

Interfaces defined in the MSF Release 4 Architecture

Designation		Description	Supporting components	Applicable Implementation Agreements	Internal MSF Document Numbers (main contribution page & GMI2008 participant page)
MSF	ETSI /3GPP ref.				
Transport control interfaces					
TC-0 (IF-2)	Gq'	DIAMETER-based protocol to query QoS-controlled bandwidth availability.	S-SBG-NE, P-CSC (MSF), CA, S-CSC (MSF), SB/SCIM, AS, ParGW as clients. BM as server.	MSF-IA-DIAMETER.004-FINAL	msf2008.003, msf-p0033.017
TC-1 (IF-3)	la	H.248-based protocol for NAT and gate control, QoS allocation.	S-SBG-NE, P-CSC (MSF), and S-SBG-NC as MGC. D-SBG-NE, D-SBG-NC as MG.	MSF-IA-MEGACO.016-FINAL	msf2008.011, msf-p0033.018
TC-2 (IF-4)	--	Protocol to collect bandwidth status.	BM as monitor, Core Transport Network as monitored entity.	Currently unspecified.	N/A
TC-3 (IF-5)	--	Between two Bandwidth Manager instances in the same administrative domain.	BM to BM	Currently unspecified.	N/A
TC-4		Deleted.			-
TC-5	3GPP Gx	DIAMETER-based protocol for admission control, QoS allocation in 3GPP networks	GGSN as client. PCRS (MSF) as server.	MSF-IA-DIAMETER.009-FINAL	msf2008.108, msf-p0033.019

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MSF	ETSI /3GPP ref.				
TC-6	Rx	DIAMETER-based protocol for admission control, QoS allocation in 3GPP networks	P-CSC (MSF) as client. PCRS (MSF) as server	MSF-IA-DIAMETER.010-FINAL	msf2008.107, msf-p0033.020
TC-7	Ty	DIAMETER-based protocol for admission control, QoS allocation in 3GP2 networks	PDSN as client. PCRS (MSF) as server	MSF-IA-DIAMETER.014-FINAL	msf2008.166, msf-p0033.042
TC-8	Tx	DIAMETER-based protocol for admission control, QoS allocation in 3GPP2 networks	P-CSC (MSF) as client. PCRS (MSF) as server	MSF-IA-DIAMETER.013-FINAL	msf2008.165, msf-p0033.022
TC-9	Rq	Diameter based protocol for admission control, QoS allocation in TISPAN networks		MSF-IA-DIAMETER.005-FINAL	msf2008.004, msf-p0033.021
TC-10	Gx	DIAMETER-based protocol for admission control, QoS allocation in WIMAX networks		MSF-IA-DIAMETER.012-FINAL	msf2008.106, msf-p0033.023
TC-11	E4	Diameter based protocol for user profile access in TISPAN networks		MSF-OA-DIMATER.011-FINAL	msf2007.168, msf-p0033.024
TR-0	Di	Bearer Interface from UE to the D-SBG-NE/C-BGW	UE, D-SBG-NE (MSF), C-BGw (MSF)	Currently unspecified	N/A

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TR-0	Ds	Bearer Interface from the D-SBG-NE/C-BGW, D-DBG-NC/I-BGW to the Core Transport Network	D-SBG-NE (MSF), C-BGW (MSF), Core Transport Network	Currently unspecified	N/A
TR-0	Iz	Bearer Interface from peering network to the D-SBG-NC/I-BGW		Currently unspecified	N/A
TR-0	Mb	Bearer Interface from MRFP and Core Transport Network	MRFP	Currently unspecified	N/A
TR-5	Xd	Interface between IMS IPTV UE and SS-MDF	IMS IPTV UE, SS-MDF	MSF-IA-MEDIA.001-FINAL	msf2008.133, msf-p0033.81
SESS-7	Xc	Interface between IMS IPTV UE and SS-MCF	IMS IPTV-UE, SS-MCF	MSF-IA-RTSP.001-FINAL	msf2008.095, msf-p0033.025
SIGT-0 (IF Z)	le M3UA	SIGTRAN based protocol for PSTN signaling transport.	SGW, CA	Currently unspecified	N/A
SIGT-2	MTP, SUA	SIGTRAN based protocol for IN support.	IN-SCP, IM-SSG	Currently unspecified	N/A
Media gateway control interfaces					
MGC-0 (IF-1c)	--	MGCP-based protocol for access line to packet connection setup and	CA , IAD/RGW/ATA, S-SBG-NE	MSF-IA-MGCP.001-FINAL MSF-IA-MGCP.002-	Document available on public web page (http://www.msforum.org/)

