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**Digital cellular telecommunications system (Phase 2+);
Universal Mobile Telecommunications System (UMTS);
Interworking between the 3GPP CS domain with BIC or
ISUP as signalling protocol and external SIP-I networks
(3GPP TS 29.164 version 12.0.0 Release 12)**



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650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
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1 Scope

The present document defines interworking procedures between a 3GPP CS domain (see 3GPP TS 23.205 [2]) which applies either BICC or ISUP as signalling protocol, and external networks that use SIP-I (see ITU-T Q.1912.5 [20], Profile C) as signalling protocol. The document also describes the related interworking architecture. The control plane interworking is performed by an interworking unit at the interconnection between the 3GPP CS domain and an external SIP-I network. The user plane interworking is performed by an MGW. The present document defines stage 2 procedures for the control of the MGW.

The present specification reuses existing interworking procedures of 3GPP TS 29.163 [4] and ITU-T Q.1912.5 [20], Profile C, as far as possible.

2 References

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

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- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 23.205: "Bearer-independent circuit-switched core network; Stage 2".
- [3] 3GPP TS 26.102: "Adaptive Multi-Rate (AMR) speech codec; Interface to Iu and Uu".
- [4] 3GPP TS 29.163: "Interworking between the IP Multimedia (IM) Core Network (CN) subsystem and Circuit Switched (CS) networks".
- [5] 3GPP TS 29.205: "Application of Q.1900 series to Bearer Independent CS Network architecture; Stage 3".
- [6] 3GPP TS 29.332: "Media Gateway Control Function (MGCF) – IM-Media Gateway (IM-MGW) interface, Stage 3".
- [7] 3GPP TS 29.414: "Core network Nb data transport and transport signalling".
- [8] 3GPP TS 29.415: "Core network Nb interface user plane protocols".
- [9] ITU-T Recommendation E.164 (05/1997): "The international public telecommunication numbering plan".
- [10] ITU-T Recommendation G.711 (11/98): "Pulse Code Modulation (PCM) of voice frequencies".
- [11] ITU-T Recommendation H.248.1 (05/02): "Gateway control protocol: Version 2".
- [12] ITU-T Recommendation I.363.5 (1996): "B-ISDN ATM Adaptation Layer specification: Type 5 AAL".
- [13] ITU-T Recommendation Q.701 (03/93), Q.702 (11/88), Q.703 (07/96), Q.704 (07/96), Q.705 (03/93), Q.706 (03/93), Q.707 (11/88), Q.708 (03/99), Q.709 (03/93): "Functional description of the message transfer part (MTP) of Signalling System No. 7".