

ISO/IEC TR 29181-6:2013-04 (E)

Information technology - Future Network - Problem statement and requirements - Part 6: Media transport

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols (and abbreviated terms)	4
5	Overview	5
5.1	Networks evolving to support of media	5
5.2	User demand for media-based services	6
6	General concept of FN media transport	7
6.1	Support of connection-oriented and connection-less model	8
6.2	Classification of basic services and composite service	8
6.3	Deployment of MANE (Media Aware Network Element) in the network	9
6.4	Content delivery networking	10
7	Problem statement	10
7.1	Protocol overhead and useless information	10
7.2	Limitation of Layered Coding	11
7.3	No media-awareness	11
7.4	No information exchange between protocol stacks (layered network stack)	11
7.5	Support for new types of media	11
7.6	Merging of current solutions in supporting media transport	12
7.7	Contents are left to the end-system	12
8	Requirements for media transport in Future Network	12
8.1	General requirements	12
8.2	Requirements related to functionality of MANE	14
8.3	Requirements related to media delivery and network	14
Annex A (informative)	Use cases for media transport	16
A.1	HD Multiparty videoconference	16
A.1.1	Current Solution	16
A.1.2	Future Network Solution	16
A.2	Web browsing	17
A.2.1	Current Solution	17
A.2.2	Future Network Solution	18
A.3	Media Aware Network Element	18
A.3.1	Content-aware based congestion control	18
A.3.2	Decision-making	19
A.3.3	Seamless mobility	20
Annex B (informative)	Related standardization and research activities	22

B.1	MMT (MPEG Media Transport)	22
B.2	SMART of Ambient Network	23
B.3	MEDIEVAL (MultimEDIA transport for mobile Video Applications)	24
B.4	CDNi (Content Delivery Network Interconnection)	25
B.5	ALICANTE architecture	26
Bibliography		29