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# INTERNATIONAL STANDARD

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**Information technology – Home electronic system (HES) architecture –  
Part 5-5: Intelligent grouping and resource sharing for Class 2 and Class 3 –  
Device type**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INFORMATION TECHNOLOGY – HOME ELECTRONIC SYSTEM (HES) ARCHITECTURE –

### Part 5-5: Intelligent grouping and resource sharing for HES Class 2 and Class 3 – Device type

#### FOREWORD

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International Standard ISO/IEC 14543-5-5 was prepared by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

The list of all currently available parts of the ISO/IEC 14543 series, under the general title *Information technology – Home electronic system (HES) architecture*, can be found on the IEC web site.

This International Standard has been approved by vote of the member bodies, and the voting results may be obtained from the address given on the second title page.

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

## INTRODUCTION

ISO/IEC 14543-5, *Information technology – Home electronic system (HES) architecture – Part 5: Intelligent grouping and resource sharing for HES (IGRS)*, consists of the following parts:

➤ **IGRS Part 5-1: Core protocol**

- Specifies the TCP/IP protocol stack as the basis and the HTTP protocol as the message-exchanging framework among devices.
- Specifies a series of device and service interaction/invocation standards, including device and service discovery protocol, device and service description, service invocation, security mechanisms, etc.
- Specifies core protocols for a type of home network that supports streaming media and other high-speed data transport within a home.

➤ **IGRS Parts 5-2#: Application profile**

- Based on the IGRS Core Protocol.
- Specifies a device and service interaction mechanism, as well as application interfaces used in IGRS Basic Applications.
- Multiple application profiles are specified, including:
  - Part 5-21: AV profile
  - Part 5-22: File profile
- Additional application profiles are planned (part numbers to be assigned)
  - Part 5-2w: DVD profile
  - Part 5-2x: QoS profile
  - Part 5-2y: DMCP profile
  - Part 5-2z: Universal control profile

➤ **IGRS Part 5-3: Basic application**

- Includes an IGRS basic application list.
- Specifies a basic application framework.
- Specifies operation details (device grouping, service description template, etc.), function definitions and service invocation interfaces.

➤ **IGRS Part 5-4: Device validation**

- Specifies a standard method to validate an IGRS-compliant device.

➤ **IGRS Part 5-5: Device type**

- Specifies IGRS Device types used in IGRS applications.

➤ **IGRS Part 5-6: Service type**

- Specifies basic service types used in IGRS applications.

# INFORMATION TECHNOLOGY – HOME ELECTRONIC SYSTEM (HES) ARCHITECTURE –

## Part 5-5: Intelligent grouping and resource sharing for HES Class 2 and Class 3 – Device type

### 1 Scope

This part of the ISO/IEC 14543 specifies the device type of all devices that conform to ISO/IEC 14543-5-1: Core Protocol, and ISO/IEC 14543-5-2#: Application Profile.

This part of the ISO/IEC 14543 is applicable to all devices that are operating in an IGRS network.

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document, including any amendments, applies.

ISO/IEC 14543-5-1, *Information technology – Home electronic system (HES) architecture – Part 5-1: Intelligent grouping and resource sharing for Class 2 and Class 3 – Core protocol*

ISO/IEC 14543-5-6, *Information technology – Home electronic system (HES) architecture – Part 5-6: Intelligent grouping and resource sharing for HES Class 2 and Class 3 – Service type<sup>1</sup>*

ISO/IEC 14543-5-21, *Information technology – Home electronic system (HES) architecture – Part 5-21: Intelligent grouping and resource sharing for HES Class 2 and Class 3 – Application profile – AV profile*

ISO/IEC 14543-5-22, *Information technology – Home electronic system (HES) architecture – Part 5-22: Intelligent grouping and resource sharing for HES Class 2 and Class 3 – Application profile – File profile*

ISO/IEC 29341-3-1:2008, *Information technology – UPnP Device Architecture – Part 3-1: Audio Video Device Control Protocol – Audio Video Architecture*