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**WORKSHOP** 

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## **AGREEMENT**

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**English version** 

# Guidelines and support for building application profiles in elearning

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## **Foreword**

This CEN Workshop Agreement (CWA) provides guidance on how to build application profiles for e-learning.

Application profiles enable "mixing and matching" metadata elements, in order to meet specific requirements for a particular context. As an example, some communities may want to make certain elements mandatory or restrict the value space of a particular element.

However, there is much confusion and only limited experience and expertise in the development and deployment of application profiles. That is why the CEN/ISSS Learning Technologies Workshop decided to develop guidelines on the use of application profiles for (e-)learning. This document is the concrete result of this work.

Although many of the guidelines presented in this document can be applied to any kind of application profile, the focus here is on application profiles for metadata, more specifically for learning object metadata. In addition, application profiles of other metadata standards, such as for instance the Learner Information Package (LIP), have also been considered.

In parallel to this CWA, an online registry for Application Profiles equally with a particular focus on the IEEE LTSC LOM standard has been developed.

The decision for this work item was taken by the Learning Technologies Workshop at the 19th meeting on July 05/06, 2004. Work on the CWA actually started at the 23rd meeting on June 16/17, 2005. The editing team consisted of Neil Smith (Knowledge Integration Ltd), Marc Van Coillie (Eifel) and Erik Duval (Dept Computerwetenschappen, Katholieke Universiteit Leuven).

The document has been developed through the collaboration of a number of contributing partners, representing a wide mix of interests, from universities to commercial companies representatives. The names of the individuals and their affiliations that have expressed support for this CWA is available from the CEN/ISSS Secretariat.

The final review/endorsement round for this CWA was started on 2006-02-17 and closed on 2006-04-21.

The final text of this CWA was submitted to CEN for approval and publication on 2006-04-28.

Comments and feedback are explicitly solicited, and can be sent by email to erik.duval@cs.kuleuven.be

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## 1 Scope

Although many of the guidelines presented in this document can be applied to any kind of application profile, the focus here is on application profiles for metadata, more specifically for learning object metadata<sup>1</sup>. In addition, we will also consider application profiles of other metadata standards, such as for instance the Learner Information Package (LIP)<sup>2</sup>.

#### 2 Normative references

This CEN Workshop Agreement incorporates by dated or undated reference, provisions from other publications.

These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications do not apply. However, parties to agreements based on this CWA are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies.

#### 3 General references

- Erik Duval, Wayne Hodgins, Stuart Sutton, Stuart L. Weibel, Metadata Principles and Practicalities, D-Lib Magazine, April 2002, Volume 8 Number 4 (<a href="http://www.dlib.org/dlib/april02/weibel/04weibel.html">http://www.dlib.org/dlib/april02/weibel/04weibel.html</a>)
- 2. BS 8419:2005 Interoperability between metadata systems used for learning, education and training
- 3. CWA14855 Dublin Core Application Profile guidelines
- 4. CWA15248 Guidelines for machine-processable representation of Dublin Core Application Profiles
- 5. CWA15249 Guidance for naming, versioning, evolution and maintenance of element declarations and Application Profiles
- 6. IMS Guidelines for Application Profiling, 2005 (http://www.imsglobal.org/ap/)
- 7. TELCERT : Technology Enhanced Learning Conformance European Requirements & Testing (<a href="http://www.opengroup.org/telcert">http://www.opengroup.org/telcert</a>)
- 8. Jehad Najjar, Stefaan Ternier and Erik Duval, *Interoperability of Learning Object Repositories:*Complications and Guidelines, IADIS International Journal of WWW/Internet, 2004.

  <a href="http://www.cs.kuleuven.ac.be/~najjar/papers/ladiswwwJournal.pdf">http://www.cs.kuleuven.ac.be/~najjar/papers/ladiswwwJournal.pdf</a>

### 4 Terms and definitions

**application profile:** "An application profile is an assemblage of metadata elements selected from one or more metadata schemas and combined in a compound schema. [...] The purpose of an application profile is to adapt or combine existing schemas into a package that is tailored to the functional requirements of a particular application, while retaining interoperability with the original base schemas." [1]

<sup>1</sup> http://ieeeltsc.org/wg12LOM/

<sup>&</sup>lt;sup>2</sup> http://www.imsglobal.org/profiles/