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TECHNICAL SPECIFICATION

**Digital cellular telecommunications system (Phase 2+) (GSM);
Universal Mobile Telecommunications System (UMTS);
High Speed Circuit Switched Data (HSCSD);
Stage 2
(3GPP TS 23.034 version 13.0.0 Release 13)**

GLOBAL SYSTEM FOR
MOBILE COMMUNICATIONS

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Contents

Foreword

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

The present document specifies the Stage 2 description of High Speed Circuit Switched Data (HSCSD) 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 contains the stage 2 service description for a High Speed Circuit Switched Data (HSCSD) on GSM/GERAN in A/Gb mode and Iu mode. HSCSD utilizes the multislot mechanism, i.e. using multiple traffic channels (/bearers) for the communication.

Additionally, the present document specifies some HSCSD related requirements for multi system mobile stations operating in UTRAN Iu mode. In UTRAN Iu mode one bearer can provide all needed data rates, and the multislot mechanism is therefore not needed. However, for inter-system handover to GERAN, certain information has to be provided by the mobile station during the service negotiation. The UTRAN Iu mode aspects concerning HSCSD are described exclusively in clause 4.2.

In analogy with ITU-T Recommendation I.130 [6] (refer to annex A) and with reference of ITU-T Recommendation Q.65 [7] VI.1 (Stage 2 of the method for characterization of services supported by an ISDN), the second stage of the HSCSD is defined as follows.

Stage 2 identifies the functional capabilities and information flows needed to support the service as described in 3GPP TS 22.034 [9]. Furthermore, it identifies various possible physical locations for the functional capabilities. The output of Stage 2, which is signalling system independent, is used as an input to Stage 3, the design of signalling system and switching Recommendations.

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. 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]   Void.

[1a]   3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2]   3GPP TS 45.002: "Multiplexing and multiple access on the radio path".

[3]   3GPP TS 24.008: "Mobile Radio Interface Layer 3 specification; Core Network Protocols - Stage 3".

[4]   3GPP TS 48.008: "Mobile-services Switching Centre - Base Station System (MSC - BSS) interface; Layer 3 specification".

[5]   3GPP TS 24.022: "Radio Link Protocol (RLP) for data and telematic services on the Mobile Station - Base Station System (MS - BSS) interface and the Base Station System - Mobile-services Switching Centre (BSS - MSC)".

[6]   ITU-T Recommendation I.130: "Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN".

[7]   ITU-T Recommendation Q.65: "The unified functional methodology for the characterization of services and network capabilities".

[8]   ITU-T Recommendation I.460: "Multiplexing, rate adaptation and support of existing interfaces".

[9]   3GPP TS 22.034: "High Speed Circuit Switched Data (HSCSD); Stage 1".

[10]   3GPP TS 43.020: "Security related network functions".