# ELMO and Diploma Supplement

An ELMO workshop will be held on 7 September 2018 in Helsinki, to discuss adding Diploma Supplement structure to ELMO. This is a contribution to prepare this discussion.

## Diploma Supplement

The Diploma Supplement is a document described at <a href="http://ec.europa.eu/education/resources/diploma-supplement\_en">http://ec.europa.eu/education/resources/diploma-supplement\_en</a>

"The Diploma Supplement (DS) is a document accompanying a higher education diploma, providing a standardised description of the nature, level, context, content and status of the studies completed by its holder. It is produced by the higher education institutions according to standards agreed by the European Commission, the Council of Europe and UNESCO. The Diploma Supplement is also part of the Europass framework transparency tools

The supplement is designed as an aid to help (but not guarantee) recognition – it is not a CV or a substitute for the original qualification.

It has the following eight sections of information:

- the holder of the qualification
- the qualification
- the level of the qualification
- the contents and results gained
- the function of the qualification
- any additional relevant information
- certification of the supplement
- details of the national higher education system concerned (provided by the National Academic Recognition Information Centres (NARICs)).

Graduates in all the countries taking part in the Bologna Process have the right to receive the Diploma Supplement automatically, free and in a major European language."

#### ELMO

ELMO is a format describing assessments for a person. This covers any level of education, and includes descriptions of the courses or qualifications the person has achieved.

ELMO is based on two standards:

• Metadata for Learning Opportunities (MLO) Advertising – CEN 15982:2011

• European Learner Mobility Achievement information (EuroLMAI) – CEN 15981:2011

The development of these standards was funded by the European Commission.

The format is generic, not based on a single countries education system.

The versions of the format is on github: <u>https://github.com/emrex-eu/elmo-schemas/releases</u>

The figure below shows a model for ELMO 1.3 developed by EMREX, later adopted by Erasmus Without Paper (EWP).

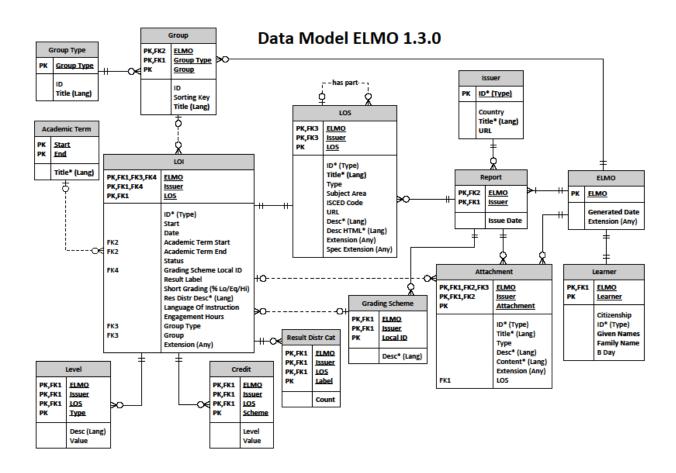


Figure 1 Data model for ELMO (EMREX/EWP)

### Digitalization of the Diploma Supplement

Digitalization of the Diploma Supplement requires a common format.

The European Commission has published a report on digitalization of the Diploma Supplement, and refers to a number of projects and initiatives for standardization of exchange format for Diploma Supplement. ELMO is among these, and is used in projects like EMREX and EWP.

As part of the work with the ELM standard, a workshop agreement on "Guidelines on European Learner Mobility Model" was made:

ftp://ftp.cen.eu/CEN/Sectors/List/ICT/CWAs/CWA16133 2010 LMmodel.pdf

## Suggestion for ELMO enhancement

A large part of the information in the Diploma Supplement is already included in the ELMO format. The work so far on the format relates to the information on the Diploma and the Transcript of Records.

ISO 15836 – Dublin Core

mlo:Metadata for Learner Mobility

elm:European Learner Mobility

eds:Europass Diploma Supplement

Diploma Supplement	Class	MLO/ELM	ELMO support
1.1 Family name	elm:Learner	elm:familyName	learner.familyName
1.2 Given name	elm:Learner	elm:givenNames	learner.givenNames
1.3 Date of birth	elm:Learner	vcard-rdf:bday	learner.bday
1.4 Student identification number or code	elm:Learner	dublincore:identifier	learner.identifier
2.1 Name of qualification	mlo:Learning Opportunity- Specification	elm:qualification	learningOpportunity Specification.title
2.2 Main field of study for the qualification	mlo:Learning Opportunity- Specification	eds:qualificationMain StudyField	learningOpportunity Specification.subjectArea / iscedCode
2.3 Name and status of awarding institution	mlo:Issuer	dublincore:title	issuer.title - no support for status
2.4 Name and status of institution	mlo:Learning Opportunity- Provider	dublincore:title	-X-

administering			
studies			
2.5 Language of instruction	mlo:Learning Opportunity- Instance	mlo:languageOfInstruction	learningOpportunityInstance. languageOfInstruction
3.1 Level of qualification	mlo:Learning Opportunity- Specification	dublincore:educationlevel	learningOpportunityInstance. level
3.2 Official length of programme	mlo:Learning Opportunity- Instance	mlo:duration	-X-
3.3 Access requirements	mlo:Learning Opportunity- Instance	mlo:prerequisite	-X-
4.1 Mode of study	mlo:Learning Opportunity- Instance	mlo:engagement	learningOpportunityInstance. EngagementHours
4.2 Programme requirements	mlo:Learning Opportunity- Specification	dublincore:description	learningOpportunity Specification.description
4.3 Programme details	mlo:Learning Opportunity- Specification (transcript level)		Full support? – learningOpportunity Specification.hasPart
4.4 Grading scheme and, if available, grade distribution guidance	mlo:Learning Opportunity- Instance	elm:gradingScheme	learningOpportunityInstance. gradingScheme(LocalId) Refer to report.gradingScheme
4.5 Overall classification of the qualification	mlo:Learning Opportunity- Instance	elm:result	learningOpportunityInstance. resultLabel
5.1 Access to	mlo:Learning	mlo:DegreeProgramme	-X-
further studies	Opportunity- Specification	AssessToFurtherStudies	
5.2 Professional status	mlo:Learning Opportunity- Specification	eds: professionalStatus	-X-
6.1 Additional information	mlo:Learning Opportunity- Specification	elm:additionalInformation	-X-
6.2 Further information sources	mlo:Learning Opportunity- Specification	eds:qualificationInfoSource	-X-

7.1 Date	elm:issueDate	learningOpportunityInstance. date
7.2 Signature	N/A	-X-
7.3 Capacity	N/A	-X-
7.4 Official	N/A	-X-
stamp or seal		
8 Information on the national higher education system	elm:additionalInformation	-X-

The missing elements are in general attributes for textual information of different types:

- 2.2 Main field of study for the qualification (additional information to iscedcodes?)
- 4.2 Programme requirements (need to be looked into)
- 5.1 Assess to further studies
- 5.2 Professional status
- 6.1 Additional information
- 6.2 Further information sources

To solve these in ELMO, we could add a general information element with a type and language attribute.

Other information not supported:

2.3 Name and status of awarding institution	Status of awarding institution need to be added	
2.4 Name and status of institution	Need to be addressed – only one issuer in	
administering studies	ELMO	
3.2 Official length of programme	Need to be added	
7. Certification	Is date ok? Should signature (name) and	
	capacity be added?	
8. Information on the national higher education	This is a more complex presentation. Should	
system	this be added as an attachment, URL?	