



SLOVENSKI STANDARD

SIST EN 15981:2011

01-oktober-2011

Evropski model za mobilnost na področju izobraževanja - Podatki o dosežkih (EuroLMAI)

European Learner Mobility - Achievement information (EuroLMAI)

Europäisches Model für Lernermobilität - Angaben über die Leistung (EuroLMAI)

Mobilité des apprenants européens - Informations relatives aux résultats obtenus (EuroLMAI)

STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: EN 15981:2011

SIST EN 15981:2011
<https://standards.iteh.ai/catalog/standards/sist/c5295845-cf50-412c-948d-44c581de804d/sist-en-15981-2011>

ICS:

03.180	Vzgoja in izobraževanje	Education
35.240.99	Uporabniške rešitve IT na drugih področjih	IT applications in other fields

SIST EN 15981:2011

en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 15981:2011

<https://standards.iteh.ai/catalog/standards/sist/c5295845-cf50-412c-948d-44c581de804d/sist-en-15981-2011>

EUROPEAN STANDARD

EN 15981

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2011

ICS 35.240.99

English Version

**European Learner Mobility - Achievement information
(EuroLMAI)**Mobilité des apprenants européens - Informations relatives
aux résultats obtenus (EuroLMAI)Europäisches Model für Lernermobilität - Angaben über die
Leistung (EuroLMAI)

This European Standard was approved by CEN on 24 March 2011.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

[SIST EN 15981:2011](https://standards.iteh.ai/catalog/standards/sist/c5295845-cf50-412c-948d-44c581de804d/sist-en-15981-2011)<https://standards.iteh.ai/catalog/standards/sist/c5295845-cf50-412c-948d-44c581de804d/sist-en-15981-2011>EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG**Management Centre: Avenue Marnix 17, B-1000 Brussels**

Contents	Page
Foreword	4
Introduction	5
1 Scope	7
2 Normative references	8
3 Terms and definitions	9
4 Symbols and abbreviated terms	12
5 Conventions	14
6 Conformance	15
6.1 Conforming instances	15
6.2 Conforming bindings	15
6.3 Conforming applications	15
7 European Learner Mobility Achievement Information Model	16
7.1 General	16
7.2 Domain model	16
7.3 EuroLMAI Resources	17
7.3.1 Classes	17
7.3.2 Association properties	18
7.3.3 Attribute properties	18
7.4 Resources included from CWA 15903:2008	19
7.4.1 Classes	19
7.4.2 Association properties	19
7.4.3 Attribute properties	20
7.5 Properties included from ISO 15836	20
7.6 Properties included from DCMI Metadata Terms	20
7.7 Properties included from IETF RFC 2426	20
7.8 Properties included from the CWA 16077:2010	20
8 The EuroLMAI Description Set Profile	21
8.1 General	21
8.2 EuroLMAI Report	21
8.3 Learner	21
8.4 Issuer	21
8.5 Learning Opportunity Specification	22
8.6 Learning Opportunity Instance	22
8.7 Qualification	23
8.8 Credit	23
Annex A (normative) Europass Diploma Supplement Application Profile of the EuroLMAI (EuroLMAI Europass DS AP)	24
A.1 General	24
A.2 Europass DS Refinements of the EuroLMAI	24
A.2.1 Classes	24
A.2.2 Association properties	24
A.2.3 Attribute Properties	24
A.3 The Europass DS Description Set Profile	26
A.3.1 General	26
A.3.2 Diploma Supplement Document	26
A.3.3 Learner	26
A.3.4 Issuer	26

A.3.5	Learning Opportunity Specification: Programme Level	27
A.3.6	Learning Opportunity Instance: Programme Level	27
A.3.7	Learning Opportunity Specification: Transcript Level	28
A.3.8	Learning Opportunity Instance: Transcript Level	29
A.3.9	Qualification	29
A.3.10	Credit	30
Annex B (informative) The EuroLMAI conceptual model		31
Annex C (informative) Mapping of the Europass DS to EuroLMAI		33
Annex D (informative) Illustrative uses of the EuroLMAI Model and the Europass DS Application Profile		36
D.1	General	36
D.2	Report on completed parts of a programme of study	36
D.3	Transcript information for a period of learning	37
D.4	Report on qualification obtained for a completed programme of study	39
D.5	EuroLMAI Europass DS document	39
Annex E (informative) Application Profiling		41
E.1	DCMI Abstract Model	41
E.2	Application Profiles and their roles and usage	41
E.3	Extensions to properties	41
E.4	Graceful degradation	42
Bibliography		43

