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ITLET supportive technology and specification integration —

Part 1: Framework

*Technologie de support ITLET et intégration de spécification —
Partie 1: Cadre*



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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.

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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.

In exceptional circumstances, when the joint technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide to publish a Technical Report. A Technical Report is entirely informative in nature and shall be subject to review every five years in the same manner as an International Standard.

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/IEC TR 24725-1 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 36, *Information technology for learning, education and training*.

ISO/IEC TR 24725 consists of the following parts, under the general title *ITLET supportive technology and specification integration*:

- *Part 1: Framework*
- *Part 2: Rights Expression Language (REL) — Commercial Applications¹⁾*
- *Part 3: Platform and Media Taxonomy (PMT)*

1) To be published.

Introduction

The purpose of this part of ISO/IEC TR 24725 is to provide a framework to assist with the development and implementation of technology profiles and bundles to support information technology for learning, education and training (ITLET). It presents a framework, objectives and considerations for the development of ITLET supportive technology and specification integration. A profile defines conforming subsets or combinations of base standards that support a specific function, and can be associated with a particular application, community and/or environment. Different profiles can be created and utilized to meet the needs of specific communities (e.g., learning communities, educational institutions, corporate training organizations).

During the development of this part of ISO/IEC TR 24725, a review was undertaken to identify the major components of profile and platform integration relevant to the field of learning, education, and training.

Components of profile development

- are in agreement with the concept of 'open systems' and 'open system environment'. Thus, the development of profiles takes place within an environment that can be viewed as heterogeneous, combining both proprietary and non-proprietary technologies;
- facilitate interoperability and portability of information technology system components;
- provide an infrastructure that is based on identification of base standards;
- create subsets or combinations of base standards to provide specific functionalities, and to provide the basis for conformance tests that are uniform and internationally recognized;
- create description mechanisms that allow for the specification of parameters.

When profiles are developed, choices are made regarding the permitted options for each base standard(s), and regarding the parameter values that can be unspecified in the base standard(s).

In the base standards or profiles, the description mechanism is provided to specify the detailed parameterization. Instead of formal centralized registration, other technologies, such as XSD like schema referencing, could be used to point a file specifying related description (e.g., "<xsd: schema xmlns: xsd = \"http://www.w3.org/2001/ XML-Schema\">" pointing to the responsible organization) or some alternative mechanism that does not require a monitoring organization.

Following a limited review of the components involved in the development of profiles and bundles, factors that can impact on user needs and requirements were considered and objectives for technology integration development work related to information technology for learning, education, and training were identified. This led to the development of a proposed framework, which was developed to guide development and implementation of profiles and bundles related to information technology for learning, education, and training.

