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Information technology – Home electronic system (HES) architecture –

Part 3-4: System management – Management procedures for network based control of HES Class 1

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FOREWORD

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Hager Control SAS has informed IEC and ISO that it has the following patent that is not essential for the implementation of any particular clause of this standards but may concern specific combinations thereof:

EP 0817 423A1

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International Standard ISO/IEC 14543-3-4 was prepared by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

This International Standard is a product family standard. It shall be used in conjunction with ISO/IEC 14543-2-1, 14543-3-1, 14543-3-2, 14543-3-3, 14543-3-5, 14543-3-6 and 14543-3-7.

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.

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

INTRODUCTION

The management procedures capture the dynamics of managing distributed resources on the network in terms of abstract procedures. On the network itself, a procedure consists of a sequence of telegrams, exchanged between two partners, the management client and the management server.

The management client is a powerful device with 'controller' function, typically, but not exclusively, PC-based. Except for network-oriented management, the server is always a 'target device'. In the former case, it is in fact the network as a whole which acts as partner or server. Ultimately, of course, the response to a client request is always generated by the individual devices connected to the network, either one or many. In addition to its run-time behaviour (based on group communication), every device moreover supports a rich management server profile for this purpose. An important objective of this part “Management Procedures” is to allow a concise description of such a profile. It is clear that the information about the full set of management procedures supported by a particular device or implementation tells us significantly more about the device than merely the list of services through which this is realised.

In general, one single device may well implement both client as well as server function. For and during the execution of a particular management procedure, however, one device takes on one single role.

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*
Part 3-4: *System management – Management procedures for network based control of HES Class 1*
Part 3-5: *Media and media dependent layers – Power line for network based control of HES Class 1*
Part 3-6: *Media and media dependent layers – Twisted pair for network based control of HES Class 1*
Part 3-7: *Media and media dependent layers – Radio frequency for network based control of HES Class 1*
Part 4: *Home and building automation in a mixed-use building (technical report)*
Part 5-1: *Intelligent grouping and resource sharing for HES Class 2 and Class 3 – Core protocol (under consideration)*
Part 5-2: *Intelligent grouping and resource sharing for HES Class 2 and Class 3 – Device certification (under consideration)*

Additional parts may be added later.