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 15981:2011](https://standards.iteh.ai/catalog/standards/sist/c5295845-cf50-412c-948d-44c581de804d/sist-en-15981-2011)

<https://standards.iteh.ai/catalog/standards/sist/c5295845-cf50-412c-948d-44c581de804d/sist-en-15981-2011>

EN 15981:2011 (E)**Foreword**

This document (EN 15981:2011) has been prepared by Technical Committee CEN/TC 353 "Information and Communication Technologies for Learning, Education and Training", the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2011, and conflicting national standards shall be withdrawn at the latest by November 2011.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

The European Learner Mobility Achievement Information Model (EuroLMAI) addresses the identified need for a harmonized solution to the recording and exchange of learner mobility information within the European Education Area. The results of this work will contribute to the effort towards interoperable European-wide IT systems that manage and exchange learner achievement information.

The "European Learner Mobility" Working Item was initiated by the Hellenic Organization for Standardization (ELOT), Greece. The development of the proposed model has been carried out within the context of the CEN WS-LT project on "Guidelines for a European Learner Mobility Model", funded under the 2008 ICT Standardization Work Programme. The project was initiated and led by the Hellenic Organization for Standardization (ELOT) and the Technological Educational Institute of Athens (Greece). The document has been developed through the collaboration of a number of contributing partners, representing a wide mix of interests, among others JISC-CETIS (UK), Hypatia AS (Norway), KION (Italy), the Manchester Metropolitan University (UK), University of Duisburg Essen/eLC (Germany), USIT/UiO (Norway), Digitary (Ireland), University of Vigo (Spain), ISFOL (Italy), Alan Paull Services (UK). The close collaboration and substantial support of the Rome Student Systems and Standards Group of software implementers regarding the European Learner Mobility (EuroLM) standardization efforts is highly acknowledged.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

The establishment of Europass as a common framework which is accepted throughout Europe demonstrates that European education has reached a maturity stage where the demand for the recording and exchange of learner mobility information needs to be efficiently supported by technical interoperability standards.

At the initiation point of this Working Item several relevant standardization efforts were identified and significant national expertise had already been accumulated. However, harmonization was deemed necessary towards a European solution, in order to provide viable support for emerging European student management information systems and dissuade service providers from developing proprietary services and platforms.

The results of the current and future European Learner Mobility (EuroLM) work aspire to support the development of a new generation of technology-enhanced services for learners (learning and employment opportunities exploration), higher education institutions (certification or augmentation of learner information), employers (work-place descriptions, recruiting and development of learners' competences) and other stakeholders of learning, education, and training throughout Europe, as the European Union and Commission, the Member States and their governments and ministries, etc.

The EuroLM Achievement Information (EuroLMAI) model directly addresses the European requirement for rapid implementation and dissemination of the institution-owned transparency information tools throughout Europe. It has been developed as a generic model for representing the institution attested achievements of a learner within a formal learning setting, resulting from the learner's participation in one or more learning opportunity instances and including any available associated results.

This European Standard specifies a subset (skeleton) of the generic EuroLMAI model that supports the expression of institution-owned learner achievement information and the formation of official achievement reports (e.g. the learner's Transcript of records) and transparency documents (e.g. Europass Diploma Supplement). The need for supporting of additional learner mobility achievement structures and tools (e.g. that of Europass Mobility) calls for the enhancement of the skeleton model with additional standardized information entities (e.g. intended learning outcomes, assessment processes) and relevant standardization activities are underway in order to provide other important extensions to EuroLMAI.

In addition to EuroLMAI, this European Standard provides an Application Profile of the EuroLMAI model, introducing necessary refinements and constraints for the accurate representation of the Europass Diploma Supplement (DS).

