



TECHNICAL SPECIFICATION

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General aspects
(3GPP TS 24.010 version 19.1.0 Release 19)**



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Foreword

This Technical Specification (TS) has been produced by the 3rd Generation Partnership Project (3GPP).

The present document defines the general aspects of the specification of supplementary services at the layer 3 radio interface within the 3GPP system.

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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1 Scope

The present document gives the general aspects of the specification of supplementary services at the layer 3 radio interface.

3GPP TS 24.08x and 24.09x-series specify the procedures used at the radio interface (reference point Um as defined in 3GPP 24.002) for normal operation, registration, erasure, activation, deactivation, invocation and interrogation of supplementary services. Provision and withdrawal of supplementary services is an administrative matter between the mobile subscriber and the service provider and cause no signalling on the radio interface.

3GPP TS 24.008 [48] and 3GPP TS 24.080 [27] specifies the formats and coding for the supplementary services.

Definitions and descriptions of supplementary services are given in 3GPP TS 22.004 and 3GPP TS 22.08x and 22.09x-series.

Technical realization of supplementary services is described in 3GPP TS 23.011 and GSM 23.08x and 23.09x-series.

The procedures for Call Control, Mobility Management and Radio Resource management at the layer 3 radio interface are defined in 3GPP TS 24.007 [49] and 3GPP TS 24.008 [48].

1.1 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TS 21.905: "Abbreviations and acronyms".
- [2] 3GPP TS 22.004: "General on supplementary services".
- [3] 3GPP TS 22.081: "Line identification supplementary services - Stage 1".
- [4] 3GPP TS 22.082: "Call Forwarding (CF) supplementary services - Stage 1".
- [5] 3GPP TS 22.083: "Call Waiting (CW) and Call Hold (HOLD) supplementary services - Stage 1".
- [6] 3GPP TS 22.084: "MultiParty (MPTY) supplementary services - Stage 1".
- [7] 3GPP TS 22.085: "Closed User Group (CUG) supplementary services - Stage 1".
- [8] 3GPP TS 22.086: "Advice of charge (AoC) supplementary services - Stage 1".
- [9] 3GPP TS 22.088: "Call Barring (CB) supplementary services - Stage 1".
- [10] 3GPP TS 22.090: "Unstructured Supplementary Services Data (USSD) - Stage 1".
- [11] 3GPP TS 22.091: "Explicit Call Transfer (ECT) supplementary service - Stage 1".
- [12] 3GPP TS 23.011: "Technical realization of supplementary services".
- [13] 3GPP TS 23.081: "Line identification supplementary services - Stage 2".
- [14] 3GPP TS 23.082: "Call Forwarding (CF) supplementary services - Stage 2".
- [15] 3GPP TS 23.083: "Call Waiting (CW) and Call Hold (HOLD) supplementary services - Stage 2".
- [16] 3GPP TS 23.084: "MultiParty (MPTY) supplementary services - Stage 2".

- [17] 3GPP TS 23.085: "Closed User Group (CUG) supplementary services - Stage 2".
- [18] 3GPP TS 23.086: "Advice of Charge (AoC) supplementary services - Stage 2".
- [19] 3GPP TS 23.088: "Call Barring (CB) supplementary services - Stage 2".
- [20] 3GPP TS 23.090: "Unstructured supplementary services operation - Stage 2".
- [21] 3GPP TS 23.091: "Explicit Call Transfer (ECT) supplementary service - Stage 2".
- [22] 3GPP TS 24.002: "GSM Public Land Mobile Network (PLMN) access reference configuration".
- [23] 3GPP TS 24.003: "Mobile Station - Base Stations system (MS - BSS) interface; Channel structures and access capabilities".
- [24] 3GPP TS 24.004: "Layer 1; General requirements".
- [25] 3GPP TS 44.005: "Data Link (DL) layer; General aspects".
- [26] 3GPP TS 44.006: "Mobile Station - Base Station System (MS - BSS) interface; Data Link (DL) layer specification".
- [27] 3GPP TS 24.080: "Mobile radio interface layer 3 supplementary services specification; Formats and coding".
- [28] 3GPP TS 24.081: "Line identification supplementary services - Stage 3".
- [29] 3GPP TS 24.082: "Call Forwarding (CF) supplementary services - Stage 3".
- [30] 3GPP TS 24.083: "Call Waiting (CW) and Call Hold (HOLD) supplementary services - Stage 3".
- [31] 3GPP TS 24.084: "MultiParty (MPTY) supplementary services - Stage 3".
- [32] 3GPP TS 24.085: "Closed User Group (CUG) supplementary services - Stage 3".
- [33] 3GPP TS 24.086: "Advice of Charge (AoC) supplementary services - Stage 3".
- [34] 3GPP TS 24.088: "Call Barring (CB) supplementary services - Stage 3".
- [35] 3GPP TS 24.090: "Unstructured supplementary services operation - Stage 3".
- [36] 3GPP TS 24.091: "Explicit Call Transfer (ECT) supplementary service - Stage 3".
- [37] 3GPP TS 45.001: "Physical layer on the radio path; General description".
- [38] 3GPP TS 45.002: "Multiplexing and multiple access on the radio path".
- [39] 3GPP TS 45.003: "Channel coding".
- [40] 3GPP TS 45.004: "Modulation".
- [41] 3GPP TS 45.005: "Radio transmission and reception".
- [42] 3GPP TS 45.008: "Radio subsystem link control".
- [43] 3GPP TS 45.010: "Radio subsystem synchronization".
- [44] GSM 05.90: "Digital cellular telecommunications system; GSM Electro Magnetic Compatibility (EMC) considerations".
- [45] 3GPP TS 29.002: "Mobile Application Part (MAP) specification".
- [46] 3GPP TS 29.011: "Signalling interworking for supplementary services".
- [47] CCITT Recommendation Q.774 (White Book): "Specifications of Signalling System No.7; Transaction capabilities procedures".
- [48] 3GPP TS 24.008: "Core network protocols; Stage 3".

- [49] 3GPP TS 24.007: "Mobile radio interface signalling layer 3; General aspects".
- [50] 3GPP TS 24.571: "Control plane Location Services (LCS) procedures; Stage 3".

1.2 Abbreviations

Abbreviations used in the present document are listed in 3GPP TS 21.905.

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