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**Minimum Operational Performance Standards (MOPS) for
the Aeronautical Mobile Airport Communication System
(AeroMACS)**

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FOREWORD

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TABLE OF CONTENTS

1	Purpose and Scope	1
1.1	Introduction.....	1
1.2	System Overview – AeroMACS.....	2
1.2.1	Document Hierarchy.....	3
1.3	Operational Application(s).....	5
1.3.1	Mobile Applications Examples.....	6
1.4	Intended Function.....	6
1.5	Operational Goals.....	6
1.6	Assumptions.....	6
1.7	Test Procedures.....	6
1.8	Definition of Terms.....	7
1.9	Anticipated Future Growth.....	9
1.10	Reference Documents.....	9
2	Minimum Performance Standards.....	11
2.1	General Design Requirements.....	11
2.1.1	Effect of Test.....	11
2.1.2	Intended Function.....	11
2.1.3	ITU Regulations and Federal Communications Commission Rules.....	11
2.1.4	Equipment Classes.....	11
2.1.5	Airborne - General Design Requirements	11
2.1.5.1	Software Management.....	11
2.1.5.2	Airworthiness.....	11
2.1.5.3	Fire Protection.....	11
2.1.5.4	Operation of Controls.....	11
2.1.5.5	Design Assurance	12
2.1.5.5.1	Accessibility of Controls.....	12
2.1.5.5.2	Display of Navigation Facility Identification.....	12
2.1.6	Ground – General Design Requirements.....	12
2.1.6.1	Controls and indicators.....	12
2.2	Equipment Performance – Standard Conditions.....	12
2.2.1	AeroMACS Operating Frequency Band.....	12
2.2.2	Supported Channel Bandwidth.....	12
2.2.3	Reserved	13
2.2.4	Reserved	13
2.2.5	Service-specific CS.....	13
2.2.5.1	ATM CS.....	13
2.2.5.2	Packet CS.....	13
2.2.5.2.1	MAC SDU format	13
2.2.5.2.2	Classification.....	13
2.2.5.2.3	Payload header suppression (PHS).....	13
2.2.5.2.3.1	PHS operation.....	13
2.2.5.2.3.2	PHS signaling.....	13
2.2.5.2.4	IEEE 802.3/Ethernet-specific part.....	13
2.2.5.2.4.1	IEEE 802.3/Ethernet CS PDU format.....	13

2.2.5.2.4.2	IEEE 802.3/Ethernet CS classification rules	13
2.2.5.2.5	IP specific part.....	13
2.2.5.2.5.1	IP CS PDU format	14
2.2.5.2.5.2	IP classification rules.....	14
2.2.5.3	Generic Packet Convergence Sublayer (GPCS).....	14
2.2.6	MAC common part sub-layer.....	14
2.2.6.1	Point to multipoint (PMP) operation overview.....	14
2.2.6.2	Reserved.....	14
2.2.6.3	Data and Control Plane.....	14
2.2.6.3.1	Addressing and connections.....	14
2.2.6.3.1.1	Point-to-multipoint (PMP).....	14
2.2.6.3.2	MAC PDU formats.....	14
2.2.6.3.2.1	MAC header formats.....	14
2.2.6.3.2.1.1	Generic MAC header.....	14
2.2.6.3.2.1.2	MAC header without payload.....	14
2.2.6.3.2.1.2.1	MAC signaling header type I.....	14
2.2.6.3.2.1.2.1.1	Bandwidth request (BR) header.....	14
2.2.6.3.2.1.2.1.2	Bandwidth request and UL Tx power report header.....	14
2.2.6.3.2.1.2.1.3	BR and CINR report header.....	14
2.2.6.3.2.1.2.1.4	CQICH allocation request header	14
2.2.6.3.2.1.2.1.5	PHY channel report header.....	15
2.2.6.3.2.1.2.1.6	BR and UL sleep control header.....	15
2.2.6.3.2.1.2.1.7	SN report header.....	15
2.2.6.3.2.1.2.2	MAC signaling header type II.....	15
2.2.6.3.2.1.2.2.1	Feedback header.....	15
2.2.6.3.2.1.2.2.2	MIMO channel feedback header.....	15
2.2.6.3.2.2	MAC subheaders and special payloads.....	15
2.2.6.3.2.2.1	Fragmentation subheader (FSH)	15
2.2.6.3.2.2.2	Grant management subheader (GMSH).....	15
2.2.6.3.2.2.3	Packing subheader (PSH)	15
2.2.6.3.2.2.4	ARQ/Feedback	15
2.2.6.3.2.2.5	Reserved.....	15
2.2.6.3.2.2.6	Fast-feedback allocation subheader (FFSH).....	15
2.2.6.3.2.2.7	Extended subheader format.....	15
2.2.6.3.2.2.7.1	SDU SN extended subheader.....	15
2.2.6.3.2.2.7.2	DL sleep control extended subheader.....	15
2.2.6.3.2.2.7.3	Feedback request extended subheader.....	15
2.2.6.3.2.2.7.4	MIMO mode feedback extended subheader.....	16
2.2.6.3.2.2.7.5	UL Tx power report extended subheader	16
2.2.6.3.2.2.7.6	Mini-feedback extended subheader.....	16
2.2.6.3.2.2.7.7	SN request extended subheader.....	16
2.2.6.3.2.2.7.8	PDU SN extended subheader.....	16
2.2.6.3.2.2.7.9	ertPS resumption bitmap extended subheader.....	16
2.2.6.3.2.2.7.10	Persistent Allocation Error Event.....	16
2.2.6.3.2.3	MAC management messages	16
2.2.6.3.2.3.1	DCD (DL channel descriptor) message.....	16
2.2.6.3.2.3.2	DL-MAP (Downlink map) message.....	16

2.2.6.3.2.3.3	UCD (UL channel descriptor) message.....	16
2.2.6.3.2.3.4	UL-MAP (UL map) message	16
2.2.6.3.2.3.5	RNG-REQ (ranging request) message	16
2.2.6.3.2.3.6	RNG-RSP (ranging response) message.....	16
2.2.6.3.2.3.7	REG-REQ (registration request) message.....	16
2.2.6.3.2.3.8	REG-RSP (registration response) message	16
2.2.6.3.2.3.9	Privacy key management (PKM) messages (PKM-REQ/PKM-RSP).....	16
2.2.6.3.2.3.10	DSA-REQ message	17
2.2.6.3.2.3.10.1	MS-Initiated DSA.....	17
2.2.6.3.2.3.10.2	BS-Initiated DSA.....	17
2.2.6.3.2.3.11	DSA-RSP message	17
2.2.6.3.2.3.11.1	MS-Initiated DSA.....	17
2.2.6.3.2.3.11.2	BS-Initiated DSA.....	17
2.2.6.3.2.3.12	DSA-ACK message.....	17
2.2.6.3.2.3.13	DSC-REQ (DSC request) message	17
2.2.6.3.2.3.14	DSC-RSP (DSC response) message.....	17
2.2.6.3.2.3.15	DSC-ACK (DSC acknowledge) message	17
2.2.6.3.2.3.16	DSD-REQ message	17
2.2.6.3.2.3.17	DSD-RSP message.....	17
2.2.6.3.2.3.18	MCA-REQ (multicast polling assignment request) message.....	17
2.2.6.3.2.3.19	MCA-RSP (multicast polling assignment response) message.....	17
2.2.6.3.2.3.20	DBPC-REQ (DL burst profile change request) message.....	17
2.2.6.3.2.3.21	DBPC-RSP (DL burst profile change response) message	18
2.2.6.3.2.3.22	RES-CMD (reset command) message	18
2.2.6.3.2.3.23	SBC-REQ (SS basic capability request) message.....	18
2.2.6.3.2.3.24	SBC-RSP (SS basic capability response) message	18
2.2.6.3.2.3.25	CLK-CMP (clock comparison) message.....	18
2.2.6.3.2.3.26	DREG-CMD (de/reregister command) message	18
2.2.6.3.2.3.27	DSX-RVD (DSx received) message	18
2.2.6.3.2.3.28	TFTP-CPLT (Config File TFTP complete) message.....	18
2.2.6.3.2.3.29	TFTP-RSP (Config File TFTP complete response) message.....	18
2.2.6.3.2.3.30	ARQ-Feedback message.....	18
2.2.6.3.2.3.31	ARQ-Discard message.....	18
2.2.6.3.2.3.32	ARQ-Reset message	18
2.2.6.3.2.3.33	Channel Measurement REP-REQ/RSP (report request/response)	18
2.2.6.3.2.3.34	FPC (fast power control) message	18
2.2.6.3.2.3.35	AAS-FBCK-REQ/RSP (AAS channel feedback request/response) messages	18
2.2.6.3.2.3.36	AAS_Beam_Select message.....	18
2.2.6.3.2.3.37	DREG-REQ (SS deregistration request) message	18
2.2.6.3.2.3.38	HARQ MAP message	18
2.2.6.3.2.3.39	MOB_SLP-REQ (sleep request) message.....	19
2.2.6.3.2.3.40	MOB_SLP-RSP (sleep response) message.....	19
2.2.6.3.2.3.41	MOB_TRF-IND (traffic indication) message	19
2.2.6.3.2.3.42	MOB_NBR-ADV (neighbor advertisement) message.....	19
2.2.6.3.2.3.43	MOB_SCN-REQ (scanning interval allocation request) message	19
2.2.6.3.2.3.44	MOB_SCN-RSP (scanning interval allocation response) message.....	19
2.2.6.3.2.3.45	MOB_SCN-REP (scanning result report) message.....	19