The Europass DS is considered one of the most important documents of the Europass framework, which significantly contributes to the transparent interpretation and recognition of academic and professional qualifications (diplomas, degrees, certificates) across the diverse European educational systems. In essence, the Europass DS aims at:

- promoting transparency within and between higher education systems;
- providing accurate and up-to-date information on an individual's qualifications;
- aiding mobility and access to further study and employment abroad;
- providing fair and informed information relating to qualifications;

EN 15981:2011 (E)

- facilitating academic and professional recognition and thus increasing the transparency of qualifications.

The Europass DS constitutes an instrument upon which a high level of agreement on the content and structure has been achieved among the EU member states. The European countries have taken up the DS initiative and have specified their national variants, in most cases being minor variations of the Europass DS. However, currently the DS is mostly issued in paper-based format. In cases where it is issued electronically, the DS is represented in a proprietary manner. A major problem has been the lack of interoperable tools, impeding the recording and/or reuse of data in existing student management systems for the production of an electronic DS and the exchange of information among interested parties.

The EuroLMAI model and its Europass DS Application Profile have been developed as:

- a lightweight standard taking into consideration existing and emerging educational practice processes and the relevant European policies;
- an easy-to-implement standard in order to ensure a rapid uptake by stakeholders of learning, education and training throughout Europe (higher education institutions, learners, employers, service providers, etc.)

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 15981:2011](https://standards.iteh.ai/catalog/standards/sist/c5295845-cf50-412c-948d-44c581de804d/sist-en-15981-2011)

<https://standards.iteh.ai/catalog/standards/sist/c5295845-cf50-412c-948d-44c581de804d/sist-en-15981-2011>

1 Scope

This European Standard specifies a model for the recording and exchange of learner achievement information among student management information systems, as well as the aggregation of information by third party suppliers.

The model proposed within this European Standard is not intended to define the representation of the entire spectrum of Learner Mobility information - the scope of the standard is restricted to the definition of the electronic representation of official, institutionally attested achievement information for learners engaged in formal learning processes, in order to facilitate its recording and subsequent exchange within the European education area.

Achievement Information structured and presented in compliance with this standard may, of course, be used for other purposes - for instance, to provide descriptions of achievement to enrich a learner-owned report, in terms of an e-portfolio. However, guidance on the specification and the organisation of information for purposes other than the representation of formal achievement reports is outside the scope of this European Standard.

In addition, this European Standard defines refinements to the EuroLMAI model for representing the Europass DS.

The Europass Diploma Supplement Application Profile of EuroLMAI, in full compliance with the Europass requirements, focuses on the expression of information regarding the qualification awarded to a learner upon completion of a formal educational programme. The proposed profile is needed for the general purposes of:

- the exploitation of academic achievements abroad: in continuing education or in seeking job opportunities;
- the admission of students or graduates in home and European universities: acknowledgment of credits or transfer of credits accumulated in home institutions moving from one university to another;
- the expression of the level, content and nature of qualifications to potential employers both nationally and at a European level;
- the enhancement of internal and European student mobility, from a university to another, or from one branch of studies to another;
- the proper integration of foreign workers into a country's employment setting;
- the normalisation of higher education qualifications, either in academic or non-academic paths;
- the establishment of good practices in the recognition procedures of qualifications among Higher Education Institutions.

EN 15981:2011 (E)**2 Normative 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.

CWA 15903:2008, *Metadata for Learning Opportunities (MLO) — Advertising*

CWA 16077:2010, *Educational Credit Information Model*

CWA 16076:2010, *ECTS Information Package/Course Catalogue MLO Application Profile*

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 15981:2011](https://standards.iteh.ai/catalog/standards/sist/c5295845-cf50-412c-948d-44c581de804d/sist-en-15981-2011)

<https://standards.iteh.ai/catalog/standards/sist/c5295845-cf50-412c-948d-44c581de804d/sist-en-15981-2011>

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

assessment result

result

recorded result of an assessment process

3.2

awarding body

organisation that awards credit or qualifications

NOTE The same organisation may also be a learning opportunity provider or an issuer.

3.3

credit

quantified means of expressing the volume of learning based on the workload students need in order to achieve the expected outcomes of a learning process at a specified level [1]

3.4

credit scheme

credit transfer scheme

see 3.9

3.5

credit value

particular amount of credit

NOTE Credit value is only meaningful within a framework or credit scheme, and the framework or scheme may require the specification of a level. The European Credit Transfer System (ECTS) is one such scheme. Credit value is an abstract amount that can be applied in several circumstances.

