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TECHNICAL REPORT

Model and framework for standardization in multimedia equipment and systems

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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CONTENTS

FOREWORD....4
INTRODUCTION....6
1 Scope....7
2 Normative references....7
3 Terms and definitions....7
4 Generic model....7
4.1 General....7
4.2 Physical and logical connectivity....8
4.2.1 General....8
4.2.2 Information transfer media....9
4.2.3 Transferred data structure....10
4.3 Easy operation....12
4.4 Security....13
5 Specific models....13
5.1 General....13
5.2 Multimedia data....13
5.3 Data creation....14
5.4 Equipment structure....14
5.5 User interface....15
5.6 Distribution and management....15
5.7 Open system interconnection with media....15
5.7.1 Specific layers....15
5.7.2 Application layer....17
5.7.3 Presentation layer....17
5.7.4 File layer....18
5.7.5 Logical storage layer....18
5.7.6 Physical storage layer....18
5.7.7 Physical layer....18
5.8 Application specific modeling....19
5.9 TC 100 frameworks....19
5.9.1 TC 100 model....19
5.9.2 TC 100 model and user communication....21
5.9.3 Networked TC 100 model....22
5.9.4 Environmental aspect of the TC 100 model....23
Bibliography....24

Figure 1 – Generic model....8
Figure 2 – Model of physical and logical connectivity....9
Figure 3 – Intersystem model....9
Figure 4 – Inter-device (intra-system) model....10
Figure 5 – Data structure in intersystem/intercommunication media....11
Figure 6 – Data structure in intersystem/interchangeable storage media....11
Figure 7 – Generic model for user-system interfaces....12
Figure 8 – Generic model for security....13
Figure 9 – Dexter model....14

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Document Sharing Hub
Full document details: PD IEC/TR 61998:2015

Figure 10 – Systems and equipment model 15
Figure 11 – Seven layer reference model and peer formats 16
Figure 12 – Information interchange involving open systems for medium conversion 17
Figure 13 – TC 100 model 20
Figure 14 – TC 100 model and user communication 22
Figure 15 – Networked TC 100 models 23

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Document Sharing Hub
Full document details: PD IEC/TR 61998:2015

INTERNATIONAL ELECTROTECHNICAL COMMISSION

MODEL AND FRAMEWORK FOR STANDARDIZATION IN MULTIMEDIA EQUIPMENT AND SYSTEMS

FOREWORD

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The main task of IEC technical committees is to prepare International Standards. However, a technical committee may propose the publication of a technical report when it has collected data of a different kind from that which is normally published as an International Standard, for example "state of the art".

IEC TR 61998, which is a technical report, has been prepared by IEC technical committee 100: Audio, video and multimedia systems and equipment.

This second edition cancels and replaces the first edition published in 1999 and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) the annexes describing various technologies have been deleted because their roles have ceased over the past two decades;

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b) TC 100 frameworks are described in more general form and from the viewpoint of the model of data usage and communication including the possible future technologies of TC 100.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
100/2528/DTR	100/2576/RVC

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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INTRODUCTION

Multimedia technology covers a wide range of technical areas and involves a number of technical elements. Most of the technical elements for multimedia are now being developed and updated. IEC standardization activities on the multimedia technology, therefore, should be carried out with enough discussions and clarifications on

- position and relationship of the technology to be standardized among the collection of related technologies,
- scope and framework/guideline of the standardization,
- appropriate standardization organisation having the responsibility,
- schedule of the standardization,
- relationship between new work items and the existing standards on multimedia or single medium technology.

These discussions should be based on appropriate multimedia technology models to create a framework for multimedia standardization.

The first edition of this Technical Report was a snapshot of these discussions in IEC/TC 100 with consideration of the draft IEC PACT (President's Advisory Committee on Future Technology) report which was a study and foreseer on future technology. After that, TC 100 had been engaged in standardization of audio, video and multimedia equipment and systems for over ten years.

In 2010, TC 100/AGS (Advisory Group on Strategy) started to study future technology again because some of ten years of progress of technology had reached beyond the IEC PACT foreseer. The study was FT-TG (Future Technology Task Force) that studied the technology forecast in the near future and resulted to raise Study Sessions in AGS to initiate the new technology areas in TC 100. At the same time, the need to revise IEC TR 61998 was recognized.

This new edition of this Technical Report is based on the IEC PACT report and redefines the TC 100 system model to initiate the future TC 100 standardization work. This Technical Report is expected to contribute as a guideline for IEC standardization experts and National Committees interested in multimedia equipment and systems.

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MODEL AND FRAMEWORK FOR STANDARDIZATION IN MULTIMEDIA EQUIPMENT AND SYSTEMS

1 Scope

This Technical Report provides models and frameworks for the standardization of multimedia technology, being undertaken or to be undertaken by IEC as the result of the IEC PACT report.

2 Normative references

Void.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
originator
entity, system or device that provides information or service, or container which includes information or service

3.2
recipient
entity, system, operator or device that receives information or service, or container which includes information or service

3.3
multimedia technology
systematic co-ordination of different single medium technologies

4 Generic model

4.1 General

The generic model clarifies AV and IT multimedia technology and its boundaries.

Standardization is in general required to obtain the following:

- physical and logical connectivity;
- usability and accessibility;
- identification;
- quality;
- safety and security;
- easy implementation;
- ecological considerations;
- energy efficiency;
- environmental safeguards.

The major purposes of multimedia standardization are:

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