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Technical Specification

**Digital cellular telecommunications system (Phase 2+);
Universal Mobile Telecommunications System (UMTS);
LTE;**

**Technical Specifications and Technical Reports relating
to the Common IP Multimedia Subsystem (IMS)
(3GPP TS 21.202 version 10.2.0 Release 10)**



Reference

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Foreword

This Technical Specification (TS) has been produced by ETSI 3rd Generation Partnership Project (3GPP).

The present document may refer to technical specifications or reports using their 3GPP identities, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

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Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 2 presented to TSG for approval;
 - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

1 Scope

The present document identifies the 3GPP Technical Specifications and Technical Reports specifically relating to the Common IP Multimedia Subsystem (IMS) maintained by 3GPP. Standards organizations adopting the Common IP Multimedia Subsystem (IMS) might not need to use all listed specifications.

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 TR 21.900: "Technical specification group working methods"

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in TR 21.905 [1] apply.

3.2 Symbols

(None)

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in TR 21.905 [1].

NGN	Next Generation Network
R1	Release 1
R2	Release 2
TISPAN	Telecommunications and Internet converged Services and Protocols for Advanced Networks

4 General

The numbering scheme for specifications is described in 3GPP TR 21.900 [2].

5 Specifications and Reports

NOTE 1: The "for publication?" column of the table below indicates whether or not the documents are intended for adoption by the partner Standards Development Organizations as their own publications. Those marked "no" are internal working documents of the 3GPP TSGs.

NOTE 2: "Type" indicates Technical Specification (TS) or Technical Report (TR).

The table below contains all Common IMS specs pertaining to Release 9.

Type	Number	Title	Group	For publication?
TS	21.111	USIM and IC card requirements	C6	Yes
TR	21.905	Vocabulary for 3GPP Specifications	SP	Yes
TS	22.030	Man-Machine Interface (MMI) of the User Equipment (UE)	S1	Yes
TS	22.041	Operator Determined Barring (ODB)	S1	Yes
TS	22.071	Location Services (LCS); Service description; Stage 1	S1	Yes
TS	22.101	Service aspects; Service principles	S1	Yes
TS	22.105	Services and service capabilities	S1	Yes
TS	22.115	Service aspects; Charging and billing	S1	Yes
TS	22.140	Multimedia Messaging Service (MMS); Stage 1	S1	Yes
TS	22.141	Presence service; Stage 1	S1	Yes
TS	22.153	Multimedia priority service	S1	Yes
TS	22.173	IP Multimedia Core Network Subsystem (IMS) Multimedia Telephony Service and supplementary services; Stage 1	S1	Yes
TS	22.174	Push Service; Service aspects; Stage 1	S1	Yes
TS	22.182	Customized Alerting Tones (CAT) requirements; Stage 1	S1	Yes
TS	22.183	Customized Ringing Signal (CRS) requirements; Stage 1	S1	Yes
TS	22.228	Service requirements for the Internet Protocol (IP) multimedia core network subsystem (IMS); Stage 1	S1	Yes
TS	22.250	IP Multimedia Subsystem (IMS) Group Management; Stage 1	S1	Yes
TS	22.279	Combined Circuit Switched (CS) and IP Multimedia Subsystem (IMS) sessions; Stage 1	S1	Yes
TS	22.340	IP Multimedia Subsystem (IMS) messaging; Stage 1	S1	Yes
TR	22.979	Feasibility study on combined Circuit Switched (CS) calls and IP Multimedia Subsystem (IMS) sessions	S1	Yes
TS	23.141	Presence service; Architecture and functional description	S2	Yes
TS	23.167	IP Multimedia Subsystem (IMS) emergency sessions	S2	Yes
TS	23.204	Support of Short Message Service (SMS) over generic 3GPP Internet Protocol (IP) access; Stage 2	S2	Yes
TS	23.218	IP Multimedia (IM) session handling; IM call model; Stage 2	C1	Yes
TS	23.228	IP Multimedia Subsystem (IMS); Stage 2	S2	Yes
TS	23.333	Multimedia Resource Function Controller (MRFC) - Multimedia Resource Function Processor (MRFP) Mp interface: Procedures descriptions	C4	Yes
TS	23.334	IP Multimedia Subsystem (IMS) Application Level Gateway (IMS-ALG) – IMS Access Gateway (IMS-AGW) interface: Procedures descriptions	C4	Yes
TS	24.141	Presence service using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3	C1	Yes
TS	24.147	Conferencing using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3	C1	Yes
TS	24.173	IMS Multimedia telephony communication service and supplementary services; Stage 3	C1	Yes
TS	24.182	IP Multimedia Subsystem (IMS) Customized Alerting Tones (CAT); Protocol specification	C1	Yes
TS	24.229	IP multimedia call control protocol based on Session Initiation Protocol (SIP) and	C1	Yes

