

Title : Allocation of more than one MCC per country

Source : 3GPP CN

To : ITU-T

Cc :

As some discussions held in 3GPP CN groups about the allocation of more than one Mobile Country Code (MCC) per country for 3GPP networks, and as ITU-T is responsible of the allocation of the MCC resources, 3GPP CN would like to inform ITU-T of the results of its investigation on 3GPP specifications.

The wording “country” is understood in 3GPP specifications as equivalent to an area identified by only one MCC (cf. TS 22.011 and TS 23.122).

However, one specific implementation allows the support of multiple MCC in one specific area which corresponds to North America (range of MCC from 310 to 316). This implementation has been explicitly defined in TS 03.22 and TS 23.122 from R98 onwards.

As MCC is used by a Mobile Station (MS) for certain procedures (e.g. periodic scan procedure), extending the meaning of “country” to several MCC will then have impacts for these MSs when performing these procedures. The problem arises in the case if an additional MCC is allocated to a country which already has got at least one existing MCC. Any implementation from the time before the introduction of the new MCC for the same country will treat the new country code as being abroad. So allocating an MCC to a country which does not yet have one is causes no problem.

The addition of periodic scan procedure makes the problem much more difficult as the periodic scan must be limited to the same country as the current serving VPLMN because of border area issues.

Therefore 3GPP CN would like to highlight that the allocation of new MCC to a country which already has got at least one is not yet covered in 3GPP specifications. Moreover, 3GPP CN would like to inform ITU-T that, at least, such a change will cause backwards compatibility problems on existing MS behavior.