

ISO/IEC 14476-2:2003-12 (E)

Information technology - Enhanced communications transport protocol: Specification of QoS management for simplex multicast transport

CONTENTS		<i>Page</i>
1	Scope	1
2	Normative references	1
3	Definitions	2
3.1	Terms defined in ITU-T Rec. X.605 ISO/IEC 13252	2
3.2	Terms defined in ITU-T Rec. X.606 ISO/IEC 14476-1	2
3.3	Terms defined in this Recommendation International Standard	2
4	Abbreviations	2
4.1	Packet types	2
4.2	Miscellaneous	3
5	Conventions	3
6	Overview	3
7	Components for QoS management	6
7.1	Connection information element	6
7.2	QoS parameters	7
7.3	QoS extension element	7
7.4	Acknowledgement element	9
7.5	Packets used for QoS management	10
8	Procedures for QoS management	10
8.1	QoS negotiation	10
8.1.1	Negotiation procedures	11
8.1.2	QoS negotiation in the tree hierarchy	12
8.1.3	MSS negotiation	12
8.1.4	Resource reservation	12
8.2	QoS monitoring	13
8.2.1	Generation of ACK	13
8.2.2	Measurement of QoS parameter values	13
8.2.3	Mapping to a parameter status value	14
8.2.4	Reporting toward the sender	14
8.3	QoS maintenance	15
8.3.1	Adjustment of data transmission rate	16
8.3.2	Connection pause and resume	16
8.3.3	Troublemaker ejection	17
8.3.4	Connection termination	17
9	Timers and variables	17
9.1	Timers	17
9.2	Operation variables	17
Annex A	– Interworking between ECTP and RSVP for resource reservation	19
A.1	ECTP QoS parameters	19
A.2	Overview of RSVP	19
A.2.1	RSVP SENDER_TSPEC	19
A.2.2	RSVP ADSPEC	20
A.2.3	RSVP FLOWSPEC	20
A.2.4	RSVP API	20
A.3	An example of the parameter mapping between RSVP and ECTP	21
A.4	A scenario of interworking between ECTP and RSVP	21
Annex B	– Application Programming Interfaces	24
B.1	Overview	24
B.1.1	API functions	24
B.1.2	Use of ECTP API functions	24
B.2	ECTP API functions	25
B.2.1	msocket()	25
B.2.2	mbind()	26
B.2.3	maccept()	27
B.2.4	mconnect()	28

	<i>Page</i>
B.2.5 msend()	28
B.2.6 mrecv().....	29
B.2.7 mclose().....	30
B.2.8 mgetsockopt() and msetsockopt()	30
B.3 An example of the msocket.h header file.....	32
Bibliography.....	36