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*Technical Specification*

**Digital cellular telecommunications system (Phase 2+);  
Channel coding  
(3GPP TS 05.03 version 8.9.0 Release 1999)**



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## Foreword

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

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# 1 Scope

A reference configuration of the transmission chain is shown in GSM 05.01 [4]. According to this reference configuration, the present document specifies the data blocks given to the encryption unit.

It includes the specification of encoding, reordering, interleaving and the stealing flag. It does not specify the channel decoding method.

The definition is given for each kind of logical channel, starting from the data provided to the channel encoder by the speech coder, the data terminal equipment, or the controller of the Mobile Station (MS) or Base Transceiver Station (BTS). The definitions of the logical channel types used in this technical specification are given in GSM 05.02 [5], a summary is in annex A.

## 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.
- For this Release 1999 document, references to GSM documents are for Release 1999 versions (version 8.x.y).

- [1] GSM 01.04: "Digital cellular telecommunications system (Phase 2+); Abbreviations and acronyms".
- [2] GSM 04.08: "Digital cellular telecommunications system (Phase 2+); Mobile radio interface layer 3 specification".
- [3] GSM 04.21: "Digital cellular telecommunications system (Phase 2+); Rate adaption on the Mobile Station - Base Station System (MS - BSS) interface".
- [4] GSM 05.01: "Digital cellular telecommunications system (Phase 2+); Physical layer on the radio path General description".
- [5] GSM 05.02: "Digital cellular telecommunications system (Phase 2+); Multiplexing and multiple access on the radio path".
- [6] GSM 05.05: "Digital cellular telecommunications system (Phase 2+); Radio Transmission and Reception".
- [7] GSM 05.09: "Digital cellular telecommunications system (Phase 2+); Link adaptation".
- [8] GSM 06.10: "Digital cellular telecommunications system; Full rate speech transcoding".
- [9] GSM 06.20: "Digital cellular telecommunications system; Half rate speech transcoding".
- [10] GSM 06.60: "Digital cellular telecommunications system; Enhanced Full Rate (EFR) speech transcoding".
- [11] GSM 06.90: "Digital cellular telecommunications system; Adaptive Multi-Rate speech transcoding".
- [12] GSM 06.93: "Digital cellular telecommunications system; Discontinuous transmission (DTX) for Adaptive Multi-Rate speech traffic channels".
- [13] GSM 03.64: "Digital cellular telecommunications system (Phase 2+); General Packet Radio Service (GPRS); Overall description of the GPRS Radio Interface; Stage 2".