

Guidelines for the Technical Proposal

2007 ICT Standardization Work Programme

Application Form

Title: European Course Description Metadata (CDM) Organisation : CEN
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Part I – Policy relevance and expected market impact

1. Objective

The project will provide a specification for describing courses or other forms of educational offerings on all levels. This will facilitate the establishment of national and international course catalogues, course portals and other services helping students to choose from organized learning opportunities. When the project has reached sufficient maturity (CWA) the project will be moved forward and the goal is to produce a EN.

The project will choose a harmonised approach, by identifying the needs and to build upon already existing applications to ensure that the project captures existing best practice in countries that already have CDM like projects.

The CDM proposal will also address the accessibility aspects of a course, ensuring that special accessibility needs are identified and described. This gives users in Europe a unique possibility to search for offerings that are not discriminating based on disabilities. Describing the accessibility requirements or the accessibility provisions for a course would be a huge step forward for a inclusive Europe.

The following deliverables will be submitted:

- interim report 10 months after the start of the work. The report will consist of the following: Draft CWA with a harmonised data model.
- final report 15 months after the start of the work. The report will consist of the CWA, and implementation guidelines and a compiled list of applications that support the CDM profiles.

2. Rationale

Initiatives on course description metadata are already identified in Norway, Sweden, UK and France. Other European countries like Germany, Italy and Spain have announced their interest and identified a need for Course Description Metadata, and they are likely to develop their own meta data scheme. This specification will build on

existing initiatives on course description metadata and identify the usecases and need from other interested countries, to build a harmonised course description data model.

Better communication of course offerings across national boundaries will significantly contribute to the education and skill-development in the European society. Without a standardised representation of educational offerings there is no way one can build services that could inform the European citizens to enhance their competencies for the 21st century.

By also identifying accessibility requirements and provisions of a course or educational offering a new set of important information related to course offerings will be made available, providing important information to an important group of people searching and applying for an educational or a course.

The Education and Culture Directorate-General of the European Commission has launched the second phase of PLOTEUS (Portal on Learning Opportunities Throughout the European Space).

PLOTEUS II aims to provide European citizens with a query tool that gives direct access to learning opportunity descriptions, as opposed to the existing portal¹ that "only" offers categorized links to learning opportunity sources (universities, national databases, etc.).

To fulfil the PLOTEUS II aims it is necessary to have a European consensus about how to exchange Course Description Metadata.

This project will ensure that a common approach is taken for describing courses or other forms of educational offerings on all levels. European countries not yet having developed their own approach will also be invited to participate.

3. Policy relevance and market impact

The eEurope 2005 action plan and the i2010 initiative list eLearning as one of the modern online public services that should be a priority, and also highlight skills for the knowledge society as a major objective. Better communication of course offerings across national boundaries will significantly contribute to the education and skill-development in the European society. Without a standardised representation of educational offerings there is no way one can build services that could inform the European citizens to enhance their competencies for the 21st century.

4. Market impact

Since there already exist several implementations of exchange of course description developed in UK (XCRI¹), France (CDM-FR²), Sweden (EMIL³) and Norway (CDM⁴) there is a need for a standardised format within Europe to exchange Course information. The possibility to develop portals and services for course offerings

1 <http://www.elframework.org/projects/xcri>

2 <http://acces.inrp.fr/cdm/>

3 <http://mjukis.skolutveckling.se/ListActiveNews.action?container=6>

4 <http://cdm.utdanning.no/>

requires a standardised format. With a standardised course description format a service developed in one country for the CDM data model could easily be used by others.

This project have support from all that have developed course descriptions that they see a great advantage of a harmonised approach for a common course description. The project has also received interest from Italy, the Netherlands, Spain and Finland who all see interest in a harmonised approach towards course and educational description.

Consequences if not performed

If the project is not performed several countries will develop their own metadata descriptions for course exchange within each country or institution. Then it will be hard to exchange information between different countries for providing information about courses and educational offerings.

Part II- Execution of the work

5. Working method/approach

To ensure that all countries that have projects related to describing course and educational offerings a invitation will be sent out widely to attract as many experts as possible to ensure that all aspects are covered to facilitate a harmonisation of existing data models of course descriptions.

For the production of the deliverable, use will be made of a small number of Project Team experts should have the following expertise:

- expertise with metadata
- expertise of course and educational offerings
- expertise with standards development
- expertise with developing of vocabularies
- expertise of educational and course structures
- technical development expertise.
- accessibility expertise

One important issues is to liaise with other EU projects to ensure that CDM is interoperable with the data model defined in these projects, such projects will be identified within the eContent+ project and within the FP7 call. Projects working to develop learning resources or learning resource repositories or projects that describe course offerings are among the target groups of this project proposal.

