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**Integrated broadband cable
telecommunication networks (CABLE);
Fourth Generation Transmission Systems for
Interactive Cable Television Services - IP Cable Modems;
Part 3: MAC and Upper Layer Protocols Interface;
DOCSIS® 3.1**

Reference

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Contents

Intellectual Property Rights	28
Foreword.....	28
Modal verbs terminology.....	28
1 Scope	29
2 References	29
2.1 Normative references	29
2.2 Informative references.....	32
3 Definitions, symbols and abbreviations	34
3.1 Definitions.....	34
3.2 Symbols.....	45
3.3 Abbreviations	45
4 Requirements and Conventions.....	52
4.1 Requirements.....	52
4.2 Conventions.....	52
5 Overview and Theory of Operations	52
5.1 MULPI Key Features	52
5.2 Technical Overview	55
5.2.0 MAC Layer Features	55
5.2.1 CMTS and CM Models.....	55
5.2.1.1 CMTS Model	55
5.2.1.1.0 Overview	55
5.2.1.1.1 CMTS Types	56
5.2.1.1.2 CMTS Internal Forwarding Model.....	57
5.2.1.1.3 CMTS MAC Domain	58
5.2.1.2 CM Model.....	59
5.2.2 Downstream Convergence Layer.....	59
5.2.2.1 Control Channel	59
5.2.2.1.1 PLC.....	59
5.2.2.1.2 NCP	59
5.2.2.2 Profiles	60
5.2.2.2.1 Multiple Downstream Profile Support in OFDM Channels	60
5.2.3 OFDMA Upstream	60
5.2.4 QoS	61
5.2.4.0 Overview	61
5.2.4.1 Individual and Group Service Flows.....	62
5.2.4.2 Hierarchical QoS.....	62
5.2.4.3 AQM	63
5.2.4.4 Channel Bonding.....	63
5.2.4.4.1 Downstream Channel Bonding.....	63
5.2.4.4.2 Upstream Channel Bonding.....	64
5.2.4.5 Upstream Time and Frequency Multiplexing	66
5.2.4.6 Autonomous Load Balancing	67
5.2.5 Multicast Operation	68
5.2.6 Network and Higher Layer Protocols	68
5.2.7 CM and CPE Provisioning and Management	69
5.2.7.1 Initialization, Provisioning and Management of CMs	69
5.2.7.2 Initialization, Provisioning and Management of CPEs	70
5.2.8 Enhanced Support for Timing Protocol	70
5.2.9 Energy Management	70
5.2.10 Relationship to the Physical HFC Plant Topology	71
5.2.10.1 RF Topology Configuration.....	71
5.2.10.2 Frequency Assignment.....	72
5.2.11 Cable Modem Service Group (CM-SG)	73
5.2.11.0 Overview.....	73

5.2.11.1	MAC Domain Channel Assignment.....	74
5.2.11.2	Multiple MAC Domains per Fibre Node	75
5.2.11.3	MAC Domain Downstream and Upstream Service Groups.....	76
5.2.11.4	Channel Bonding Topology Considerations	77
5.2.12	CMTS Downstream Service Model Example.....	77
6	Media Access Control Specification	79
6.1	Introduction	79
6.1.1	Overview	79
6.1.2	Definitions	79
6.1.2.1	MAC-Sublayer Domain	79
6.1.2.2	MAC Service Access Point.....	79
6.1.2.3	Service Flows	79
6.1.2.4	Upstream Intervals, Minislots and 6,25 microsecond Increments.....	80
6.1.2.4.0	Upstream Transmission Timeline.....	80
6.1.2.4.1	TDMA Mode	80
6.1.2.4.2	S-CDMA Mode	80
6.1.2.4.3	OFDMA Mode	81
6.1.2.5	MAC Frame	81
6.1.2.6	Logical Upstream Channels	81
6.1.2.6.0	Logical Upstream Types.....	81
6.1.2.6.1	Type 3 Logical Upstreams.....	82
6.1.2.6.2	Type 4 Logical Upstreams.....	82
6.1.2.6.3	Type 5 Logical Upstreams.....	83
6.1.3	Future Use.....	83
6.2	MAC Frame Formats.....	83
6.2.1	Generic MAC Frames.....	83
6.2.1.0	Generic MAC Frame Format	83
6.2.1.1	PMD Overhead	84
6.2.1.2	Ordering of Bits and Octets.....	84
6.2.1.2.1	Bit Ordering.....	84
6.2.1.2.2	Octet Ordering	84
6.2.1.2.3	Textual Conventions.....	84
6.2.1.2.4	Representing Negative Numbers.....	84
6.2.1.2.5	Type-Length-Value Fields.....	84
6.2.1.3	MAC Header Format.....	85
6.2.1.4	Data PDU	86
6.2.2	Packet-Based MAC Frames	86
6.2.2.1	Packet PDU and Isolation Packet PDU.....	86
6.2.3	MAC Frames with FC_TYPE 0x01.....	87
6.2.4	MAC-Specific Headers.....	87
6.2.4.0	Overview	87
6.2.4.1	Timing Header	88
6.2.4.2	MAC Management Header	88
6.2.4.3	Request Frame.....	89
6.2.4.4	Fragmentation Header.....	90
6.2.4.5	Queue-depth Based Request Frame	91
6.2.4.6	Concatenation Header	91
6.2.5	Extended MAC Frame Length.....	92
6.2.6	Extended MAC Headers	93
6.2.6.0	Overview and General Requirements.....	93
6.2.6.1	Piggyback Requests	94
6.2.6.2	Request Extended Header	94
6.2.6.3	Fragmentation Extended Header	94
6.2.6.4	Service Flow Extended Header	95
6.2.6.4.0	Overview	95
6.2.6.4.1	Payload Header Suppression Header.....	95
6.2.6.4.2	Unsolicited Grant Synchronization Header.....	95
6.2.6.5	BP_UP2 Extended Header	95
6.2.6.6	Downstream Service Extended Header.....	96
6.2.6.7	DPV Extended Header	97
6.2.6.8	Ordering of Extended Headers in Upstream DOCSIS	97

6.3	Segment Header Format	98
6.4	MAC Management Messages.....	98
6.4.1	MAC Management Message Header	98
6.4.2	Time Synchronization (SYNC).....	102
6.4.3	Upstream Channel Descriptor (UCD).....	103
6.4.3.0	UCD Message Format, Parameters and Attributes.....	103
6.4.3.1	Example of UCD Encoded TLV Data.....	114
6.4.3.2	Example of UCD Encoding of Channel Parameters for OFDMA Channels.....	115
6.4.3.3	Subcarrier to Minislot Mapping for OFDMA Channels	117
6.4.3.4	Required Burst Attributes on OFDMA Channels	117
6.4.4	Upstream Bandwidth Allocation Map (MAP).....	118
6.4.4.0	MAP Types, Message Format and Information Elements	118
6.4.4.1	Upstream Quiet Probe Measurement	124
6.4.5	Ranging Request Messages	125
6.4.5.0	Types of Ranging Request Messages.....	125
6.4.5.1	Ranging Request (RNG-REQ).....	127
6.4.5.2	Initial Ranging Request (INIT-RNG-REQ)	128
6.4.5.3	Bonded Initial Ranging Request (B-INIT-RNG-REQ).....	128
6.4.5.4	OFDMA Initial Ranging Request (O-INIT-RNG-REQ).....	129
6.4.6	Ranging Response (RNG-RSP).....	129
6.4.6.0	RNG-RSP Message Format	129
6.4.6.1	RNG-RSP Encodings.....	131
6.4.6.2	Example of TLV Data.....	133
6.4.6.3	Transmit Equalization Encodings for S-CDMA and TDMA Channels	134
6.4.6.4	Transmit Equalization Encodings for OFDMA Channels.....	135
6.4.6.5	RNG-RSP Channel Overrides.....	135
6.4.6.6	Upstream Channel Adjustments.....	135
6.4.6.7	T4 Timeout Multiplier.....	136
6.4.6.8	Commanded Power	136
6.4.7	Registration Request Messages.....	137
6.4.7.0	Types of Registration Request Messages.....	137
6.4.7.1	Registration Request (REG-REQ)	138
6.4.7.2	Multipart Registration Request (REG-REQ-MP)	138
6.4.8	Registration Response Messages	139
6.4.8.0	Types and Formatting of Registration Response Messages	139
6.4.8.1	Registration Response (REG-RSP).....	140
6.4.8.2	Multipart Registration Response (REG-RSP-MP).....	141
6.4.8.3	Encodings.....	142
6.4.8.3.0	General	142
6.4.8.3.1	Modem Capabilities.....	142
6.4.8.3.2	DOCSIS 1.0 Service Class Data.....	143
6.4.9	Registration Acknowledge (REG-ACK)	143
6.4.10	Upstream Channel Change Request (UCC-REQ).....	145
6.4.11	Upstream Channel Change Response (UCC-RSP).....	145
6.4.12	Dynamic Service Addition - Request (DSA-REQ).....	145
6.4.12.0	DSA-REQ Message Format	145
6.4.12.1	CM-Initiated Dynamic Service Addition	146
6.4.12.2	CMTS-Initiated Dynamic Service Addition.....	146
6.4.13	Dynamic Service Addition - Response (DSA-RSP)	146
6.4.13.0	DSA-RSP Message Format.....	146
6.4.13.1	CM-Initiated Dynamic Service Addition	148
6.4.13.2	CMTS-Initiated Dynamic Service Addition.....	148
6.4.14	Dynamic Service Addition - Acknowledge (DSA-ACK)	148
6.4.15	Dynamic Service Change - Request (DSC-REQ).....	149
6.4.16	Dynamic Service Change - Response (DSC-RSP)	150
6.4.17	Dynamic Service Change - Acknowledge (DSC-ACK)	152
6.4.18	Dynamic Service Deletion - Request (DSD-REQ)	152
6.4.19	Dynamic Service Deletion - Response (DSD-RSP).....	153
6.4.20	Dynamic Channel Change - Request (DCC-REQ)	154
6.4.20.0	DCC-REQ Message Format.....	154
6.4.20.1	Encodings.....	155
6.4.20.1.0	General	155

