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**Source:** SA1  
**Title:** Release 99/4/5 CRs to 22.011 on correction to periodic PLMN scan  
**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-020547	22.011	047		R99	F	CR to 22.011 Rel 99 - correction to periodic PLMN scan	3.7.0	3.8.0	S1-021824
SP-020547	22.011	048		Rel-4	A	CR to 22.011 Rel 4 - correction to periodic PLMN scan	4.7.0	4.8.0	S1-021825
SP-020547	22.011	049		Rel-5	A	CR to 22.011 Rel 5 - correction to periodic PLMN scan	5.0.0	5.1.0	S1-021826

CR-Form-v7

## CHANGE REQUEST

⌘ **22.011 CR 047** ⌘ rev **-** ⌘ Current version: **3.7.0** ⌘

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

**Proposed change affects:** UICC apps  ME  Radio Access Network  Core Network

<b>Title:</b>	⌘ Editorial correction to timer to return to HPLMN		
<b>Source:</b>	⌘ SA1 (T-Mobile )		
<b>Work item code:</b>	⌘ TEI	<b>Date:</b>	⌘ 25/07/2002
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ R99
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	<b>F</b> (correction)		2 (GSM Phase 2)
	<b>A</b> (corresponds to a correction in an earlier release)		R96 (Release 1996)
	<b>B</b> (addition of feature),		R97 (Release 1997)
	<b>C</b> (functional modification of feature)		R98 (Release 1998)
	<b>D</b> (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900.		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

<b>Reason for change:</b>	⌘ Two editorial changes are proposed in this CR: 1. replacing "...any of..." with "...all..." in the first paragraph of 3.2.2.5 The current text explaining the interaction between the priority of an equivalent PLMN and the priority of a selected PLMN has been wrongly interpreted as meaning that as soon as the UE finds a PLMN in the equivalent PLMN with lower priority than the selected PLMN, a rescan is performed. The intention of the text is instead that the UE checks the priority of <b>ALL</b> the PLMNs in the equivalent PLMN list. It is then proposed to change the text to remove this potential ambiguity.  2. section title 3.2.2.5 renamed to "Timer for return to higher priority PLMN" The new title is a generalisation of the existing one and reflects better the content of the section.
<b>Summary of change:</b>	⌘ 1. replacing "...any of..." with "...all..." in the first paragraph of 3.2.2.5 2. section title 3.2.2.5 renamed to "Timer for return to higher priority PLMN"
<b>Consequences if not approved:</b>	⌘ Misinterpretation of the requirement for higher priority PLMN scan leading to incorrect implementation. Less meaningful title not reflecting the whole content of the section (also not in line with subsequent releases).

<b>Clauses affected:</b>	⌘ 3.2.2.5
	<input type="checkbox"/> Y <input type="checkbox"/> N

<b>Other specs affected:</b>	⌘	<input checked="" type="checkbox"/>		Other core specifications	⌘	23.122
		<input checked="" type="checkbox"/>		Test specifications		34.123
			<input checked="" 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/specs/CR.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.

### 3.2.2.5 ~~Timer for return to HPLMN~~ Periodic Network selection attempts

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. For the ranking of PLMNs the UE shall use the order used in subclause 3.2.2.2. In the case that the UE has stored a list of equivalent PLMNs, the UE shall only select a PLMN if it has a higher priority than ~~any~~ of all the PLMNs, in the list of equivalent PLMNs, which are of the same country as the currently registered PLMN

NOTE: In the context of this TS, the term country is to be interpreted not as a political entity but as a single Mobile Country Code (MCC). For instance the USA has multiple MCC. The USA case is in fact treated as an exception in the 3GPP specifications. For all other countries, multiple MCCs may be used, however the specifications have not taken this into account and there could be adverse effects such as the UE being unable to detect that multiple MCCs are within the same country.

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 60 minutes, shall be used by the UE.