2.2.6.3.2.3.46	MOB_ASC-REP (association result report) message.....	19
2.2.6.3.2.3.47	MOB_BSHO-REQ (BS HO request) message.....	19
2.2.6.3.2.3.48	MOB_MSHO-REQ (MS HO request) message.....	19
2.2.6.3.2.3.49	MOB_BSHO-RSP (BS HO response) message.....	19
2.2.6.3.2.3.50	MOB_HO-IND (HO indication) message.....	19
2.2.6.3.2.3.51	MOB_PAG-ADV (BS broadcast paging) message.....	19
2.2.6.3.2.3.52	MBS_MAP (multicast and broadcast service map) message.....	19
2.2.6.3.2.3.53	PMC_REQ (power control mode change request) message.....	20
2.2.6.3.2.3.54	PMC_RSP (power control mode change response) message.....	20
2.2.6.3.2.3.55	OFDMA SUB-DL-UL-MAP message.....	20
2.2.6.3.2.3.56	MIMO precoding setup/tear-down messages.....	20
2.2.6.3.2.3.57	MIH Payload Transfer (MOB_MIH-MSG) message.....	20
2.2.6.3.2.3.58	Service Identity Information (SII-ADV) message.....	20
2.2.6.3.2.3.59	Location Based Services (LBS-ADV) message.....	20
2.2.6.3.3	Construction and transmission of MAC PDUs.....	20
2.2.6.3.3.1	Conventions.....	20
2.2.6.3.3.2	Concatenation.....	20
2.2.6.3.3.3	Fragmentation.....	20
2.2.6.3.3.3.1	Non-ARQ connections.....	20
2.2.6.3.3.3.2	ARQ-enabled connections.....	20
2.2.6.3.3.4	Packing.....	20
2.2.6.3.3.4.1	Packing for non-ARQ connections.....	20
2.2.6.3.3.4.1.1	Packing fixed-length MAC SDUs.....	20
2.2.6.3.3.4.1.2	Packing variable-length MAC SDUs.....	21
2.2.6.3.3.4.2	Packing for ARQ-enabled connections.....	21
2.2.6.3.3.4.3	Packing ARQ Feedback IEs.....	21
2.2.6.3.3.5	CRC calculation.....	21
2.2.6.3.3.5.1	CRC32 calculation for SC and OFDM mode.....	21
2.2.6.3.3.5.2	CRC32 calculation for OFDMA mode.....	21
2.2.6.3.3.5.2.1	CRC32 test vectors for OFDMA mode.....	21
2.2.6.3.3.6	Encryption of MAC PDUs.....	21
2.2.6.3.3.7	Padding.....	21
2.2.6.3.4	ARQ mechanisms.....	21
2.2.6.3.4.1	ARQ block usage.....	21
2.2.6.3.4.2	ARQ Feedback IE format.....	21
2.2.6.3.4.2.1	ARQ Feedback IE format with extended capability.....	22
2.2.6.3.4.3	ARQ parameters.....	22
2.2.6.3.4.3.1	ARQ_BSN_MODULUS.....	22
2.2.6.3.4.3.2	ARQ_WINDOW_SIZE.....	22
2.2.6.3.4.3.3	ARQ_BLOCK_LIFETIME.....	22
2.2.6.3.4.3.4	ARQ_RETRY_TIMEOUT.....	22
2.2.6.3.4.3.5	ARQ_SYNC_LOSS_TIMEOUT.....	22
2.2.6.3.4.3.6	ARQ_RX_PURGE_TIMEOUT.....	22
2.2.6.3.4.3.7	ARQ_BLOCK_SIZE.....	22
2.2.6.3.4.4	ARQ procedures.....	22
2.2.6.3.4.4.1	ARQ state machine variables.....	22
2.2.6.3.4.4.1.1	Transmitter variables.....	22

2.2.6.3.4.4.1.2	Receiver variables.....	22
2.2.6.3.4.5	ARQ-enabled connection setup and negotiation.....	22
2.2.6.3.4.6	ARQ operation.....	22
2.2.6.3.4.6.1	Sequence number comparison.....	22
2.2.6.3.4.6.2	Transmitter state machine.....	22
2.2.6.3.4.6.3	Receiver state machine.....	23
2.2.6.3.5	Scheduling services.....	23
2.2.6.3.5.1	Outbound transmission scheduling.....	23
2.2.6.3.5.2	UL request/grant scheduling.....	23
2.2.6.3.5.2.1	Unsolicited grant service (UGS).....	23
2.2.6.3.5.2.2	Real-time polling service (rtPS).....	23
2.2.6.3.5.2.2.1	Extended rtPS.....	23
2.2.6.3.5.2.3	Non-real-time polling service (nrtPS).....	23
2.2.6.3.5.2.4	Best effort (BE) service.....	23
2.2.6.3.6	Bandwidth allocation and request mechanisms.....	23
2.2.6.3.6.1	Requests.....	23
2.2.6.3.6.2	Grants.....	23
2.2.6.3.6.3	Polling.....	23
2.2.6.3.6.3.1	Unicast polling.....	23
2.2.6.3.6.3.2	Multicast and broadcast polling.....	24
2.2.6.3.6.3.3	PM bit.....	24
2.2.6.3.6.4	Contention-based focused BRs for WirelessMAN-OFDM.....	24
2.2.6.3.6.5	Contention-based CDMA BRs for WirelessMAN-OFDMA.....	24
2.2.6.3.7	MAC support of PHY.....	24
2.2.6.3.7.1	Frequency division duplexing (FDD).....	24
2.2.6.3.7.2	Time division duplexing (TDD).....	24
2.2.6.3.7.3	DL-MAP message.....	24
2.2.6.3.7.4	UL-MAP message.....	24
2.2.6.3.7.4.1	UL timing.....	24
2.2.6.3.7.4.2	UL allocations.....	24
2.2.6.3.7.4.3	UL interval definition.....	24
2.2.6.3.7.4.3.1	Request IE.....	24
2.2.6.3.7.4.3.2	Initial ranging IE.....	24
2.2.6.3.7.4.3.3	Data Grant Burst Type IEs.....	24
2.2.6.3.7.4.3.4	End of Map IE.....	24
2.2.6.3.7.4.3.5	Gap IE.....	24
2.2.6.3.7.5	Map relevance and synchronization.....	25
2.2.6.3.7.5.1	WirelessMAN-SC PHY.....	25
2.2.6.3.7.5.2	WirelessMAN-OFDM PHY.....	25
2.2.6.3.7.5.3	WirelessMAN-OFDMA PHY.....	25
2.2.6.3.7.6	Optional MAC AAS support of OFDM and OFDMA.....	25
2.2.6.3.7.6.1	AAS MAC services.....	25
2.2.6.3.7.6.2	MAC control functions.....	25
2.2.6.3.7.6.3	AAS DL synchronization.....	25
2.2.6.3.7.6.4	Alerting the BS about presence of a new SS in an AAS system.....	25
2.2.6.3.7.6.5	FDD/TDD support.....	25
2.2.6.3.7.6.6	Requesting bandwidth.....	25

