

INTERNATIONAL ISO
This is a preview of "ISO 19439:2006". Click here to purchase the full version from the ANSI store.

First edition
2006-04-15

Enterprise integration — Framework for enterprise modelling

Entreprise intégrée — Cadre de modélisation d'entreprise



Reference number
ISO 19439:2006(E)

© ISO 2006

This is a preview of "ISO 19439:2006". [Click here to purchase the full version from the ANSI store.](#)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2006

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

This is a preview of "ISO 19439:2006". [Click here to purchase the full version from the ANSI store.](#)

Contents

Page

Foreword.....	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions.....	1
4 Symbols and abbreviations	8
5 The framework	8
5.1 Underlying concepts	8
5.2 Dimension of enterprise model phase.....	10
5.3 Dimension of enterprise model view	14
5.4 Dimension of genericity	17
5.5 Graphical representation of the framework	19
6 Requirements on enterprise models and modelling methodologies	20
Annex A (informative) Enterprise models, frameworks and modelling languages	22
Annex B (informative) Using the enterprise modelling framework	24
Bibliography	33

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 19439 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 310, *Advanced manufacturing technologies*, in collaboration with Technical Committee ISO/TC 184, *Industrial automation systems and integration*, Subcommittee SC 5, *Architecture, communications and integration frameworks*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This is a preview of "ISO 19439:2006". [Click here to purchase the full version from the ANSI store.](#)

Introduction

This framework defines and specifies the generic concepts that are required to enable the creation of enterprise models for industrial businesses and to provide support for the use of frameworks by industrial enterprises.

Enterprise modelling consultancies and tool vendors have developed enterprise modelling methodologies and supporting tools that address phases of the enterprise life cycle and various aspects of enterprise modelling. These methodologies and tools support business decision-making (such as process visualization and simulation), enterprise process management, control and monitoring of operational processes (such as workflow) and performance monitoring (such as visualization of work in progress). This framework provides a unified conceptual basis for model-based enterprise engineering that enables consistency, convergence and interoperability of the various modelling methodologies and supporting tools. The framework does not encompass methodological processes; it is neutral in this regard.

ISO 15704:2000, 4.2.2 (see also A.3.1.2) places requirements on the description of the essential roles of humans. In this International Standard, these are described in terms of:

- organizational roles that are specified in the Organization View, which captures the various assigned responsibilities and required capabilities (skills);
- operational roles that are specified in the Resource View, which captures the operational capabilities (skills) and which are then matched to the ones identified in the Function View.

The Annex A contains a general description of the concepts of enterprise models, modelling frameworks and modelling language constructs (as defined in ENV 12204:1996) as background to the normative content of Clauses 5 and 6. Annex B describes with illustrative examples how the enterprise modelling framework can be used by both enterprise model developers and enterprise model tool developers.