

**Source:** SA1  
**Title:** New WI on Behaviour of Multi system UEs  
**Document for:** Approval  
**Agenda Item:** 7.1.3

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### Work Item Description

Title

Behaviour of multi system UEs

**1**                    **3GPP Work Area**

<b>X</b>	Radio Access
<b>X</b>	Core Network
<b>X</b>	Services

**2**                    **Linked work items**

**3**                    **Justification**

Currently it is not standardised on how a multi system mobile station should perform system selection, network operator selection (PLMN selection in 3GPP terms) between the supported systems.

**4**                    **Objective**

It is proposed that SA1 should study the best way to document the behaviour of a multi system mobile station that supports 3GPP systems. This will be documented in a new Technical Report. The distinction between 3GPP internal requirements and system selection requirements between 3GPP and other systems should be kept clearly visible for the implementors.

It should be identified clearly which requirements are mandatory and which can be left implementation specific. The intention is to ensure that the multi system operation does not lead to non 3GPP-compliant behaviour by the UE. Standardization should take account of interoperability.

Particular issues to be handled include, but are not restricted to:

- It should be studied whether the system selection or PLMN selection should take

higher priority in multi system mobile. Related with this, also the criteria for system change would need to be defined. This could take the form of a background scan of higher priority systems. If this is supported, then what is the interaction between the user's and the operator's preferences should be studied.

- It should also be considered whether automatic or manual system selection mode, or both, needs to be supported. The study will identify different methods of system selection and their impact on 3GPP specifications.
- If any priority lists for user's preferences, supported systems or network operators are needed, it should be studied if these should reside in the phone memory or in the smartcard. When dealing with the 3GPP-compliant part of the UE, we can safely assume the (U)SIM to be available. Also the existing PLMN selector lists and HPLMN information could be re-used in system selection.
- Testing of multi-mode terminals, in particular the mechanisms for system selection will be considered. The study will consider what needs to be tested and by whom.

Other groups working in this area will be consulted.

#### 5 Service Aspects

The work item proposes to study and identify requirements for system selection for multi system mobile station. The work item has no impact on the services offered by different systems.

#### 6 MMI-Aspects

Changes to the traditional Man Machine Interface have to be considered, when a multi system mobile station needs to select a particular system, when multiple choices are available.

#### 7 Charging Aspects

Different charging principles may apply when operating in different system modes. Therefore implications shall be studied together with SA5.

#### 8 Security Aspects

Security Aspects shall be addressed, as different systems may rely on different security concepts. This may be done by input from SA3.

#### 9 Impacts

Affects:	UICC apps	ME	AN	CN	Others
Yes		X	X	X	
No	X				
Don't know					

**10 Expected Output and Time scale (to be updated at each plenary)**

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TR 22.XXX	TR on the Behaviour of Multi System UEs	SA1		#26	#27	
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#		Comments
						TBD

**11 Work item rapporteurs**

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**12 Work item leadership**

3GPP TSG SA1

**13 Supporting Companies**

Nokia, Qualcomm, Research In Motion, Siemens, T-Mobile, Samsung,  
 Motorola

**14 Classification of the WI (if known)**

X	Feature (go to 14a)
	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

none

14b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

form change history:  
2002-07-04: "USIM" box changed to "UICC apps"