6.4.20.1.1	Upstream Channel ID	155
6.4.20.1.2	Downstream Parameters	155
6.4.20.1.3	Initialization Technique	157
6.4.20.1.4	UCD Substitution	157
6.4.20.1.5	Security Association Identifier (SAID) Substitution	158
6.4.20.1.6	Service Flow Substitutions	158
6.4.20.1.7	CMTS MAC Address	159
6.4.21	Dynamic Channel Change - Response (DCC-RSP).....	159
6.4.21.0	DCC-RSP Message Format.....	159
6.4.21.1	Encodings.....	160
6.4.21.1.0	General	160
6.4.21.1.1	CM Jump Time.....	160
6.4.22	Dynamic Channel Change - Acknowledge (DCC-ACK)	161
6.4.23	Device Class Identification Request (DCI-REQ)	161
6.4.24	Device Class Identification Response (DCI-RSP).....	161
6.4.25	Upstream Transmitter Disable (UP-DIS).....	161
6.4.26	Test Request (TST-REQ).....	162
6.4.27	Downstream Channel Descriptor (DCD)	162
6.4.28	MAC Domain Descriptor (MDD).....	162
6.4.28.0	MDD Message Format.....	162
6.4.28.1	MDD TLV Encodings.....	163
6.4.28.1.0	General	163
6.4.28.1.1	Downstream Active Channel List TLV	163
6.4.28.1.2	MAC Domain Downstream Service Group (MD-DS-SG) TLV	165
6.4.28.1.3	Downstream Ambiguity Resolution Frequency List TLV.....	165
6.4.28.1.4	Receive Channel Profile Reporting Control TLV	166
6.4.28.1.5	IP Initialization Parameters TLV.....	166
6.4.28.1.6	Early Authentication and Encryption (EAE) Enable/Disable TLV	167
6.4.28.1.7	Upstream Active Channel List TLV.....	167
6.4.28.1.8	Upstream Ambiguity Resolution Channel List TLV	168
6.4.28.1.9	Upstream Frequency Range TLV	168
6.4.28.1.10	Symbol Clock Locking Indicator	169
6.4.28.1.11	CM-STATUS Event Control	169
6.4.28.1.12	Upstream Transmit Power Reporting	169
6.4.28.1.13	DSG DA-to-DSID Association Entry.....	170
6.4.28.1.14	CM-STATUS Event Enable for Non-Channel-Specific Events	170
6.4.28.1.15	Extended Upstream Transmit Power Support	171
6.4.28.1.16	CMTS DOCSIS Version	171
6.4.28.1.17	CM Periodic Maintenance Timeout Indicator	171
6.4.28.1.18	DLS Broadcast and Multicast Delivery Method TLV	172
6.4.28.1.19	CM-STATUS Event Enable for DOCSIS 3.1 Specific Events.....	172
6.4.29	Dynamic Bonding Change Request (DBC-REQ)	173
6.4.30	Dynamic Bonding Change Response (DBC-RSP)	174
6.4.31	Dynamic Bonding Change Acknowledge (DBC-ACK)	175
6.4.32	DOCSIS Path Verify Request (DPV-REQ).....	176
6.4.33	DOCSIS Path Verify Response (DPV-RSP)	177
6.4.34	Status Report (CM-STATUS).....	177
6.4.34.0	CM-STATUS Message Format.....	177
6.4.34.1	CM-STATUS TLV Encodings.....	179
6.4.35	CM Control Request (CM-CTRL-REQ).....	179
6.4.35.0	CM-CTRL-REQ Message Format	179
6.4.35.1	CM-CTRL-REQ TLV Encodings	180
6.4.36	CM Control Response (CM-CTRL-RSP).....	180
6.4.37	Energy Management Request (EM-REQ)	181
6.4.38	Energy Management Response (EM-RSP).....	182
6.4.38.0	EM-RSP Message Format.....	182
6.4.38.1	EM-RSP TLV-Encodings	183
6.4.38.1.1	Hold-Off Timer	183
6.4.39	Status Report Acknowledge (CM-STATUS-ACK).....	183
6.4.40	OFDM Channel Descriptor (OCD).....	183
6.4.41	Downstream Profile Descriptor (DPD).....	185
6.4.41.0	DPD Message Format and TLV Encoding.....	185

6.4.41.1	Subcarrier Assignment	188
6.4.41.1.0	Overview	188
6.4.41.1.1	Default and Specific Values	188
6.4.41.1.2	Subcarrier Assignment Vector.....	189
6.4.41.1.3	Example Subcarrier Assignment	189
6.4.42	OFDM Downstream Spectrum Request Message (ODS-REQ).....	189
6.4.43	OFDM Downstream Spectrum Response (ODS-RSP)	190
6.4.43.0	ODS-RSP Message Format.....	190
6.4.43.1	ODS-RSP TLV Encodings.....	190
6.4.44	OFDM Downstream Profile Test Request (OPT-REQ).....	191
6.4.44.0	OPT-REQ Message Format	191
6.4.44.1	OPT-REQ TLV Encodings	191
6.4.45	OFDM Downstream Profile Test Response (OPT-RSP)	193
6.4.45.0	OPT-RSP Message Format	193
6.4.45.1	OPT-RSP TLV Encodings	194
6.4.46	OFDM Downstream Profile Test Acknowledge (OPT-ACK).....	196
6.4.47	DOCSIS Time Protocol - Request (DTP-REQ).....	196
6.4.47.0	DTP-REQ Message Format	196
6.4.47.1	CMTS is DTP Master.....	197
6.4.47.2	CM is DTP Master	197
6.4.48	DOCSIS Time Protocol - Response (DTP-RSP)	197
6.4.48.0	DTP-RSP Message Format	197
6.4.48.1	CMTS is DTP Master.....	197
6.4.48.2	CM is DTP Master	197
6.4.49	DOCSIS Time Protocol - Info (DTP-INFO).....	198
6.4.49.0	DTP-INFO Message Format	198
6.4.49.1	CMTS is DTP Master.....	198
6.4.49.2	CM is DTP Master	198
6.4.50	DOCSIS Time Protocol - Acknowledge (DTP-ACK).....	198
6.4.50.0	DTP-ACK Message Format	198
6.4.50.1	CMTS is DTP Master.....	198
6.4.50.2	CM is DTP Master	199
6.5	PHY Link Channel	199
6.5.0	Overview	199
6.5.1	PLC Structure	199
6.5.2	Timestamp Message Block.....	200
6.5.3	Energy Management Message Block.....	201
6.5.4	Message Channel Message Block.....	202
6.5.5	Trigger Message Block.....	203
6.5.5.0	Requirements for Trigger Message Block.....	203
6.5.5.1	Application of Trigger Message Block	205
6.5.6	Future Use Message Blocks.....	206
7	Media Access Control Protocol Operation.....	207
7.1	Timing and Synchronization	207
7.1.0	Overview	207
7.1.1	Global Timing Reference.....	207
7.1.2	CM Synchronization	207
7.1.3	Ranging.....	207
7.1.3.0	Purpose of Ranging.....	207
7.1.3.1	Broadcast Initial Ranging.....	208
7.1.3.1.0	General	208
7.1.3.1.1	Broadcast Initial Ranging on SC-QAM Upstreams.....	208
7.1.3.1.2	Broadcast Initial Ranging on OFDMA Upstreams.....	208
7.1.3.2	Unicast Initial Ranging	208
7.1.3.2.1	Unicast Initial Ranging on SC-QAM Upstreams	208
7.1.3.2.2	Unicast Initial Ranging on OFDMA Upstreams.....	209
7.1.4	Timing Units and Relationships.....	209
7.1.4.0	Timing Units	209
7.1.4.1	TDMA Timing Units and Relationships	209
7.1.4.1.1	Minislot Capacity	209
7.1.4.1.2	Minislot Numbering	210

7.1.4.2	S-CDMA Timing Units and Relationships	210
7.1.4.2.1	Minislot Capacity	210
7.1.4.2.2	Minislot Numbering	210
7.1.4.3	OFDMA Timing Units and Relationships.....	211
7.1.4.3.1	Minislot Capacity	211
7.1.4.3.2	Minislot Numbering	211
7.1.5	Extended Timestamp	211
7.1.6	Timestamp Rules for Systems with both Primary Capable OFDM Channels and Primary Capable SC-QAM Channels	212
7.2	Upstream Data Transmission	212
7.2.1	Upstream Bandwidth Allocation.....	212
7.2.1.0	Overview.....	212
7.2.1.1	The Allocation MAP MAC Management Message	213
7.2.1.2	Information Elements.....	213
7.2.1.2.0	Types of Information Elements	213
7.2.1.2.1	The Request IE	214
7.2.1.2.2	The Request_2 IE	214
7.2.1.2.3	The Initial Maintenance IE	214
7.2.1.2.4	The Station Maintenance IE	215
7.2.1.2.5	Short and Long Data Grant IEs (also known as Data Profiles IUC5 and IUC6)	215
7.2.1.2.6	Data Acknowledge IE.....	215
7.2.1.2.7	Expansion IE	215
7.2.1.2.8	Null IE	216
7.2.1.2.9	Advanced PHY Short and Long Data Grant IEs (also known as Data Profiles IUC9 and IUC10).....	216
7.2.1.2.10	Advanced PHY Unsolicited Grant IE (also known as Data Profile IUC11).....	216
7.2.1.2.11	Data Profiles IUC12 and IUC13 IEs	216
7.2.1.2.12	Probe IE.....	216
7.2.1.3	Requesting with Multiple Transmit Channel Mode Disabled	216
7.2.1.4	Requesting with Multiple Transmit Channel Mode Enabled	217
7.2.1.4.0	Types of Request Mechanisms with MTC Enabled	217
7.2.1.4.1	Request Mechanisms for Segment Header OFF Service Flows	218
7.2.1.4.2	Request Mechanisms for Segment Header ON Service Flows.....	218
7.2.1.5	Information Element Feature Usage Summary	222
7.2.1.6	Map Transmission and Timing	223
7.2.1.7	Protocol Example.....	224
7.2.1.8	MAP Generation Examples - Two Logical Upstreams	225
7.2.1.8.1	S-CDMA and TDMA Logical Channel Combination	225
7.2.1.8.2	OFDMA and TDMA Logical Channel Combination	226
7.2.1.9	MAP Generation for Initial Ranging Regions on OFDMA Upstream Channels	227
7.2.2	Upstream Transmission and Contention Resolution.....	228
7.2.2.1	Contention Resolution Overview Mechanisms.....	228
7.2.2.1.0	Overview	228
7.2.2.1.1	Contention Resolution with Multiple Transmit Channel Mode Disabled	228
7.2.2.1.2	Contention Resolution with Multiple Transmit Channel Mode Enabled.....	229
7.2.2.2	Transmit Opportunities	231
7.2.2.3	CM Bandwidth Utilization.....	233
7.2.3	Upstream Service Flow Scheduling Services	233
7.2.3.0	Overview.....	233
7.2.3.1	Unsolicited Grant Service	234
7.2.3.2	Real-Time Polling Service	235
7.2.3.3	Unsolicited Grant Service with Activity Detection.....	235
7.2.3.4	Non-Real-Time Polling Service	236
7.2.3.5	Best Effort Service	236
7.2.3.6	Other Services	236
7.2.3.6.1	Committed Information Rate (CIR).....	236
7.2.3.7	Parameter Applicability for Upstream Service Scheduling.....	236
7.2.3.8	CM Transmit Behaviour	237
7.2.4	Continuous Concatenation and Fragmentation	237
7.2.5	Pre-3.0 DOCSIS Concatenation and Fragmentation.....	238
7.3	Upstream - Downstream Channel Association within a MAC Domain	238
7.3.1	Primary Downstream Channels and Backup Primary Downstream Channels.....	238