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

CR-Form-v7

## CHANGE REQUEST

⌘ **22.011 CR 048** ⌘ rev **-** ⌘ Current version: **4.7.0** ⌘

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

**Proposed change affects:** UICC apps  ME  Radio Access Network  Core Network

<b>Title:</b>	⌘ Editorial correction to the periodic network selection attempt paragraph		
<b>Source:</b>	⌘ SA1 (T-Mobile )		
<b>Work item code:</b>	⌘ TEI	<b>Date:</b>	⌘ 25/07/2002
<b>Category:</b>	⌘ <b>A</b>	<b>Release:</b>	⌘ REL-4
	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 TR 21.900.		<b>Rel-4</b> (Release 4)
			<b>Rel-5</b> (Release 5)
			<b>Rel-6</b> (Release 6)

<b>Reason for change:</b>	⌘ The following editorial change is proposed in this CR: Replacing "...any of..." with "...all..." in the first paragraph of 3.2.2.5 The current text explaining the interaction between the priority of an equivalent PLMN and the priority of a selected PLMN has been wrongly interpreted as meaning that as soon as the UE finds a PLMN in the equivalent PLMN with lower priority than the selected PLMN, a rescan is performed. The intention of the text is instead that the UE checks the priority of <b>ALL</b> the PLMNs in the equivalent PLMN list. It is then proposed to change the text to remove this potential ambiguity.
<b>Summary of change:</b>	⌘ Replacing "...any of..." with "...all..." in the first paragraph of 3.2.2.5
<b>Consequences if not approved:</b>	⌘ Misinterpretation of the requirement for higher priority PLMN scan leading to incorrect implementation.

<b>Clauses affected:</b>	⌘ 3.2.2.5										
<b>Other specs affected:</b>	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"></td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"></td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;">X</td> </tr> </table>	Y	N	X		X			X	Other core specifications	⌘ 23.122
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	X										
		Test specifications	⌘ 34.123								
		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

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. For the ranking of PLMNs the UE shall use the order used in subclause 3.2.2.2. In the case that the UE has stored a list of equivalent PLMNs, the UE shall only select a PLMN if it has a higher priority than all ~~any~~ of the PLMNs, in the list of equivalent PLMNs, which are of the same country as the currently registered PLMN.

NOTE: In the context of this 3GPP TS, the term country is to be interpreted not as a political entity but as a single Mobile Country Code (MCC). For instance the USA has multiple MCC. The USA case is in fact treated as an exception in the 3GPP specifications. For all other countries, multiple MCCs may be used, however the specifications have not taken this into account and there could be adverse effects such as the UE being unable to detect that multiple MCCs are within the same country.

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 60 minutes, shall be used by the UE.

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

CR-Form-v7

## CHANGE REQUEST

⌘ **22.011 CR 049** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

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

**Proposed change affects:** UICC apps  ME  Radio Access Network  Core Network

<b>Title:</b>	⌘ Editorial correction to the periodic network selection attempt paragraph		
<b>Source:</b>	⌘ SA1 (T-Mobile )		
<b>Work item code:</b>	⌘ TEI	<b>Date:</b>	⌘ 25/07/2002
<b>Category:</b>	⌘ <b>A</b>	<b>Release:</b>	⌘ REL-5
	Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.		Use <u>one</u> of the following releases: <b>2</b> (GSM Phase 2) <b>R96</b> (Release 1996) <b>R97</b> (Release 1997) <b>R98</b> (Release 1998) <b>R99</b> (Release 1999) <b>Rel-4</b> (Release 4) <b>Rel-5</b> (Release 5) <b>Rel-6</b> (Release 6)

<b>Reason for change:</b>	⌘ The following editorial change is proposed in this CR: Replacing "...any of..." with "...all..." in the first paragraph of 3.2.2.5 The current text explaining the interaction between the priority of an equivalent PLMN and the priority of a selected PLMN has been wrongly interpreted as meaning that as soon as the UE finds a PLMN in the equivalent PLMN with lower priority than the selected PLMN, a rescan is performed. The intention of the text is instead that the UE checks the priority of <b>ALL</b> the PLMNs in the equivalent PLMN list. It is then proposed to change the text to remove this potential ambiguity.
<b>Summary of change:</b>	⌘ Replacing "...any of..." with "...all..." in the first paragraph of 3.2.2.5
<b>Consequences if not approved:</b>	⌘ Misinterpretation of the requirement for higher priority PLMN scan leading to incorrect implementation.

<b>Clauses affected:</b>	⌘ 3.2.2.5										
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Y	N										
X											
X											
	X										
<b>Other comments:</b>	⌘										

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