Type	Number	Title	Group	For publication?
		Session Description Protocol (SDP); Stage 3		
TS	24.238	Session Initiation Protocol (SIP) based user configuration; Stage 3	C1	Yes
TS	24.239	Flexible Alerting (FA) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification	C1	Yes
TS	24.247	Messaging service using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3	C1	Yes
TS	24.341	Support of SMS over IP networks; Stage 3	C1	Yes
TS	24.604	Communication Diversion (CDIV) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification	C1	Yes
TS	24.605	Conference (CONF) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification	C1	Yes
TS	24.606	Message Waiting Indication (MWI) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification	C1	Yes
TS	24.607	Originating Identification Presentation (OIP) and Originating Identification Restriction (OIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification	C1	Yes
TS	24.608	Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification	C1	Yes
TS	24.610	Communication HOLD (HOLD) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification	C1	Yes
TS	24.611	Anonymous Communication Rejection (ACR) and Communication Barring (CB) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification	C1	Yes
TS	24.615	Communication Waiting (CW) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol Specification	C1	Yes
TS	24.616	Malicious Communication Identification (MCID) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification	C1	Yes
TS	24.628	Common Basic Communication procedures using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification	C1	Yes
TS	24.629	Explicit Communication Transfer (ECT) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification	C1	Yes
TS	24.642	Completion of Communications to Busy Subscriber (CCBS) and Completion of Communications by No Reply (CCNR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification	C1	Yes
TS	24.647	Advice Of Charge (AOC) using IP Multimedia (IM) Core Network (CN) subsystem	C1	Yes
TS	24.654	Closed User Group (CUG) using IP Multimedia (IM) Core Network (CN) subsystem, Protocol Specification	C1	Yes
TR	24.930	Signalling flows for the session setup in the IP Multimedia core network Subsystem (IMS) based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3	C1	Yes
TS	29.162	Interworking between the IM CN subsystem and IP networks	C3	Yes
TS	29.163	Interworking between the IP Multimedia (IM) Core Network (CN) subsystem and Circuit Switched (CS) networks	C3	Yes
TS	29.165	Inter-IMS Network to Network Interface (NNI)	C3	Yes
TS	29.212	Policy and Charging Control (PCC) over Gx/Sd reference point	C3	Yes
TS	29.213	Policy and charging control signalling flows and Quality of Service (QoS) parameter mapping	C3	Yes
TS	29.214	Policy and charging control over Rx reference point	C3	Yes
TS	29.215	Policy and Charging Control (PCC) over S9 reference point; Stage 3	C3	Yes
TS	29.228	IP Multimedia (IM) Subsystem Cx and Dx Interfaces; Signalling flows and message contents	C4	Yes
TS	29.229	Cx and Dx interfaces based on the Diameter protocol; Protocol details	C4	Yes
TS	29.232	Media Gateway Controller (MGC) - Media Gateway (MGW) interface; Stage 3	C4	Yes
TS	29.238	Interconnection Border Control Functions (IBCF) - Transition Gateway (TrGW) interface, Ix interface; Stage 3	C4	Yes
TS	29.292	Interworking between the IP Multimedia (IM) Core Network (CN) subsystem (IMS) and MSC Server for IMS Centralized Services (ICS)	C3	Yes