7.3.1.0	Primary Downstream Channel	238
7.3.1.1	Backup Primary Downstream Channels.....	240
7.3.2	MAP and UCD Messages	240
7.3.3	Multiple MAC Domains	240
7.4	DSID Definition	241
7.5	Quality of Service.....	242
7.5.1	Concepts	242
7.5.1.1	Service Flows	242
7.5.1.2	Classifiers.....	244
7.5.1.2.0	General	244
7.5.1.2.1	Upstream and Downstream QoS Classifiers.....	244
7.5.1.2.2	Upstream Drop Classifiers.....	245
7.5.2	Object Model	246
7.5.3	Service Classes	247
7.5.4	Authorization	248
7.5.5	States of Service Flows.....	249
7.5.5.0	General	249
7.5.5.1	Deferred Service Flows.....	249
7.5.5.1.0	States of Deferred Service Flows	249
7.5.5.1.1	Provisioned Service Flows	249
7.5.5.1.2	Authorized Service Flows	249
7.5.5.2	Admitted Service Flows	250
7.5.5.3	Active Service Flows	250
7.5.6	Service Flows and Classifiers	251
7.5.6.0	Basic Model of Classification	251
7.5.6.1	Policy-Based Classification and Service Classes	251
7.5.7	General Operation.....	252
7.5.7.0	Service Flow Rejection	252
7.5.7.1	Static Operation.....	252
7.5.7.2	Dynamic Service Flow Creation - CM Initiated.....	253
7.5.7.3	Dynamic Service Flow Creation - CMTS Initiated.....	253
7.5.7.4	Dynamic Service Flow Modification and Deletion.....	254
7.5.8	QoS Support for Joined IP Multicast Traffic	254
7.5.8.0	Overview.....	254
7.5.8.1	IP Multicast QoS Operation	254
7.5.8.2	Group Configuration and Group QoS Configuration Tables	256
7.5.8.3	Instantiating Group Classifier Rules and Group Service Flows	257
7.5.8.4	Default Group Service Flows.....	264
7.5.8.5	Service Class QoS Parameter Changes	264
7.5.8.6	Group QoS Configuration Changes	265
7.5.9	Other Multicast and Broadcast Traffic.....	265
7.5.10	Hierarchical QoS	266
7.5.10.0	General	266
7.5.10.1	CMTS and CM Roles.....	266
7.5.10.2	Aggregate Service Flow	266
7.5.10.2.0	Concept of Aggregate Service Flow.....	266
7.5.10.2.1	Relationship between Service Flow and ASF.....	266
7.5.10.2.2	ASF QoS Profile.....	267
7.5.10.3	Interface Aggregate Traffic Class	268
7.5.10.3.0	Concept of Interface Aggregate Traffic Class	268
7.5.10.3.1	IATC Profiles	268
7.5.10.3.2	Mapping of Service Flows to IATCs.....	269
7.6	Packet Queuing	269
7.6.1	Downstream Traffic Priority.....	269
7.6.1.0	General	269
7.6.1.1	Traffic Priority Ordering and Mapping to CM Output Queues.....	269
7.6.2	Active Queue Management.....	269
7.6.2.0	Overview.....	269
7.6.2.1	CM AQM Requirements	270
7.6.2.2	CMTS AQM Requirements	270
7.7	Data Link Encryption Support.....	271
7.7.0	General.....	271

7.7.1	MAC Messages.....	271
7.7.2	Framing.....	271
7.7.3	Multiple Transmit Channel Mode Operation and Packet Encryption.....	271
7.8	Downstream Profiles.....	271
7.8.0	Concept of Downstream Profiles.....	271
7.8.1	CM and CMTS Profile Support.....	272
7.8.2	Changes to the Profiles.....	272
7.8.3	Service Flow to Profile Mapping.....	272
7.9	CM Downstream MER Reporting Protocol.....	273
7.9.0	Overview.....	273
7.9.1	Calculations.....	273
7.9.2	Message Flow.....	273
8	Channel Bonding.....	274
8.0	Overview.....	274
8.1	Upstream and Downstream Common Aspects.....	274
8.1.1	Service Flow Assignment.....	274
8.1.2	CMTS Bonding and Topology Requirements.....	278
8.2	Downstream Channel Bonding.....	279
8.2.1	Multiple Downstream Channel Overview.....	279
8.2.2	CMTS Downstream Bonding Operation.....	280
8.2.3	Sequenced Downstream Packets.....	280
8.2.3.0	General.....	280
8.2.3.1	Downstream Sequencing.....	281
8.2.3.2	Skew Requirements.....	283
8.2.3.3	Resequencing DSID Signalling.....	285
8.2.4	Cable Modem Physical Receive Channel Configuration.....	286
8.2.4.0	Cable Modem Receiver Capabilities.....	286
8.2.4.1	Receive Channels.....	286
8.2.4.2	Receive Modules.....	287
8.2.4.2.0	Receive Module Definition.....	287
8.2.4.2.1	Receive Module Interconnection.....	288
8.2.4.3	Receive Channel Profile.....	289
8.2.4.3.0	Receive Channel Profile Definition.....	289
8.2.4.3.1	Standard Receive Channel Profiles.....	290
8.2.4.4	RCP DOCSIS 3.0 Backwards Compatibility.....	291
8.2.4.5	Receive Channel Configuration.....	291
8.2.4.5.0	General Requirements.....	291
8.2.4.5.1	Static Receive Module Assignments.....	293
8.2.5	QoS for Downstream Channel Bonding.....	293
8.3	Upstream Channel Bonding.....	293
8.3.0	Relation to Multiple Transmit Channel Mode.....	293
8.3.1	Granting Bandwidth.....	293
8.3.2	Upstream Transmissions with Upstream Channel Bonding.....	294
8.3.2.0	General.....	294
8.3.2.1	Segment Header ON Operation.....	294
8.3.2.2	Segment Header OFF Operation.....	294
8.3.3	Dynamic Range Window.....	295
8.3.3.0	Overview.....	295
8.3.3.1	Channels Added During Registration.....	295
8.3.3.2	Channels Added by a DBC-REQ.....	296
8.3.3.3	Channels Deleted by a DBC-REQ.....	296
8.3.3.4	UCD Changes Burst Profiles Resulting in New Value for P_{hi}	296
8.4	Partial Service.....	297
9	Data Forwarding.....	297
9.1	General Forwarding Requirements.....	297
9.1.0	Overview.....	297
9.1.1	CMTS Forwarding Rules.....	299
9.1.1.1	General CMTS Forwarding.....	299
9.1.1.2	DSID Labelling.....	300
9.1.2	CM Address Acquisition, Filtering and Forwarding Rules.....	300

9.1.2.0	General CM Forwarding	300
9.1.2.1	MAC Address Acquisition.....	301
9.1.2.2	CM Filtering Rules.....	301
9.1.2.3	CM Forwarding Rules.....	302
9.1.2.3.0	General Behaviour.....	302
9.1.2.3.1	CM Pre-Operational Forwarding Behaviour	302
9.1.2.3.2	CM Operational Forwarding Behaviour	302
9.2	Multicast Forwarding	304
9.2.0	Multicast Forwarding Architecture.....	304
9.2.1	Introduction Multicast Forwarding.....	304
9.2.2	Downstream Multicast Forwarding	305
9.2.2.0	Downstream Multicast Forwarding Requirements.....	305
9.2.2.1	Examples of Downstream Multicast Forwarding using DSIDs	306
9.2.2.2	Labelling Multicast Packets with DSIDs	308
9.2.2.2.0	General	308
9.2.2.2.1	Mixed CM Environment.....	309
9.2.2.2.2	Pre-Registration DSID.....	309
9.2.2.2.3	Upstream Multicast Traffic from a Multicast Client	309
9.2.2.3	Communicating DSIDs and Group Forwarding Attributes to a CM.....	309
9.2.2.4	DSID based Filtering and Forwarding by a Cable Modem	310
9.2.2.5	Individually Directed Multicast	311
9.2.3	Downstream Multicast Traffic Encryption	311
9.2.3.1	Multicast Encryption Overview	311
9.2.3.2	Dynamic Multicast Encryption	312
9.2.3.3	DSIDs and SAIDs	312
9.2.3.4	Pre-Registration Multicast Encryption	312
9.2.4	Static Multicast Session Encodings	313
9.2.5	IGMP and MLD Support	313
9.2.5.1	Motivation Behind Taking CM out of IGMP Control Plane.....	313
9.2.5.2	IP Multicast Service Model Support	313
9.2.5.3	IGMP and MLD Membership Handling	314
9.2.5.4	IGMPv2/MLDv1 Leave Processing.....	315
9.2.5.5	IGMP and MLD Version and Query Support	315
9.2.5.6	Separation of Query Domains.....	315
9.2.6	Encrypted Multicast Downstream Forwarding Example.....	316
9.2.7	IP Multicast Join Authorization	319
9.2.7.0	Overview.....	319
9.2.7.1	Maximum Multicast Sessions	320
9.2.7.2	Session Rules	320
9.2.7.2.0	Concept of Session Rules	320
9.2.7.2.1	IP Multicast Profiles	321
9.2.7.2.2	Static IP Multicast Join Authorization Rules.....	321
9.2.7.3	CM Configuration File	321
9.2.7.3.0	Overview	321
9.2.7.3.1	IP Multicast Profile Name Subtype	321
9.2.7.3.2	Static IP Multicast Session Rule Subtype.....	321
9.2.7.4	Matching Session Rules	322
9.2.7.5	IP Multicast Profile Changes.....	322
9.2.8	Multicast in a DOCSIS 3.1 OFDM Channel with Multiple Downstream Profiles	322
10	Cable Modem - CMTS Interaction.....	323
10.1	CMTS Initialization.....	323
10.2	Cable Modem Initialization and Reinitialization.....	323
10.2.0	Initialization Overview	323
10.2.1	Scan for Downstream Channel	325
10.2.1.0	Overall Process	325
10.2.1.1	Gather Downstream Channel Parameters from PLC.....	326
10.2.1.2	Remove All Frequencies Covered by this Channel from the PLC List.....	327
10.2.2	Continue Downstream Scanning.....	327
10.2.3	Service Group Discovery and Initial Ranging	327
10.2.3.0	Overall Process	327
10.2.3.1	Read MAC Domain Descriptor (MDD).....	330