2.2.6.3.8	Contention resolution.....	25
2.2.6.3.8.1	Transmission opportunities.....	25
2.2.6.3.9	Network entry and initialization.....	25
2.2.6.3.9.1	Scanning and synchronization to the DL.....	25
2.2.6.3.9.2	Obtain DL parameters.....	25
2.2.6.3.9.3	Obtain UL parameters.....	25
2.2.6.3.9.4	Message flows during scanning and UL parameter acquisition.....	26
2.2.6.3.9.5	Initial ranging and automatic adjustments.....	26
2.2.6.3.9.5.1	Contention-based initial ranging and automatic adjustments.....	26
2.2.6.3.9.6	Ranging parameter adjustment.....	26
2.2.6.3.9.7	Negotiate basic capabilities.....	26
2.2.6.3.9.8	SS authorization and key exchange.....	26
2.2.6.3.9.9	Registration.....	26
2.2.6.3.9.9.1	IP version negotiation.....	26
2.2.6.3.9.10	Establishing IP connectivity.....	26
2.2.6.3.9.11	Establishing time of day.....	26
2.2.6.3.9.12	Transferring operational parameters.....	26
2.2.6.3.9.13	Establishing provisioned connections.....	26
2.2.6.3.9.14	Forcing MSs to perform network entry at once.....	27
2.2.6.3.10	Ranging.....	27
2.2.6.3.10.1	DL burst profile management.....	27
2.2.6.3.10.2	UL periodic ranging.....	27
2.2.6.3.10.3	OFDMA-based ranging.....	27
2.2.6.3.10.3.1	Contention-based initial ranging and automatic adjustments.....	27
2.2.6.3.10.3.2	Periodic ranging and automatic adjustments.....	27
2.2.6.3.10.4	CDMA HO ranging and automatic adjustment.....	27
2.2.6.3.10.4.1	Dedicated ranging and automatic adjustments.....	27
2.2.6.3.11	Update of channel descriptors.....	27
2.2.6.3.12	Assigning SSs to multicast groups.....	27
2.2.6.3.13	Establishment of multicast connections.....	27
2.2.6.3.14	Quality of Service.....	27
2.2.6.3.14.1	Theory of operation.....	27
2.2.6.3.14.2	Service flows.....	27
2.2.6.3.14.3	Object models.....	27
2.2.6.3.14.4	Service classes.....	28
2.2.6.3.14.4.1	Global service classes.....	28
2.2.6.3.14.5	Authorization.....	28
2.2.6.3.14.6	Types of service flows.....	28
2.2.6.3.14.6.1	Provisioned service flows.....	28
2.2.6.3.14.6.2	Admitted service flows.....	28
2.2.6.3.14.6.3	Active service flows.....	28
2.2.6.3.14.7	Service flow creation.....	28
2.2.6.3.14.7.1	Dynamic service flow creation.....	28
2.2.6.3.14.7.1.1	Dynamic service flow creation – SS-initiated.....	28
2.2.6.3.14.7.1.2	Dynamic service flow creation – BS-initiated.....	28
2.2.6.3.14.8	Dynamic service flow modification and deletion.....	28
2.2.6.3.14.9	Service flow management.....	28

2.2.6.3.14.9.1	Overview	28
2.2.6.3.14.9.2	Dynamic service flow state transitions	28
2.2.6.3.14.9.3	Dynamic service addition (DSA).....	28
2.2.6.3.14.9.3.1	SS-initiated DSA	28
2.2.6.3.14.9.3.2	BS-initiated DSA.....	28
2.2.6.3.14.9.3.3	DSA state transition diagrams.....	28
2.2.6.3.14.9.4	Dynamic service change (DSC)	29
2.2.6.3.14.9.4.1	SS-initiated DSC.....	29
2.2.6.3.14.9.4.2	BS-initiated DSC.....	29
2.2.6.3.14.9.4.3	DSC state transition diagrams.....	29
2.2.6.3.14.9.5	Connection release.....	29
2.2.6.3.14.9.5.1	SS-initiated DSD	29
2.2.6.3.14.9.5.2	BS-initiated DSD.....	29
2.2.6.3.14.9.5.3	DSD state transition diagrams.....	29
2.2.6.3.15	Procedures for shared frequency band usage	29
2.2.6.3.16	MAC support for HARQ.....	29
2.2.6.3.16.1	Subpacket generation.....	29
2.2.6.3.16.2	DL/UL ACK/NAK signaling.....	29
2.2.6.3.16.3	HARQ parameter signaling.....	29
2.2.6.3.17	DL CINR report operation.....	29
2.2.6.3.17.1	DL CINR report with REP-RSP MAC message	29
2.2.6.3.17.2	Periodic CINR report with fast-feedback (CQICH) channel	29
2.2.6.3.17.2.1	Conditions of transition triggering.....	30
2.2.6.3.18	Optional band AMC operations using 6-bit CQICH encoding.....	30
2.2.6.3.19	Data delivery services for mobile network.....	30
2.2.6.3.19.1	Types of data delivery services.....	30
2.2.6.3.19.1.1	Unsolicited grant service (UGS)	30
2.2.6.3.19.1.2	Real-time variable-rate (RT-VR) service.....	30
2.2.6.3.19.1.3	Non-real time variable-rate (NRT-VR) service.....	30
2.2.6.3.19.1.4	Best effort (BE) service.....	30
2.2.6.3.19.1.5	Extended real-time variable-rate (ERT-VR) service.....	30
2.2.6.3.20	Sleep mode for mobility-supporting MS.....	30
2.2.6.3.21	MAC HO procedures.....	30
2.2.6.3.21.1	Network topology acquisition.....	30
2.2.6.3.21.1.1	Network topology advertisement.....	30
2.2.6.3.21.1.2	MS scanning of neighbor BSs.....	30
2.2.6.3.21.1.3	Association procedure.....	30
2.2.6.3.21.2	HO process	30
2.2.6.3.21.2.1	Cell reselection	31
2.2.6.3.21.2.2	HO decision and initiation.....	31
2.2.6.3.21.2.3	HO cancellation	31
2.2.6.3.21.2.4	Fast ranging.....	31
2.2.6.3.21.2.5	Termination with the serving BS.....	31
2.2.6.3.21.2.6	Drops during HO.....	31
2.2.6.3.21.2.7	Network entry/reentry.....	31
2.2.6.3.21.2.8	MS-assisted coordination of DL transmission at target BS for HO.....	31
2.2.6.3.21.2.8.1	Context management during optimized HO.....	31

