

**Services and Protocols for Advanced Networks (SPAN);
Short Message Service (SMS) for PSTN/ISDN;
Service description**



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Foreword

This ETSI Standard (ES) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN).

In accordance with ITU-T Recommendation I.130 [1] the following three level structure is used to describe the supplementary telecommunication services as provided by European public telecommunications operators under the pan-European Integrated Services Digital Network (ISDN):

- Stage 1: is an overall service description, from the user's stand-point;
- Stage 2: identifies the functional capabilities and information flows needed to support the service described in stage 1; and
- Stage 3: defines the signalling system protocols and switching functions needed to implement the service described in stage 1.

The present document details the stage 1 aspects (overall service description) for the Short Message Service (SMS).

Introduction

The Short Message Service (SMS) is a service that shall make it possible to offer seamless SMS over different networks (PSTN, ISDN, PLMN).

In the following of the present document it is assumed that both the sending and receiving Terminal Equipment (TE) have appropriate capabilities to send, receive, store, display and delete short messages.

1 Scope

The present document defines the stage 1 service description of the Short Message Service (SMS). Stage 1 is an overall service description, primarily from the service subscriber's and user's point of view, but does not deal with the details of the human interface itself.

The SMS can be provided via ISDN and PSTN accesses. The present document includes information applicable to service providers and equipment manufacturers. Where the text indicates the status of a requirement, (i.e. as strict command or prohibition, as authorization leaving freedom or, as a capability or possibility), this shall be reflected in the text of the relevant stage two and stage three standards.

The present document describes only the short message service between Terminal Equipment (TE) and a Short Message Service Centre (SM-SC). The kind of protocols for sending and receiving a Short Message (SM) as well as charging principles are outside the scope of the present document.

Interactions with supplementary services not mentioned in clause 7 and the respective annexes are outside the scope of the present document.

The present document contains the core service features and also optional service features for the Short Message Service. A service may be provided on the basis of the core requirements alone. The present document does not deal with a Short Message Service Broadcast.

Furthermore, additional functionalities not covered in the present document may be implemented. The requirements of which are considered outside of the scope of the present document are consequently outside the scope of the corresponding stage 2 and stage 3 standards. Such additional functionalities may be on a network-wide basis, or particular to one user or a group of users. Such additional functionalities do not compromise conformance to the core requirements of the service.

Furthermore, conformance to the present document is met by conforming to the stage three standards with the field of application appropriate to the equipment being implemented. Therefore no method of testing is provided for the present document.

The SMS can be realized in two ways, either as a network based solution or as a user based solution using the basic call procedures only. The sending and/or receiving part can be preceded in the same or in a different way.

- 1) Network Based Solution: a service offered as part of a function within the public network.
- 2) User Based Solution: a service offered as part of a function within the end-user equipment, which does not require any specific short message transfer function inside the public network.

The present document covers in general both possibilities but if different or specific descriptions are necessary, the relevant clauses are marked as "**NBS**" (Network Based Solution) or "**UBS**" (User Based Solution). Clauses that are valid for both realizations are marked as "**UBS/NBS**".

There are two different protocols known for the UBS (protocol 1 and protocol 2; see ES 201 912 [3]) and a third one for NBS. The handling between terminals with different protocols on the same subscriber line and service centres should be managed within the service centres or the terminals. These handling matters are outside the scope of the present document.