10.2.3.2	Determination of MD-DS-SG	332
10.2.3.3	Determination of MD-US-SG	333
10.2.3.3.0	Overall Process	333
10.2.3.3.1	Ranging Holdoff	335
10.2.3.3.2	Bonded Initial Ranging	336
10.2.3.3.3	Continue US Ambiguity Initial Ranging	339
10.2.3.4	Ranging and Automatic Adjustments	340
10.2.3.4.0	Message Sequence and State Machine	340
10.2.3.4.1	Adjust Transmit Parameters	344
10.2.3.5	CMTS Determination of Cable Modem Service Group and Initial Ranging	344
10.2.4	Authentication	347
10.2.5	Establish IP Connectivity	348
10.2.5.0	Modes for Establishing IP Connectivity	348
10.2.5.1	Establish IPv4 Network Connectivity	355
10.2.5.1.0	Message Flow	355
10.2.5.1.1	DHCPv4 Fields Used by the CM	356
10.2.5.1.2	Use of T1 and T2 Timers	357
10.2.5.1.3	CMTS Requirements	358
10.2.5.2	Establish IPv6 Network Connectivity	358
10.2.5.2.0	Message Flow	358
10.2.5.2.1	Obtain Link-Local Address	359
10.2.5.2.2	Obtain Default Routers	359
10.2.5.2.3	Obtain IPv6 Management Address and Other Configuration Parameters	359
10.2.5.2.4	IP Provisioning Mode Override	361
10.2.5.2.5	Use of T1 and T2 Timers	362
10.2.5.2.6	CMTS Requirements	363
10.2.5.2.7	Prefix Stability at the CMTS	363
10.2.5.3	Alternate Provisioning Mode (APM) Operation	364
10.2.5.4	Dual-stack Provisioning Mode (DPM)	364
10.2.5.5	Establish Time of Day	365
10.2.5.6	Transfer Operational Parameters	365
10.2.5.7	Configuration File Processing	366
10.2.5.8	Post-registration Failures to Renew IP Addresses	367
10.2.6	Registration with the CMTS	367
10.2.6.1	Cable Modem Requirements	367
10.2.6.2	CMTS Requirements	375
10.2.6.3	CMTS Requirements for Pre-DOCSIS 3.0 CMs	379
10.2.6.3.0	Registration Process	379
10.2.6.3.1	Channel Assignment During Registration	381
10.2.7	Baseline Privacy Initialization	383
10.2.8	Service IDs During CM Initialization	383
10.3	Periodic Maintenance	384
10.4	OFDM Profile Usability Testing Process	387
10.4.0	Objective	387
10.4.1	Downstream Profile Usability Testing Process	387
10.4.2	Upstream OFDMA Data Profile Assignment and Testing	391
10.4.2.1	Assignment of OFDMA Upstream Data Profile (OUDP) IUCs	391
10.4.2.2	Upstream Profile Testing	391
10.4.2.3	Upstream Probes and RxMER Measurements	391
10.4.2.4	Upstream Data Profile Testing Bursts	391
10.5	Fault Detection and Recovery	392
10.5.0	Fault Detection and Recovery Mechanisms	392
10.5.1	CM Downstream Channel Lost Lock Handling	393
10.5.1.0	Lost Lock Handling Mechanism	393
10.5.1.1	Primary Downstream Channel Interruption	395
10.5.1.2	Primary Downstream Channel Redundancy	396
10.5.2	MAC Layer Error-Handling	397
10.5.2.0	Types of MAC Layer Errors	397
10.5.2.1	Error Recovery During Pre-3.0 DOCSIS Fragmentation	398
10.5.2.2	Error Recovery During Segmentation with Segment Headers On	398
10.5.3	Partial Channel Mode of OFDM Downstream Channel	398
10.5.4	CM Status Report	399

10.5.4.0	Overview	399
10.5.4.1	CM Requirements	400
10.5.4.1.0	General	400
10.5.4.1.1	CM-STATUS State Diagram.....	402
10.5.4.1.2	Event Codes.....	404
10.5.4.2	CMTS Requirements.....	410
10.6	DOCSIS Path Verification	410
10.6.1	DPV Overview.....	410
10.6.2	DPV Reference Points	410
10.6.3	DPV Math.....	412
10.6.4	DPV Per Path Operation.....	412
10.6.5	DPV Per Packet Operation	413
10.7	DOCSIS Time Protocol.....	413
10.7.1	DTP Overview	413
10.7.2	DOCSIS and PTP Clock Types	415
10.7.3	True Ranging Offset	415
10.7.4	DTP Math	415
10.7.5	DTP Example.....	418
10.7.6	DTP Signalling	419
10.7.7	DTP Configuration	419
10.7.8	DTP System Level Performance.....	420
11	Dynamic Operations.....	422
11.1	Upstream Channel Descriptor Changes.....	422
11.2	Dynamic Service Flow Changes	423
11.2.0	Overview	423
11.2.1	Dynamic Service Flow State Transitions.....	424
11.2.2	Dynamic Service Addition.....	432
11.2.2.1	CM Initiated Dynamic Service Addition.....	432
11.2.2.2	CMTS Initiated Dynamic Service Addition.....	433
11.2.2.3	Dynamic Service Addition State Transition Diagrams	434
11.2.3	Dynamic Service Change.....	442
11.2.3.0	General	442
11.2.3.1	CM-Initiated Dynamic Service Change	443
11.2.3.2	CMTS-Initiated Dynamic Service Change.....	443
11.2.3.3	Dynamic Service Change State Transition Diagrams	444
11.2.4	Dynamic Service Deletion	452
11.2.4.0	General	452
11.2.4.1	CM Initiated Dynamic Service Deletion	452
11.2.4.2	CMTS Initiated Dynamic Service Deletion	452
11.2.4.3	Dynamic Service Deletion State Transition Diagrams.....	453
11.3	Pre-3.0 DOCSIS Upstream Channel Changes.....	457
11.4	Dynamic Downstream and/or Upstream Channel Changes	457
11.4.1	DCC General Operation.....	457
11.4.1.0	Overview	457
11.4.1.1	Derivation of T15 Timer	459
11.4.1.2	Initialization Technique for DCC.....	460
11.4.1.2.0	Overview	460
11.4.1.2.1	Initialization Technique Zero (0).....	460
11.4.1.2.2	Initialization Technique One (1).....	460
11.4.1.2.3	Initialization Technique Two (2).....	460
11.4.1.2.4	Initialization Technique Three (3).....	461
11.4.1.2.5	Initialization Technique Four (4).....	461
11.4.2	DCC Exception Conditions	461
11.4.3	DCC State Transition Diagrams	462
11.5	Dynamic Bonding Change (DBC).....	467
11.5.1	DBC General Operation.....	467
11.5.1.0	Overview	467
11.5.1.1	Changes to the Receive Channel Set.....	467
11.5.1.2	Changes to a DSID.....	468
11.5.1.2.0	Overview	468
11.5.1.2.1	Changes to Resequencing Encodings	469

11.5.1.2.2	Changes to Multicast Encodings	470
11.5.1.2.3	Changes to Rapid Loss Detection.....	471
11.5.1.2.4	Changes to Move Service Flows Between Downstream Profiles.....	471
11.5.1.3	Changes to the Security Association for Encrypting Downstream Traffic	472
11.5.1.4	Changes to the Transmit Channel Set	472
11.5.1.4.0	General	472
11.5.1.4.1	Impact of TCS Changes on Periodic Ranging	473
11.5.1.4.2	Exception Conditions for TCS Changes.....	473
11.5.1.5	Changes to the Service Flow SID Cluster Assignments.....	474
11.5.1.5.0	General	474
11.5.1.5.1	Bandwidth Sufficiency	475
11.5.1.6	Changes to the Energy Management Mode	475
11.5.1.7	Initialization Technique for DBC.....	475
11.5.1.7.0	Selection of Initialization Technique.....	475
11.5.1.7.1	Initialization Technique One (1).....	476
11.5.1.7.2	Initialization Technique Two (2).....	476
11.5.1.7.3	Initialization Technique Three (3).....	476
11.5.1.7.4	Initialization Technique Four (4).....	476
11.5.1.8	Fragmentation of DBC-REQ Messages	477
11.5.2	Exception Conditions.....	477
11.5.3	DBC State Transition Diagrams	479
11.5.3.1	CMTS DBC State Transition Diagrams.....	479
11.5.3.2	CM DBC State Transition Diagrams	482
11.6	Autonomous Load Balancing	489
11.6.0	Concept of Autonomous Load Balancing	489
11.6.1	Load Balancing Groups	490
11.6.1.0	Overview.....	490
11.6.1.1	General Load Balancing Groups	490
11.6.1.2	Restricted Load Balancing Groups.....	491
11.6.2	CMTS Load Balancing Operation	491
11.6.3	Multiple Channel Load Balancing	492
11.6.4	Initialization Techniques during Autonomous Load Balancing.....	492
11.6.5	Load Balancing Policies	492
11.6.6	Load Balancing Priorities	493
11.6.7	Load Balancing and Multicast	493
11.6.8	Externally-Directed Load Balancing	494
11.7	Energy Management Operations	494
11.7.1	Energy Management Features.....	494
11.7.2	Entry and Exit for Energy Management Modes	495
11.7.2.0	General	495
11.7.2.1	Example Threshold Operation	497
11.7.2.2	Exiting Energy Management 1x1 Mode	497
11.7.3	Energy Management 1x1 Feature	498
11.7.3.0	Overview.....	498
11.7.3.1	Bonded Multicast and Energy Management 1x1 Mode	498
11.7.4	DOCSIS Light Sleep (DLS) Feature.....	499
11.7.4.0	Overview.....	499
11.7.4.1	Wake Substate.....	502
11.7.4.2	PLC Rx Substate	503
11.7.4.3	PLC Sleep Substate	504
11.7.4.4	CMTS Requirements for DLS Mode	504
11.7.4.5	Multicast, Broadcast, and DLS Mode	505
11.7.5	Interaction between Battery Backup and DLS.....	505
11.8	Downstream Profile Descriptor Changes	507
12	Supporting Future New Cable Modem Capabilities	508
12.1	Downloading Cable Modem Operating Software	508
12.2	Future Capabilities	509
Annex A (normative): Well-known Addresses		510
A.1	Addresses	510
A.1.1	General MAC Addresses.....	510

A.1.2	Well-known IPv6 Addresses	510
A.2	MAC Service IDs	510
A.2.1	All CMs and No CM Service IDs.....	510
A.2.2	Well-Known Multicast Service IDs	511
A.2.3	Priority Request Service IDs	511
A.3	MPEG PID	511
Annex B (normative):	Parameters and Constants	512
Annex C (normative):	Common TLV Encodings.....	517
C.0	Overview	517
C.1	Encodings for Configuration and MAC-Layer Messaging	519
C.1.0	Area of Application	519
C.1.1	Configuration File and Registration Settings	519
C.1.1.0	Area of Application	519
C.1.1.1	Downstream Frequency Configuration Setting.....	519
C.1.1.2	Upstream Channel ID Configuration Setting.....	519
C.1.1.3	Network Access Control Object	519
C.1.1.4	DOCSIS 1.0 Class of Service Configuration Setting.....	520
C.1.1.4.0	TLV Encoding.....	520
C.1.1.4.1	Class ID.....	520
C.1.1.4.2	Maximum Downstream Rate Configuration Setting.....	520
C.1.1.4.3	Maximum Upstream Rate Configuration Setting.....	521
C.1.1.4.4	Upstream Channel Priority Configuration Setting	521
C.1.1.4.5	Guaranteed Minimum Upstream Channel Data Rate Configuration Setting	521
C.1.1.4.6	Maximum Upstream Channel Transmit Burst Configuration Setting.....	522
C.1.1.4.7	Class-of-Service Privacy Enable	522
C.1.1.5	CM Message Integrity Check (MIC) Configuration Setting.....	522
C.1.1.6	CMTS Message Integrity Check (MIC) Configuration Setting	522
C.1.1.7	Maximum Number of CPEs	522
C.1.1.8	TFTP Server Timestamp.....	523
C.1.1.9	TFTP Server Provisioned Modem IPv4 Address.....	523
C.1.1.10	TFTP Server Provisioned Modem IPv6 Address.....	523
C.1.1.11	Upstream Packet Classification Configuration Setting	523
C.1.1.12	Downstream Packet Classification Configuration Setting	523
C.1.1.13	Upstream Service Flow Encodings.....	524
C.1.1.14	Downstream Service Flow Encodings	524
C.1.1.15	Payload Header Suppression.....	524
C.1.1.16	Maximum Number of Classifiers.....	524
C.1.1.17	Privacy Enable	524
C.1.1.18	DOCSIS Extension Field	524
C.1.1.18.0	TLV Encoding.....	524
C.1.1.18.1	General Extension Information	525
C.1.1.18.1.0	TLV Encoding	525
C.1.1.18.1.1	CM Load Balancing Policy ID	525
C.1.1.18.1.2	CM Load Balancing Priority	525
C.1.1.18.1.3	CM Load Balancing Group ID	526
C.1.1.18.1.4	CM Ranging Class ID Extension.....	526
C.1.1.18.1.5	L2VPN Encoding	526
C.1.1.18.1.6	Extended CMTS MIC Configuration Setting	526
C.1.1.18.1.7	Source Address Verification (SAV) Authorization Encoding.....	527
C.1.1.18.1.8	Cable Modem Attribute Masks.....	529
C.1.1.18.1.9	IP Multicast Join Authorization Encoding	530
C.1.1.18.1.10	Service Type Identifier	532
C.1.1.18.1.11	DEMARC Auto-Configuration (DAC) Encoding	532
C.1.1.18.2	Vendor Specific Information.....	532
C.1.1.19	Subscriber Management TLVs	533
C.1.1.19.0	Area of Application.....	533
C.1.1.19.1	Subscriber Management Control.....	533

