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**Digital cellular telecommunications system (Phase 2+);
Universal Mobile Telecommunications System (UMTS);
Signalling interworking between ISDN supplementary services;
Application Service Element (ASE)
and Mobile Application Part (MAP) protocols
(3GPP TS 29.013 version 13.0.0 Release 13)**

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Contents

Foreword

This Technical Specification has been produced by the 3GPP.

This TS provides a detailed specification for interworking between the ISDN Supplementary Services ASE protocol and the Mobile Application Part (MAP) D interface protocol for handling of supplementary services 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 this TS, 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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where:

x the first digit:

1 presented to TSG for information;

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y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.

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1 Scope

The scope of the present document is to provide a specification for interworking between the ISDN Application Service Element (ASE) protocol for supplementary services and the Mobile Application Part (MAP) protocol on MAP D-interface protocol for handling of supplementary services within the digital cellular telecommunications system (Phase 2+). This version of the specification includes the interworking for the Call Completion to Busy Subscriber (CCBS) service between the ISDN CCBS-ASE and MAP.

The MAP protocol for CCBS service is specified in GSM 09.02. The ISDN CCBS-ASE protocol is specified in ETS 300 356-18. The ISDN CCBS-ASE protocol is also commonly referred to as the SSAP protocol in GSM 03.93. This specification clarifies the interworking within the HLR between these protocols for the Call Completion to Busy Subscriber (CCBS) service.

Clause 4 describes the mapping between MAP application layer messages and SSAP application layer messages.

Clause 5 describes the mapping between MAP message parameters and SSAP message parameters.

Clause 6 describes the dialogue handling on the SSAP interface.

Clause 7 describes the SCCP layer addressing for messages on the SSAP interface.

2 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.

[1] GSM 01.04: "Digital cellular telecommunications system (Phase 2+); Abbreviations and acronyms".

[2] GSM 02.93: "Digital cellular telecommunications system (Phase 2+); Completion of calls to busy subscriber (CCBS) supplementary services - Stage 1".

[3] GSM 03.93: "Digital cellular telecommunications system (Phase 2+); Technical Realisation of Completion of Calls to Busy Subscriber (CCBS); Stage 2'.

[4] GSM 04.80: "Digital cellular telecommunications system (Phase 2+); Mobile radio interface layer 3 supplementary services specification Formats and coding".

[5] GSM 04.93: "Digital cellular telecommunications system (Phase 2+); Technical Realisation of Completion of Calls to Busy Subscriber (CCBS); Stage 3'.

[6] GSM 09.02 "Digital cellular telecommunications system (Phase 2+); Mobile Application Part (MAP) specification".

[7] GSM 09.07 : "Digital cellular telecommunications system (Phase 2+); General requirements on interworking between the Public Land Mobile Network (PLMN) and the Integrated Services Digital Network (ISDN) or Public Switched Telephone Network (PSTN)".

[8] ETS 300 102-1 (1990): "Integrated Services Digital Network (ISDN); User-network interface layer 3 specifications for basic call control".

[9] ETS 300 356-18: 'ISDN User Part (ISUP) version 2 for the international interface: Part 18: Completion of Calls to Busy Subscriber (CCBS) supplementary service".

[10] ETS 300 358: 'Integrated Services Digital Network (ISDN); Completion of Calls to Busy Subscriber (CCBS) supplementary service; Functional capabilities and information flows".