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## Foreword

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

The present document describes the general aspects on how supplementary services within the 3GPP system.

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#### 1 Scope

The present document describes the general aspects on how supplementary services in the 3GPP system are realised from a technical point of view.

Description of technical realisation for specific supplementary services can be found in 3GPP TS 23.072, 230.8x and 230.9x-series technical specifications.

All supplementary services may require signalling on the radio path. Signalling procedures and messages used are defined in the 3GPP TS 24.072, 24.08x and 24.09x-series of technical specifications.

For some supplementary services information needs to be transferred between the Home Location Register (HLR), the Visitor Location Register (VLR), the Mobile services Switching Centre (MSC) and the Serving GPRS Support Node (SGSN). Signalling procedures for such information transfer are defined in 3GPP TS 29.002.

Definitions and descriptions of supplementary services are given in the 3GPP TS 22.072, 22.08x and 22.09x-series of technical specifications.

Definitions are given in 3GPP TS 22.004..

NOTE: The technical specifications on the technical realisation of supplementary services do not distinguish between subscriber, user and customer, since all three do not fully cover the textual needs. Generally the term "subscriber" is used, even if this person is not having the subscription.

#### 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.
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- 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: "3G Vocabulary".
- [2] 3GPP TS 22.004: "General on Supplementary Services".
- [3] 3GPP TS 22.030: "Man-Machine Interface (MMI) of the Mobile Station (MS)".
- [4] 3GPP TS 23.081: "Line Identification Supplementary Services Stage 2".
- [5] 3GPP TS 23.082: "Call Forwarding (CF) Supplementary Services Stage 2".
- [6] 3GPP TS 23.083: "Call Waiting (CW) and Call Hold (HOLD) Supplementary Service Stage 2".
- [7] 3GPP TS 23.084: "MultiParty (MPTY) Supplementary Service Stage 2".
- [8] 3GPP TS 23.085: "Closed User Group (CUG) Supplementary Service Stage 2".
- [9] 3GPP TS 23.086: "Advice of Charge (AoC) Supplementary Service Stage 2".
- [10] 3GPP TS 23.088: "Call Barring (CB) Supplementary Service Stage 2".
- [11] 3GPP TS 23.090: "Unstructured Supplementary Service Data (USSD) Stage 2".
- [12] 3GPP TS 24.080: "Mobile radio Layer 3 Supplementary Service specification Formats and coding".