C.1.1.19.2	Subscriber Management CPE IPv4 List.....	533
C.1.1.19.3	Subscriber Management CPE IPv6 Prefix List	533
C.1.1.19.4	Subscriber Management Filter Groups.....	533
C.1.1.19.5	Subscriber Management Control Max CPE IPv6 Addresses	534
C.1.1.19.6	Subscriber Management CPE IPv6 List.....	534
C.1.1.20	Enable 2.0 Mode.....	534
C.1.1.21	Enable Test Modes.....	534
C.1.1.22	Downstream Channel List	535
C.1.1.22.0	Overview.....	535
C.1.1.22.1	Single Downstream Channel.....	535
C.1.1.22.1.0	TLV Encoding.....	535
C.1.1.22.1.1	Single Downstream Channel Timeout.....	536
C.1.1.22.1.2	Single Downstream Channel Frequency	536
C.1.1.22.1.3	Single Downstream Channel Type	536
C.1.1.22.2	Downstream Frequency Range	536
C.1.1.22.2.0	Overview	536
C.1.1.22.2.1	Downstream Frequency Range Timeout	537
C.1.1.22.2.2	Downstream Frequency Range Start	537
C.1.1.22.2.3	Downstream Frequency Range End	537
C.1.1.22.2.4	Downstream Frequency Range Step Size.....	537
C.1.1.22.2.5	Downstream Frequency Range Channel Type	537
C.1.1.22.3	Default Scanning.....	538
C.1.1.22.4	Examples Illustrating Usage of the Downstream Channel List.....	538
C.1.1.23	Static Multicast MAC Address	539
C.1.1.24	Downstream Unencrypted Traffic (DUT) Filtering Encoding.....	539
C.1.1.25	Channel Assignment Configuration Settings	539
C.1.1.25.0	Overview.....	539
C.1.1.25.1	Transmit Channel Assignment Configuration Setting.....	540
C.1.1.25.2	Receive Channel Assignment Configuration Setting.....	540
C.1.1.26	Upstream Drop Classifier Group ID	540
C.1.1.27	CMTS Static Multicast Session Encoding.....	540
C.1.1.27.0	Overview.....	540
C.1.1.27.1	Static Multicast Group Encoding	540
C.1.1.27.2	Static Multicast Source Encoding	541
C.1.1.27.3	Static Multicast CMIM Encoding	541
C.1.1.28	Upstream Aggregate Service Flow Encodings	541
C.1.1.29	Downstream Aggregate Service Flow Encodings.....	541
C.1.1.30	Energy Management Parameter Encoding.....	541
C.1.1.30.0	TLV Encoding.....	541
C.1.1.30.1	Energy Management Feature Control	541
C.1.1.30.2	Energy Management 1x1 Mode Encodings	542
C.1.1.30.3	Energy Management DOCSIS Light Sleep Mode Encodings.....	542
C.1.1.30.4	General Energy Management Mode Encodings.....	542
C.1.1.30.4.1	Downstream Activity Detection Parameters.....	542
C.1.1.30.4.2	Upstream Activity Detection Parameters	543
C.1.1.30.5	Energy Management Cycle Period.....	544
C.1.2	Configuration-File-Specific Settings.....	544
C.1.2.0	Area of Application	544
C.1.2.1	End-of-Data Marker.....	544
C.1.2.2	Pad Configuration Setting.....	544
C.1.2.3	Software Upgrade Filename	545
C.1.2.4	SNMP Write-Access Control.....	545
C.1.2.5	SNMP MIB Object	545
C.1.2.6	CPE Ethernet MAC Address	546
C.1.2.7	Software Upgrade IPv4 TFTP Server	546
C.1.2.8	Software Upgrade IPv6 TFTP Server	546
C.1.2.9	SnmpV3 Kickstart Value	546
C.1.2.9.0	TLV Encoding.....	546
C.1.2.9.1	SnmpV3 Kickstart Security Name	546
C.1.2.9.2	SnmpV3 Kickstart Manager Public Number.....	547
C.1.2.10	Manufacturer Code Verification Certificate	547
C.1.2.11	Co-signer Code Verification Certificate	547

C.1.2.12	SNMPv3 Notification Receiver	547
C.1.2.12.0	TLV Encoding.....	547
C.1.2.12.1	SNMPv3 Notification Receiver IPv4 Address	548
C.1.2.12.2	SNMPv3 Notification Receiver UDP Port Number	548
C.1.2.12.3	SNMPv3 Notification Receiver Trap Type.....	548
C.1.2.12.4	SNMPv3 Notification Receiver Timeout	548
C.1.2.12.5	SNMPv3 Notification Receiver Retries	548
C.1.2.12.6	SNMPv3 Notification Receiver Filtering Parameters	548
C.1.2.12.7	SNMPv3 Notification Receiver Security Name	549
C.1.2.12.8	SNMPv3 Notification Receiver IPv6 Address	549
C.1.2.13	SNMPv1v2c Coexistence Configuration	549
C.1.2.13.0	Overview	549
C.1.2.13.1	SNMPv1v2c Community Name.....	549
C.1.2.13.2	SNMPv1v2c Transport Address Access	549
C.1.2.13.2.0	TLV Encoding	549
C.1.2.13.2.1	SNMPv1v2c Transport Address.....	550
C.1.2.13.2.2	SNMPv1v2c Transport Address Mask	550
C.1.2.13.3	SNMPv1v2c Access View Type	550
C.1.2.13.4	SNMPv1v2c Access View Name.....	550
C.1.2.14	SNMPv3 Access View Configuration	550
C.1.2.14.0	Overview	550
C.1.2.14.1	SNMPv3 Access View Name	551
C.1.2.14.2	SNMPv3 Access View Subtree.....	551
C.1.2.14.3	SNMPv3 Access View Mask	551
C.1.2.14.4	SNMPv3 Access View Type.....	551
C.1.2.15	SNMP CPE Access Control.....	552
C.1.2.16	Management Event Control Encoding	552
C.1.2.17	Default Upstream Target Buffer Configuration.....	552
C.1.2.18	MAC Address Learning Control Encoding	553
C.1.2.18.0	TLV Encoding.....	553
C.1.2.18.1	MAC Address Learning Control	553
C.1.2.18.2	MAC Address Learning Holdoff Timer.....	553
C.1.2.19	Network Timing Profile.....	553
C.1.2.19.0	TLV Encoding.....	553
C.1.2.19.1	Network Timing Profile Reference	553
C.1.2.19.2	Network Timing Profile Name.....	554
C.1.2.20	CM Upstream AQM Disable	554
C.1.3	Registration-Request/Response-Specific Encodings	554
C.1.3.0	Area of Application	554
C.1.3.1	Modem Capabilities Encoding.....	554
C.1.3.1.0	Concatenation Support	554
C.1.3.1.1	Concatenation Support.....	554
C.1.3.1.2	DOCSIS Version	555
C.1.3.1.3	Fragmentation Support.....	555
C.1.3.1.4	Payload Header Suppression Support	555
C.1.3.1.5	IGMP Support	555
C.1.3.1.6	Privacy Support.....	555
C.1.3.1.7	Downstream SAID Support	556
C.1.3.1.8	Upstream Service Flow Support	556
C.1.3.1.9	Optional Filtering Support	556
C.1.3.1.10	Transmit Pre-Equalizer Taps per Modulation Interval.....	556
C.1.3.1.11	Number of Transmit Equalizer Taps	556
C.1.3.1.12	DCC Support.....	557
C.1.3.1.13	IP Filters Support	557
C.1.3.1.14	LLC Filters Support	557
C.1.3.1.15	Expanded Unicast SID Space.....	557
C.1.3.1.16	Ranging Hold-Off Support.....	558
C.1.3.1.17	L2VPN Capability.....	558
C.1.3.1.18	L2VPN eSAFE Host Capability.....	558
C.1.3.1.19	Downstream Unencrypted Traffic (DUT) Filtering	558
C.1.3.1.20	Upstream Frequency Range Support.....	558
C.1.3.1.21	Upstream SC-QAM Symbol Rate Support	559

C.1.3.1.22	Selectable Active Code Mode 2 Support	559
C.1.3.1.23	Code Hopping Mode 2 Support	559
C.1.3.1.24	SC-QAM Multiple Transmit Channel Support	559
C.1.3.1.25	5,12 Msps Upstream Transmit SC-QAM Channel Support	560
C.1.3.1.26	2,56 Msps Upstream Transmit SC-QAM Channel Support	560
C.1.3.1.27	Total SID Cluster Support	560
C.1.3.1.28	SID Clusters per Service Flow Support	560
C.1.3.1.29	SC-QAM Multiple Receive Channel Support	560
C.1.3.1.30	Total Downstream Service ID (DSID) Support	561
C.1.3.1.31	Resequencing Downstream Service ID (DSID) Support	561
C.1.3.1.32	Multicast Downstream Service ID (DSID) Support	561
C.1.3.1.33	Multicast DSID Forwarding	561
C.1.3.1.34	Frame Control Type Forwarding Capability	562
C.1.3.1.35	DPV Capability	562
C.1.3.1.36	Unsolicited Grant Service/Upstream Service Flow Support	562
C.1.3.1.37	MAP and UCD Receipt Support	562
C.1.3.1.38	Upstream Drop Classifier Support	563
C.1.3.1.39	IPv6 Support	563
C.1.3.1.40	Extended Upstream Transmit Power Capability	563
C.1.3.1.41	Optional IEEE 802.1ad, IEEE 802.1ah, MPLS Classification Support	563
C.1.3.1.42	D-ONU (Optical Network Unit) Capabilities Encoding	564
C.1.3.1.43	Energy Management Capabilities	564
C.1.3.1.44	C-DOCSIS Capability Encoding	565
C.1.3.1.45	CM-STATUS-ACK	565
C.1.3.1.46	Energy Management Preference	565
C.1.3.1.47	Extended Packet Length Support Capability	565
C.1.3.1.48	OFDM Multiple Receive Channel Support	566
C.1.3.1.49	OFDMA Multiple Transmit Channel Support	566
C.1.3.1.50	Downstream OFDM Profile Support	566
C.1.3.1.51	Downstream OFDM Channel Subcarrier QAM Modulation Support	566
C.1.3.1.52	Upstream OFDM Channel Subcarrier QAM Modulation Support	567
C.1.3.1.53	Downstream Lower Band Edge Support	567
C.1.3.1.54	Downstream Upper Band Edge Support	567
C.1.3.1.55	Diplexer Upper Band Edge Support	568
C.1.3.1.56	DOCSIS Time Protocol Mode	568
C.1.3.1.57	DOCSIS Time Protocol Performance Support	568
C.1.3.2	Vendor ID Encoding	568
C.1.3.3	Modem IP Address	569
C.1.3.4	Service(s) Not Available Response	569
C.1.3.5	Vendor Specific Capabilities	569
C.1.3.6	CM Initialization Reason	569
C.1.4	Dynamic-Message-Specific Encodings	570
C.1.4.0	Area of Application	570
C.1.4.1	HMAC-Digest	570
C.1.4.2	Authorization Block	571
C.1.4.3	Key Sequence Number	571
C.1.4.4	Energy Management Mode Indicator	571
C.1.4.5	Energy Management - DOCSIS Light Sleep Encodings	571
C.1.4.5.0	TLV Encoding	571
C.1.4.5.1	DLS EM Receive Timer Duration	572
C.1.4.5.2	DLS Maximum Sleep Latency	572
C.1.4.5.3	DLS Maximum Sleep Bytes	572
C.1.5	Registration, Dynamic Service, and Dynamic Bonding Settings	572
C.1.5.0	Area of Application	572
C.1.5.1	Transmit Channel Configuration (TCC)	572
C.1.5.1.0	Overview	572
C.1.5.1.1	Transmit Channel Configuration (TCC) Reference	573
C.1.5.1.2	Upstream Channel Action	573
C.1.5.1.3	Upstream Channel ID	574
C.1.5.1.4	New Upstream Channel ID	574
C.1.5.1.5	UCD	574
C.1.5.1.6	Ranging SID	575

