



N° 7 – December 2007

# Ident-PHF newsletter



The Newspaper of the « Non Production Material Identification » network

## Editorial

By **Thierry GENITEAU** (manager of Maintenance & Equipment Efficiency dept) - RENAULT

At the dawn of a new year which we hope will be fruitful for our common projects, I send you, first of all, my best wishes..

Concerning our "Projet de Place Communautaire de Données Techniques de Catalogues de Produits Industriels », the major objective of our PFI Committee, 2007 saw large user companies, such as Total and Michelin, joining us. It is essential that our circle of large industrial companies widens and achieves a minimum threshold of 7 or 8 members, all as strongly implicated as each other.

Indeed, on one hand, the more partners there are, the smaller will become the financial contribution of each partner. These financial contributions are necessary as much to strengthen the prototype catalogue, the concrete tool of conviction and lobbying to draw in the other manufacturers, as to allow the necessary initial investment to implement the data pool..

On the other hand, it is important that all the companies, confronted with the same problem of enterprise repository and electronic catalogues as us, become aware of the strengths of the initiative and know, as quickly as possible, how to measure the gains which will be theirs from the time that they will jump the step, even if not immediately.

This project cannot lean only on the companies, such as Arc International, PSA Peugeot Citroën and Renault, which, having a short-term need, have already discovered and measured the benefits which they had to gain from membership of such a data pool.

That the manufacturers, convinced by the economic gains, join us as quickly as possible: " more numerous we shall be at first, more easily and more quickly we shall reach the targeted solution" ...

Th. GENITEAU

## KEY EVENT

### Development of Ontologies for eCl@ss : review of work led by Renault in 2007

*After the officialization, in April, 2007, of a partnership between the PFI Committee and eClass, concrete works, on the French side, have already taken place ... Let's make a first assessment with regard to the evolutions of the eCl@ss ontology ...*

*Let's remember that, through Claude Pichot, president of AFIM and member of the PFI Committee, the members of this committee mandated and financed its representation in the high echelons of eClass: steering committee and board of directors.*



*Among the subjects prioritised within the framework of a fruitful collaboration between the PFI committee and eCl@ss, besides the propositions of individual improvement to the currently diffused ontologies and in particular their French version, an effort was launched on the creation of new families of products, called elementary ontologies.*

see page 2

## THE REPORT...

### Policy paper on standardization in the "Product Knowledge Chain"

by **Raymond BETZ**, Independent Consultant, Brussels (2007 November 15th)/ ePDC-CEN .

1 – introduction

This paper results from 5 years of experience collected during standardization work on the **Product Information Chain** (or "Product Knowledge Chain"). It relies on three basic facts that have appeared lately in this domain:

- It is often heard that nothing more needs to be done on standardization of the product data and data models. This is not true: **much work is still needed.**

...see page 3

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# KEY EVENT

## Review of work led by Renault in 2007 for ecl@ss (continuation)

(continued from page 1)....

RENAULT, in particular, had decided from Spring 2007 to animate the development in working groups of about fifteen elementary ontologies.

### Why only fifteen elementary ontologies ?

It was a question of concretizing as quickly as possible a realistic "trial run" on the possibilities of collaboration with eCl@ss. It required a good appropriation of the existing methodology of eClass on the animation of such working groups and on the formalization expected from the result. Indeed this result is required to be collected in an Excel type document, named "e-form" (electronic form) with a particular structure to be satisfied.

It was the occasion to test out the functioning and the animation of such working groups. Every Workgroup must be constituted of at least 1 large user-company (ideally 2 or 3) and from 2 to 5 manufacturers, market leaders for the typical product to be modelled. We should add that the ambition of Renault was to drive these working groups in audio and web-conferences, in sessions of 2 hours, at the rate of 3 or 4 sessions per family of products

In this spirit, 15 families of products meant 15 times 3 sessions of 2 hours at least, that is 90 hours plus largely as much again for the preparation and the reports from the sessions.

### What were the 15 chosen elementary ontologies? And why?

It was a question of working on still non-

existent families of products or at least not modelled in eCl@ss; indeed, should the opposite occur, our only possibility would have been to join the expert group already in place on the German side, which was, in fact, the case for other families (see box below).

*A French-German cooperation was initialized in 2007 on the families of classes 27 30 (all pneumatic components) with a launch session in August 2007, and a 1st working session, in Frankfurt, on October 23rd, with participation on the French side from PSA Peugeot Citroën, Renault, and Legris, and, on the German side, Bosch-Rexroth, SMC, Festo and the VDMA.*

Besides, Renault chose families of products which were of interest directly for trades related to its process: and so 5 ontologies were decided for some safety electrical components (following on from a first initiation of this type of work launched in Autumn 2005) and 10 others for families peculiar to the trade of car body framing – sheet metal working (9 on resistance welding) or stamping (1)

### What are the results of that at the end of 2007?

Since July 2007, 9 Working Groups were launched, 7 are ended, for a total of 11 accomplished ontologies. The quantified results are:

- WG2, 3 and 6: safety mat, bumper and safety edge; participants: Michelin, PSA Peugeot Citroën, Renault and Schneider Electric, Bircher Reglomat, Schmersal and Pilz



- WG4 : Intervention box ; participants : Michelin ,Renault & Schneider Electric, Rockwell automation and Moeller Electric  
- WG9 : Low Impedance cables & braid; participants : Renault & Leoni-CIA, Brar(Ericable) and Cosel

- WG10 : leaf shunt ; participants : Renault & Cosel/SERV

- WG7 & 8 ( in progress ) : resistive welding electrode, detachable end piece, welding extension ; participants : Renault, PSA Peugeot Citroën & Le bronze Industriel, Ohlmann, SERV.

