

ISO/IEC/IEEE 8802-1AC:2018-04 (E)

Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Part 1AC: Media access control (MAC) service definition

Contents

1.SCOPE.....	13
2.Normative references	14
3.Definitions	15
3.1 Basic reference model definitions.....	15
3.2 Service conventions definitions	15
4.Acronyms and abbreviations	16
5.Conformance.....	17
5.1 Translation between media using different protocol discrimination methods	17
5.2 Support of the ISS by different MAC procedures	17
6.Conventions	18
6.1 General considerations.....	18
6.2 Parameters.....	18
7.Basic architectural concepts and terms.....	19
7.1 Protocol entities, peers, layers, services, and clients	19
7.2 Service interface primitives, parameters, and frames	19
7.3 Layer management interfaces	20
7.4 Service access points, interface stacks, and ports	20
7.5 MAC method independent protocols and shims.....	21
7.6 MAC Service clients	21
7.7 Stations and systems	21
7.8 Connectionless connectivity	22
8.Overview of the MAC Service	23
9.Model of the MAC Service.....	24
9.1 Model of a MAC connectionless-mode transmission.....	24
9.2 Service provided by the connectionless-mode MAC Service	24
10.Quality of connectionless-mode service	25
10.1 Determination of QoS for connectionless-mode service	25
10.2 Definition of connectionless-mode QoS parameters	25
11.Internal Sublayer Service.....	26
11.1 Service primitives and parameters.....	26
11.2 Status parameters	28
11.3 Point-to-point parameters	28
11.4 Control primitives and parameters.....	29
12.Protocol discrimination and media	30
12.1 M_UNITDATA.request data transformation for LPD media	30
12.2 M_UNITDATA.indication data transformation for LPD media	30

12.3 Tags in end stations.....	31
13. Support of the Internal Sublayer Service by specific MAC procedures.....	32
13.1 Ethernet convergence function	32
13.2 Wireless LAN convergence function.....	33
13.3 WirelessMAN convergence function.....	36
13.4 Resilient Packet Ring convergence function	37
13.5 Mobile Broadband Wireless Access Method convergence function	39
13.6 Point-to-Multipoint Network convergence function.....	40
14. MAC Service	42
14.1 Function	42
14.2 Service primitives and parameters.....	42
14.3 Status parameters	43
14.4 Sequence of primitives.....	43
Annex A (informative) Bibliography	44
Annex B (informative) Support of the Internal Sublayer Service by specific MAC procedure.....	45

Figures

Figure 7-1—MAC entities, the MAC Service, and MAC Service users (clients).....	20
Figure 7-2—An interface stack.....	21
Figure 9-1—Model for a MAC Service connectionless-mode transmission.....	24
Figure 13-1—IEEE 802.11 portal convergence function method	34
Figure 13-2—Simplified IEEE 802.1AE SecY	35
Figure 13-3—IEEE 802.11 Security architecture.....	35
Figure 14-1—Sequence of primitives.....	43
Figure B.1—IEEE 802.11 portal convergence function method	46
Figure B.2—Simplified IEEE 802.1AE SecY	47
Figure B.3—IEEE 802.11 Security architecture	47
Figure B.4—MAC security and IEEE 802.11 media	48

Tables

Table 5-1—MAC procedure and convergence conformance	17
Table 12-2—LLC encapsulation EtherType.....	31
Table 13-1—Priority to MAC Service class mapping.....	38
Table 13-2—MAC Service class to priority mapping	38