C.1.5.1.7	Initialization Technique	575
C.1.5.1.8	Ranging Parameters	576
C.1.5.1.8.0	TLV Encoding	576
C.1.5.1.8.1	Ranging Reference Channel ID	576
C.1.5.1.8.2	Timing Offset, Integer Part	576
C.1.5.1.8.3	Timing Offset, Fractional Part	577
C.1.5.1.8.4	Power Offset	577
C.1.5.1.8.5	Frequency Offset	577
C.1.5.1.9	Dynamic Range Window	577
C.1.5.1.10	P_{hi}	577
C.1.5.1.11	Assigned OFDMA Upstream Data Profile (OUDP) IUC	578
C.1.5.1.12	OFDMA Upstream Data Profile (OUDP) Testing SID	578
C.1.5.1.13	TCC Error Encodings	578
C.1.5.1.13.0	TLV Encoding	578
C.1.5.1.13.1	Reported Parameter	578
C.1.5.1.13.2	Error Code	579
C.1.5.1.13.3	Error Message	579
C.1.5.2	Service Flow SID Cluster Assignments	579
C.1.5.2.0	TLV Encoding	579
C.1.5.2.1	SFID	579
C.1.5.2.2	SID Cluster Encoding	579
C.1.5.2.2.0	TLV Encoding	579
C.1.5.2.2.1	SID Cluster ID	580
C.1.5.2.2.2	SID-to-Channel Mapping	580
C.1.5.2.2.3	SID-to-Channel Mapping: Upstream Channel ID	580
C.1.5.2.3	SID Cluster Switchover Criteria	580
C.1.5.2.3.0	TLV Encoding	580
C.1.5.2.3.1	Maximum Requests per SID Cluster	581
C.1.5.2.3.2	Maximum Outstanding Bytes per SID Cluster	581
C.1.5.2.3.3	Maximum Total Bytes Requested per SID Cluster	581
C.1.5.2.3.4	Maximum Time in the SID Cluster	581
C.1.5.3	CM Receive Channel (RCP/RCC) Encodings	581
C.1.5.3.0	Overview	581
C.1.5.3.1	RCP-ID	582
C.1.5.3.2	RCP Name	583
C.1.5.3.3	RCP Centre Frequency Spacing	583
C.1.5.3.4	Receive Module Encoding	583
C.1.5.3.4.0	TLV Encoding	583
C.1.5.3.4.1	Receive Module Index	583
C.1.5.3.4.2	Receive Module Adjacent Channels	583
C.1.5.3.4.3	Receive Module SC-QAM Channel Block Range	584
C.1.5.3.4.4	Receive Module First SC-QAM Channel Centre Frequency Assignment	584
C.1.5.3.4.5	Receive Module Resequencing Channel Subset Capability	584
C.1.5.3.4.6	Receive Module Connectivity	585
C.1.5.3.4.7	Receive Module Common Physical Layer Parameter	585
C.1.5.3.5	Receive Channels	585
C.1.5.3.5.0	TLV Encoding	585
C.1.5.3.5.1	Receive Channel Index	585
C.1.5.3.5.2	Receive Channel Connectivity	586
C.1.5.3.5.3	Receive Channel Connected Offset	586
C.1.5.3.5.4	Receive Channel Centre Frequency Assignment	586
C.1.5.3.5.5	Receive Channel Primary Downstream Channel Indicator	586
C.1.5.3.5.6	Simplified Receive Channel Configuration	587
C.1.5.3.6	Partial Service Downstream Channels	588
C.1.5.3.7	Primary Downstream Channel	588
C.1.5.3.8	Receive Channel Profile/Configuration Vendor Specific Parameters	588
C.1.5.3.9	RCC Error Encodings	589
C.1.5.3.9.0	TLV Encoding	589
C.1.5.3.9.1	RCC Error Type	589
C.1.5.3.9.2	DOCSIS 3.0 RCC Error Identifier	589
C.1.5.3.9.3	Reported Parameter	589
C.1.5.3.9.4	Error Code	589

C.1.5.3.9.5	Error Message.....	590
C.1.5.4	DSID Encodings	590
C.1.5.4.0	TLV Encoding.....	590
C.1.5.4.1	Downstream Service Identifier (DSID).....	590
C.1.5.4.2	Downstream Service Identifier Action.....	590
C.1.5.4.3	Downstream Resequencing Encodings	590
C.1.5.4.3.0	TLV Encoding	590
C.1.5.4.3.1	Resequencing DSID	591
C.1.5.4.3.2	Downstream Resequencing Channel List.....	591
C.1.5.4.3.3	DSID Resequencing Wait Time	591
C.1.5.4.3.4	Resequencing Warning Threshold.....	591
C.1.5.4.3.5	CM-STATUS Maximum Event Hold-Off Timer for Sequence Out-of-Range Events.....	591
C.1.5.4.3.6	Rapid Loss Detection Configuration	592
C.1.5.4.4	Multicast Encodings	592
C.1.5.4.4.0	TLV Encoding	592
C.1.5.4.4.1	Client MAC Address Encodings	592
C.1.5.4.4.2	Multicast CM Interface Mask.....	592
C.1.5.4.4.3	Multicast Group MAC Addresses Encodings.....	593
C.1.5.4.4.4	Payload Header Suppression Encodings	593
C.1.5.5	Security Association Encoding.....	593
C.1.5.5.0	TLV Encoding.....	593
C.1.5.5.1	SA Action.....	593
C.1.5.5.2	SA-Descriptor	594
C.1.5.6	Initializing Channel Timeout	594
C.1.5.7	Energy Management Identifier List for CM	594
C.1.6	DOCSIS Time Protocol Encodings	594
C.1.6.0	TLV Encoding	594
C.1.6.1	Clock ID	595
C.1.6.2	CMTS Timing Parameters	595
C.1.6.2.0	Area of Application.....	595
C.1.6.2.1	t-cmts-ds-i Timing Value	595
C.1.6.2.2	t-cmts-ds-o Timing Value	595
C.1.6.2.3	t-cmts-ds-p Timing Value	595
C.1.6.2.4	t-cmts-us-o Timing Value	595
C.1.6.2.5	t-cmts-us-p Timing Value	595
C.1.6.3	HFC Timing Parameters	596
C.1.6.3.0	Area of Application.....	596
C.1.6.3.1	t-hfc-ds-o Timing Value.....	596
C.1.6.3.2	t-hfc-ds-p Timing Value.....	596
C.1.6.3.3	t-hfc-us-o Timing Value.....	596
C.1.6.3.4	t-hfc-us-p Timing Value.....	596
C.1.6.4	CM Timing Parameters.....	596
C.1.6.4.0	Area of Application.....	596
C.1.6.4.1	t-cm-ds-o CM Timing Value.....	596
C.1.6.4.2	t-cm-ds-p CM Timing Value.....	596
C.1.6.4.3	t-cm-us-o CM Timing Value.....	597
C.1.6.4.4	t-cm-us-p CM Timing Value.....	597
C.1.6.4.5	t-cm-ds-i CM Timing Value.....	597
C.1.6.5	CMTS Timing Override Parameters	597
C.1.6.5.0	Area of Application.....	597
C.1.6.5.1	t-cm-ds-o CMTS Override Timing Value	597
C.1.6.5.2	t-cm-ds-p CMTS Override Timing Value	597
C.1.6.5.3	t-cm-us-o CMTS Override Timing Value	597
C.1.6.5.4	t-cm-us-p CMTS Override Timing Value	597
C.1.6.5.5	t-cm-ds-i CMTS Override Timing Value	598
C.1.6.6	True Ranging Offset	598
C.1.6.7	Timing Adjustment	598
C.1.6.8	DTP Error Code.....	598
C.2	Quality-of-Service-Related Encodings.....	598
C.2.1	Packet Classification Encodings.....	598
C.2.1.0	General.....	598