2.2.6.3.21.2.8.1.1	BS PHY settings.....	31
2.2.6.3.21.2.8.1.2	BS Channel descriptor settings.....	31
2.2.6.3.21.2.8.1.3	Ranging settings.....	31
2.2.6.3.21.2.8.1.4	Basic capabilities settings.....	31
2.2.6.3.21.2.8.1.5	Registration settings.....	31
2.2.6.3.21.2.8.1.6	Service flows settings.....	31
2.2.6.3.21.2.8.1.7	Scanning-dynamic and static context.....	31
2.2.6.3.21.2.9	HO process.....	31
2.2.6.3.21.2.10	HO optimization rules and scenarios.....	32
2.2.6.3.21.2.11	Seamless HO.....	32
2.2.6.3.21.3	Macro diversity handover (MDHO) and fast BS switching.....	32
2.2.6.3.21.3.1	MDHO decision and initiation.....	32
2.2.6.3.21.3.2	FBSS decision and initiation.....	32
2.2.6.3.21.3.3	Diversity set update for MDHO/FBSS.....	32
2.2.6.3.21.3.4	Anchor BS update for MDHO/FBSS.....	32
2.2.6.3.21.3.5	MS-assisted coordination of DL transmission at new anchor BS.....	32
2.2.6.3.22	Multicast and broadcast service (MBS).....	32
2.2.6.3.22.1	Establishment and maintenance of MBSs.....	32
2.2.6.3.22.1.1	Inter-MBS Zone transition.....	32
2.2.6.3.22.2	Performance enhancement with macro diversity.....	32
2.2.6.3.22.3	Power saving operation.....	32
2.2.6.3.22.4	Multicast and broadcast zone (MBS_Zone).....	32
2.2.6.3.23	MS idle mode (optional).....	32
2.2.6.3.23.1	MS idle mode initiation.....	32
2.2.6.3.23.2	Cell selection.....	32
2.2.6.3.23.3	MS Broadcast paging message time synchronization.....	32
2.2.6.3.23.4	MS paging unavailable interval.....	33
2.2.6.3.23.5	MS paging listening interval.....	33
2.2.6.3.23.6	BS Broadcast paging message.....	33
2.2.6.3.23.7	Paging availability mode termination.....	33
2.2.6.3.23.7.1	MS side.....	33
2.2.6.3.23.7.2	BS side.....	33
2.2.6.3.23.8	Location update.....	33
2.2.6.3.23.8.1	Location update conditions.....	33
2.2.6.3.23.8.2	Location update process.....	33
2.2.6.3.23.9	Network reentry from idle mode.....	33
2.2.6.3.24	MIHF support.....	33
2.2.6.3.25	Location Based Services.....	33
2.2.6.3.25.1	Time Difference of Arrival (TDOA).....	33
2.2.6.3.26	Persistent Scheduling.....	33
2.2.6.3.26.1	Persistent Region ID.....	33
2.2.6.3.26.1.1	Downlink operation.....	33
2.2.6.3.26.1.2	Uplink operation.....	33
2.2.6.3.26.2	Resource shifting.....	33
2.2.6.3.26.3	HARQ retransmission.....	34
2.2.6.3.26.4	Error handling procedures.....	34
2.2.6.3.26.4.1	Maximum Number of Persistent Allocations.....	34

2.2.6.3.26.4.2	MAP ACK channel.....	34
2.2.6.3.26.4.3	MAP NACK channel.....	34
2.2.6.3.26.4.4	Error Correction Information.....	34
2.2.6.3.26.4.5	Change indicator.....	34
2.2.6.3.26.4.6	Retransmission flag.....	34
2.2.6.3.26.4.7	Error recovery.....	34
2.2.6.3.27	Emergency Service.....	34
2.2.7	Security sublayer.....	34
2.2.7.1	Architecture.....	34
2.2.7.1.1	Secure encapsulation of MAC PDUs.....	34
2.2.7.1.2	Key Management Protocol.....	34
2.2.7.1.3	Authentication Protocol.....	34
2.2.7.1.3.1	PKM RSA Authentication.....	34
2.2.7.1.3.2	PKM EAP Authentication.....	34
2.2.7.1.4	Mapping of connections to SAs.....	35
2.2.7.1.5	Cryptographic suite.....	35
2.2.7.2	PKM protocol.....	35
2.2.7.2.1	PKM Version 1.....	35
2.2.7.2.1.1	Security Associations.....	35
2.2.7.2.1.2	SS authorization and AK exchange overview.....	35
2.2.7.2.1.2.1	Authorization via RSA protocol.....	35
2.2.7.2.1.3	TEK exchange overview.....	35
2.2.7.2.1.3.1	TEK exchange overview for PMP topology.....	35
2.2.7.2.1.4	Security Capability Selection.....	35
2.2.7.2.1.5	Authorization State Machine.....	35
2.2.7.2.1.5.1	States.....	35
2.2.7.2.1.5.2	Messages.....	35
2.2.7.2.1.5.3	Events.....	36
2.2.7.2.1.5.4	Parameters.....	36
2.2.7.2.1.5.5	Action.....	36
2.2.7.2.1.6	TEK State Machine.....	36
2.2.7.2.1.6.1	States.....	36
2.2.7.2.1.6.2	Messages.....	36
2.2.7.2.1.6.3	Events.....	36
2.2.7.2.1.6.4	Parameters.....	36
2.2.7.2.1.6.5	Action.....	36
2.2.7.2.2	PKM Version 2.....	36
2.2.7.2.2.1	TEK exchange overview for PMP topology.....	36
2.2.7.2.2.2	Key Derivation.....	36
2.2.7.2.2.2.1	RSA Based Authorization.....	36
2.2.7.2.2.2.2	EAP Authentication.....	36
2.2.7.2.2.2.3	AK derivation.....	36
2.2.7.2.2.2.4	KEK derivation.....	36
2.2.7.2.2.2.5	Group Key Encryption Key (GKEK).....	36
2.2.7.2.2.2.6	Traffic Encryption Key (TEK).....	37
2.2.7.2.2.2.6.1	Counter-based TEK Generation for HO.....	37
2.2.7.2.2.2.7	Group Traffic Encryption Key (GTEK).....	37

2.2.7.2.2.2.8	MBS Traffic Encryption Key (MTK)	37
2.2.7.2.2.2.9	Message authentication keys (HMAC/CMAC) and KEK derivation	37
2.2.7.2.2.2.9.1	CMAC_KEY_COUNT management	37
2.2.7.2.2.2.9.1.1	Maintenance of CMAC_KEY_COUNTM by the MS	37
2.2.7.2.2.2.9.1.1.1	CMAC_KEY_LOCK state	37
2.2.7.2.2.2.9.1.2	Processing of CMAC_KEY_COUNTB by the BS	37
2.2.7.2.2.2.9.2	Derivation of message authentication codes	37
2.2.7.2.2.2.10	Key Hierarchy	37
2.2.7.2.2.2.11	Maintenance of PMK and AK	37
2.2.7.2.2.2.12	PKMv2 PMK and AK switching methods	38
2.2.7.2.2.3	Associations	38
2.2.7.2.2.3.1	Security associations (SAs)	38
2.2.7.2.2.3.2	Group security associations (GSAs)	38
2.2.7.2.2.3.3	Multicast and broadcast service group security associations (MBSGSAs)	38
2.2.7.2.2.4	Security context	38
2.2.7.2.2.4.1	AK context	38
2.2.7.2.2.4.2	GKEK context	38
2.2.7.2.2.4.3	PMK context	38
2.2.7.2.2.4.4	PAK context	38
2.2.7.2.2.5	Authentication state machine	38
2.2.7.2.2.5.1	States	38
2.2.7.2.2.5.2	Messages	38
2.2.7.2.2.5.3	Events	38
2.2.7.2.2.5.4	Parameters	38
2.2.7.2.2.5.5	Actions	38
2.2.7.2.2.6	TEK state machine	38
2.2.7.2.2.6.1	States	39
2.2.7.2.2.6.2	Messages	39
2.2.7.2.2.6.3	Events	39
2.2.7.2.2.6.4	Parameters	39
2.2.7.2.2.6.5	Actions	39
2.2.7.3	Dynamic SA creation and mapping	39
2.2.7.3.1	Dynamic SA creation	39
2.2.7.3.2	Dynamic SA mapping	39
2.2.7.4	Key usage	39
2.2.7.4.1	BS key usage	39
2.2.7.4.1.1	AK key lifetime	39
2.2.7.4.1.2	AK transition period on BS side	39
2.2.7.4.1.3	BS usage of AK	39
2.2.7.4.1.4	TEK lifetime	39
2.2.7.4.1.5	BS usage of TEK	39
2.2.7.4.2	SS key usage	40
2.2.7.4.2.1	SS reauthorization	40
2.2.7.4.2.2	SS usage of AK	40
2.2.7.4.2.3	SS usage of TEK	40
2.2.7.5	Cryptographic methods	40
2.2.7.5.1	Data Encryption methods	40

