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LTE;  
IP Multimedia (IM) Core Network (CN)  
subsystem Centralized Services (ICS);  
Stage 3  
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# Foreword

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# 1 Scope

IP Multimedia (IM) Core Network (CN) subsystem centralized services (ICS) allow for the delivery of consistent IMS services to the user regardless of the attached access type (e.g. CS domain access or IP-CAN).

The present document provides the protocol details for the realization of ICS based on the Session Initiation protocol (SIP), the Session Description Protocol (SDP), the I1 protocol, and the protocols of the 3GPP Circuit-Switched (CS) domain (e.g. CAP, MAP, ISUP, BICC and the NAS call control protocol for the CS access).

This document makes no ICS specific enhancements to SIP or SDP beyond those specified in 3GPP TS 24.229 [11].

The present document is applicable to User Equipment (UEs), MSC Servers and Application Servers (AS) providing ICS capabilities.

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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.
- For a specific reference, subsequent revisions do not apply.
- 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 22.173: "IP Multimedia Core Network Subsystem (IMS) Multimedia Telephony Service and supplementary services".
- [3] 3GPP TS 23.002: "Network architecture".
- [4] 3GPP TS 23.003: "Numbering, addressing and identification".
- [4A] 3GPP TS 23.153: "Out of band transcoder control; Stage 2".
- [5] 3GPP TS 23.228: "IP multimedia subsystem; Stage 2".
- [6] 3GPP TS 23.292: "IP Multimedia Subsystem (IMS) Centralized Services; Stage 2".
- [7] 3GPP TS 24.008: "Mobile radio interface layer 3 specification; Core Network protocols; Stage 3".
- [8] 3GPP TS 24.147: "Conferencing using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3".
- [8A] 3GPP TS 24.167: "3GPP IMS Management Object (MO); Stage 3".
- [9] 3GPP TS 24.173: "IMS Multimedia telephony service and supplementary services; Stage 3".
- [10] 3GPP TS 24.228 Release 5: "Signalling flows for the IP multimedia call control based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3".
- [11] 3GPP TS 24.229: "IP multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3".
- [11A] 3GPP TS 24.301: "Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS); Stage 3".
- [11B] 3GPP TS 24.294: "IMS Centralized Services (ICS) Protocol via I1 Interface; Stage 3".