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Technical Specification

Digital cellular telecommunications system (Phase 2+);
Mobile radio interface layer 3 specification
(3GPP TS 04.08 version 7.21.0 Release 1998)

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Contents

Foreword

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

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Introduction

The present document includes references to features which are not part of the Phase 2+ Release 96 of the GSM Technical specifications. All sub-clauses which were changed as a result of these features contain a marker (see table below) relevant to the particular feature.

The following table lists all features that were introduced after Release 1996.

Feature	Designator
BA Range IE handling	$(impr-BA-range-handling)$
Advanced Speech Call Item	$(ASCI)$
Call Completion Busy Subscriber	$(CCBS)$
Mobile Assisted Frequency Allocation	$(MAFA)$
Network Indication of Alerting in MS	(NIA)

0 Scope

The present document specifies the procedures used at the radio interface (Reference Point Um, see 3GPP TS 04.02) for Call Control (CC), Mobility Management (MM), Radio Resource (RR) management and Session Management (SM).

When the notations for "further study" or "FS" or "FFS" are present in the present document they mean that the indicated text is not a normative portion of the present document.

These procedures are defined in terms of messages exchanged over the control channels of the radio interface. The control channels are described in 3GPP TS 04.03.

The structured functions and procedures of this protocol and the relationship with other layers and entities are described in general terms in 3GPP TS 04.07.

0.1 Scope of the Technical Specification

The procedures currently described in the present document are for the call control of circuit-switched connections, session management for GPRS services, mobility management and radio resource management for circuit-switched and GPRS services.

3GPP TS 04.10 contains functional procedures for support of supplementary services.

3GPP TS 04.11 contains functional procedures for support of point-to-point short message services.

3GPP TS 04.12 contains functional description of short message - cell broadcast.

3GPP TS 04.60 contains procedures for radio link control and medium access control (RLC/MAC) of packet data physical channels.

3GPP TS 04.71 contains functional descriptions and procedures for support of location services.

NOTE: "layer 3" includes the functions and protocols described in the present document. The terms "data link layer" and "layer 2" are used interchangeably to refer to the layer immediately below layer 3.

0.2 Application to the interface structures

The layer 3 procedures apply to the interface structures defined in 3GPP TS 04.03. They use the functions and services provided by layer 2 defined in 3GPP TS 04.05 and 3GPP TS 04.06. 3GPP TS 04.07 gives the general description of layer 3 including procedures, messages format and error handling.

0.3 Structure of layer 3 procedures

A building block method is used to describe the layer 3 procedures.

The basic building blocks are "elementary procedures" provided by the protocol control entities of the three sublayers, i.e. radio resource management, mobility management and connection management sublayer.

Complete layer 3 transactions consist of specific sequences of elementary procedures. The term "structured procedure" is used for these sequences.

0.4 Test procedures

Test procedures of the GSM radio interface signalling are described in 3GPP TS 11.10 and 3GPP TS 11.2x series.