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E.214

TELEPHONE NETWORK AND ISDN

**OPERATION, NUMBERING, ROUTING
AND MOBILE SERVICE**

**STRUCTURE OF THE LAND MOBILE
GLOBAL TITLE FOR THE SIGNALLING
CONNECTION CONTROL PART (SCCP)**

ITU-T Recommendation E.214

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation E.214 was published in Fascicle II.2 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

2 In this Recommendation, the expression “Administration” is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Recommendation E.214

STRUCTURE OF THE LAND MOBILE GLOBAL TITLE FOR THE SIGNALLING CONNECTION CONTROL PART (SCCP)

1 Introduction

In order to permit land mobile stations to roam, there is a need to transfer information, e.g. the mobile station roaming number between Public Land Mobile Networks (PLMNs). This transfer of information can be accomplished by the use of Transaction Capabilities (TC) and the SCCP of Signalling System No. 7.

When a land mobile station roams to a foreign PLMN, it registers with a Visited Location Register (VLR) within that PLMN. The only information available to the VLR to address the mobile's Home Location Register (HLR) is its International Mobile Station Identity (IMSI).

The purpose of this Recommendation therefore is to define the structure of the mobile global title used in SCCP addressing to the public land mobile service, and to establish the relationship between the mobile global title and the international mobile station identity as defined in Recommendation E.212.

2 Considerations

The considerations which form the basis of the Mobile Global Title (MGT) for the land mobile service are as follows:

- 2.1 The MGT shall be derived from the international mobile station identity in a simplified manner.
- 2.2 There could be a number of PLMNs in a country.
- 2.3 The MGT shall permit the identification of the country as well as the PLMN in which the mobile station is registered.
- 2.4 The MGT should, as an option, permit the identification of the home location register (HLR) of the mobile station.
- 2.5 The length of the MGT should be minimized.
- 2.6 The MGT should enable the fixed network exchanges to utilize existing routing information in order to identify the PLMN.
- 2.7 Recommendations E.163, E.164, E.165, E.212 and E.213 are applicable.

3 Global title principles

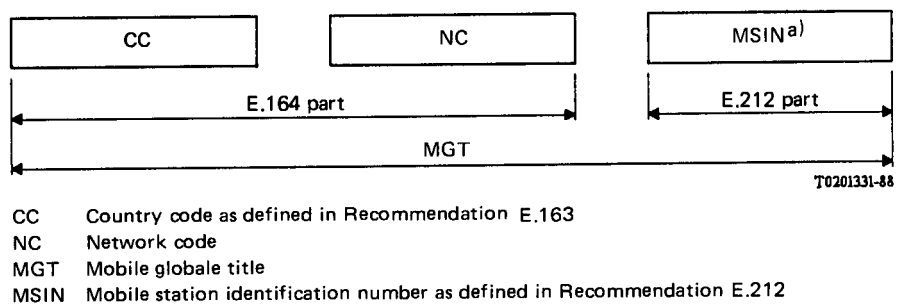
3.1 Structure of the mobile global title

The mobile global title is of variable length and composed of decimal digits arranged in two specific parts. These specific parts are the E.164 and the E.212 part.

The E.164 part is used to identify the country and the PLMN, or PLMN and HLR, where the mobile station is registered. To accomplish this, the E.164 part comprises a Country Code (CC), as defined in Recommendation E.163, and a Network Code (NC) which can be the National Destination Code (NDC), as defined in Recommendation E.164, or the NDC and some additional E.164 digits. The NC would identify the PLMN or HLR within the PLMN. The number of E.164 digits required for identification may vary from network to network, and must be established by bilateral agreement.

The E.212 part is used to identify the mobile station or mobile station and HLR and is composed of the mobile station identification number as defined in Recommendation E.212.

Figure 1/E.214 shows the structure of the mobile global title.

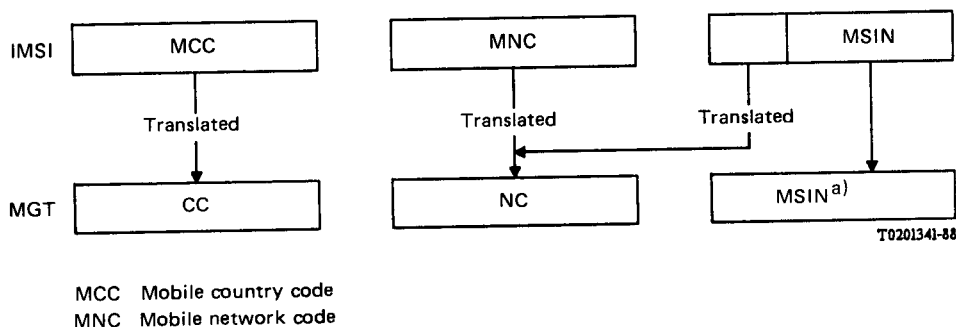


a) The MSIN may be truncated to conform to the maximum length permitted as given in § 3.3.

FIGURE 1/E.214

3.2 Derivation of the mobile global title from the international mobile station identity (IMSI)

The MGT is derived from the IMSI (Recommendation E.212) in the manner shown in Figure 2/E.214.



a) The MSIN may be truncated to conform to the maximum length permitted as given in § 3.3.

FIGURE 2/E.214

Within the MGT the CC is derived directly from the MCC and the NC is derived either directly from the MNC, or from the MNC and some initial digits of the MSIN. The MSIN is mapped directly into the MGT, up to its maximum length.

3.3 Length of mobile global title

The Mobile global title will be of variable length but with a maximum of 15 digits. Therefore, if necessary, the least significant digits of the MSIN will be omitted in order to conform with the maximum length of the MGT.

3.4 Analysis of the mobile global title

In order to permit fixed network nodes to utilize existing resources, digit analysis in the originating country will conform to Recommendation E.164. See also Recommendation E.165.

Further analysis beyond this requirement shall be by bilateral agreement.

The analysis of the E.212 part of the mobile global title in the destination fixed network is a national matter.