

Agenda item: 5.1
Document for: INFORMATION

**3GPP TSG-CN-WG1, Meeting #16
26 February 2001 to 01 March 2001,
Sophia France.**

Tdoc N1-010492

Title: Response LS on Periodic Network selection attempt

Reference LS Reply to S1-010231/N1-010340
(If available)

Source: 3GPP TSG CN1

TO ⁽¹⁾: 3GPP TSG SA1

Cc: 3GPP TSG RAN2, 3GPP TSG SA, 3GPP TSG CN

WI:

Contact Person: Sophie Aveline
Name: AVELINE
E-mail Address: sophie.aveline@francetelecom.fr
Tel. Number: + 33 1 45 29 60 84

Attachments: N1-010457 – CR on 23.122 R4 (same CR has been approved for R'99)
N1-010458 – proposed CR on 22.011 R4
(Please list documents numbers to be attached)

Date: 01 March 2001

3GPP TSG CN1 thanks 3GPP TSG SA1 for their liaison statement as reminder of enhancements of the stage 1 of periodic PLMN selection procedure for Release 4.

3GPP TSG CN1 has made the relevant changes in 23.122 (Tdoc N1-010457), and proposes 3GPP TSG SA1 to consider modifications on stage 1 TS 22.011 R4 as proposed in N1-010458. Indeed, stage 1 specification could be misleading in the sense that it could be understood that different timers shall be used for situations in national roaming and international roaming, which is not 3GPP TSG CN1 understanding.

Taking into account decision of the UE idle mode ad-hoc, 3GPP TSG CN1 has also made those changes in the release 99 of TS 23.122 and kindly asks 3GPP TSG SA1 to make also the relevant changes in TS 22.011 R'99 to align stages 1 and 2 (mainly it is needed to modify section 'Timer for return to HPLMN' into 'Periodic network selection attempts' as it was already done by 3GPP TSG SA1 for R4, with the additional modifications proposed in Tdoc N1-010458).

More over, 3GPP TSG CN1 wants to warn 3GPP TSG SA1 that the wording 'country' in TS 22.011 is understood as equivalent to an area identified by one Mobile Country Code in TS 23.122 R'99 and Release 4, as it was in the previous releases of this specification (see the Annex A which is normative).

¹ Please write any action required from the groups in a clear way.

However, 3GPP TSG CN1 is aware that one specific implementation allows the support of multiple MCC in one specific area which corresponds to North America. This case has been covered by specific exception handling for Country Codes in range of 310 to 316 (this specific handling is defined in GSM 03.22 from R'98 onwards).

In order to define a VPLMN of 'same country', the same matching criteria as for 'VPLMN in home country' has been added in TS 23.122 with the following wording:

PLMN of the same country as VPLMN is defined as:

- *if the MCC of the current VPLMN is within the range 310 to 316, any PLMN in range 310 to 316 (networks in North America)*
- *otherwise, any PLMN with same MCC as the one of the current VPLMN itself.*

Extending the meaning of 'country' to several MCCs has strong impacts on the periodic scan procedure as MS should be able to make the links between all MCCs belonging to one country in order to identify PLMNs with different MCC operating in the same area.

In the case 3GPP TSG SA1 wants to extend the 'country' meaning to multiple MCCs, then further studies should be made in order to find a solution to handle this in a standard way while maintaining correct operation of the periodic PLMN search.

Moreover, it has to be noted that a future use of an additional Mobile Country Code in a country where at least one MCC is already in use has impact on the existing MS behaviour.

If such an existing MS camps on a network which has a newly allocated MCC, then the periodic PLMN search will only allow this MS to attempt registration on PLMN with the same MCC as the one of its current serving network. This means that the MS on such network will never try to register on its home or higher priority PLMN in the other MCC of the same country (of 'user' or 'operator' lists), even though such a PLMN may be available.