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**Universal Mobile Telecommunications System (UMTS);  
Core network Nb interface user plane protocols  
(3GPP TS 29.415 version 13.1.0 Release 13)**



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## Introduction

The present document specifies the user plane protocol used between two Media Gateways in the CS core network. Through out the present document this protocol shall be referred to as the Nb UP protocol. The Nb UP protocol is for a large part identical to the Iu UP protocol (see 3GPP TS 25.415 [2]), and only the differences between the two protocols are specified. This specification defines the applicability of the UP, as defined in 3GPP TS 25.415 [2], for the Nb interface only.

Given that the Nb UP uses the same PDU types as the Iu UP, the term IuFP is used to refer to the common framing.

For the purpose of the present document, any occurrence of the term "Iu UP" in the corresponding sections of 3GPP TS 25.415 [2], shall be interpreted as "Nb UP".

# 1 Scope

The present document specifies the user plane protocol of the bearer used between two MGWs within the BICC-based CS core network, called the Nb UP protocol. The present document assumes the implementation of the split between call control and the bearer transport and control, as specified in 3GPP TS 23.205 [1], see figure 1. Note that the present document does not preclude an implementation of a combined MSC Server and MGW.

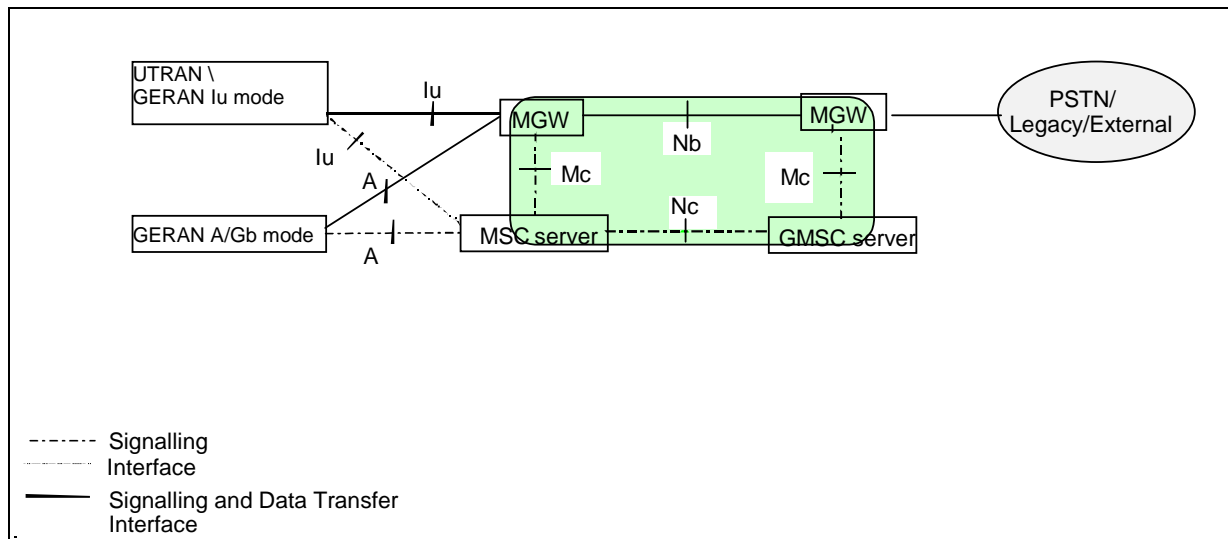


Figure 1: CS core network logical architecture

# 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 TS 23.205: "Bearer Independent CS Core Network; Stage 2"
- [2] 3GPP TS 25.415: "UTRAN Iu Interface User Plane Protocols"
- [3] 3GPP TS 29.232: "Media Gateway Controller; Media Gateway interface; Stage 3"
- [4] 3GPP TS 29.414: "Core Network Nb Data Transport and Transport Signalling"
- [5] 3GPP TR 41.001: "GSM Release specifications"
- [6] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications"
- [7] IETF RFC 1889: "RTP A Transport Protocol for Real Time Applications"
- [8] ITU-T I.366.1 (06/98): "Segmentation and Reassembly Service Specific Convergence Sublayer for the AAL type 2"
- [9] 3GPP TS 26.445: "Codec for Enhanced Voice Services (EVS); Detailed Algorithmic Description".