2.2.7.5.1.1	Data encryption with DES in CBC mode	40
2.2.7.5.1.2	Data encryption with AES in CCM mode	40
2.2.7.5.1.2.1	PDU payload format	40
2.2.7.5.1.2.2	Packet number (PN)	40
2.2.7.5.1.2.3	CCM algorithm	40
2.2.7.5.1.2.4	Receive processing rules	40
2.2.7.5.1.2.5	AES-CCM mode example encrypted MAC PDUs	40
2.2.7.5.1.3	Data encryption with AES in CTR mode	40
2.2.7.5.1.3.1	Encrypted MBS PDU payload format	40
2.2.7.5.1.4	Data encryption with AES in CBC mode	41
2.2.7.5.1.4.1	CBC IV generation	41
2.2.7.5.2	Encryption of TEK	41
2.2.7.5.2.1	Encryption of TEK with 3-DES	41
2.2.7.5.2.2	Encryption of TEK with RSA	41
2.2.7.5.2.3	Encryption of TEK-128 with AES	41
2.2.7.5.2.4	Encryption of TEK-128 with AES key wrap	41
2.2.7.5.3	Calculation of HMAC-Digests	41
2.2.7.5.4	Derivation of TEKs, KEKs, and message authentication keys	41
2.2.7.5.4.1	DES keys	41
2.2.7.5.4.2	Key encryption keys (KEKs)	41
2.2.7.5.4.3	HMAC authentication keys	41
2.2.7.5.4.4	Cipher-based message authentication code (CMAC)	41
2.2.7.5.4.4.1	Calculation of CMAC value	41
2.2.7.5.4.5	Derivation of TEKs, KEKs, message authentication keys and GKEKs in PKMv2	41
2.2.7.5.4.5.1	AES KEKs in PKMv2	41
2.2.7.5.4.5.2	Encryption of GKEK in PKMv2	42
2.2.7.5.4.5.2.1	Encryption of GKEK with 3-DES in PKMv2	42
2.2.7.5.4.5.2.2	Encryption of GKEK with RSA in PKMv2	42
2.2.7.5.4.5.2.3	Encryption of GKEK with ECB mode AES in PKMv2	42
2.2.7.5.4.5.2.4	Encryption of GKEK with AES key wrap in PKMv2	42
2.2.7.5.4.6	Key derivation functions for PKMv2	42
2.2.7.5.4.6.1	Dot16KDF for PKMv2	42
2.2.7.5.5	Public-key encryption of of AK	42
2.2.7.5.6	Digital signatures	42
2.2.7.6	Certificate profile	42
2.2.7.6.1	Certificate format	42
2.2.7.6.1.1	tbsCertificate.validity.notBefore and tbsCertificate.validity.notAfter	42
2.2.7.6.1.2	tbsCertificate.SerialNumber	42
2.2.7.6.1.3	tbsCertificate.signature and signature Algorithm	42
2.2.7.6.1.4	tbsCertificate.Issuer and tbsCertificate.subject	42
2.2.7.6.1.4.1	Manufacturer Certificate	42
2.2.7.6.1.4.2	SS certificate	42
2.2.7.6.1.4.3	BS Certificate	42
2.2.7.6.1.5	tbsCertificate.subjectPublicKeyInfo	42
2.2.7.6.1.6	tbsCertificate.issuerUniqueID and tbsCertificate.subjectUniqueID	43
2.2.7.6.1.7	tbsCertificate.extensions	43
2.2.7.6.1.7.1	SS certificate	43

2.2.7.6.1.7.2	Manufacturer certificate	43
2.2.7.6.1.8	Signature Value	43
2.2.7.6.2	Certificate storage and management in the SS	43
2.2.7.6.3	Certificate processing and management in the BS	43
2.2.7.7	Preauthentication	43
2.2.7.8	PKMv2	43
2.2.7.8.1	PKMv2 SA-TEK 3-way handshake	43
2.2.7.8.2	BS and SS RSA mutual authentication and AK exchange overview	43
2.2.7.8.3	Multicast and broadcast service (MBS) support	43
2.2.7.8.3.1	MBS security associations	43
2.2.7.8.3.2	MBS key management	43
2.2.7.8.3.2.1	MAK establishment	43
2.2.7.8.3.2.2	MGTEK establishment	43
2.2.7.8.3.2.3	MTK establishment	43
2.2.7.9	Multicast and broadcast rekeying algorithm (MBRA)	44
2.2.7.9.1	MBRA flow	44
2.2.7.9.1.1	BS usage of GTEK	44
2.2.7.9.1.2	SS usage of GTEK	44
2.2.7.9.2	Messages	44
2.2.7.9.3	Encryption of GKEK	44
2.2.7.9.4	Message authentication keys for the Key Update Command message	44
2.2.8	Physical layer	44
2.2.8.1	Wireless MAN-SC PHY specification	44
2.2.8.2	Reserved	44
2.2.8.3	WirelessMAN-OFDM PHY	44
2.2.8.4	WirelessMAN-OFDMA PHY	44
2.2.8.4.1	Introduction	44
2.2.8.4.2	OFDMA symbol description, symbol parameters and transmitted signal	44
2.2.8.4.2.1	Time domain description	44
2.2.8.4.2.2	Frequency domain description	44
2.2.8.4.2.3	Primitive parameters	44
2.2.8.4.2.4	Derived parameters	44
2.2.8.4.2.5	Transmitted signal	45
2.2.8.4.3	OFDMA basic terms definition	45
2.2.8.4.3.1	Slot and data region	45
2.2.8.4.3.2	Segment	45
2.2.8.4.3.3	Permutation zone	45
2.2.8.4.3.4	OFDMA data mapping	45
2.2.8.4.4	Frame structure	45
2.2.8.4.4.1	TDD frame structure	45
2.2.8.4.4.2	FDD Frame Structure	45
2.2.8.4.4.3	OFDMA Frame Parameters and Operations	45
2.2.8.4.4.4	DL frame prefix	45
2.2.8.4.4.5	Allocation of subchannels for FCH and DL-MAP and logical subchannel numbering	45
2.2.8.4.4.6	UL transmission allocations	45
2.2.8.4.4.7	Optional AAS Support	45
2.2.8.4.5	Map message fields and IEs	45