Type	Number	Title	Group	For publication?
TS	29.311	Service level interworking for Messaging Services	C3	Yes
TS	29.328	IP Multimedia (IM) Subsystem Sh interface; Signalling flows and message contents	C4	Yes
TS	29.329	Sh interface based on the Diameter protocol; Protocol details	C4	Yes
TS	29.333	Multimedia Resource Function Controller (MRFC) - Multimedia Resource Function Processor (MRFP) Mp interface; Stage 3	C4	Yes
TS	29.334	IMS Application Level Gateway (IMS-ALG) - IMS Access Gateway (IMS-AGW); Iq Interface; Stage 3	C4	Yes
TS	29.658	SIP Transfer of IP Multimedia Service Tariff Information; Protocol specification	C3	Yes
TS	31.101	UICC-terminal interface; Physical and logical characteristics	C6	Yes
TS	31.103	Characteristics of the IP Multimedia Services Identity Module (ISIM) application	C6	Yes
TS	31.115	Remote APDU Structure for (U)SIM Toolkit applications	C6	Yes
TS	31.116	Remote APDU Structure for (U)SIM Toolkit applications	C6	Yes
TS	31.133	IP Multimedia Services Identity Module (ISIM) Application Programming Interface (API); ISIM API for Java Card™	C6	Yes
TS	32.240	Telecommunication management; Charging management; Charging architecture and principles	S5	Yes
TS	32.260	Telecommunication management; Charging management; IP Multimedia Subsystem (IMS) charging	S5	Yes
TS	32.299	Telecommunication management; Charging management; Diameter charging applications	S5	Yes
TS	33.141	Presence service; Security	S3	Yes
TS	33.203	3G security; Access security for IP-based services	S3	Yes
TS	33.210	3G security; Network Domain Security (NDS); IP network layer security	S3	Yes

Tables are based on query " 2003-09-03_CmnIMS_specs_list_rel-x__21-202" in the [3GPP Specifications Status database](#).

Annex A (informative):
(void)

Annex M (informative): IMS related Specifications and Reports in 3GPP2

The table below shows the 3GPP2 publications relating to core functions of the IP Multimedia Subsystem (IMS) used by the 3GPP2. Also shown in the table is the mapping between the replaced 3GPP2 MMD specifications and the corresponding 3GPP IMS specifications which replace them and the final revision of the document that was published by 3GPP2.

3GPP2 Document Number and Revision	3GPP2 Document Title	3GPP Rel-8 TS/TR	3GPP WG
X.S0013-000-B v1.0	Overview	TS 23.002	S2
X.S0013-002-B v1.0	IP Multimedia Subsystem – Stage 2	TS 23.228	S2
		TS 23.002	S2
X.S0013-003-B v1.0	IP Multimedia Session Handling; IP Multimedia Call Model – Stage 2	TS 23.218	C1
X.S0013-004-B v1.0	IP Multimedia Call Control Protocol Based on SIP and SDP - Stage 3	TS 24.229	C1
X.S0013-005-B v1.0	IP Multimedia Subsystem Cx Interface Signaling flows and Message Contents	TS 29.228	C4
X.S0013-006-B v1.0	Cx Interface Based on the Diameter Protocol; Protocol Details	TS 29.229	C4
X.S0013-007-A v1.0	IP Multimedia Subsystem - Charging Architecture	TS 32.240	S5
		TS 32.260	S5
X.S0013-008-A v1.0	IP Multimedia Subsystem - Offline Accounting Information Flows and Protocol	TS 32.260	S5
		TS 32.299	S5
X.S0013-009-0 v1.0	IMS/MMD Call Flow Examples	TR 24.930	C1
X.S0013-010-B v1.0	IP Multimedia Subsystem Sh interface; Signaling flows and message contents – Stage 2	TS 29.328	C4
X.S0013-011-B v1.0	Sh Interface based on Diameter Protocols Protocol Details – Stage 3	TS 29.329	C4
X.S0013-012-0 v1.0	Service Based Bearer Control – Stage 2	TS 23.203	S2
X.S0013-013-0 v1.0	Service Based Bearer Control – Tx Interface Stage 3	TS 29.213	C3
		TS 29.214	C3
X.S0013-014-0 v1.0	Service Based Bearer Control – Ty Interface Stage 3	TS 29.212	C3
		TS 29.215	C3
X.S0013-016-0 v1.0	Messaging Service Using the IP Multimedia Subsystem	TS 24.247	C1
X.S0027-000-A v1.0	Presence Overview	No 3GPP equivalent	
X.S0027-001-0 v1.0	Presence Service: Architecture and Functional Description	TS 23.141	S2
X.S0027-002-0 v1.0	Presence Security	TS 33.141	S3
X.S0027-003-0 v1.0	Presence Stage 3	TS 24.141	C1
X.S0027-004-0 v1.0	Network Presence	No 3GPP equivalent	
X.S0029-0 v1.0	Conferencing Using the IP Multimedia (IM) Core Network (CN) Subsystem	TS 24.147	C1
X.S0049-0 v1.0	All-IP Network Emergency Call Support	TS 23.167	S2
		TS 24.229	C1
X.S0055-0 v1.0	MMD Supplementary Services	TS 24.173	C1
		TS 24.182	C1
		TS 24.238	C1

