

Function blocks for industrial-process measurement and control systems –

Part 4: Rules for compliance profiles

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FUNCTION BLOCKS FOR INDUSTRIAL-PROCESS MEASUREMENT AND CONTROL SYSTEMS –

Part 4: Rules for compliance profiles

FOREWORD

A PAS is a technical specification not fulfilling the requirements for a standard, but made available to the public.

IEC-PAS 61499-4 has been processed by IEC technical committee 65: Industrial-process measurement and control.

The text of this PAS is based on the following document:

This PAS was approved for publication by the P-members of the committee concerned as indicated in the following document:

Draft PAS	Report on voting
65/288/PAS	65/293/RVD

Following publication of this PAS, the technical committee or subcommittee concerned will investigate the possibility of transforming the PAS into an International Standard.

This is Part 4 of a projected four-part Standard under development by Working Group 6 of IEC Technical Committee 65. The projected Parts of the Standard are:

- Part 1 – Architecture
- Part 2 – Engineering task support
- Part 3 – Application guidelines
- Part 4 – Rules for compliance profiles

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FUNCTION BLOCKS FOR INDUSTRIAL-PROCESS MEASUREMENT AND CONTROL SYSTEMS –

Part 4: Rules for compliance profiles

1 General provisions

1.1 Scope

This document defines rules for the development of *compliance profiles* which specify the features of IEC 61499-1 and IEC 61499-2 to be implemented in order to promote the following *attributes* of IEC 61499-based systems, devices and software tools:

- *interoperability* of devices from multiple suppliers;
- *portability* of software between software tools of multiple suppliers; and
- *configurability* of devices from multiple vendors by software tools of multiple suppliers.

These attributes are illustrated in Figure 1.

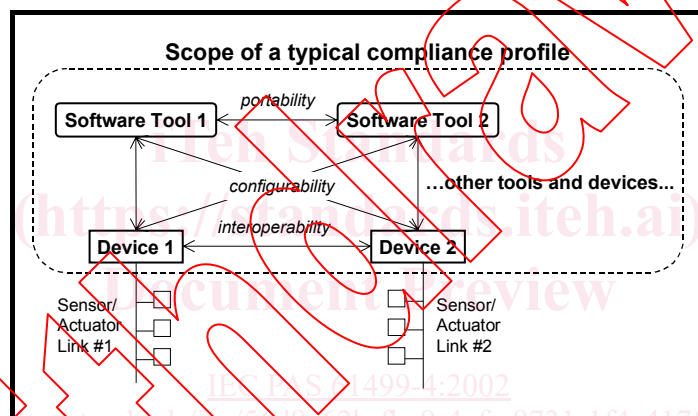


Figure 1 – Scope of a typical compliance profile

NOTE 1 The specification of provisions for the facilitation of device *interchangeability* is beyond the scope of this Part.

NOTE 2 The sensor/actuator links designated #1 and #2 in Figure 1 may be non-interoperable. However, it is intended that systems complying with a particular profile may show the transfer of *events* and *data* from sensors on one link to actuators on another link using appropriately configured and interconnected *service interface function blocks*.

NOTE 3 Compliance profiles may extend their scope beyond that shown in Figure 1 to include interoperability of sensors and actuators.

NOTE 4 Suppliers of *software tools* should assure that their products conform to the requirements of IEC 61499-2 as well as any specific requirements defined in compliance profiles applicable to their particular software tools.

1.2 Normative references

The following normative documents contain provisions and references to other normative documents which, through reference in this text, constitute provisions of this agreement. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to this agreement are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of the IEC and ISO maintain registers of currently valid International Standards.

IEC-PAS 61499-1, Edition 1.0, 2000-09, Publicly Available Specification – *Function blocks for industrial-process measurement and control systems – Part 1: Architecture*

IEC 65/260/PAS, Voting Draft, IEC 61499-2: *Function blocks for industrial-process measurement and control systems – Part 2: Software tools requirements*