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Information technology — Metamodel framework for interoperability (MFI) —

Part 3: Metamodel for ontology registration

*Technologies de l'information — Cadre du métamodèle pour
l'interopérabilité (MFI) —*

Partie 3: Métamodèle pour l'enregistrement de l'ontologie

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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.

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

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national 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 and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 19763-3 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 32, *Data management and interchange*.

This second edition cancels and replaces the first edition (ISO/IEC 19763-3:2007), which has been technically revised.

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

- *Part 1: Reference model*
- *Part 2: Core model*
- *Part 3: Metamodel for ontology registration*
- *Part 4: Metamodel for model mapping*

The following part is under preparation:

- *Part 5: Metamodel for process model registration*

Registration procedure, metamodel for service registration, metamodel for role and goal registration, and on demand model selection will form the subjects of future parts.

Introduction

Interoperation among autonomous applications, such as Web services, is becoming important. To promote interoperation among application systems, unambiguous and formal specifications of the systems, especially of their inputs and outputs, are indispensable. Ontologies have a key role for that.

Several efforts to establish standards associated with ontologies have been made. But, most of them specify languages or are based on some particular language. To promote ontology-based interoperation, in addition to them, a generic framework for registering administrative and evolution information related to ontologies, independent of languages, is necessary.

This part of ISO/IEC 19763 intends to provide a generic framework for registering administrative and evolution information related to ontologies.