# **CEN/ISSS Workshop eCAT**

Multilingual eCataloguing and eClassification in eBusiness

# Project Plan Gen-ePDC

(version 2)
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## Source:

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at the Plenary 2005-03-16

#### 1. Title of the Project

Global Multilingual Product Description and Classification for eCommerce and eBusiness – part 2: Gen-ePDC

## 2. Proposers (companies, organizations)<sup>1</sup>

CEDI – Chemical EDI Initiative (Tokyo, Japan)
CIDX (Chemical Industry Data eXchange – European contact: Ludwigshafen, Germany).
eCl@ss e.V. (Cologne, Germany)
EMF – European Multimedia Forum (Brussels, Belgium)
ENSMA/pLIB (Poitiers, France)
GS1 (Brussels, Belgium) – former EAN International
IIM - Fachhochschule Köln, Institut für Informationsmanagement (Cologne, Germany)
Infoterm – International Information Centre for Terminology (Vienna, Austria)
OILCATS (Houston, USA)
Phoenix EDH (Houston, USA)
PIDX - Petroleum Industry Data eXchange (Houston, USA)
SupplyChange (Brussels, Belgium)
TermNet (Vienna, Austria)
University of Hagen (Hagen, Germany)

## 3. Project background

In the interconnected world of today there is an increasing emphasis on the efficient flow of goods and services through the supply chain. During its lifetime many units of different companies deal with a product. Procurement forwards the information to (potential) suppliers and to their order processing systems. Suppliers match the information they receive with the data of their products. The appropriate item is selected. It is delivered and used, for example as a raw material in a production process. The information accompanying the material becomes part of the batch record.

Concurrently purchasers perform statistical analyses to determine their market position and performance. Searching in catalogs for finding the right product to be purchased is readily optimized when you have *classified* products in hierarchies. This is why *Product Description* is also important.

#### <u>Trends in product coding/classification/catalogues:</u>

Coding of products for internal processes for many years has been local, and, as a result, businesses and geographic areas had their own Product ID's. This causes significant duplication and inefficiencies in business processes.

Different initiatives have arisen since a few years to try to build a global common product classification system, but none has really succeeded until now. Some of these initiatives (Rosettanet, PIDX, SEMI, GPC...) have had a partial success as they are implemented in company supply chains within certain vertical sectors (Electronics, Petroleum, Chemicals,...). Except two (UNSPSC and eCl@ss), none has a real global coverage.

<sup>&</sup>lt;sup>1</sup>Requests for approval from other organizations have been sent and await formal written approval.

Software houses developing proprietary catalogue structures have continued to explode (more than 400 today) which renders the interoperability of catalogue data a nightmare.

#### 4. Objectives

The ePDC project was conceived in 2003<sup>1</sup> with the initial objective to harmonize existing standards for product description and classification into a common horizontal, i.e. cross-industry, system, then maintain, promote, and make it available to the public under a royalty-free license on an on-going basis.

It was quickly ascertained that this objective was very ambitious and it was felt necessary to divide the project into two parts.

The <u>first part</u> was aimed at building a *modern architecture for a global, interoperable classification schema*, and started in October 2003. It is foreseen to conclude its activities in March 2005 with the delivery of two CWAs:

- ePDC CWA1 "Dictionary of Terminology for Product Classification and Description"
- ePDC CWA2 "Description of References and Data Models for Classification"

The <u>second part</u> was aimed at diffusing the global common, interoperable classification architecture defined under part 1 and having the main existing classification schemas adopting it as well as converging towards a common base as defined hereunder.

The project duration is 14 months (from December 2004 to February 2006). The contract was signed by the Commission in December 2004. The official kick-off of the project will take place at the next plenary on 2005-03-16. The actual time scale of the project is therefore 11 months.

This document is focused on the <u>second part</u> of the project, which is called **"Gen-ePDC (Generic Product Description and Classification"**.

The project also contains a part dedicated to the link between product classifications and catalogues, taking as reference CWA 15045:2004<sup>2</sup>.

