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Foreword

This Global System for Mobile communications Technical Specification (GTS) has been produced by the Special Mobile Group (SMG) Technical Committee (TC) of the European Telecommunications Standards Institute (ETSI).

This GSM Technical Specification (GTS) describes the feature Network Identity and Timezone (NITZ).

GTS are produced by TC-SMG to enable the GSM Phase 2+ specifications to become publicly available, prior to submission for the formal ETSI standards approval procedure to become European Telecommunications Standards (ETS). This ensures the earliest possible access to GSM Phase 2+ specifications for all Manufacturers, Network operators and implementors of the Global System for Mobile communications.

The contents of this GTS are subject to continuing work within TC-SMG and may change following formal TC-SMG approval. Should TC-SMG modify the contents of this GTS it will then be republished by ETSI with an identifying change of release date and an increase in version number as follows:

Version 5.x.y

where:

- y the third digit is incremented when editorial only changes have been incorporated in the specification;
- x the second digit is incremented for all other types of changes, i.e. technical enhancements, corrections, updates, etc.

The specification from which this GTS has been derived was originally based on CEPT documentation, hence the presentation of this GTS may not be entirely in accordance with the ETSI rules.

Reference is made within this GTS to GSM-TSs (note).

NOTE: TC-SMG has produced documents which give the technical specifications for the implementation of the digital cellular telecommunications system. Historically, these documents have been identified as GSM Technical Specifications (GSM-TSs). These TSs may have subsequently become I-ETTs (Phase 1), or ETs/ETSI Technical Reports (ETRs) (Phase 2). TC-SMG has also produced ETSI GSM TSs which give the technical specifications for the implementation of Phase 2+ enhancements of the digital cellular telecommunications system. These version 5.x.x GSM Technical Specifications may be referred to as GTs.

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1 Scope

This GSM specification describes the feature Network Identity and Timezone (NITZ).

The feature provides the means for serving PLMNs to transfer current identity and the local timezone to mobile stations, and for the mobile stations to store and use this information. This enhances roaming by permitting accurate indication of PLMN identities that are either newer than the ME or have changed their name since the ME was sold. Additionally timezone information can be utilized by MEs as desired.

2 Normative references

This ETS incorporates by dated and undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

- [1] GSM 01.04: "European digital cellular telecommunication system (Phase 2); Definitions, abbreviations and acronyms".
- [2] GSM 02.07: "European digital cellular telecommunication system (Phase 2); Mobile Station (MS) Features".

3 Definitions and abbreviations

In addition to the following definitions, abbreviations used in this specification are listed in GSM 01.04.

NITZ	The feature Network Identity and Timezone as described in this specification.
UCS2	Universal Character Set 2
UT	Universal Time
LTZ	Local Time Zone, the offset from UT applying in that locality, including any adjustments for summer time, etc.

4 Description

The feature Network Identities and Timezone shall make it possible for a serving PLMN to transfer its current identity and LTZ to mobile stations, and for the mobile station to store and use this information. The feature significantly enhances roaming: the LTZ made available along with accurate indication of network identities that are either newer than the ME or have changed their name since the ME was sold. Additionally timezone information can be utilized by MEs as desired.

When using the default GSM character set, the serving PLMN shall make both a "short" and a "long" name available to the MS. As an alternative or, in addition, to the default GSM character set, the serving PLMN can make a name available in UCS2. The MS shall be free to choose one of these names depending upon its own characteristics and/or limitations, such as those of its display.

NOTE: Guidance is sought, particularly from non-European operators, as to whether long and short name is required in UCS2 format

The serving PLMN shall make local time zone (LTZ) available to the MS as an offset from Universal Time in units of no greater than 15 minutes.

The information passed to mobile stations supporting the NITZ feature is controlled by the serving PLMN Operator through administrative interaction. The interface necessary to support this administrative interaction is outside the scope of this specification.

5 Applicability

Network Identity and Timezone is both an optional network feature and an optional MS feature.

The NITZ feature is not intended to replace the existing method of PLMN Indication, nor is it intended to discharge the administration and maintenance of the associated MoU Permanent Document, SE13.

6 Normal Procedure

6.1 Transfer of NITZ information

Network name and timezone information can be transferred from the serving PLMN to the MS:

- 1) Upon registering on the network
- 2) When the MS geographically relocates to a different Local Time Zone

NOTE: For PLMNs which cover more than one timezone, it is expected that subsets of the PLMN service area will be roughly aligned with timezone boundaries.

- 3) When the network changes its Local Time Zone, e.g. between summer and winter time

NOTE: change of Local Time Zone need not force immediate transfer of information

- 4) When the network changes its identity

NOTE: change of network identity need not force immediate transfer of information

Transfer of relevant information shall not unduly consume scarce network resources.

6.2 Use of NITZ information

Relevant information shall be presented to the MS user at the earliest opportunity.

It is expected that the MS will display the most up to date information transferred to it.

Switching off the MS should not cause the updated name of the network(s) to be deleted.

Removal of the SIM should not cause the updated name of the network(s) to be deleted.

NOTE: The number of different network identities retained in the ME is a manufacturer issue

History

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SMG#19		None		5.0.0	Stage 1 approved

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