The project will also investigate different taxonomies developed and used within the educational and training communities. There exist such efforts within the library communities, the statistical communities and within CEDEFOP. Identifying and liaising with these organisations is important to ensure that CDM uses a familiar and accurate vocabulary. How this will be solved is not yet determined – but harmonising the ISO11179 Metadata registries could be one possibility.

The final specification will be developed with the expectation that it can be developed as European standard (EN) via the CEN TC353.

Additional guidance and examples will be produced as a CWA to encourage disseminations and widespread use of the format.

At each stage the WSLT members will be consulted and appropriate drafts will be sent to TC353 for comment by the member National Bodies and liaison organisations.

6. Performance indicators

Category/Policy impact indicators	
Effectiveness	<p>The target is that at least 35 experts will have participated in the overall activity'. Of these people at least 5-8 should be from liaison organisations, such as DG-EAC, CEDEFOP and CDSG.</p> <p>Physical attendance at meetings</p> <p>Contributions to the activity by email and written contributions</p> <p>In addition, the target is that the draft CWA – when it is put on a public web-site for "public comments" during a two months process will be downloaded there 20 times by non-Workshop participants.</p> <p>The CWA shall have the explicit agreement by at least 20 registered Workshop participants.</p> <p>Number of meetings: 4 meetings during the duration of the project with an average of 20 participants</p> <p>Production time of the deliverables and statistics on delivery dates versus timetables foreseen in the contracts: target dates for interim and final report: see contract</p>
Stakeholder engagement	<p>Balance of Stakeholder representation in the activity.</p> <p>Each of the following categories shall be represented as follows in the activities (note: the total target is for 30 experts – see above)</p> <p>Representatives of National approaches – 10</p> <p>ICT Industry - 5</p> <p>Universities and Academia – 10</p> <p>Liaison organisations such as CDSG, CEDEFOP, PLOTEUS - 5</p> <p>Other - 5</p>

Category/Policy impact indicators	
Dissemination Results	<p>Record of dissemination and awareness actions: A summary report will be provided</p> <p>The CWA will be made available through the CEN Members and shall be available free of charge for downloading from the CEN web site.</p> <p>The result will be made as an European contribution to ISO/IEC JTC1 SC36.</p>
Impact	<p>The Course Description Specification will create a common basis for establishing a European market for learning opportunities. Educational institutions, both in the public and private sector, will benefit from this work, as well as the learners in all walks of life throughout Europe.</p> <p>Number of free downloads of deliverables: The problem with measuring the downloads of the CWAs from CEN's web-site is that the required data will not be available until some considerable time after the completion and delivery of the CWAs</p> <p>Stakeholder satisfaction: after completion of the activity, participating organizations will be asked by the Workshop Secretariat to give feed-back on their level of satisfaction. A report will be provided on this satisfaction survey.</p> <p>The result of the work of a harmonized Course Description Metadata will be that similar course in different countries could use the same educational content. The course descriptions will also promote and support the online market place for eLearning material.</p> <p>Course offerings could be found using the PLOTEUS II and through other course offering search sites and relevant portals.</p>

7. Work plan, milestones and deliverables

The envisaged time line is the following:

Time line / Deliverable:	
J + 3 month:	Formation of the CDM working group three months after the signature of contract (J)
J + 5 months	Completed survey of existing work of CDM activities in Europe, and requirements, usecase collection and analysis.
J + 6 months	Interim Report: on CDM activities and need for harmonisation of work.
J + 8 months	Interim Report: on CDM harmonisation, harmonisation of vocabularies and structure. First draft CDM sent out for comments and discussion by WS-LT members.
J+ 10 months	Delivery to the Commission of the Interim report, consisting of the draft CWA on Course Description Metadata This draft CWA will contain a proposal for harmonization and will refer in its annexes to the information gathered in task T4 and T5
J + 10 months	Resolve all comments and write a implementation guideline document.
J + 12 months	Complete data model and implementation guideline ready and sent out for comments.
J + 13 months	Approved version of CDM data model and implementation guideline.
J +15 months	Delivery to the Commission of the Final report, consisting of the approved CWA on Course Description Metadata The contents of this CWA will consist of: <ul style="list-style-type: none"> ● a standardised CDM data model ● an implementation guideline to help the implementers of the CDM-data model

Task 1: Establish the project team 3 months after the date of signature

Task 2: Start-up of activities 4 months after the date of signature

Task 3: Contact with participants

The project team will report regularly to the members of the WSLT at each of its meetings

Task 4: Research activities

The project team will analyse all existing implementations and data models for describing courses, based on this analysis a set of commonalities will be identified, and a set of differences will be identified. Requirements and usecases will also be gathered from other countries that are interested in the CDM work. This task will be completed by month 6.