#### 5. Work programme

Classification and catalogues is an area under quick development. For this reason, the Gen-ePDC work programme detail may change during the project lifetime, if important changes in the domain occur. In this case, the Gen-ePDC work programme will be revised (revised version needs to be endorsed by WS/eCAT).

http://www.cenorm.be/cenorm/businessdomains/businessdomains/isss/cwa/electronic+business.asp

<sup>&</sup>lt;sup>1</sup>The Project is described in detail in document WS/eCAT/03/006 "ePDC Project Plan v.8". For download, please go to <a href="http://linux.termnet.org/index.py?level=level3&id=2&lang=en">http://linux.termnet.org/index.py?level=level3&id=2&lang=en</a>

<sup>&</sup>lt;sup>2</sup> The CWA 15045: 2004 can be downloaded from the CEN/ISSS website

#### Work Item 1 (W1): (Months 1-14)

W1 Maintain a table of existing classification schemes, whether or not these are participating in the Project (continuation of Work Item 1 of ePDC1)

→ Deliverable D-a: Excel sheet containg the table

→ Milestone: Month 14

#### Work Item 2 (W2): (Months 3-6)

W2 Harmonize the terminology - terms and definitions (continuation of Work Item 2 of ePDC1)

Currently, many different terms are used for the same concepts. Examples:

- Classification, hierarchy, taxonomy, ontology
- Class, noun/modifier, noun/qualifier, commodity, commodity class
- Attribute, property, characteristic

This leads to numerous misunderstandings. There is an obvious need to unify the terminology in this field.

N.B. Basic terminology will be the one defined by ISO 13584/IEC 61360. Use the terminology of this standard whenever possible.

Add all terms that are necessary in the new architecture and define them with precision. Add terminology terms necessary for extending ISO 13584. Submit these terms for approval by ISO TC 37 and ISO TC 184/SC4/WG2.

- → Deliverable D-b: Dictionary of Terminology for Product Classification Components
- → Milestone: second Plenary meeting

#### Work Item 3 (W3): (Month 3)

- W3 Decide on a precise common objective for convergence, to a certain level, of the main classification schemas, based on the commonly agreed classification architecture.
- → Deliverable D-c: see Work Item 4
- → Milestone: First Plenary meeting

#### Work Item 4 (W4): (Months 3-6)

- W4 Decide on business rules to operate a joint working committee in charge of the implementation and management of the classification
- → Deliverable D-d: Document describing the common objective for convergence of the main classification schemas (Work Item 3) and business rules for the joint working committee.
- → Milestone: Second Plenary meeting

#### Work Item 5 (W5): (Months 3-6)

- W5 Find an appropriate toolset for maintaining the system including
- W5.1 A repository able to accommodate the classification architecture and the business rules for implementation and maintenance of the common classification schema.
- W5.2 A website giving free access to the classification and to governing rules
- → Deliverable D-e: Document describing the toolset and funding proposals for maintaining the repository and website
- → Milestone: Second Plenary meeting

#### Work Item 6 (W6): (Months 3-6)

- W6 Plan the transition from proprietary structures to common architecture and request agreement from all participating organizations
- → Deliverable D-f: Document describing the transition plan
- → Milestone: Second Plenary meeting

#### Work Item 7 (W7): (Months 3-6)

- W7.1 Set up the joint working committee
- W7.2 Search + decide for experts that will manage the Product Classification and develop the multilingual Catalogues and their respective data modeling methodology
- W7.3 Discuss the conditions of use of the repository; pass an agreement to open the use of it
- → Deliverable D-g: Document describing the usage conditions of the toolset. The conditions for designing the experts will follow the CEN rules on this matter.
- → Milestone: Second Plenary meeting

