

# ETSI TS 129 329 V13.0.0 (2016-03)



**Digital cellular telecommunications system (Phase 2+) (GSM);  
Universal Mobile Telecommunications System (UMTS);  
LTE;  
Sh interface based on the Diameter protocol;  
Protocol details  
(3GPP TS 29.329 version 13.0.0 Release 13)**



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**Reference**

RTS/TSGC-0429329vd00

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**Keywords**

GSM,LTE,UMTS

**ETSI**

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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 a transport protocol for use in the IP multimedia (IM) Core Network (CN) subsystem based on Diameter.

The present document is applicable to:

- The Sh interface between an AS and the HSS.
- The Sh interface between an SCS and the HSS.

Whenever it is possible this document specifies the requirements for this protocol by reference to specifications produced by the IETF within the scope of Diameter. Where this is not possible, extensions to Diameter are defined within this document.

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# 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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- 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 TS 29.328 "IP Multimedia (IM) Subsystem Sh interface; signalling flows and message contents".
- [2] 3GPP TS 33.210 "3G Security; Network Domain Security; IP Network Layer Security".
- [3] IETF RFC 2960 "Stream Control Transmission Protocol".
- [4] IETF RFC 3588 "Diameter Base Protocol".
- [5] IETF RFC 2234 "Augmented BNF for syntax specifications".
- [6] 3GPP TS 29.229 "Cx and Dx Interfaces based on the Diameter protocol; protocol details".
- [7] IETF RFC 3589 "Diameter Command Codes for Third Generation Partnership Project (3GPP) Release 5".
- [8] ITU-T Recommendation E.164: "The international public telecommunication numbering plan".
- [9] 3GPP TR 33.978 "Security aspects of early IP Multimedia Subsystem (IMS) (Release 6)".
- [10] 3GPP TS 29.364 "IMS Application Server Service Data Descriptions for AS interoperability".
- [11] 3GPP TS 29.002 "Mobile Application Part (MAP) specification".
- [12] IETF RFC 7683: "Diameter Overload Indication Conveyance".
- [13] IETF draft-ietf-dime-drmp-02: "Diameter Routing Message Priority".

**Editor's note:** The above document cannot be formally referenced until it is published as an RFC.