2.2.8.4.5.1	DL-MAP PHY Synchronization field.....	45
2.2.8.4.5.2	Frame duration codes.....	45
2.2.8.4.5.3	DL-MAP IE format.....	46
2.2.8.4.5.3.1	DIUC allocation.....	46
2.2.8.4.5.3.2	DL-MAP Extended IE format.....	46
2.2.8.4.5.3.2.1	DL-MAP Extended IE encoding format.....	46
2.2.8.4.5.3.2.2	DL-MAP Extended-2 IE encoding format.....	46
2.2.8.4.5.3.2.3	DL-MAP Extended-3 IE encoding format.....	46
2.2.8.4.5.3.3	AAS DL IE format.....	46
2.2.8.4.5.3.4	STC DL Zone IE format.....	46
2.2.8.4.5.3.5	Channel Measurement IE.....	46
2.2.8.4.5.3.6	Data Location In Another BS IE.....	46
2.2.8.4.5.3.7	CID Switch IE.....	46
2.2.8.4.5.3.8	MIMO DL Basic IE format.....	46
2.2.8.4.5.3.9	MIMO DL Enhanced IE.....	46
2.2.8.4.5.3.10	HARQ and Sub-MAP Pointer IE.....	46
2.2.8.4.5.3.11	DL-MAP Physical Modifier IE.....	46
2.2.8.4.5.3.12	MBS MAP IE.....	47
2.2.8.4.5.3.13	DL PUSC Burst Allocation in Other Segment IE.....	47
2.2.8.4.5.3.14	HO Anchor Active DL MAP.....	47
2.2.8.4.5.3.15	HO Active Anchor DL MAP.....	47
2.2.8.4.5.3.16	HO CID Translation MAP IE.....	47
2.2.8.4.5.3.17	MIMO in Another BS IE.....	47
2.2.8.4.5.3.18	Macro-MIMO DL Basic IE.....	47
2.2.8.4.5.3.19	UL Noise and Interference Level IE format.....	47
2.2.8.4.5.3.20	Dedicated DL Control IE.....	47
2.2.8.4.5.3.21	HARQ DL MAP IE.....	47
2.2.8.4.5.3.21.1	Dedicated MIMO DL Control IE format.....	47
2.2.8.4.5.3.22	DL HARQ ACK IE.....	47
2.2.8.4.5.3.23	Enhanced DL MAP IE.....	47
2.2.8.4.5.3.24	Closed-loop MIMO DL enhanced IE.....	47
2.2.8.4.5.3.25	Broadcast Control Pointer IE.....	47
2.2.8.4.5.3.26	AAS SDMA DL IE format.....	47
2.2.8.4.5.3.27	PUSC ASCA Allocation IE.....	47
2.2.8.4.5.3.28	H-FDD Group Switch IE.....	47
2.2.8.4.5.3.29	Persistent HARQ DL MAP Allocation IE.....	48
2.2.8.4.5.3.30	Power Boosting IE.....	48
2.2.8.4.5.3.31	Extended Broadcast Control Pointer IE.....	48
2.2.8.4.5.4	UL-MAP IE format.....	48
2.2.8.4.5.4.1	UIUC allocation.....	48
2.2.8.4.5.4.2	PAPR Reduction/Safety Zone/Sounding Zone Allocation IE.....	48
2.2.8.4.5.4.3	CDMA Allocation UL-MAP IE format.....	48
2.2.8.4.5.4.4	UL-MAP Extended IE.....	48
2.2.8.4.5.4.4.1	UL-MAP Extended IE.....	48
2.2.8.4.5.4.4.2	UL-MAP Extended-2 IE.....	48
2.2.8.4.5.4.4.3	UL-MAP Extended-3 IE.....	48
2.2.8.4.5.4.5	Power Control IE format.....	48

2.2.8.4.5.4.6	AAS UL IE format.....	48
2.2.8.4.5.4.7	UL Zone Switch IE.....	48
2.2.8.4.5.4.8	Mini-Subchannel Allocation IE	48
2.2.8.4.5.4.9	Fast-Feedback Allocation IE.....	48
2.2.8.4.5.4.10	MIMO UL Basic IE format.....	48
2.2.8.4.5.4.11	CQICH Allocation IE Format.....	48
2.2.8.4.5.4.12	UL-MAP Physical Modifier IE.....	49
2.2.8.4.5.4.13	UL Allocation Start IE	49
2.2.8.4.5.4.14	CQICH Enhanced Allocation IE.....	49
2.2.8.4.5.4.15	UL PUSC Burst Allocation in Other Segment IE.....	49
2.2.8.4.5.4.16	HO Anchor Active UL-MAP IE.....	49
2.2.8.4.5.4.17	HO Active Anchor UL MAP IE.....	49
2.2.8.4.5.4.18	MIMO UL Enhanced IE format.....	49
2.2.8.4.5.4.19	OFDMA Fast Ranging IE	49
2.2.8.4.5.4.20	UL-MAP Fast Tracking IE.....	49
2.2.8.4.5.4.21	Anchor BS Switch IE.....	49
2.2.8.4.5.4.22	HARQ UL-MAP IE.....	49
2.2.8.4.5.4.22.1	Dedicated UL Control IE.....	49
2.2.8.4.5.4.22.2	Dedicated MIMO UL Control IE format.....	49
2.2.8.4.5.4.23	HARQ ACK Region Allocation IE.....	49
2.2.8.4.5.4.24	UL Sounding Command IE.....	49
2.2.8.4.5.4.25	AAS SDMA UL IE format.....	49
2.2.8.4.5.4.26	Feedback Polling IE feedback header not supported.....	49
2.2.8.4.5.4.27	Uplink Power Control Bitmap IE.....	49
2.2.8.4.5.4.28	Persistent HARQ UL MAP Allocation IE.....	50
2.2.8.4.5.4.29	FDD Paired Allocation IE.....	50
2.2.8.4.5.5	Burst profile format.....	50
2.2.8.4.5.6	Compressed maps.....	50
2.2.8.4.5.6.1	Compressed DL-MAP.....	50
2.2.8.4.5.6.2	Compressed UL-MAP.....	50
2.2.8.4.5.7	AAS-FBCK-REQ/RSP message bodies.....	50
2.2.8.4.5.8	Optional reduced AAS private maps.....	50
2.2.8.4.5.9	Reduced AAS private maps.....	50
2.2.8.4.5.9.1	Reduced AAS private DL-MAP	50
2.2.8.4.5.9.2	Reduced AAS private UL-MAP	50
2.2.8.4.6	OFDMA subcarrier allocations.....	50
2.2.8.4.6.1	Downlink (DL).....	50
2.2.8.4.6.1.1	Preamble.....	51
2.2.8.4.6.1.1.1	Common SYNC symbol (optional).....	51
2.2.8.4.6.1.1.2	Common SYNC symbol sequence.....	51
2.2.8.4.6.1.2	Symbol structure.....	51
2.2.8.4.6.1.2.1	Symbol Structure for PUSC.....	51
2.2.8.4.6.1.2.1.1	DL subchannels subcarrier allocation in PUSC.....	51
2.2.8.4.6.1.2.2	Symbol Structure for FUSC.....	51
2.2.8.4.6.1.2.3	Additional optional symbol structure for FUSC.....	51
2.2.8.4.6.1.2.4	Optional DL tile usage of subchannels – TUSC1	51
2.2.8.4.6.1.2.5	Optional DL tile usage of subchannels – TUSC2	51