Task 5: Analysis

Usecases and requirements will be compared and mapped to the findings of the existing “CDM” applications. These analysis will be used for further development and as important input to the harmonised development of a common European course description metadata data model. The Analysis will be completed by month 8.

Task 6: First Draft

The first draft of the CWA sent to the registered participants in the Workshop on Learning Technologies for comments. The drafts will contain already a substantial part of the technical material for discussion and will be ready by month 9.

Task 7: Organisation of Workshop meeting to comment the First draft

All experts participated in the CDM work, and other stakeholders among the experts in WS-LT will be invited to discuss the proposed data model. The proposed model will also be submitted to TC353 for comments.

Task 8: Interim report to EC/EFTA

In Month 10 a status report of the project will be presented, with the proposed data model and the most important background material.

Task 9: Produce Final draft

When all comments have been resolved and all experts have agreed on a common data model, the final draft version of the CDM will be produced and submitted to the WS-LT for comments before approved as a WSA. The Final draft will be ready by month 12.

Task 10: Organisation of a conference to collect comments on this Final draft

When the final draft is completed a meeting will be arranged to present the results, and how a common European Course Description Metadata model could be used, the benefits to all parties etc. To this meeting organisations and projects that are anticipated to work with discovery and marketing of courses and educational offers will be invited, the same with organisations that work with learning resources and learning resource repositories. This conference should be arranged in month 13.

Task 11: Approval of the CWA by the Workshop

When all comments have been resolved, the CDM project will be presented to the WS-LT for approval as a WSA. This should be done before month 15.

Task 12: Submission of the final report to EC/EFTA

The final CWA and a project report will be sent to EC/EFTA. The final report should be available by month 15.

Task 14: Dissemination of the outcome (CWA and other results) of the Grant

When the CWA is approved by the WS-LT, the CWA will be sent to TC353 for standardisation at a European level. Projects and organisations that work with related activities within Europe will receive the CWA for consideration in their projects. This will take place in month 15-17.

Resources

95 person days is requested for this proposal. The financing will cover the project team and the secretariat support to the consensus process within the CEN/ISSS/WS-LT, where the work will be processed.

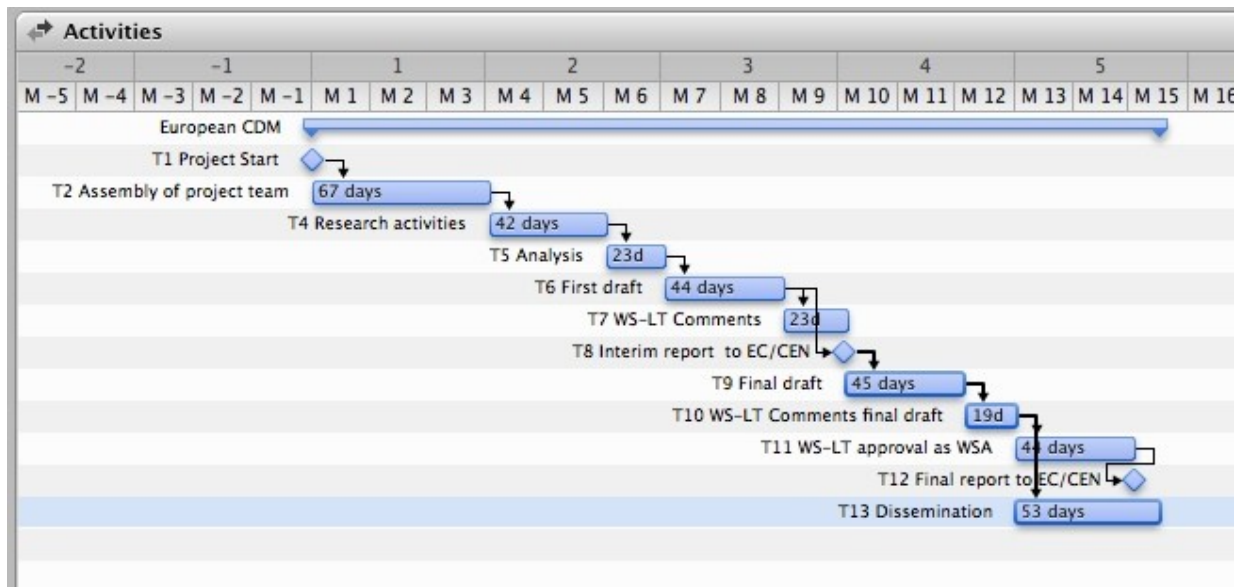


Figure 1: European CDM Gant chart