#### Work Item 8 (W8): (Months 3-7)

- W8 Segment and assign domains to collaborating organizations
- W8.1 Segment all goods and services into domain classes
- W8.2 Assign classes to specific organizations
- W8.3 Resolve overlap and gap in classes and properties
- → Deliverable D-h: Data file on domain responsibility and incorporation into the repository
- → Milestone: Third Plenary meeting (end of action)

## Work Item 9 (W9): (Months 4-7)

- W9 Harmonize the maintenance processes and policies. Propose a financial plan for the future maintenance of the classification.
- W9.1 Harmonize the maintenance processes and policies
- W9.2 Design the necessary XML schemas to be used for the maintenance process exchange format
- W9.3 Propose a financial plan for the future maintenance of the classification
- → Deliverable D-i: New process and policy documents
- Milestone: Third Plenary meeting

## Work Item 10 (W10): (Months 3-14)

Help migrate existing classifications to the common architecture

- → Deliverable D-j: Report on the results of the migration
- → Milestone: Third Plenary meeting

## Work item 11 (W11): (Months 3-7)

W11.1 Write a CWA on the New Properties Library (NPLib) and submit it to ISO W11.2 Write a CWA on Product Classes with sets of Properties and submit it to ISO

- → Deliverable D2: CWA "New Properties Library"
- → Deliverable D3: CWA Product Classes with sets of Properties"
- → Milestone: Third Plenary meeting

#### Work item 12 (W12): (Month 13)

W12.1 Decide if Hierarchies are to be further standardized W12.2 If yes, write a CWA on the subject matter and submit it to ISO

- → Deliverable D-k: Report on "Standardization of Hierarchies"
- → Milestone: 2006-01

#### Work item 13 (W13): (Month 3-9)

- W13 Development of multilingual catalogues and their respective data modelling methodology
- → Deliverable D4: CWA "Results of development of multilingual catalogues and their respective data modelling methodology"
- → Milestone: Third Plenary meeting

## The W comprises 6 subtasks, defined as follows:

#### Work item 13.1:

#### Subtask 1:

Basic requirements concerning a multilingual Catalogue metamodel, based on ISO 13584. They will include the relationships between metadata, the high-level metamodel and the prototyping.

### Subtask 2:

Basic principles and requirements of net-based distributed cooperative content creation of eCatalogue data. These basic principles and requirements represent the necessary bottom-up aspects of future eCataloguing. They also comprise the workflow methods for real-time preparation and adaptation of eCatalogue data via the Internet.

#### Subtask 3:

(Draft) Rules and procedures for repositories in connection with eCataloguing. This framework will describe the necessary repositories for eCatalogue related:

- software architectures
- communication protocols, messages
- interfaces, interface elements
- data dictionaries
- metamodels
- ontologies
- data structures/datamodels & metamodels
- metadata/data categories
- certain types of content items: authority data, attributes, values, proper names,
- etc

to be implemented in the form of maintenance agencies, registration authorities and all kinds of other registries. It will describe business model options for different types of repositories and formulate recommendations on the extension of rules and procedures at international level.

#### Subtask 4:

Description and definition of interfaces. This subtask will result in specifications for the most important interfaces to

- major product classification and identification schemes
- other ERP environments
- other pertinent system environments
- existing and future repositories
- workflow management systems

#### Subtask 5:

Definition of harmonized terminology. The terminology, which has been harmonized for the purpose of the carrying out the projects within the framework of CEN/ISSS/eCAT, will be further extended, refined and defined as occurring in this CWA. Recommendations for changing certain terminology usage in existing international standards will be formulated.

## Work item 13.2:

#### Subtask 6:

XML schemas for Catalogues based on ISO 13584 and use of ebXML. This task is liaised with work item 9.2 and must be done by the same expert.

#### Summary of deliverables (part 2 of ePDC)

- D1: Interim Report
- D2: CWA1 "The New Properties Library"
- D3: CWA2 "Product Classes with sets of Properties" (and hierarchies if standardization required)
- D4: CWA3 "Results of development of multilingual catalogues and their respective data modelling methodology"

#### 5.1 Time scale

The project duration will be 14 months (from December 2004 to February 2006), and 8 months for the Catalogues section (February 2005 to September 2005).

