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**Digital cellular telecommunications system (Phase 2+) (GSM);
General Packet Radio Service (GPRS);
Base Station System (BSS) -
Serving GPRS Support Node (SGSN) interface;
Gb interface Layer 1
(3GPP TS 48.014 version 14.0.0 Release 14)**



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1 Scope

The present document specifies the physical layer on the Base Station System (BSS) to Serving GPRS Support Node (SGSN) interface (Gb interface) and references layer 1 standards to be used on this interface.

The protocol stack on the Gb interface is defined in the stage 2 3GPP TS 23.060.

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.
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- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 22.060: "General Packet Radio Service (GPRS); Service description; Stage 1".
- [3] 3GPP TS 23.060: "General Packet Radio Service (GPRS); Service description; Stage 2".
- [4] 3GPP TS 48.004: "Base Station System - Mobile-services Switching Centre (BSS-MSC) interface; Layer 1 specification".
- [5] FRF.1.2 (July 2000): "User-to-Network Interface (UNI) Implementation Agreement".
- [6] ITU-T Recommendation G.704 (Blue Book): "Synchronous frame structures used at 1 544, 6 312, 2 048, 8 488 and 44 736 kbit/s hierarchical levels".
- [7] ANSI T1.403-1999: "Network and Customer Installation Interfaces - DS1 - Electrical Interface".
- [8] Bellcore TR-NWT-001203 Issue 2 (December 1992): "Generic Requirements for the Switched DS1/Switched Fractional DS1 Service Capability From an ISDN Interface (SWF-DS1/ISDN)".
- [9] ITU-T Recommendation V.35: "Data transmission at 48 kilobits per second using 60-108 kHz group band circuits".
- [10] ITU-T Recommendation G.703: "Physical/electrical characteristics of hierarchical digital interfaces".
- [11] ITU-T Recommendation X.21: "Interface between Data Terminal Equipment and Data Circuit-terminating Equipment for synchronous operation on public data networks".
- [12] TIA/EIA-530-A: "High Speed 25-Position Interface for Data Terminal Equipment and Data Circuit-Terminating Equipment, Including Alternative 26-Position Connector (ANSI/TIA/EIA-530-A-92) (R98)".

3 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 and 3GPP TS 23.060, and the following apply:

DCE	Data Circuit-terminating Equipment
DTE	Data Terminal Equipment
FRF	Frame Relay Forum