3.6

diploma

official documentary record of the awarding of a qualification

NOTE This is equivalent to the ECTS Users' Guide Glossary [1] term Qualification: "Any degree, diploma or other certificate issued by a competent authority attesting the successful completion of a recognised programme of study." Here, the preferred usage of the term "qualification" (q.v.) is for the status conferred, not the documentation.

3.7

Diploma Supplement

EuroLMAI report that contains Europass Diploma Supplement Information

3.8

EuroLMAI report

report that contains achievement information for a single learner within a formal educational setting

3.9

framework

credit scheme

system of concepts, definitions and provisions through which educational practices are ordered, related and articulated

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 15981:2011

EN 15981:2011 (E)**3.10****issuer**

body that issues the EuroLMAI report

NOTE The same body may also be a learning opportunity provider or an awarding body.

3.11**learner**

individual currently or formerly enrolled in a formal learning opportunity

NOTE The learning opportunity may be a part or whole programme of study, a seminar, work experience, a single course, etc.

3.12**learning opportunity**

formally specified education or training process

NOTE This is close to the ECTS Users' Guide Glossary [1] definition of Educational Component: "A self-contained and formally structured learning experience (such as: course unit, module, seminar, work placement)." There are other opportunities to learn that are less structured, but these are of less interest in the context of European learner mobility. Within the Diploma Supplement context, a learning opportunity is seen as either the formal educational programme the learner has successfully completed or a component of this programme.

3.13**learning opportunity instance**

single presentation of a learning opportunity

NOTE "Unlike a learning opportunity specification, a learning opportunity instance is not abstract, may be bound to particular dates or locations, and may be applied for or participated in by learners" as in CWA 15903:2008.

[SIST EN 15981:2011](https://standards.iteh.ai/catalog/standards/sist/c5295845-cf50-412c-948d-44c581de804d/sist-en-15981-2011)

3.14**learning opportunity provider**

organisation that validates or advertises learning opportunity specifications, or that runs learning opportunity instances

NOTE The same organization may also be an issuer or an awarding body.

3.15**learning opportunity specification**

description of a learning opportunity, consisting of information that will be consistent across multiple instances of the learning opportunity

[CWA 15903:2008]

3.16**level**

educational level

one of a set of terms, properly defined within a framework or scheme, applied to an entity in order to group it together with other entities relevant to the same stage of education

NOTE This is similar in intention to the definition of level in CWA 15903:2008 which in turn refers to the Dublin Core term with name "educationLevel" and label "Audience Education Level". Level terms are typically consecutive small integers.

3.17**module**

course unit in a system in which each course unit carries the same number of credits or a multiple thereof [1]

3.18**programme**

set of learning opportunities for successful completion of which the learner can be awarded a specified qualification

NOTE ECTS Users' Guide Glossary [1] defines "Programme (educational)" as a "set of educational components, based on learning outcomes that are recognised for the award of a specific qualification". In a learner mobility document (including Diploma Supplement), the programme refers to the top level learning opportunity whose results are represented in the document.

3.19**qualification**

status awarded to or conferred on a learner by an awarding body

NOTE This is compatible with the Qualification property of CWA 15903:2008. A qualification is identified and represented by its name, and possibly also its subject. To be of value, a qualification needs to be meaningful within the system of education and within the society in which it is embedded. The European Qualifications Framework (EQF) defines a qualification as "a formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards", which says a lot about the process, but little about the nature of the outcome.

3.20**student**

see 3.11

3.21**transcript**

collection of information, represented in a learner mobility achievement report, about learning opportunity instances taken by a learner, including any available associated results for that learner

iTeh STANDARD PREVIEW

(standards.itech.ai)

[SIST EN 15981:2011](https://standards.itech.ai/catalog/standards/sist/c5295845-cf50-412c-948d-44c581de804d/sist-en-15981-2011)

<https://standards.itech.ai/catalog/standards/sist/c5295845-cf50-412c-948d-44c581de804d/sist-en-15981-2011>