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MSF	ETSI /3GPP ref.				
		takedown, line signal detection and output.		FINAL MSF-IA-SDP.002-FINAL	techinfo/approved.shtml .
MGC-1 (IF-1c or IF-1d)		H.248-based protocol for access line to packet connection setup and takedown, line signal detection and output.	CA, AGC	MSF-IA-MEGACO.005-FINAL MSF-IA-MEGACO.007-FINAL MSF-IA-MEGACO.008-FINAL (UK market only) MSF-IA-MEGACO.010-FINAL (other markets) MSF-IA-SDP.002-FINAL	Document available on public web page (http://www.msforum.org/techinfo/approved.shtml) .
MGC-2 (IF-13)	Mn	H.248-based protocol for inter-exchange circuit-to-packet connection setup and takedown.	CA, TGw, MGC.	MSF-IA-MEGACO.011-FINAL MSF-IA-SDP.002-FINAL	Document available on public web page (http://www.msforum.org/techinfo/approved.shtml) .
MGC-3		Deleted			N/A
Session control interfaces					
SESS-0 (IF-1e)	--	SIP-based protocol for call signaling across the UNI.	Basic SIP UA, S-SBG-NE as proxy/ALG, CA, and R2 CA.	MSF-IA-SIP.002-FINAL MSF-IA-SIP.003-FINAL MSF-IA-SDP.002-FINAL	Document available on public web page (http://www.msforum.org/techinfo/approved.shtml) .

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MSF	ETSI /3GPP ref.				
SESS-1 (IF-6)	--	SIP with encapsulated ISUP for PSTN bridging and emulation,	CA, R2 CA as UAs. I-CSC (MSF) as proxy. S-SBG-NC as proxy/ALG and MGCF	MSF-IA-SIP-I.001-FINAL	msf2008.007, msf-p0033.026
SESS-2	Gm	SIP with IMS extensions for call signaling across the UNI.	IMS-aware SIP UA to P-CSC (MSF).	MSF-IA-SIP.016-FINAL	msf2007.187, msf-p0033.027
SESS2a	Gm	Gm for IMS based IPTV	IMS-aware IPTV SIP UA to P-CSC (MSF).	MSF-IA-SIP.021-FINAL	msf2008.257, msfp0033.080
SESS-3		Deleted			N/A
SESS-4	Mw, Mr, Mi, Mj, Mg	SIP with IMS extensions for call signaling between network components.	Common protocol between P-CSC (MSF), S-CSC (MSF), and CA. I-CSC (MSF) as proxy. S-SBG-NC as proxy/ALG. Will be received by the R2 CA when an S-CSC (MSF) sends a call to an MSF R2 network.	MSF-IA-SIP.016-FINAL	msf2007.187, msf-p0033.027
SESS-5	lc	SIP for signaling between Call Agents.	R2 CA, CA. I-CSC (MSF) as proxy. S-SBG-NC as proxy/ALG. Must be handled by the S-CSC (MSF) when an MSF	MSF-IA-SIP.019-FINAL	Msf2008.008, msf-p0033.028

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MSF	ETSI /3GPP ref.				
			R2 network sends a call to an end point served by the S-CSC (MSF).		
SESS-6		SIP for signaling between AGC and S-CSC	AGC, S-CSC, S-SBG-NC, I-CSC	Currently Unspecified	N/A
SESS-7	Xc	Interface between IMS IPTV UE and SS-MCF	IMS IPTV-UE, SS-MCF	MSF-IA-RTSP.001-FINAL	msf2008.095, msf-p0033.025
SESS-8	Y2	Interface between S-CSC and SS-MCF for IPTV Media Control Function	IMS IPTV-UE, SS-MCF	MSF-IA-SIP.018-FINAL	msf2008.097, msf-p0033.029
DNS-1			S-CSC, DNS	Currently Unspecified	N/A
DNS-2			ENUM, S-SBG-NC, S-CSC, TRC	Currently Unspecified	N/A
Application interfaces					
APP-0 (IF-7)		SESS-5 with additional modifications for invocation of services	CA, SB/SCIM	MSF-IA-SIP.005-FINAL	Document available on public web page (http://www.msforum.org/techinfo/approved.shtml)
APP-1	ISC /Ma	SESS-4 with additional modifications for invocation of services.	S-CSC, SB/SCIM, AS, ParGW, PS	MSF-IA-SIP.017-FINAL	msf2007.133, msf-p0033.030
APP-1a	ISC	IPTV specific extensions	IPTV-AS, S-CSC	MSF-IA-SIP.020-FINAL	msf2008.127,