2.2.8.4.6.1.2.6	TUSC1/TUSC2 Support for SDMA.....	51
2.2.8.4.6.2	Uplink (UL).....	51
2.2.8.4.6.2.1	Symbol structure for subchannel (PUSC).....	51
2.2.8.4.6.2.2	Partitioning of subcarriers into subchannels in the UL.....	51
2.2.8.4.6.2.3	UL permutation example.....	51
2.2.8.4.6.2.4	Partition a slot to mini-subchannels.....	51
2.2.8.4.6.2.5	Additional optional symbol structure for PUSC.....	52
2.2.8.4.6.2.6	Data subchannel rotation scheme.....	52
2.2.8.4.6.2.7	Optional UL channel sounding in TDD systems.....	52
2.2.8.4.6.3	Optional adjacent subcarrier permutations for AMC.....	52
2.2.8.4.6.4	Optional permutations for PUSC.....	52
2.2.8.4.7	OFDMA ranging.....	52
2.2.8.4.7.1	Initial ranging and HO ranging transmissions.....	52
2.2.8.4.7.2	Periodic ranging and BR transmissions.....	52
2.2.8.4.7.3	Ranging codes.....	52
2.2.8.4.7.4	Ranging and BR opportunity size.....	52
2.2.8.4.8	Space-time coding (STC).....	52
2.2.8.4.8.1	STC using two antennas.....	52
2.2.8.4.8.1.1	Multiple-input, single-output channel estimation and synchronization.....	52
2.2.8.4.8.1.2	STC using two antennas.....	53
2.2.8.4.8.1.2.1	STC encoding.....	53
2.2.8.4.8.1.2.1.1	STC using 2 antennas in PUSC.....	53
2.2.8.4.8.1.2.1.2	STC using 2 antennas in FUSC.....	53
2.2.8.4.8.1.2.1.3	Data mapping.....	53
2.2.8.4.8.1.2.2	STC decoding.....	53
2.2.8.4.8.1.3	Frequency hopping diversity coding (FHDC).....	53
2.2.8.4.8.1.4	STC/FHDC configurations.....	53
2.2.8.4.8.1.5	UL using STC.....	53
2.2.8.4.8.1.6	STC of two antennas using directivity through four antennas.....	53
2.2.8.4.8.2	STC for four antennas.....	53
2.2.8.4.8.2.1	STC for four antennas using PUSC.....	53
2.2.8.4.8.2.2	STC for four antennas using FUSC.....	53
2.2.8.4.8.2.3	STC configurations.....	53
2.2.8.4.8.2.4	MIMO MDHO-based macro-diversity transmission.....	53
2.2.8.4.8.3	STC for the optional zones in the DL.....	53
2.2.8.4.8.3.1	Symbol structure for optional AMC and optional FUSC.....	54
2.2.8.4.8.3.2	Symbol structure for the optional PUSC-ASCA.....	54
2.2.8.4.8.3.3	Transmission schemes for 2-antenna BS in DL.....	54
2.2.8.4.8.3.4	Transmission schemes for 3-antenna BS in DL.....	54
2.2.8.4.8.3.5	Transmission schemes for 4-antenna BS.....	54
2.2.8.4.8.3.6	MIMO precoding.....	54
2.2.8.4.8.4	STC for the optional zones in the UL.....	54
2.2.8.4.8.4.1	Allocation of pilot subcarriers.....	54
2.2.8.4.8.4.2	Allocation of data subchannels.....	54
2.2.8.4.8.4.3	Transmission schemes for 2-antenna MS in UL.....	54
2.2.8.4.8.5	MIMO Midamble.....	54
2.2.8.4.8.5.1	Midamble sequence.....	54

2.2.8.4.8.5.1.1	PAPR reduction sequence for BS with two antennas	54
2.2.8.4.8.5.1.2	PAPR reduction sequence for BS with three or four antennas	54
2.2.8.4.8.6	STC subpacket combining.....	54
2.2.8.4.8.7	Cyclic delay diversity (CDD).....	54
2.2.8.4.9	Channel coding.....	54
2.2.8.4.9.1	Randomization.....	54
2.2.8.4.9.2	Encoding.....	55
2.2.8.4.9.2.1	Convolutional coding (CC).....	55
2.2.8.4.9.2.1.1	Incremental redundancy HARQ support (optional).....	55
2.2.8.4.9.2.2	Block turbo coding (BTC) (optional).....	55
2.2.8.4.9.2.3	Convolutional turbo codes (CTCs) (optional).....	55
2.2.8.4.9.2.3.1	CTC encoder (Basic functionality).....	55
2.2.8.4.9.2.3.2	CTC interleaver.....	55
2.2.8.4.9.2.3.3	Determination of CTC circulation states.....	55
2.2.8.4.9.2.3.4	Subpacket generation.....	55
2.2.8.4.9.2.3.4.1	Bit separation.....	55
2.2.8.4.9.2.3.4.2	Subblock interleaving.....	55
2.2.8.4.9.2.3.4.3	Bit grouping.....	55
2.2.8.4.9.2.3.4.4	Bit selection.....	55
2.2.8.4.9.2.3.5	Optional IR HARQ support.....	56
2.2.8.4.9.2.4	Zero tailed convolutional coding (optional).....	56
2.2.8.4.9.2.5	Low density parity check (LDPC) code (optional).....	56
2.2.8.4.9.3	Interleaving.....	56
2.2.8.4.9.3.1	Optional interleaver for convolutional coding.....	56
2.2.8.4.9.4	Modulation.....	56
2.2.8.4.9.4.1	Subcarrier randomization.....	56
2.2.8.4.9.4.2	Data modulation.....	56
2.2.8.4.9.4.3	Pilot modulation.....	56
2.2.8.4.9.4.4	Example of OFDMA UL CC encoding is just an example	56
2.2.8.4.9.5	Repetition.....	56
2.2.8.4.9.6	Zone boosting.....	56
2.2.8.4.9.7	Multiple HARQ (optional).....	56
2.2.8.4.9.7.1	Generic chase HARQ.....	56
2.2.8.4.9.7.2	CC-IR HARQ.....	56
2.2.8.4.10	Control mechanisms.....	57
2.2.8.4.10.1	Synchronization.....	57
2.2.8.4.10.1.1	Network synchronization.....	57
2.2.8.4.10.1.2	SS synchronization.....	57
2.2.8.4.10.2	Ranging.....	57
2.2.8.4.10.3	Power control.....	57
2.2.8.4.10.3.1	Closed-loop power control.....	57
2.2.8.4.10.3.2	Optional open-loop power control.....	57
2.2.8.4.11	Fast-feedback channels.....	57
2.2.8.4.11.1	Fast DL measurement feedback.....	57
2.2.8.4.11.2	Fast MIMO feedback.....	57
2.2.8.4.11.3	Mode selection feedback.....	57
2.2.8.4.11.4	Effective CINR feedback for fast-feedback channel.....	57

2.2.8.4.11.5	Enhanced fast-feedback channels.....	57
2.2.8.4.11.6	Fast DL measurement feedback for enhanced fast-feedback channel.....	57
2.2.8.4.11.7	Fast MIMO feedback of quantized precoding weight for enhanced fast-feedback channel	57
2.2.8.4.11.8	MIMO mode feedback for enhanced fast-feedback channel.....	58
2.2.8.4.11.9	Anchor BS report.....	58
2.2.8.4.11.10	UEP fast-feedback.....	58
2.2.8.4.11.11	Band AMC differential CINR feedback for enhanced fast-feedback channel.....	58
2.2.8.4.11.12	Indication flag feedback.....	58
2.2.8.4.11.13	Primary and secondary fast-feedback channels.....	58
2.2.8.4.11.14	Extended rTPS BR.....	58
2.2.8.4.11.15	MIMO feedback for Tx beamforming.....	58
2.2.8.4.11.16	MAP ACK Channel.....	58
2.2.8.4.11.17	MAP NACK Channel.....	58
2.2.8.4.12	Channel quality measurements.....	58
2.2.8.4.12.1	Introduction.....	58
2.2.8.4.12.2	RSSI mean and standard deviation.....	58
2.2.8.4.12.3	CINR mean and standard deviation.....	58
2.2.8.4.12.4	Optional frequency selectivity characterization.....	58
2.2.8.4.13	Transmitter requirements.....	58
2.2.8.4.13.1	Tx power level control.....	58
2.2.8.4.13.2	Transmitter spectral flatness.....	59
2.2.8.4.13.3	Transmitter constellation error and test method.....	59
2.2.8.4.13.3.1	RMS constellation error measurement for BS (DL).....	59
2.2.8.4.13.3.2	RMS constellation error measurement for SS.....	59
2.2.8.4.13.3.3	Calculation of RMS constellation error.....	59
2.2.8.4.13.3.4	Unmodulated subcarrier errors for SS.....	59
2.2.8.4.13.4	Transmitter reference timing accuracy.....	59
2.2.8.4.14	Receiver requirements.....	59
2.2.8.4.14.1	OFDMA PHY requirements for enhanced HO performance.....	59
2.2.8.4.14.1.1	Receiver sensitivity.....	59
2.2.8.4.14.1.2	MS UL Tx time tracking accuracy.....	59
2.2.8.4.14.1.3	MS autonomous neighbor cell scanning.....	59
2.2.8.4.14.2	Receiver adjacent and nonadjacent channel rejection.....	59
2.2.8.4.14.3	Receiver maximum input signal.....	60
2.2.8.4.14.3.1	SS receiver maximum input signal.....	60
2.2.8.4.14.3.2	BS receiver maximum input signal.....	60
2.2.8.4.14.4	Receiver maximum tolerable signal.....	60
2.2.8.4.14.4.1	SS receiver maximum tolerable signal.....	60
2.2.8.4.14.4.2	BS receiver maximum tolerable signal.....	60
2.2.8.4.15	Frequency control requirements.....	60
2.2.8.4.15.1	Center frequency and symbol clock frequency tolerance.....	60
2.2.8.4.16	Optional HARQ support.....	60
2.2.8.4.16.1	Optional Chase HARQ support.....	60
2.2.8.4.16.1.1	HARQ retransmission process.....	60
2.2.8.4.16.1.2	CRC.....	60
2.2.8.4.16.1.3	Concurrent transmission of UL HARQ bursts.....	60

