## TSGS#8(00)0210

Technical Specification Group Services and System Aspects Meeting #8, Düsseldorf, Germany, 26-28 June 2000

Source: TSG SA1

Title: CRs to PLMN selection (22.101) Release 2000

Document for: Approval

Agenda Item: 6.1.3

Doc-1st-	Doc-2nd-	Spec	CR	Re	Phase	Cat	Subject	Versi	Versi
Level	Level			٧				on-	on-
								Curre	New
								nt	
SP-000210	S1-000271	22.101	033		R99	D	Network selection procedures removed from	3.9.0	3.10.0
							section 16, reference to 22.011 added		
SP-000210	S1-000270	22.101	034		R00	D	Network selection procedures removed from	3.9.0	4.0.0
							section 16, reference to 22.011 added		

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Source:		SA1					Date	<u>e:</u> 14	.04.2000	
Subject:		Network selec	tion procedu	ures remove	d from	section 1	6, reference to	22.01	1 added	
Work item:										
Category:  (only one category shall be marked with an X)	F A B C D	Correction Corresponds to a correction in an earlier release Addition of feature Functional modification of feature Editorial modification  Release: Release								X
Reason for change:		22.011 include	es network s	selection pro	cedure	es, they or	nly need to be	referer	nced here	
Clauses affect	ted:									
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## 16 Network Selection

Network selection procedures are defined in TS 22.011.

Three roles may be involved in network selection: the home environment, the serving network and the user. Services may be available to the user through a choice of several serving networks in a given location, possibly using different types of Radio Access Network, however, it is expected that a user terminal will communicate with one network at a given instant (there may be exceptions such as when an inter-network handover occurs).

All selection schemes make use of information provided by the serving networks, including the network name, the network capabilities and any restrictions. Other information such as terminal capabilities may also be required. This information may change with time but must be accurate and available at the time network selection is being made. Procedures 1 and 2 below for network selection shall be supported by all user equipment. The user shall be able to choose which procedure to use at any given time.

1. Default Automatic Procedure

A default procedure for network selection shall be defined which selects a network from amongst those available based

upon information such as network name/ID, network capabilities, signal strength and network type.

2. Manual Procedure

The manual procedure consists in presenting to the user the list of all available networks and letting her make the selection. The user shall be able to make use of the manual selection procedure at any time.

3. Home Environment Specific Procedure

Optionally, if provisioned by the UE and selected by the user, the home environment can add the ability to define the behaviour when selecting the required network from those available. A standardised framework for over-the-air transfer of behaviour definition is required. If enabled by the user, it shall be possible for the home environment procedure to instruct the user equipment to search for a network which meets a given set of requirements, indicated by certain parameters or to compile a list of all available networks.

Other procedures may be offered by the UE.

Both automatic and manual network selection schemes are constrained by commercial agreements between the home environments and serving networks. If a roaming agreement does not exist and cannot be established using the procedure for automatic establishment of roaming agreements, then registration on the network will not succeed. Therefore the user must provide sufficient information to allow the serving network to identify the relevant home environment and to allow the home environment to identify the user.

A SIM/USIM shall be registered on one and only one serving network at any given time (there may be exceptions such as when preparing for an inter-network handover). Changing the serving network between two calls requires USIM deregistration from the current serving network and USIM re-registration on the newly selected serving network. A procedure for handling network rejections is required, see TS 22.001 [4] for an example. During manual selection the user may be allowed to attempt to select any available network (subject to restrictions that may be specified by the home environment). Successful manual network selection shall update the procedure for preventing unnecessary network access attempts. A set of network access rejection causes shall be standardised.

It shall be possible for a network operator to control access to the network. This may be done for example to provide priority to emergency services or to control demand upon the access channel after a network failure, see TS 22.011 [11] for further details.

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Source:		SA1					Date:	14.04.2000		
<u> </u>		0711					<u> </u>	11.01.2000		
Subject:		Network selec	tion procedures	removed	from sec	ction 16, r	eference to 22	2.011 added		
<b>NA</b>										
Work item:										
Category:	F	Correction					Release:	Phase 2		
	Α	Corresponds to a correction in an earlier release Release 96								
(only one category	В	Addition of fea	ature					Release 97		
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with an X)	D	Editorial modi	fication			X		Release 99		
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