# TECHNICAL REPORT



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# Information technology — Metamodel framework for interoperability (MFI) —

# Part 9: **On demand model selection**

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Partie 9: Sélection de modèle à la demande



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### Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: Foreword — Supplementary information.

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ISO/IEC 19763-9 was prepared by Joint Technical Committee ISO/IEC JTC 1, Information Technology, Subcommittee SC 32, Data management and Interchange.

ISO/IEC 19763 consists of the following parts, under the general title Information technology - Metamodel framework for interoperability (MFI):

Part 1: Framework

Part 3: Metamodel for ontology registration

Part 5: Metamodel for process model registration

Part 6: Registry summary

Part 7: Metamodel for service model registration

Part 8: Metamodel for role and goal model registration

Part 9: On demand model selection [Technical Report]

Part 10: Core model and basic mapping

Part 12: Metamodel for information model registration

Part 13: Metamodel for form design registration

# Introduction

Industrial consortia have engaged in the standardization of domain-specific objects including business process models and software components using common modelling facilities and interchange facilities such as UML and XML. They are very active in standardizing domain-specific business process models and standard modelling constructs such as data elements, entity profiles, and value domains.

ISO/IEC 19763 provides registration mechanisms for different kinds of information resources in business domains, such as ontologies, roles, goals, processes, and services. Faced with the abundant and heterogeneous models, how to select appropriate services and/or models to meet user-requests becomes an important issue. Based on the metamodels defined in parts 3, 5, 7 and 8 of ISO/IEC 19763, this technical es for c. report describes a framework and procedures for model selection so as to help users discover corresponding models or services that support their requests.

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# Information technology – Metamodel framework for interoperability (MFI) – Part 9: On demand model selection

### 1 Scope

This ISO/IEC Technical Report specifies a technical guideline on how to use the Role and Goal, Process, and Service (RGPS) metamodels to select appropriate combinations of models and/or services to support user-requests.

The scope of ISO/IEC TR 19763-9 is limited to model selection based on ISO/IEC 19763-5, ISO/IEC 19763-7, and ISO/IEC 19763-8.

### 2 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 19763-1, Information technology – Metamodel framework for interoperability (MFI) – Part 1: Framework

ISO/IEC 19763-3, Information technology – Metamodel framework for interoperability (MFI) – Part 3: Metamodel for ontology registration

ISO/IEC 19763-5, Information technology – Metamodel framework for interoperability (MFI) – Part 5: Metamodel for process model registration

ISO/IEC 19763-7, Information technology – Metamodel framework for interoperability (MFI) – Part 7: Metamodel for service model registration

ISO/IEC 19763-8, Information technology – Metamodel framework for interoperability (MFI) – Part 8: Metamodel for role and goal model registration

ISO/IEC 19763-10, Information technology – Metamodel framework for interoperability (MFI) – Part 10: Core model and basic mapping

ISO/IEC 11179-6, Information technology – Metadata registries (MDR) – Part 6: Registration

### 3 Terms, definitions and abbreviated terms

### 3.1 Terms and definitions

For the purposes of this part, the terms and definitions contained in ISO/IEC 19763-1, 3, 5, 7, 8, 10 and the following shall apply.

### 3.1.1

### goal

intended outcome of user interaction with a **process** (3.1.4) or **service** (3.1.10)

[ISO/IEC 19763-8, 3.1.1]

### 3.1.2

### involvement type

statement that indicates the type of involvement of a role (3.1.8) with a process (3.1.4) or service (3.1.10)

NOTE Examples are performer, beneficiary, and customer

[ISO/IEC 19763-8, 3.1.4]