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MSF	ETSI /3GPP ref.				
					msf-p0033.031
APP-2	--	SIP-based control interface to Media Resource Broker to request assignment of Media Server resources.	CA, S-CSC (MSF), SB/SCIM, AS, ParGW as requestors. MRB as responder.	MSF-IA-SIP.014-FINAL	Document available on public web page (http://www.msforum.org/techinfo/approved.shtml) .
APP-3 (IF-10)	-	SIP with encapsulated control signaling directed to the Media Server.	CA, MRB as proxy. MS as server.	MSF-IA-SIP.015-FINAL (MSML, MOML, ... variant) MSF-IA-SIP.011-FINAL (MGCP control variant)	Document available on public web page (http://www.msforum.org/techinfo/approved.shtml) .
APP-4 (IF-11)	--	Parlay API	Parlay AS, Parlay Gw	MSF-IA-PARLAY.003	Document available on public web page (http://www.msforum.org/techinfo/approved.shtml) .
APP-5 (IF-12)	--	Parlay X API	Parlay X AS, Parlay X Gw	MSF-IA-PARLAY.005	msf2008.070, msf-p0033.032
APP-6 (IF-8)		Deleted			N/A
APP-7	Mp	H.248 based control interface to the Multimedia Resource Function Controller to the Multimedia Resource	MRFP, MRFC	MSF-IA-MEGACO.015-FINAL	msf2008.013, msf-p0033.033

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MSF	ETSI /3GPP ref.				
		Function Processor			
Database interfaces					
DB-0	Cx, Dx, Dw, Wx	DIAMETER-based protocol to retrieve and update subscriber service profiles.	CA, I-CSC and S-CSC as clients. SLS as redirect server. HSS as server.	MSF-IA-DIAMETER.006-FINAL	msf2008.009, msf-p0033.034
DB-1		Deleted			N/A
DB-2	Sh, Dh	DIAMETER-based protocol to pass information between the Application block entities and the HSS.	SB/SCIM as client. AS, Parlay GW as clients when SB/SCIM not engaged. SLS as redirect server. HSS as server.	MSF-IA-DIAMETER.003-FINAL	Document available on public web page (http://www.msforum.org/techinfo/approved.shtml)
DB-3		Deleted			N/A
Billing Interfaces					
BI-1	Rf	Diameter based interface for transfer of Billing Record information	CDS (MSF), P-CSC (MSF), S-CSCF (MSF), I-CSC (MSF), BGC (MSF), P-TRC (MSF), SIP-AS	MSF-IA-BILLING.001-FINAL	msf2008.109, msf-p0033.035
BI-2	Ga	Diameter based interface for transfer of Charging event information	CGS (MSF)	Currently Unspecified	N/A

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MSF	ETSI /3GPP ref.				
BI-3	Bi	Diameter based interface for transfer of Charging Data Records to Billing Domain	CGS (MSF)	Currently Unspecified	N/A
Location Based Interfaces					
LOC-1	E2	Diameter based protocol to retrieve location information	ALS (MSF), P-CSC (MSF), PS, S-SBG-NE (MSF)	MSF-IA.DIAMETER.008-FINAL	msf2008.001, msf-p0033.036
Management Interfaces					
MI-1		Interface used to measure Video performance metrics and determine near-term performance of IPTV service	Based on IETF-draft-venna-avt-rtcp-iptv-02	MSF-IA-RTCP.001-FINAL	msf2008.029, msf-p0033.037
MI-2		Interface used for IPTV STB Remote Management	Based on DSL Forum TR-069 Amendment 2 (CPE WAN Management Protocol) & TR-135 (Data Model for a TR-069 Enabled STB)	MSF-IA-HTTPS.001-FINAL	msf2008.163, msf-p0033.038
MI-3		Interface used to pass RTP media metrics from Media Plane to the Control Plane, over H.248	Based on RTCP HR QoS Statistics Pkg for H.248 ITU-T	MSF-IA-RTCP.002-FINAL	msf2008.112, msf-p0033.039

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MSF	ETSI /3GPP ref.				
MI-4		Interface used to pass RTP media metrics from Media Plane to the Control Plane, over MGCP	Based on IETF draft-auerbach-mgcp-rtcp-06 for RTCP XR VoIP Metrics Package for MGCP	Currently unspecified	N/A
MI-5		Interface for Reporting RTP media metrics from Edge Device to Core Device in Media Plane	Based on IETF draft-malas-performance-metrics-07 for SIP End-to-End Performance Metrics	Currently unspecified	N/A
MI-6		Interface used to pass RTP media metrics from the Control Plane to the Management Plane.	Based on IETF draft-ietf-sipping-rtcp-summary-02 for SIP Package for Voice Quality Reporting Event	MSF-IA-RTCP.003-FINAL	msf2008.155, msf-p0033.040
MI-7		Interface for Reporting VoIP Perf metrics from Edge Device to Mgmt Plane	Based on TR-069 using TR-104 data model	Currently unspecified	N/A
MI-8		Interface for Reporting SIP Session metrics from Edge Device to Core Device in Control Plane	Based on "SIP End-to-End Performance Metrics" IETF draft-ietf-pmol-sip-perf-metrics-00	Currently unspecified	N/A
MI-9		Interface for Reporting SIP session metrics from Control Plane to Management Plane	TBA	MSF-IA-SFTP.001-FINAL	msf2008.155, msf-p0033.040

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MSF	ETSI /3GPP ref.				
STB-1	Xa	Interface used to retrieve service selection data.	IMS IPTV UE, SSF-IPTV	MSF-IA-XML.002-FINAL	msf2008.117, msf-p0033.041