2.2.8.4.16.1.4	Encoding.....	61
2.2.8.4.16.2	Optional IR HARQ for convolutional code.....	61
2.2.8.4.16.3	UL ACK channel.....	61
2.2.9	AeroMACS Transmitter Output power.....	61
2.2.9.1	Downlink Output Power.....	61
2.2.9.2	Uplink Output Power.....	61
2.2.10	AeroMACS Transmitter characteristics.....	62
2.2.10.1	Transmitter Spurious Emissions.....	62
2.2.10.2	AeroMACS Transmitted Spectral Mask.....	62
2.2.11	Receiver Spurious Emissions.....	63
2.2.12	Transceiver Requirements.....	63
2.2.12.1	Doppler Velocity.....	63
2.2.12.2	Time Standard.....	63
2.3	Equipment Performance – Environmental Conditions.....	63
2.3.1	Airborne (MS) Environmental Conditions.....	63
2.3.2	Ground Base Station Environmental Conditions.....	66
2.3.2.1	Test conditions, power sources and ambient temperatures.....	66
2.3.2.1.1	Test power source.....	66
2.3.2.1.2	Test channels.....	67
2.3.2.1.3	General conditions of measurement.....	67
2.3.2.1.3.1	Receiver test signal arrangement.....	67
2.3.2.1.3.2	Performance check.....	67
2.3.2.1.4	Normal and extreme test conditions.....	67
2.3.2.1.4.1	Normal test conditions.....	67
2.3.2.1.4.1.1	Normal temperature and humidity.....	67
2.3.2.1.4.1.2	Normal power sources.....	67
2.3.2.1.4.1.2.1	Mains voltage and frequency.....	67
2.3.2.1.4.1.2.2	Other power sources.....	67
2.3.2.1.4.2	Extreme test conditions.....	68
2.3.2.1.4.2.1	Extreme temperatures.....	68
2.3.2.1.4.2.2	Procedure for tests at extreme temperatures.....	68
2.3.2.1.4.2.2.1	General.....	68
2.3.2.1.4.2.2.2	High temperature.....	68
2.3.2.1.4.2.2.3	Low temperature.....	68
2.3.2.1.4.2.3	Extreme values of test power sources.....	68
2.3.2.1.4.2.4	Other power sources.....	69
2.3.2.1.4.2.5	Performance check.....	69
2.4	Equipment Test Procedures.....	69
2.4.1	Definition of Terms and Conditions of Test.....	69
2.4.2	Test Procedures.....	70
3	Installed Equipment Performance.....	71
3.1	Equipment Installation.....	71
3.1.1	Dynamic Range.....	71
3.1.2	Interference Effects.....	71
3.1.3	Aircraft Power Source.....	71
3.1.4	Frame Duration and Uplink/Downlink Ratio Configuration.....	71

3.2	Installed Equipment Performance Requirements (MS).....	71
3.2.1	Antenna Cables (MS).....	71
3.2.1.1	Antenna Cable VSWR (MS).....	71
3.2.2	Antenna Characteristics (MS).....	72
3.2.3	Mobile Station Equivalent Isotropic Radiated Power (EIRP).....	72
3.3	Conditions of Test.....	73
3.3.1	Ground Test Procedures.....	73
3.3.2	Verification of Dynamic Range.....	73
3.3.3	Interference Effects.....	73
3.3.4	Verification of Power Fluctuation.....	73
3.3.5	Antenna Cables.....	73
3.3.5.1	Verification of Antenna Cable VSWR.....	73
3.3.6	Antenna Characteristics.....	73
4	Equipment Operational Performance Characteristics.....	75
4.1	Required Operational Performance Requirements.....	75
4.1.1	Power Inputs.....	75
4.1.2	Displays.....	75
4.1.3	Communication Controls.....	75
4.1.4	Equipment Operating Functions.....	75
4.1.5	System Operational Indication.....	75
4.1.6	Equipment Operating Limitations.....	75
4.2	Test Procedures for Operational Performance Requirements.....	75
4.2.1	Power Input.....	75
4.2.2	Communication Displays.....	75
4.2.3	Communication Controls.....	76
4.2.4	Functional Operating Tests.....	76
4.2.5	System Operational Indication.....	76
4.2.6	Equipment Operating Limitations.....	76
5	Membership.....	77
Appendix A List of Abbreviations and Acronyms.....		1
Appendix B Requirement Applicability.....		1
Appendix C Example Receiver Sensitivity Calculation.....		1

TABLE OF TABLES

Table 1-1: Features of IEEE 802.16 Desirable for Implementation of AeroMACS Networks.....	2
Table 2-1: ARQ Ack Definitions.....	21
Table 2-2: Transmitter Spurious Emissions.....	62
Table 2-3: General Receiver Spurious Emission Requirements.....	63
Table 2-4: Airborne MS Environmental Conditions.....	64

Table 3-1: Transmitter Spurious EIRP Emissions.....	72
Table B-1: Requirements Applicability.....	B-1
Table C-1: Receiver Sensitivity.....	C-1
Table C-2: Receiver SNR Assumptions.....	C-2

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1 PURPOSE AND SCOPE

1.1 Introduction

This document contains Minimum Operational Performance Standards for both the Airborne Component and Ground Based base station of the Aeronautical Mobile Airport Communication System (AeroMACS).

Compliance with these standards is recommended as one means of assuring that the equipment will perform its intended function(s) satisfactorily under all conditions normally encountered in routine aeronautical operation. Any regulatory application of this document is the sole responsibility of appropriate governmental agencies. These standards specify system characteristics that should be useful to designers, manufacturers, installers and users of the equipment.

Section 1 of this document provides information needed to understand the rationale for equipment characteristics and requirements stated in the remaining sections. It describes typical equipment operations and operational goals, as envisioned by the members of Special Committee 223 and Working Group 82, and establishes the basis for the standards stated in Sections 2 through 3. Definitions and assumptions essential to proper understanding of this document are also provided in this section.

Section 2 contains the Minimum Performance Standards for the equipment. These standards specify the required performance under standard environmental conditions. Also included are recommended bench test procedures necessary to demonstrate equipment compliance with the stated minimum requirements.

Section 3 describes the performance required for installed equipment. Tests for the installed equipment are included when performance cannot be adequately determined through bench testing.

Section 4 describes the operational performance characteristics for equipment installations and defines conditions that will assure the equipment user that operations can be conducted safely and reliably in the expected operational environment.

Appendix A - List of abbreviations and acronyms

Appendix B – Requirement Applicability

Appendix C – Example receiver sensitivity calculation

This document considers an equipment configuration consisting of AeroMACS radio and modem from antenna interface to the network interface. This MOPS addresses both Airborne Mobile Station and Ground Base Station components of the AeroMACS system.

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