### TECHNICAL REPORT

### ISO/IEC TR 19583-22

First edition 2018-07

## Information technology — Concepts and usage of metadata —

Part 22:

# Registering and mapping development processes using ISO/IEC 19763

Technologies de l'information — Concepts et utilisation des métadonnées —

Partie 22: L'enregistrant et mappant de processus de développement à l'aide de ISO/IEC 19763



#### ISO/IEC TR 19583-22:2018(E)



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Published in Switzerland

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#### **Foreword**

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This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 32, *Data, management and interchange*.

A list of all parts in the ISO/IEC 19583 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

#### Introduction

The ISO/IEC 19583 series consists of Technical Reports showing how to implement ISO/IEC 11179 and ISO/IEC 19763.

When a software development project is started the project structure, consisting of processes, activities and tasks, is defined and described in the Project Initiation Document or Project Plan. The project deliverables are also defined in these documents. These documents are then maintained until the project is completed.

The project processes, activities and tasks can be modelled using a process model. A 'standard project process model' is defined in ISO/IEC/IEEE 12207 but the process model for each project should be defined and tailored to recognize the distinctive characteristics of that project. These tailored process models, and their associated deliverables, should be preserved so that the processes, activities, tasks and deliverables can be reused or adapted for new projects, enabling these new projects to be managed efficiently and effectively and at low risk.

ISO/IEC/IEEE 12207 establishes a common framework for software development, containing the processes, activities, and tasks that are to be applied during the whole lifecycle of a software product or service. In software development, each organisation establishes its standard processes based on the specification provided by ISO/IEC/IEEE 12207. During project initiation, the project manager defines the processes, activities, and tasks for the project by tailoring the standard processes so that the new project process model recognizes the distinctive characteristics of the project. For future projects with similar characteristics the new project will be more efficiently and effectively managed with higher quality deliverables produced at lower risk if an existing project process model can be easily reused.

### Information technology — Concepts and usage of metadata —

#### **Part 22:**

## Registering and mapping development processes using ISO/IEC 19763

#### 1 Scope

This document provides a usage scenario that utilizes the facilities defined in ISO/IEC 11179-3, ISO/IEC 19763-5 and ISO/IEC 19763-10 to demonstrate the registration of the mapping between process models. The availability of these registered process model mappings will help to promote the reuse of process models.

The scope of this document is limited to a discussion of the process models associated with software development projects and the deliverables produced during these projects.

This document describes a scenario that evaluates the combined usage of ISO/IEC 11179-3, ISO/IEC 19763-5 and ISO/IEC 19763-10 to enable the reuse of past knowledge of process models describing project processes and deliverables.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 19763-5, Information technology — Metamodel framework for interoperability (MFI) — Part 5: Metamodel for process 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