

INTERNATIONAL STANDARD



Multimedia gateway in home networks – Guidelines





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MULTIMEDIA GATEWAY IN HOME NETWORKS – GUIDELINES

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This second edition cancels and replaces the first edition published in 2010. This edition constitutes a technical revision.

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

- a) addition of new multimedia processing functions and requirements the HMG shall support, including adaptive multimedia processing, audio/video remote processing, and play function enhancement, in Clause 6;
- b) addition of home automation functions and requirements of audio/video analysis, recognition and alarm services based on AI technologies in Clause 7;
- c) addition of upgrade function and requirements of HMG in Clause 12.

The text of this International Standard is based on the following documents:

| Draft | Report on voting |
|---------------|------------------|
| 100/4160/FDIS | 100/4175/RVD |

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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INTRODUCTION

In the smart-home system, in order to meet the various requirements of home intelligence, all kinds of communication devices (computers, consumer-electrical products, etc.) and multimedia devices (TVs, surveillance cameras, etc.) are integrated into a home network. Such a network (comprising home information, entertainment, control services, etc.) thus forms a system of information exchange with outside networks.

In a home network system, terminal devices such as information devices, communication devices, entertainment devices, household appliances, meters of gas, water and electricity, health-care equipment, and lighting and security systems are interconnected through the Internet of Things (IoT) technology to implement the network management and services and share the resources and services in the network. Based on the interconnection of terminal devices, home network systems can also provide comprehensive multimedia processing services through the use of multi-screen interactive services, remote access, image recognition, and other audio and video processing technologies.

The multimedia services and the management for devices mentioned above can be performed through a home multimedia gateway.