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## Information technology – Home electronic system (HES) architecture – Part 3-1: Communication layers – Application layer for network based control of HES Class 1

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# CONTENTS

FOREWORD ..... 5
INTRODUCTION ..... 6
1 Scope ..... 7
2 Normative references ..... 7
3 Terms, definitions and abbreviations ..... 7
3.1 Terms and definitions ..... 7
3.2 Abbreviations ..... 8
4 Conformance ..... 8
5 Services of the application layer ..... 8
5.1 Communication modes ..... 8
5.2 Service primitives of the application layer ..... 9
6 Application layer protocol data unit (APDU) ..... 10
7 Application layer services ..... 12
7.1 Application layer services on multicast communication mode ..... 12
7.1.1 General ..... 12
7.1.2 A_GroupValue_Read Service ..... 13
7.1.3 A_GroupValue_Write Service ..... 17
7.2 Application layer services on broadcast communication mode ..... 19
7.2.1 A_IndividualAddress_Write Service ..... 19
7.2.2 A_IndividualAddress_Read-Service ..... 20
7.2.3 A_IndividualAddressSerialNumber_Read-Service ..... 23
7.2.4 A_IndividualAddressSerialNumber_Write Service ..... 26
7.2.5 A_ServiceInformation_Indication_Write Service ..... 27
7.2.6 A_DomainAddress_Write Service ..... 28
7.2.7 A_DomainAddress_Read Service ..... 30
7.2.8 A_DomainAddressSelective_Read Service ..... 32
7.2.9 A_NetworkParameter_Read Service ..... 33
7.2.10 A_NetworkParameter_Write Service ..... 36
7.3 Application layer services on point-to-point connectionless communication mode ..... 37
7.3.1 General ..... 37
7.3.2 A_PropertyValue_Read Service ..... 38
7.3.3 A_PropertyValue_Write Service ..... 41
7.3.4 A_PropertyDescription_Read Service ..... 43
7.3.5 A_DeviceDescriptor_Read Service ..... 46
7.3.6 A_Link_Read Service ..... 49
7.3.7 A_Link_Write Service ..... 50
7.4 Application layer services on point-to-point connection-oriented communication mode ..... 51
7.4.1 General ..... 51
7.4.2 A_ADC_Read Service ..... 52
7.4.3 A_Memory_Read Service ..... 54
7.4.4 A_Memory_Write Service ..... 57
7.4.5 A_MemoryBit_Write Service ..... 59
7.4.6 A_UserData ..... 62

7.4.7 A_Restart Service ..... 73
7.4.8 A_Authorize_Request Service ..... 74
7.4.9 A_Key_Write Service ..... 76
7.5 Router-specific application layer services on point-to-point connection-oriented communication mode ..... 78
8 Parameters of application layer ..... 79
8.1 Association table ..... 79
8.2 Verify flag ..... 79
Bibliography ..... 80

Figure 1 – Interaction of the application layer for services that are not remote confirmed ..... 9
Figure 2 – Interaction of the application layer for services that are remote confirmed ..... 10
Figure 3 – APDU (Example) ..... 10
Figure 4 – Mapping the ASAP to the TSAP (Example) ..... 13
Figure 5 – Mapping a TSAP to an ASAP ..... 13
Figure 6 – Handling requests and responses ..... 13
Figure 7 – Message flow for the A_Group_Value_Read service ..... 13
Figure 8 – A_GroupValue_Read-PDU (Example) ..... 14
Figure 9 – A_GroupValue_Response-PDU (Example), length of ASAP data is more than 6 bit ..... 14
Figure 10 – A_GroupValue_Response-PDU (Example) length of ASAP data is 6 bit or less ..... 15
Figure 11 – Message flow for the A_Group_Value_Write service ..... 17
Figure 12 – A_GroupValue_Write-PDU (Example), length of ASAP data is more than 6 bit ..... 17
Figure 13 – A_GroupValue_Write-PDU (Example), length of ASAP data is 6 bit or less ..... 18
Figure 14 – A_IndividualAddress_Write-PDU (Example) ..... 19
Figure 15 – A_IndividualAddress_Read-PDU (Example) ..... 21
Figure 16 – A_IndividualAddress_Response-PDU (Example) ..... 21
Figure 17 – Message flow for the A_IndividualAddressSerialNumber_Read service ..... 23
Figure 18 – A_IndividualAddressSerialNumber_Read-PDU (Example) ..... 23
Figure 19 – A_IndividualAddressSerialNumber_Response-PDU (Example) ..... 24
Figure 20 – A_IndividualAddressSerialNumber_Write-PDU (Example) ..... 26
Figure 21 – A_ServiceInformation_Indication_Write-PDU (Example) ..... 27
Figure 22 – A_DomainAddress_Write-PDU ..... 29
Figure 23 – A_DomainAddress_Read-PDU (Example) ..... 30
Figure 24 – A_DomainAddress_Response-PDU (Example) ..... 30
Figure 25 – A_DomainAddressSelective_Read-PDU (Example) ..... 32
Figure 26 – A_NetworkParameter_Read-PDU (Example) ..... 34
Figure 27 – A_NetworkParameter_Response-PDU (Example) ..... 34
Figure 28 – A_NetworkParameter_Write-PDU (Example) ..... 36
Figure 29 – A_PropertyValue_Read-PDU (Example) ..... 38
Figure 30 – A_PropertyValue_Response-PDU (Example) ..... 39
Figure 31 – A_PropertyValue_Write-PDU (Example) ..... 41
Figure 32 – A_PropertyDescription_Read-PDU (Example) ..... 44

