



AMENDMENT

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**This amendment A1 modifies
the European Telecommunication Standard ETS 300 536 (1994)**

**European digital cellular telecommunications system (Phase 2);
Technical realization of the Short Message Service (SMS)
Point-to-Point (PP)
(GSM 03.40)**

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

Tel.: +33 92 94 42 00 - Fax: +33 93 65 47 16

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Foreword

This Amendment to ETS 300 536 (1994) has been produced by the Special Mobile Group (SMG) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This Amendment to ETS 300 536 (1994) corresponds to the changes to GSM Technical Specification (GSM-TS) 03.40 from version 4.9.0 to version 4.10.0, as approved by TC-SMG.

This Amendment modifies pages 21 and 45 of ETS 300 536 (1994).

Amendments

Page 45, subclause 9.2.3.6.

Replace the existing subclause 9.2.3.6 with the following new subclause 9.2.3.6:

9.2.3.6 TP-Message-Reference (TP-MR)

The TP-Message-Reference field gives an integer representation of a reference number of the SMS-SUBMIT or SMS-COMMAND submitted to the SC by the MS. The MS increments TP-Message-Reference by 1 for each SMS-SUBMIT or SMS-COMMAND being submitted. The value to be used for each SMS-SUBMIT is obtained by reading the Last-Used-TP-MR value from the SMS Status data field in the SIM (see TS GSM 11.11) and incrementing this value by 1. After each SMS-SUBMIT has been submitted to the network, the Last-Used-TP-MR value in the SIM is updated with the TP-MR that was used in the SMS-SUBMIT operation. The reference number may possess values in the range 0 to 255. The value in the TP-MR assigned by the MS is the same value which is received at the SC.

In the case where no acknowledgement is received in response to an SMS-SUBMIT or SMS-COMMAND, then the MS may automatically repeat the SMS-SUBMIT or SMS-COMMAND but must use the same TP-MR value. The number of times the MS may repeat the SMS-SUBMIT or SMS-COMMAND is an implementation matter.

If all automatic attempts fail (including the case where no automatic repeat is provided), the user shall be informed. The failed message shall be stored in the mobile in such a way that the user can request a retransmission using the same TP-MR value, without needing to re-enter any information. Such storage need only be provided for a single failed message, the one most recently attempted.

The SC may discard an SMS-SUBMIT or SMS-COMMAND which has the same TP-MR value as the previous SMS-SUBMIT or SMS-COMMAND received from the same originating address.

A phase 2 or later ME using a phase 1 SIM cannot read or update the TP-Message-Reference from/to the SIM, and so the ME shall always retain the Last-Used-TP-MR value in its own memory, to be used only in the case of a phase 1 SIM.

The SMS-STATUS-REPORT also contains a TP-Message-Reference field. The value sent to the MS will be the same as the TP-Message-Reference value generated by the MS in the earlier SMS-SUBMIT or SMS-COMMAND to which the status report relates.

Page 21, subclause 3.3.2, table 03.40/1.

Replace table 03.40/1 with the following table:

| Error indication | S ¹⁾ | Meaning |
|---|-----------------|--|
| Unknown subscriber | P | The PLMN rejects the short message TPDU because there is not allocated an IMSI or a directory number for the mobile subscriber in the HLR (see GSM 09.02). |
| Teleservice not provisioned | P | The PLMN rejects the short message TPDU because the recipient MS has no SMS subscription (see GSM 09.02). |
| Call barred | T | The PLMN rejects the short message TPDU due to barring of the MS (see GSM 09.02, description of the Barring supplementary service, GSM 02.04 and 03.11), and description of Operator Determined Barring, GSM 02.41 and 03.15). |
| Facility not supported | T | The VPLMN rejects the short message TPDU due to no provision of the SMS in the VPLMN (see GSM 09.02). |
| Absent subscriber | T | The PLMN rejects the short message TPDU because - there was no paging response (see GSM 04.08) - the IMSI record is marked detached (see GSM 09.02), or - the MS is subject to roaming restrictions (see 'Roaming not allowed', GSM 09.02). |
| MS busy for MT SMS | T | The PLMN rejects the short message TPDU because of congestion encountered at the visited MSC. Possible reasons include any of the following events in progress: - short message delivery from another SC - IMSI detach - Location Update - paging - emergency call - call setup |
| SMS lower layers capabilities not provisioned | T | The PLMN rejects the short message TPDU due to MS not being able to support the Short Message Service. The short message transfer attempt is rejected either due to information contained in the class-mark, or the MSC not being able to establish connection at SAPI = 3 (see GSM 04.08 and GSM 09.02). |
| Error in MS | T | The PLMN rejects the short message TPDU due to an error occurring within the MS at reception of a short message, e.g.lack of free memory capacity or protocol error. |
| Illegal Subscriber | P | The PLMN rejects the short message TPDU because the MS failed authentication |
| Illegal Equipment | P | The PLMN rejects the short message TPDU because the IMEI of the MS was black-listed in the EIR |
| System failure | T | The PLMN rejects the short message TPDU due to network or protocol failure others than those listed above (see GSM 09.02) |
| Memory Capacity Exceeded | T | The MS rejects the short message since it has no memory capacity available to store the message |

1) : Status (Permanent or Temporary)

History

| Document history | |
|-------------------------|---|
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| December 1995 | Converted into Adobe Acrobat Portable Document Format (PDF) |
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