The contract was signed by the Commission on 2004-12-16. The official kick-off of the project will take place at the next plenary on 2005-03-16.

→ The actual time scale of the project is therefore 11 months: begin 2005-03-16 and end 2006-02.

## (Draft) Time table of Project Plan Gen-ePDC

	Month 0	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14
	04-12	05-1	05-2	05-3	05-4	05-5	05-6	05-7	05-8	05-9	05-10	05-11	05-12	06-1	06-2
						2 <sup>nd</sup> p	hase								
W1				M1											
W2															
W3															
W4															
W5															
W6															
W7															
W8															
W9															
W10											M2				M3
W11											D2+D3				D2+D3
W12														M	
W13															D4
Interims Report								D1							

- (W) Work Item
- (D) Deliverable (D1: Interim Report, D2: Gen-ePDC CWA1, D3: Gen-ePDC CWA2, D4: Gen-ePDC CWA3)
- (M) Milestones = Plenary

# 5.2 Summary table

Work Items	(D)	Deliverable Name	Activity	Date (M)	
	D1	Interim Report		2005-07	
W1	D-a	Excel sheet containg the table (part of <b>D1</b> )	Maintain a table of existing classifications (continue)	M3: 2006-02	
W2	D-b	Dictionary of Terminology for Product Classification Components	Harmonize terminology (continue)	M2: 2005-10	
W3	D-c	see Work Item 4	Common objective for convergence	M1: 2005-03	
W4	D-d	Document describing the common objective for convergence of the main classification schemas (Work Item 3) and business rules for the joint working committee. (part of <b>D1</b> )	Business rules for management of the Classification	M2: 2005-10	
W5	D-e	Document describing the toolset and funding proposals for maintaining the repository and website. (part of <b>D1</b> )	Toolset for maintaining the system (repository, website)	M2: 2005-10	
W6	D-f	Document describing the transition plan. (part of <b>D1</b> )	Plan the transition to new system and request agreement	M2: 2005-10	
W7	D-g	Document describing the usage conditions of the toolset. The conditions for designing the experts will follow the CEN rules on this matter.	Implement the management of the Classification	M2: 2005-10	
W8	D-h	Data file on domain responsibility and incorporation into the repository	Segment and assess domains	M2: 2005-10 M3: 2006-02	
W9	D-i	New process and policy documents	Harmonize the maintence processes and policies	M3: 2006-02	
W10	D-j	Report on the results of the migration	Help migrate existing classifications to common architecture	M3: 2006-02	
W11.1	D2	CWA "New Properties Library"	Write a document on the New Properties Library	M2: 2005-10 M3: 2006-02	
W11.2	D3	CWA "Product Classes with sets of Properties"	Write a document on Product Classes with Sets of Properties	M2: 2005-10 M3: 2006-02	
Milestone			Decide on the necessity of a standard Hierarchy and of cross-linking to other hierarchies. If the decision is negative end here.	2006-01	
W12	D-k	Report on "Standardization of Hierarchies"	Write document on Hierarchy	M3: 2006-2	
W13	D4	CWA Results of development of multilingual catalogues and their respective data modelling methodology	Development of multilingual catalogues and their respective data modelling methodology	M3: 2006-2	

(D) Deliverable (M) Milestone

## 6. Organization and resources

The Project is run in the framework of the CEN/ISSS Workshop eCAT.

It is proposed that the project is coordinated by Mr. Raymond Betz, WS/eCAT vice-Chair. Mr. Betz coordinated the first part of ePDC, as agreed by WS/eCAT members at the plenary in October 2003.

A Project Team of 3 experts will be appointed for this project, following an open call according to CEN/ISSS rules. Funding for a total of 155 man/days is available, via EU/EFTA funding, provided that adequate voluntary effort is met.

The Project Team will work under the guidance and supervision of Workshop eCAT.

#### 7. Contact

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