Figure 33 – A_PropertyDescription_Response-PDU (Example) ..... 44
Figure 34 – A_DeviceDescriptor_Read-PDU (Example) ..... 47
Figure 35 – A_DeviceDescriptor_Response-PDU (Example) ..... 47
Figure 36 – Message flow for A_Link_Read Service ..... 49
Figure 37 – A_Link_Read-PDU (Example) ..... 49
Figure 38 – A_Link_Response-PDU ..... 49
Figure 39 – Message flow for A_Link_Write Service ..... 50
Figure 40 – A_Link_Write-PDU ..... 51
Figure 41 – A_ADC_Read-PDU (Example) ..... 52
Figure 42 – A_ADC_Response-PDU (Example) ..... 52
Figure 43 – A_Memory_Read-PDU (Example) ..... 55
Figure 44 – A_Memory_Response-PDU (Example) ..... 55
Figure 45 – A_Memory_Write-PDU (Example) ..... 57
Figure 46 – A_MemoryBit_Write-PDU ..... 61
Figure 47 – A_UserMemory_Read-PDU (Example) ..... 63
Figure 48 – A_UserMemory_Response-PDU ..... 63
Figure 49 – A_UserMemory_Write-PDU ..... 66
Figure 50 – A_UserMemoryBit_Write-PDU (Example) ..... 69
Figure 51 – A_UserManufacturerInfo_Read-PDU (Example) ..... 71
Figure 52 – A_UserManufacturerInfo_Response-PDU ..... 72
Figure 53 – A_Restart-PDU (Example) ..... 74
Figure 54 – A_Authorize_Request-PDU (Example) ..... 75
Figure 55 – A_Authorize_Response-PDU (Example) ..... 75
Figure 56 – A_Key_Write-PDU (Example) ..... 77
Figure 57 – A_Key_Response-PDU (Example) ..... 77

Table 1 – APCI overview ..... 11
Table 2 – Function table for A_MemoryBit_Write-Services ..... 60
Table 3 – Function table for A_UserMemoryBit_Write-Services ..... 68
Table 4 – Association table of keys to access levels ..... 76

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

## Part 3-1: Communication layers – Application layer for network based control of HES Class 1

## FOREWORD

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International Standard ISO/IEC 14543-3-1 was prepared by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

This International Standard together with ISO/IEC 14543-3-2 cancels and replaces ISO/IEC TR 14543-3, published in 2000. It constitutes a complete revision of the principles outlined in ISO/IEC TR 14543-3 and provides the specifications essential for an international standard.

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

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 title page.

# INTRODUCTION

This part of ISO/IEC 14543 specifies the services and protocol of the application layer for usage in Home Electronic Systems. Some services are targeted to field level communication between devices. Other services are exclusively reserved for management purposes. Some services can be used for both management and run-time communication.

Currently, ISO/IEC 14543, *Information technology – Home Electronic System (HES) architecture*, consists of the following parts:

Part 2-1: *Introduction and device modularity*
Part 3-1: *Communication layers – Application layer for network based control of HES Class 1*
Part 3-2: *Communication layers – Transport, network and general parts of data link layer for network based control of HES Class 1*
Part 3-3: *User process for network based control of HES Class 1 (under consideration)*
Part 3-4: *System management – Management procedures for network based control of HES Class 1 (under consideration)*
Part 3-5: *Media and media dependent layers – Power line for network based control of HES Class 1 (under consideration)*
Part 3-6: *Media and media dependent layers – Twisted pair for network based control of HES Class 1 (under consideration)*
Part 3-7: *Media and media dependent layers – Radio frequency for network based control of HES Class 1 (under consideration)*
Part 4: *Home and building automation in a mixed-use building (technical report)*
*Additional parts may be added later.*

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

# Part 3-1: Communication layers – Application layer for network based control of HES Class 1

## 1 Scope

This part of the ISO/IEC 14543 specifies the services and protocol of the application layer for usage in Home Electronic Systems. It provides the services and the interface to the user process as defined in ISO/IEC 14543-3-3 (EN 50090-3-2). This procedure is based on the services and the protocol as provided by the transport layer, the network layer and the data link layer as specified in ISO/IEC 14543-3-2.

## 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 11801, *Information technology – Generic cabling for customer premises*

ISO/IEC 14543-2-1, *Information technology – Home electronic system (HES) architecture – Part 2-1: Introduction and device modularity*

ISO/IEC 14543-3-2, *Information technology – Home electronic system (HES) – Part 3-2: Communication layers – Transport, network and general parts of data link layer for network based control of HES class 1*

EN 50090-3-2:2003, *Home and Building Electronic Systems (HBES) – Part 3-2: Aspects of application – User process for HBES Class 1*

NOTE 1 Reference to this standard will be replaced by reference to International Standard ISO/IEC 14543-3-3 which is currently under consideration. Please refer to bibliography.

EN 50090-7-1:2003, *Home and Building Electronic Systems (HBES) – Part 7-1: System Management – Management procedures*

NOTE 2 Reference to this standard will be replaced by reference to International Standard ISO/IEC 14543-3-4 which is currently under consideration. Please refer to bibliography.