C.2.1.1	Upstream Packet Classification Encoding	599
C.2.1.2	Upstream Drop Packet Classification Encoding	599
C.2.1.3	Downstream Packet Classification Encoding	599
C.2.1.4	General Packet Classifier Encodings	599
C.2.1.4.1	Classifier Reference	599
C.2.1.4.2	Classifier Identifier.....	599
C.2.1.4.3	Service Flow Reference	600
C.2.1.4.4	Service Flow Identifier.....	600
C.2.1.4.5	Rule Priority	600
C.2.1.4.6	Classifier Activation State.....	600
C.2.1.4.7	Dynamic Service Change Action	600
C.2.1.4.8	CM Interface Mask (CMIM) Encoding.....	601
C.2.1.5	Classifier Error Encodings.....	601
C.2.1.5.0	Overview	601
C.2.1.5.1	Errored Parameter	602
C.2.1.5.2	Error Code.....	602
C.2.1.5.3	Error Message	602
C.2.1.6	IPv4 Packet Classification Encodings.....	602
C.2.1.6.0	TLV Encoding.....	602
C.2.1.6.1	IPv4 Type of Service Range and Mask	602
C.2.1.6.2	IP Protocol.....	603
C.2.1.6.3	IPv4 Source Address	603
C.2.1.6.4	IPv4 Source Mask	603
C.2.1.6.5	IPv4 Destination Address.....	603
C.2.1.6.6	IPv4 Destination Mask	603
C.2.1.7	TCP/UDP Packet Classification Encodings.....	604
C.2.1.7.0	Overview.....	604
C.2.1.7.1	TCP/UDP Source Port Start	604
C.2.1.7.2	TCP/UDP Source Port End	604
C.2.1.7.3	TCP/UDP Destination Port Start.....	604
C.2.1.7.4	TCP/UDP Destination Port End.....	604
C.2.1.8	Ethernet LLC Packet Classification Encodings	604
C.2.1.8.0	TLV Encoding.....	604
C.2.1.8.1	Destination MAC Address	605
C.2.1.8.2	Source MAC Address	605
C.2.1.8.3	Ethertype/DSAP/MacType	605
C.2.1.9	IEEE 802.1P/Q Packet Classification Encodings	606
C.2.1.9.0	TLV Encoding.....	606
C.2.1.9.1	IEEE 802.1P User_Priority	606
C.2.1.9.2	IEEE 802.1Q VLAN_ID	606
C.2.1.10	IPv6 Packet Classification Encodings.....	606
C.2.1.10.0	Overview	606
C.2.1.10.1	IPv6 Traffic Class Range and Mask.....	607
C.2.1.10.2	IPv6 Flow Label.....	607
C.2.1.10.3	IPv6 Next Header Type.....	607
C.2.1.10.4	IPv6 Source Address	608
C.2.1.10.5	IPv6 Source Prefix Length (bits).....	608
C.2.1.10.6	IPv6 Destination Address.....	608
C.2.1.10.7	IPv6 Destination Prefix Length (bits)	608
C.2.1.11	Vendor Specific Classifier Parameters	608
C.2.1.12	ICMPv4/ICMPv6 Packet Classification Encodings.....	608
C.2.1.12.0	TLV Encoding.....	608
C.2.1.12.1	ICMPv4/ICMPv6 Type Start	609
C.2.1.12.2	ICMPv4/ICMPv6 Type End	609
C.2.1.13	IEEE Std. 802.1ad S-Tag and C-Tag Frame Classification Encodings	609
C.2.1.13.0	TLV Encoding.....	609
C.2.1.13.1	IEEE Std. 802.1ad S-TPID.....	609
C.2.1.13.2	IEEE Std. 802.1ad S-VID	609
C.2.1.13.3	IEEE Std. 802.1ad S-PCP	610
C.2.1.13.4	IEEE Std. 802.1ad S-DEI.....	610
C.2.1.13.5	IEEE Std. 802.1ad C-TPID	610
C.2.1.13.6	IEEE Std. 802.1ad C-VID	610

C.2.1.13.7	IEEE Std. 802.1ad C-PCP	611
C.2.1.13.8	IEEE Std. 802.1ad C-CFI	611
C.2.1.13.9	IEEE Std. 802.1ad S-TCI	611
C.2.1.13.10	IEEE Std. 802.1ad C-TCI	611
C.2.1.14	IEEE Std. 802.1ah Packet Classification Encodings	611
C.2.1.14.0	TLV Encoding	611
C.2.1.14.1	IEEE Std. 802.1ah I-TPID	612
C.2.1.14.2	IEEE Std. 802.1ah I-SID	612
C.2.1.14.3	IEEE Std. 802.1ah I-TCI	612
C.2.1.14.4	IEEE Std. 802.1ah I-PCP	612
C.2.1.14.5	IEEE Std. 802.1ah I-DEI	612
C.2.1.14.6	IEEE Std. 802.1ah I-UCA	613
C.2.1.14.7	IEEE Std. 802.1ah B-TPID	613
C.2.1.14.8	IEEE Std. 802.1ah B-TCI	613
C.2.1.14.9	IEEE Std. 802.1ah B-PCP	613
C.2.1.14.10	IEEE Std. 802.1ah B-DEI	613
C.2.1.14.11	IEEE Std. 802.1ah B-VID	614
C.2.1.14.12	IEEE Std. 802.1ah B-DA	614
C.2.1.14.13	IEEE Std. 802.1ah B-SA	614
C.2.1.15	MPLS Classification Encodings	614
C.2.1.15.0	TLV Encoding	614
C.2.1.15.1	MPLS TC Bits	615
C.2.1.15.2	MPLS Label	615
C.2.2	Service Flow Encodings	615
C.2.2.0	Area of Application	615
C.2.2.1	Upstream Service Flow Encodings	615
C.2.2.2	Downstream Service Flow Encodings	615
C.2.2.3	Upstream Aggregate Service Flow (ASF)	615
C.2.2.4	Downstream Aggregate Service Flow (ASF)	616
C.2.2.5	General Service Flow Encodings	616
C.2.2.5.1	Service Flow Reference	616
C.2.2.5.2	Service Flow Identifier	616
C.2.2.5.3	Service Identifier	617
C.2.2.5.4	Service Class Name	617
C.2.2.5.5	Quality of Service Parameter Set Type	617
C.2.2.5.6	Service Flow Required Attribute Mask	618
C.2.2.5.7	Service Flow Forbidden Attribute Mask	618
C.2.2.5.8	Service Flow Attribute Aggregation Rule Mask	618
C.2.2.5.9	Application Identifier	619
C.2.2.5.10	Aggregate Service Flow Reference	619
C.2.2.5.11	MESP Reference	619
C.2.2.6	Service Flow Error Encodings	619
C.2.2.6.0	Overview	619
C.2.2.6.1	Errored Parameter	620
C.2.2.6.2	Error Code	620
C.2.2.6.3	Error Message	620
C.2.2.7	Common Upstream and Downstream Quality-of-Service Parameter Encodings	621
C.2.2.7.0	General	621
C.2.2.7.1	Traffic Priority	621
C.2.2.7.2	Maximum Sustained Traffic Rate	621
C.2.2.7.2.0	Overview	621
C.2.2.7.2.1	Upstream Maximum Sustained Traffic Rate	622
C.2.2.7.2.2	Downstream Maximum Sustained Traffic Rate	622
C.2.2.7.3	Maximum Traffic Burst	622
C.2.2.7.4	Minimum Reserved Traffic Rate	623
C.2.2.7.5	Assumed Minimum Reserved Rate Packet Size	623
C.2.2.7.6	Timeout for Active QoS Parameters	623
C.2.2.7.7	Timeout for Admitted QoS Parameters	624
C.2.2.7.8	Vendor Specific QoS Parameters	624
C.2.2.7.9	IP Type Of Service (DSCP) Overwrite	624
C.2.2.7.10	Peak Traffic Rate	625
C.2.2.7.10.0	Overview	625

C.2.2.7.10.1	Upstream Peak Traffic Rate	625
C.2.2.7.10.2	Downstream Peak Traffic Rate.....	625
C.2.2.7.11	Buffer Control	626
C.2.2.7.11.0	Overview	626
C.2.2.7.11.1	Upstream Buffer Control.....	626
C.2.2.7.11.2	Downstream Buffer Control	627
C.2.2.7.11.3	Minimum Buffer.....	627
C.2.2.7.11.4	Target Buffer	627
C.2.2.7.11.5	Maximum Buffer	627
C.2.2.7.12	ASF QoS Profile Name.....	628
C.2.2.7.13	Service Flow Matching Criteria.....	628
C.2.2.7.13.0	TLV Encoding.....	628
C.2.2.7.13.1	Service Flow to ASF Matching by Application ID	628
C.2.2.7.13.2	Service Flow to ASF Matching by Service Class Name	628
C.2.2.7.13.3	Service Flow to ASF Matching by Traffic Priority Range	628
C.2.2.7.14	Service Flow to IATC Profile Name Reference.....	629
C.2.2.7.15	AQM Encodings	629
C.2.2.7.15.0	TLV Encoding.....	629
C.2.2.7.15.1	SF AQM Disable	629
C.2.2.7.15.2	SF AQM Latency Target.....	629
C.2.2.7.16	Data Rate Unit Setting	629
C.2.2.8	Upstream-Specific QoS Parameter Encodings.....	630
C.2.2.8.1	Maximum Concatenated Burst.....	630
C.2.2.8.2	Service Flow Scheduling Type	630
C.2.2.8.3	Request/Transmission Policy	631
C.2.2.8.4	Nominal Polling Interval.....	631
C.2.2.8.5	Tolerated Poll Jitter	632
C.2.2.8.6	Unsolicited Grant Size	632
C.2.2.8.7	Nominal Grant Interval	632
C.2.2.8.8	Tolerated Grant Jitter	632
C.2.2.8.9	Grants per Interval.....	633
C.2.2.8.10	Unsolicited Grant Time Reference.....	633
C.2.2.8.11	Multiplier to Contention Request Backoff Window	633
C.2.2.8.12	Multiplier to Number of Bytes Requested	634
C.2.2.9	Downstream-Specific QoS Parameter Encodings.....	634
C.2.2.9.1	Maximum Downstream Latency	634
C.2.2.9.2	Downstream Resequencing.....	634
C.2.2.10	Metro Ethernet Service Profile (MESP) Encoding	634
C.2.2.10.0	TLV Encoding.....	634
C.2.2.10.1	MESP Reference	635
C.2.2.10.2	MESP Bandwidth Profile (MESP-BP).....	635
C.2.2.10.2.0	TLV Encoding.....	635
C.2.2.10.2.1	MESP-BP Committed Information Rate	635
C.2.2.10.2.2	MESP-BP Committed Burst Size	635
C.2.2.10.2.3	MESP-BP Excess Information Rate	635
C.2.2.10.2.4	MESP-BP Excess Burst Size	635
C.2.2.10.2.5	MESP-BP Coupling Flag.....	636
C.2.2.10.2.6	MESP-BP Colour Mode	636
C.2.2.10.2.7	MESP-BP Colour Marking.....	637
C.2.2.10.3	MESP Name.....	638
C.2.3	Payload Header Suppression	638
C.2.4	Payload Header Suppression Error Encodings.....	638
C.3	Encodings for Other Interfaces.....	638
C.3.1	Baseline Privacy Configuration Settings Option.....	638
C.3.2	eSAFE Configuration Settings Option	639
C.3.3	Unidirectional (UNI) Control Encodings	639
C.3.3.0	Overview	639
C.3.3.1	Context CMIM.....	639
C.3.3.2	UNI Admin Status	639
C.3.3.3	UNI Auto-Negotiation Status	640
C.3.3.4	UNI Operating Speed.....	640