		TS 24.239	C1
		TS 24.604	C1
		TS 24.605	C1
		TS 24.606	C1
		TS 24.607	C1
		TS 24.608	C1
		TS 24.610	C1
		TS 24.611	C1
		TS 24.615	C1
		TS 24.628	C1
		TS 24.629	C1
S.S0086-B v2.0	IMS Security Framework	TS 33.203	S3
		TS 33.210	S3
S.R0058	IP Multimedia Domain – System Requirements	TS 22.228	S1
S.R0062	Presence for Wireless Systems – Stage 1 Requirements	TS 22.141	S1
S.R0125	VoIP Supplementary Services Feature Description	TS 22.173	S1
X.R0052-0	All-IP System – MMD Roaming Technical Report	No 3GPP equivalent	
X.S0042	Voice Call Continuity between IMS and Circuit Switched Systems	TS 23.206	S2
		TS 24.206	C1
C.S0069	ISIM Application on UICC for cdma2000 Spread Spectrun Systems	TS 31.103	C6

Annex C (informative): Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2008-05					First draft based on SA1 request to SP-38, refined at SP-39. Spec list based on Specification Manager's whim.		0.0.0
2008-12					Update based on continuing evolution of Release 8 specs	0.0.0	0.1.0
2008-12	SP-42	SP-080724			Incorporation of comments from TSG CT: removal of §5.1 (substituted by two examples in annex A); indication in list of specs of those which do not progress beyond NGN R2 applicability.	0.1.0	0.2.0
2009-01					Update to specs list table resulting from further feedback; Correction to URL of TISPAN spec mapping following revamp of 3GPP web site	0.2.0	0.3.0
2009-03	CP-43	CP-090103			Presentation for information	0.3.0	1.0.0
2009-03	SP-43	SP-090035			Presentation to TSG for approval	1.0.0	1.1.0
2009-03	SP-43				Approved	1.1.0	8.0.0
2009-05	SP-44	SP-090463	2	2	Annex mapping 3GPP2 specs to 3GPP common IMS specs	8.0.0	8.1.0
		SP-090464	3		Revise scope		8.1.0
2009-06	SP-46	SP-090695	4	1	Correction to list of specifications	8.1.0	8.2.0
2010-03	SP-47	SP-100012	5		Update list of specs	8.2.0	8.3.0
			6		Update list of specs	8.3.0	9.0.0
			7		Removal of information only relevant for earlier Release		9.0.0
2010-12	SP-50	SP-100871	8	1	Clarification of scope to indicate use of complete set of TSs/TRs is not obligatory in all IMS implementations	9.0.0	9.1.0
2011-03	SP-51				Automatic upgrade on Release freeze	9.1.0	10.0.0
2011-06	SP-52	SP-110298	11		Correction to list of specifications	10.0.0	10.1.0
2011-03	SP-55	SP-120114	14	1	Changes to list of Specs: common IMS	10.1.0	10.2.0

History

Document history		
V10.0.0	April 2011	Publication
V10.1.0	July 2011	Publication
V10.2.0	March 2012	Publication