### Some figures, in summary:

40 sessions of 2 hours in audio-web conference will have been necessary to arrive at this result: 15 elementary ontologies, described by 311 properties, including 187new properties.

3 large user-companies & 15 manufacturers participated in these sessions.

3 big principals and 15 manufacturers participated in these sessions.

# OTHER EVENTS

## **NPMI European Working Group (Non Production Materials Identification) Odette:**

Three working sessions took place during these last 4 months: **September 12th** on one hand, with a session, in web-conference, dedicated to sections "codification" (evolution of this paragraph) and "data exchange model" (definition of its content). Two other sessions were held, one on **October 5th**, in web-conference, the other on **October 26th** in the premises of GALIA in **Boulogne Billancourt**: the compilation of the various chapters and the shaping of the whole recommendation were the agenda of these 2 sessions. The finalization of the work of the group is scheduled for the end of the 1st quarter 2008

**IDE@-Mosaic-PFI Steering committee:** 4 new sessions of this committee took place since the beginning of September, 2007:

- A session held **September 25th** allowed the realization of an analysis of the offers relative to the catalogue data pool, to envisage a session of reinforcement of the core of large user-companies, with, as the key, the signature of a charter, as well as the organization of a convention of enlargement of these core companies on the horizon at the beginning of 2008
- Another session, on **October 25th**, was the occasion to deepen the contents of the charter, to organize in detail the forthcoming sessions about reinforcement and enlargement of core companies; the wish to see again in more detail the supplier of one of 3 offers for the data pool for deepening of the content
- A 3rd session held **November 22nd** concerned the pursuit of the analysis of the offers of the data pool and on the situation of the current prototyping with regard to this project
- Finally a 4th session held **December 20th** allowed to propose an updating of the charter further to the meeting of December 11th, and to prepare the action plan and the milestones 2008.

**French Experimental Standard XP Z 99-005:** sessions of the workgroup CN-DSTI GT2 (Committee of Normalization - Scientific Technical and Industrial Data - Workgroup 2) continued on **September 20th**, on **October 24th** and **November 29th** in the premises of AFNOR (St Denis + web-conference). They allowed significant progress on the draft of the experimental standard, which allows us to assert that the finalization of this 1st work should end in Spring 2008  
*Note that this workgroup is open to all, we can thus welcome new volunteers on this subject (contact [catherine.protic@afnor.org](mailto:catherine.protic@afnor.org))*

**IDE@-PFI technical meeting:** On **October 11th**, 2007, Paul Kempf ( GIFEC), Jean-Luc Poupet (Edicot / technical and IT responsible of IDE@) and Nadine Dagonneau (Gifec / IDE@) met Gérard Chaumond (Renault / PFI), in the premises of Gifec, at the "Maison de la Mécanique" (Courbevoie): the objective of this meeting was to exchange on the respective operations of generation of technical data by the manufacturers of industrial components. The adoption of the dictionary eCl@ss as the basic pedestal of the IDE@ modelling (progressive upgrade) as well as the willingness of a collaboration and a contribution of IDE@ to the ontology eCl@ss were the main subjects covered.

# Afnet- MINEFI

Exchanges continued between the PFI Committee and AFNET (Association of French-speaking users of the NET, the e-business and the network society, founded by Dassault Aviation, Thalès, Saffron, Dassault systems, IBM). On one hand, by the participation of G. Chaumont (RENAULT / PFI Committee), on September 6th, in the 2nd meeting of the workgroup "PLM working community (Product Lifecycle Management) ; but especially by the presence of C. Pichot and G. Chaumont in 2 sessions on the " electronic catalogues ", animated by AFNET, which took place in the premises of the "Direction Générale des Entreprises" ( DGE) within the Ministry of the Economy, Finances and the Industry ( Minefi-Bercy). The 1st session, on September 7th allowed GS1 to explain its solutions. That of December 6th was dedicated in its entirety to the presentation of the PFI initiative....

...to be continued

# THE REPORT

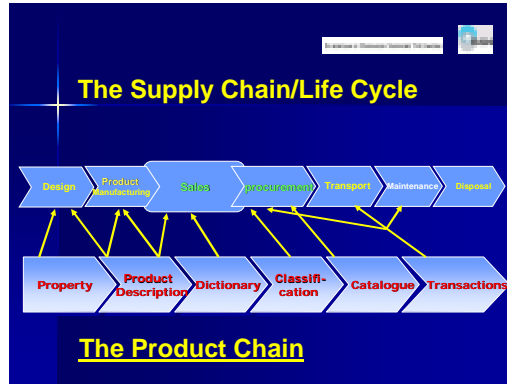
## Policy paper on standardization in the "Product Knowledge Chain"

(SUITE P.1)

- Globalization requirements increasingly trigger localization requirements, which entail new needs for standardization.
- A consultation, followed by the publication of a **report on Policy needs for ICT Standardization** (see: <http://www.ictstandardisation.eu/>), is a very **appropriate framework** in which the needs of standardization of the Product Information Chain fits perfectly well.

### 2 - Definition of the Product Knowledge Chain

We have identified **six different processes** that have to be followed one after the other to manage internally and externally the **descriptive data** pertaining to products manufactured by any company. The **six processes** are summarized in the following diagram:



In this diagram, the Product Chain is set in parallel and interconnects with the Supply Chain/Life Cycle Chain.

This policy paper deals with the standardization of the **first five processes**: Property, