selector" data field or in the "User Controlled PLMN Selector". In case of GPRS terminals, the UE shall only make reselection attempts while in idle or stand-by mode.

The UE shall only make reselection attempts while in idle mode for circuit services.

The interval between attempts shall be stored in the SIM/USIM. Only the service provider shall be able to select for which of the previous situations, periodic network selection shall be attempted and to set the interval, which shall be between 6 minutes and 8 hours, with a step size of 6 minutes. One value shall be designated to indicate that no periodic attempts shall be made.

In the absence of a permitted value in the SIM/USIM, or the SIM/USIM is phase 1 and therefore does not contain the datafield, then a default value of ~~30~~60 minutes, shall be used by the UE.

NOTE: Use of values less than ~~30~~60 minutes may result in excessive ME battery drain.



CR-Form-v3

## CHANGE REQUEST

⌘ **22.011 CR 029** ⌘ rev **-** ⌘ Current version: **4.3.0** ⌘

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

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

|                        |   |   |  |
|------------------------|---|---|--|
| <b>Title:</b>          | ⌘ | Default timer value for periodic network selection attempt  |  |
| <b>Source:</b>         | ⌘ | SA1   |  |
| <b>Work item code:</b> | ⌘ |   | <b>Date:</b> ⌘ 11 – May – 2001   |
| <b>Category:</b>       | ⌘ | <b>A</b>  | <b>Release:</b> ⌘ Rel-4  |
|                        |   | <p>Use <u>one</u> of the following categories:</p> <p><b>F</b> (essential correction)</p> <p><b>A</b> (corresponds to a correction in an earlier release)</p> <p><b>B</b> (Addition of feature),</p> <p><b>C</b> (Functional modification of feature)</p> <p><b>D</b> (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p> | <p>Use <u>one</u> of the following releases:</p> <p><b>2</b> (GSM Phase 2)</p> <p><b>R96</b> (Release 1996)</p> <p><b>R97</b> (Release 1997)</p> <p><b>R98</b> (Release 1998)</p> <p><b>R99</b> (Release 1999)</p> <p><b>REL-4</b> (Release 4)</p> <p><b>REL-5</b> (Release 5)</p> |

|                                      |   |   |
|--------------------------------------|---|---|
| <b>Reason for change:</b>            | ⌘ | The default value of 30 minutes before triggering a periodic network selection attempt was considered to be acceptable for single mode terminals (i.e. GSM terminals). With multimode terminals, the power necessary to perform a full scan could result in excessive battery drain. The change of this value is also needed for alignment with stage 2 specifications. |
| <b>Summary of change:</b>            | ⌘ | The default value before triggering a periodic network selection attempt is changed from 30 to 60 minutes.  |
| <b>Consequences if not approved:</b> | ⌘ | Frequent periodic network selection attempts may result in an excessive battery drain in the ME   |

|                              |   |   |
|------------------------------|---|---|
| <b>Clauses affected:</b>     | ⌘ | Section 3.2.2.5   |
| <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:

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

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.

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

### 3.2.2.5 Periodic network selection attempts

The UE shall make periodic network selection attempts in one or both of the following situations:

- If the UE is in Automatic Mode and has selected and registered on a VPLMN of its home country and the HPLMN is not included in the group of equivalent PLMNs, it shall make periodic attempts to return to its HPLMN.
- If the UE is in Automatic Mode and has selected and registered on a VPLMN which is neither the HPLMN nor one of the PLMNs contained either in the "Operator Controlled PLMN Selector" data field or in the "User Controlled PLMN Selector", it shall make periodic attempts to return to one of the PLMNs of the same country contained either in the "Operator Controlled PLMN Selector" data field or in the "User Controlled PLMN Selector". In case of GPRS terminals, the UE shall only make reselection attempts while in idle or stand-by mode.

The UE shall only make reselection attempts while in idle mode for circuit services.

The interval between attempts shall be stored in the SIM/USIM. Only the service provider shall be able to select for which of the previous situations, periodic network selection shall be attempted and to set the interval, which shall be between 6 minutes and 8 hours, with a step size of 6 minutes. One value shall be designated to indicate that no periodic attempts shall be made.

In the absence of a permitted value in the SIM/USIM, or the SIM/USIM is phase 1 and therefore does not contain the datafield, then a default value of ~~30~~60 minutes, shall be used by the UE.

NOTE: Use of values less than ~~30~~60 minutes may result in excessive ME battery drain.