Source:	**NAKAGOMI, Hisashi @ NTTDoCoMo (TSG T1 vice chairman)**
Title:	**Conformance Test Aspects – Network Sharing**
Agenda item:	**6.1.5**
Document for:	**Approval**

This document includes T1 New Work Item "Network sharing tests" endorsed by TSG-T1#26.

In Release 6, new functionality is introduced within the WI on Network Sharing. This enables network sharing partners to broadcast multiple PLMN identities on one UMTS carrier. UE behaviour for PLMN selection, cell selection and cell reselection is modified. This contribution contains a Release 6 WI proposal to cover the conformance test aspects of the new UE mandatory functionality.

Work Item Description

WT_XX. Conformance Test Aspects – Network Sharing

1. 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2. Linked work items

WP ID	WID	Rel. *	Title
31018	SA	P_F	Network Sharing
31019	SA	BB	Technical Report
31038	SA	BB	Stage 1 - CRs to implement Network Sharing
32044	SA	BB	Stage 2
11043	CN	BB	Network sharing - stage 3
22004	RAN	BB	Enhancement of the support of network sharing in the UTRAN

* Relationship: P = Parent, F = Feature, BB = Building Block, S = Subordinate, R = Related

3. Justification

The core specifications are being updated and enhanced for Release 6 and therefore the test specifications must be updated to reflect these changes. Core specification updates for Network Sharing with UE impact are done in 23.122, 24.008, 25.331 and 25.304.

4. Objective

In release 6, new functionality is introduced within the WI on Network Sharing to enable network sharing partners to broadcast multiple PLMN identities on one UMTS carrier. The UE behaviour for PLMN selection, cell selection and reselection is modified to take multiple PLMN identities into account.

The objective of this WI is to specify conformance tests in TS 34.123-1 (and corresponding updates to 34.123-2 and 34.108 if necessary) covering the new UE mandatory functionality.

The following aspects need to be considered

- Automatic PLMN selection when multiple PLMN identities are broadcast on one carrier
- Manual PLMN selection when multiple PLMN identities are broadcast on one carrier
- Cell selection of a cell broadcasting multiple PLMN identities
- Cell reselection to a cell broadcasting multiple PLMN identities (both in idle mode and in connected mode)
- PLMN indication in RRC initial direct transfer message
- Forbidden list handling at LA/RA reject, when LAU/RAU is initiated in cell broadcasting multiple PLMN identities
- Usage of SIB18 (PLMN identity of neighbour cells) for neighbour cells with multiple PLMN identities

- LA/RA update triggered by dedicated RRC signalling of PLMN identity, using the new Rel 6 RRC PLMN identity IE, overriding the old PLMN identity in the RRC "CN-information-info" IE
- Equivalent PLMN based cell reselection to a cell broadcasting multiple PLMN identities, followed by LA/RA update.

5. Service Aspects

None

6. MMI-Aspects

None

7. Charging Aspects

None

8. Security Aspects

None

9. Impacts

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

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
	TBD					
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#		Comments
TS 34.108		Common test environments for User Equipment (UE) conformance testing		TSG RAN#30, Dec 05		Definition of test environment for network sharing test cases.
TS 34.123-1		User Equipment (UE) conformance specification; Part 1: Protocol conformance specification		TSG RAN#30, Dec 05		Introduction of new test cases related to network sharing
TS 34.123-2		User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification		TSG RAN#30, Dec 05		Applicability statements for new network sharing test cases
TS 34.123-3		User Equipment (UE) conformance specification; Part 3: Abstract test suites (ATSs)		TBD		Development of TTCN test cases for the new network sharing test cases

11.Work item rapporteurs

Mr Niklas Wirén, TeliaSonera, Sweden

12 Work item leadership

TSG T1

13 Supporting Companies

TeliaSonera, Ericsson, Nokia, Motorola, Cingular

14 Classification of the WI (if known)

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

14c. See section 2, Linked Work Items for relationship between this Work Task and its parent Building Block and Feature.