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Universal Mobile Telecommunications System (UMTS);**

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5G;**

**Inter-IMS Network to Network Interface (NNI)  
(3GPP TS 29.165 version 10.22.0 Release 10)**

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**ETSI**

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

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

Siret N° 348 623 562 00017 - NAF 742 C  
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# Foreword

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# 1 Scope

The objective of this document is to address the Inter-IMS Network to Network Interface (II-NNI) consisting of Ici and Izi reference points between IMS networks in order to support end-to-end service interoperability.

The present document will address the issues related to control plane signalling (3GPP usage of SIP and SDP protocols, required SIP header fields) as well as other interconnecting aspects like security, numbering/naming/addressing and user plane issues as transport protocol, media and codecs actually covered in a widespread set of 3GPP specifications. A profiling of the Inter-IMS Network to Network Interface (II-NNI) is also provided.

Charging aspects will be addressed as far as SIP signalling is concerned.

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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.

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- [133] IETF RFC 6794: "A Framework for Session Initiation Protocol (SIP) Session Policies".
- [134] IETF RFC 5875: "An Extensible Markup Language (XML) Configuration Access Protocol (XCAP) Diff Event Package".
- [135] IETF RFC 4488: "Suppression of Session Initiation Protocol (SIP) REFER Method Implicit Subscription".
- [136] IETF RFC 7462: "URNs for the Alert-Info Header Field of the Session Initiation Protocol (SIP)".
- [137] Void.
- [138] OMA-TS-Presence\_SIMPLE-V2\_0-20120710-A: "Presence SIMPLE Specification".
- [139] 3GPP TS 24.247: "Messaging service using the IP Multimedia (IM) Core Network (CN) subsystem".
- [140] IETF RFC 4538: "Request Authorization through Dialog Identification in the Session Initiation Protocol (SIP)".
- [141] IETF RFC 5318: "The Session Initiation Protocol (SIP) P-Refused-URI-List Private-Header (P-Header)".
- [142] OMA-TS-Presence\_SIMPLE-V1\_1\_1-20100225-A: "Presence SIMPLE Specification".
- [143] IETF RFC 6809: "Mechanism to Indicate Support of Features and Capabilities in the Session Initiation Protocol (SIP)".
- [144] IETF RFC 5839: "An Extension to Session Initiation Protocol (SIP) Events for Conditional Event Notification".
- [145] Void.
- [146] IETF RFC 3264: "An Offer/Answer Model with the Session Description Protocol (SDP)".
- [147] IETF RFC 4566: "SDP: Session Description Protocol".
- [148] 3GPP TS 29.079: "Optimal Media Routeing within the IP Multimedia Subsystem; Stage 3".
- [149] 3GPP TS 24.337: "IP Multimedia Subsystem (IMS) inter-UE transfer".
- [150] IETF RFC 3960: "Early Media and Ringing Tone Generation in the Session Initiation Protocol (SIP)".
- [151] IETF RFC 3550: "RTP: A Transport Protocol for Real-Time Applications".
- [152] IETF RFC 768: "User Datagram Protocol".
- [153] IETF RFC 3551: "RTP Profile for Audio and Video Conferences with Minimal Control".