

ISO/IEC 16512-2:2011-12 (E)

Information technology - Relayed multicast protocol: Specification for simplex group applications

Contents		Page
1	Scope	1
2	Normative references	1
2.1	Identical Recommendations International Standards	1
2.2	Additional references	1
3	Definitions	2
4	Abbreviations	3
5	Overview	4
5.1	RMCP-2 entities	4
5.2	RMCP-2 protocol block	5
5.3	Simplex delivery model of RMCP-2	6
5.4	Types of RMCP-2 messages.....	6
6	Protocol operation	7
6.1	SM's operation.....	7
6.2	MA's operation	9
7	RMCP-2 message format	19
7.1	Common format of RMCP-2 message	19
7.2	Control data format	20
7.3	Messages.....	21
8	Parameters	52
8.1	Data forwarding profile	52
8.2	Parameters used in RMCP-2.....	53
8.3	Encoding rules to represent values used in RMCP-2.....	54
9	Overview of secure RMCP-2	57
9.1	Conventions	57
9.2	Secure RMCP-2 entities	58
9.3	Protocol blocks	60
9.4	Types of secure RMCP-2 protocol messages	61
9.5	Structure of regional security management	62
10	Protocol operation	63
10.1	SM operation	63
10.2	MA operation.....	67
11	Format of secure RMCP-2 messages	73
11.1	Common format for secure RMCP-2 messages	73
11.2	Secure RMCP-2 messages	73
12	Parameters	86
12.1	Secure RMCP-2 node types and code values	86
12.2	Secure RMCP-2 message types and code values.....	86
12.3	Secure RMCP-2 control types and code values	87
12.4	Code values related to the RMCP-2 security policy.....	88
12.5	Miscellaneous code values	89
Annex A	Tree configuration algorithm	91
A.1	Bootstrapping rule.....	91
A.2	Neighbour discovering rule	92
A.3	HMA selection rule	93
A.4	CMA acceptance rule.....	93

A.5	Parent decision rule	94
A.6	Tree improvement rule	95
A.7	PMA's kicking-out rule	95
Annex B	– Real-time data delivery scheme	96
B.1	Overview.....	96
B.2	IP-IP tunnel mechanism for RMCP-2 real-time data delivery	96
Annex C	– Reliable data delivery scheme	98
C.1	Overview.....	98
C.2	Operation	98
C.3	Data encapsulation format.....	100
C.4	Data profile.....	100
Annex D	– RMCP-2 API	101
D.1	Overview.....	101
D.2	RMCP-2 API functions	102
Annex E	– Membership authentication mechanism	105
E.1	Overview.....	105
E.2	Authentication procedure.....	105
Annex F	– Bibliography	107
F.1	Informative references	107