C.3.3.5	UNI Duplex	640
C.3.3.6	EEE Status	640
C.3.3.7	Maximum Frame Size.....	640
C.3.3.8	Power Over Ethernet (PoE) Status.....	641
C.3.3.9	Media Type.....	641
C.4	Confirmation Code	641
Annex D (normative):	CM Configuration Interface Specification	647
D.1	CM Configuration	647
D.1.1	CM Binary Configuration File Format.....	647
D.1.2	Configuration File Settings.....	647
D.1.3	Configuration File Creation.....	648
D.1.3.0	Configuration File Content	648
D.1.3.1	CM MIC Calculation	650
D.2	Configuration Verification	651
D.2.1	CMTS MIC Calculation	651
D.2.1.0	General.....	651
D.2.1.1	Pre-3.0 DOCSIS CMTS MIC Digest Calculation.....	652
D.2.1.2	Extended CMTS MIC Digest Calculation	652
Annex E (normative):	Standard Receive Channel Profile Encodings.....	654
Annex F (normative):	The DOCSIS MAC/PHY Interface (DMPI)	676
Annex G (normative):	Compatibility with Previous Versions of DOCSIS	677
G.0	Overview	677
G.1	General Interoperability Issues.....	677
G.1.1	Initial Ranging	677
G.1.1.1	Initial Ranging on an SC-QAM Channel.....	677
G.1.1.2	Initial Ranging on an OFDMA Channel.....	677
G.1.2	Topology Resolution	678
G.1.3	Early Authentication and Encryption (EAE).....	678
G.1.4	Provisioning	678
G.1.5	Registration	683
G.1.6	Requesting Bandwidth	686
G.1.7	Encryption Support.....	686
G.1.8	Downstream Channel Bonding.....	686
G.1.9	Upstream Channel Bonding and Transmit Channel Configuration Support	687
G.1.10	Dynamic Service Establishment.....	687
G.1.11	Fragmentation.....	687
G.1.12	Multicast Support	687
G.1.13	Changing Upstream Channels	687
G.1.14	Changing Downstream Channels	688
G.1.15	Concatenation Support	688
G.1.16	PHS Support.....	688
G.1.17	IP/LLC Filtering Support	688
G.1.18	Differences in Downstream Lower Frequency Band Edge Support.....	689
G.2	Upstream Physical Layer Interoperability.....	690
G.2.1	DOCSIS 2.0 TDMA Interoperability	690
G.2.1.1	Mixed-mode Operation with TDMA on a Type 2 Channel	690
G.2.1.2	Interoperability and Performance	691
G.2.2	DOCSIS 2.0 S-CDMA Interoperability.....	691
G.2.2.1	Mixed mode Operation with S-CDMA.....	691
G.2.2.2	Interoperability and Performance	691
G.2.3	DOCSIS 3.0 Interoperability	691
G.3	Multicast Support for Interaction with Pre-3.0 DOCSIS Devices.....	692
G.3.0	Overview	692
G.3.1	Multicast DSID Forwarding (MDF) Capability Exchange.....	692

G.3.2	GMAC-Explicit Multicast DSID Forwarding Mode	692
G.3.2.0	General	692
G.3.2.1	GMAC-Promiscuous Override	693
G.3.3	MDF Mode 0	694
G.3.3.0	Overview	694
G.3.3.1	CMTS Requirements with MDF Mode 0	694
G.3.3.2	CM Requirements with MDF Disabled	695
Annex H (normative):	DHCPv6 Vendor Specific Information Options for DOCSIS 3.0.....	696
Annex I:	Void	697
Annex J (normative):	DHCPv4 Vendor Identifying Vendor Specific Options for DOCSIS 3.0	698
Annex K (normative):	The Data-Over-Cable Spanning Tree Protocol.....	699
K.1	Background	699
K.2	Public Spanning Tree	699
K.3	Public Spanning Tree Protocol Details	700
K.4	Spanning Tree Parameters and Defaults.....	701
K.4.0	General	701
K.4.1	Path Cost	701
K.4.2	Bridge Priority.....	701
Annex L (normative):	Additions and Modifications for Chinese Specification	702
Annex M (normative):	Proportional-Integral-Enhanced Active Queue Management Algorithm.....	703
M.0	Overview	703
M.1	PIE AQM Constants and Variables.....	703
M.2	PIE AQM Control Path	704
M.3	PIE AQM Data Path.....	705
Annex N (informative):	MAC Service Definition	707
N.1	MAC Service Overview	707
N.1.0	Overview	707
N.1.1	MAC Service Parameters	708
N.1.1.0	General.....	708
N.1.1.1	Service Flow QoS Traffic Parameters	708
N.1.1.2	Active/Admitted QoS Traffic Parameters.....	708
N.1.1.3	Service Flow Classification Filter Rules.....	708
N.1.1.4	Service Flow PHS Suppressed Headers.....	708
N.2	MAC Data Service Interface	709
N.2.0	Overview	709
N.2.1	MAC_DATA_INDIVIDUAL.Request	709
N.2.1.1	General.....	709
N.2.1.1	Databases	710
N.2.1.2	Pseudocode	710
N.2.2	MAC_DATA_GROUP.request.....	711
N.2.3	MAC_DATA_INTERNAL.request	712
N.2.4	MAC_GRANT_SYNCHRONIZE.indicate	713
N.2.5	MAC_CMTS_MASTER_CLOCK_SYNCHRONIZE.indicate.....	713
N.3	MAC Control Service Interface	713
N.3.0	Overview	713
N.3.1	MAC_REGISTRATION_RESPONSE.indicate	713

N.3.2	MAC_CREATE_SERVICE_FLOW.request	714
N.3.3	MAC_CREATE_SERVICE_FLOW.response.....	714
N.3.4	MAC_CREATE_SERVICE_FLOW.indicate	714
N.3.5	MAC_DELETE_SERVICE_FLOW.request.....	715
N.3.6	MAC_DELETE_SERVICE_FLOW.response	715
N.3.7	MAC_DELETE_SERVICE_FLOW.indicate	715
N.3.8	MAC_CHANGE_SERVICE_FLOW.request	715
N.3.9	MAC_CHANGE_SERVICE_FLOW.response.....	715
N.3.10	MAC_CHANGE_SERVICE_FLOW.indicate.....	716
N.4	MAC Service Usage Scenarios	716
N.4.0	Overview	716
N.4.1	Transmission of PDUs from Upper Layer Service to MAC DATA Service.....	716
N.4.2	Reception of PDUs to Upper Layer Service from MAC DATA Service	716
N.4.3	Sample Sequence of MAC Control and MAC Data Services	717
Annex O (informative): Plant Topologies.....		718
O.0	Overview	718
O.1	Single Downstream and Single Upstream per Cable Segment.....	718
O.2	Multiple Downstreams and Multiple Upstreams per Cable Segment	720
O.2.0	Overview	720
O.2.1	HFC Plant Topologies.....	721
O.2.2	Normal Operation.....	722
O.2.3	Initial Ranging.....	722
O.2.4	Dynamic Channel Change.....	723
Annex P (informative): DOCSIS Transmission and Contention Resolution.....		724
P.1	Multiple Transmit Channel Mode	724
P.1.1	Introduction	724
P.1.2	Variable Definitions	725
P.1.3	State Examples	726
P.1.3.1	Idle - Waiting for a Packet to Transmit.....	726
P.1.3.2	Grant Pending - Waiting for a Grant.....	726
P.1.3.3	Deferring - Determine Proper Transmission Timing and Transmit	726
P.1.4	Function Examples	726
P.1.4.1	CalcDefer() - Determine Defer Amount	726
P.1.4.2	UtilizeGrant() - Determine Best Use of a Grant	726
P.1.4.3	Retry().....	728
P.1.4.4	Process Map().....	728
P.1.4.5	timeout (sid).....	728
P.1.4.6	is_my_SID(sid).....	728
P.2	Non-Multiple Transmit Channel Mode.....	728
P.2.1	Introduction	728
P.2.2	Variable Definitions	729
P.2.3	State Examples	730
P.2.3.1	Idle - Waiting for a Packet to Transmit.....	730
P.2.3.2	Grant Pending - Waiting for a Grant.....	730
P.2.3.3	Deferring - Determine Proper Transmission Timing and Transmit	730
P.2.4	Function Examples	730
P.2.4.1	CalcDefer() - Determine Defer Amount	730
P.2.4.2	UtilizeGrant() - Determine Best Use of a Grant	731
P.2.4.3	Retry().....	731
Annex Q (informative): Unsolicited Grant Services.....		732
Q.1	Unsolicited Grant Service (UGS).....	732
Q.1.1	Introduction	732
Q.1.2	Configuration Parameters.....	732
Q.1.3	Operation.....	732
Q.1.4	Jitter.....	732

Q.1.5	Synchronization Issues	733
Q.2	Unsolicited Grant Service with Activity Detection (UGS-AD)	734
Q.2.1	Introduction	734
Q.2.2	MAC Configuration Parameters	734
Q.2.3	Operation	734
Q.2.4	Example	735
Q.2.5	Talk Spurt Grant Burst	735
Q.2.6	Admission Considerations	736
Q.3	Multiple Transmit Channel Mode Considerations for Unsolicited Grant Services	737
Annex R (informative): Error Recovery Examples		738
R.0	Responsibility of CMTS	738
R.1	Example 1 - Modem Cannot Range on All Upstreams	738
R.2	Example 2 - CM Fails to Receive MDD Message	738
R.3	Example 3 - Finding a Stray Modem	739
Annex S (informative): SDL Notation		740
Annex T (informative): Notes on Address Configuration in DOCSIS 3.1		741
Annex U (Informative): IP Multicast Replication Examples		742
U.0	Overview	742
U.1	Scenario I: First Multicast Client Joiner to a Multicast Session (Start of a New Multicast Session) ..	742
U.1.0	General	742
U.1.1	Scenario 1 - Case 1	743
U.1.2	Scenario 1 - Case 2	744
U.1.3	Scenario I - Case 3	745
U.2	Scenario II: A Multicast Client Joining an Existing Multicast Session that is Being Forwarded Bonded, with FC-Type 10 (Typical 3.0 Multicast Mode of Operation)	746
U.2.0	General	746
U.2.1	Scenario II - Case 1	746
U.2.2	Scenario II - Case 2	749
U.2.3	Scenario II - Case 3	750
Annex V (informative): IGMP Example for DOCSIS 2.0 Backwards Compatibility Mode		752
Annex W (informative): CM Multicast DSID Filtering Summary		753
Annex X (informative): Example DHCPv6 Solicit Message Contents		755
Annex Y (informative): Dynamic Operations Examples		756
Y.1	Dynamic Bonding Change Example Operation	756
Y.1.1	Change to Transmit Channel Set and Service Flow SID Cluster Assignments	756
Y.1.2	Change to Receive Channel Set and Downstream Resequencing Channel List	757
Y.1.3	Change to Move Service Flows Between Downstream Profiles	758
Y.2	Autonomous Load Balancing Example	758
Y.3	Downstream Profile Descriptor Change	761
Y.3.1	DPD Change to Profile A	761
Y.3.2	DPD Change to the NCP Profile	761
Annex Z (informative): Bibliography		763
History	764

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Integrated broadband cable telecommunication networks (CABLE).

The present document is part 3 of a multi-part deliverable. Full details of the entire series can be found in part 1 [54].

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Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

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1 Scope

The present document is part 3 of a multi-part deliverable that define the fourth generation of high-speed data-over_cable systems, commonly referred to as the DOCSIS[®] 3.1 specifications. This specification was developed for the benefit of the cable industry, and includes contributions by operators and vendors from North and South America, Europe, and Asia.

This generation of the DOCSIS[®] specifications builds upon the previous generations of DOCSIS[®] specifications (commonly referred to as the DOCSIS[®] 3.0 and earlier specifications), leveraging the existing Media Access Control (MAC) and Physical (PHY) layers, but with the addition of a new PHY layer designed to improve spectral efficiency and provide better scaling for larger bandwidths (and appropriate updates to the MAC and management layers to support the new PHY layer). It includes backward compatibility for the existing PHY layers in order to enable a seamless migration to the new technology.

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <https://docbox.etsi.org/Reference/>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are necessary for the application of the present document.

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