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Digital cellular telecommunications system (Phase 2+) (GSM);
Packet-switched handover for GERAN A/Gb mode;
Stage 2
(3GPP TS 43.129 version 14.0.0 Release 14)

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Contents

Foreword

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Introduction

Packet Switched (PS) handover is introduced in order to support real-time packet-switched with strict QoS requirements on low latency and packet loss. Packet switched handover reduces the service interruption of the user plane information at cell change compared to the cell-reselection and enables methods to improve buffer handling of user plane data in order to reduce packet loss at cell-change.

1 Scope

The present document defines the stage-2 service description for packet switched handover in GERAN *A/Gb mode* and GAN mode. ITU-T Recommendation I.130 [8] describes a three-stage method for characterisation of telecommunication services, and ITU-T Recommendation Q.65 [9] defines stage 2 of the method. The present document refers to packet switched handover in GERAN *A/Gb mode/GAN mode*, and therefore focuses on the corresponding radio protocol enhancements to the packet switched domain only i.e. when services are provided through the Gb interface.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

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

[2] 3GPP TS 22.105: "Services and service capabilities".

[3] 3GPP TS 22.060: "General Packet Radio Service (GPRS); Service description; Stage 1".

[4] 3GPP TS 43.064: "Overall description of the GPRS radio interface; Stage 2".

[5] 3GPP TS 25.922: "Radio Resource Management strategies".

[6] 3GPP TS 23.107: "Quality of Service (QoS) concept and architecture".

[7] 3GPP TS 44.060: "General Packet Radio Service (GPRS); Mobile Station (MS) - Base Station System (BSS) interface; Radio Link Control/Medium Access Control (RLC/MAC) protocol".

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

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

[10] 3GPP TS 48.018: "General Packet Radio Service (GPRS); Base Station System (BSS) - Serving GPRS Support Node (SGSN); BSS GPRS Protocol".

[11] 3GPP TS 29.060: "General Packet Radio Service (GPRS); GPRS Tunnelling Protocol (GTP) across the Gn and Gp interface".

[12] 3GPP TS 23.003: "Numbering, addressing and identification".

[13] 3GPP TS 25.401: "UTRAN overall description".

[14] 3GPP TS 43.051: "GSM/EDGE Radio Access Network (GERAN) overall description; Stage 2".

[15] 3GPP TS 24.008: "Mobile radio interface Layer 3 specification; Core network protocols; Stage 3".

[16] 3GPP TS 44.118: "Mobile radio interface layer 3 specification, Radio Resource Control (RRC) protocol; Iu mode".

[17] 3GPP TS 25.331: "Radio Resource Control (RRC) protocol specification".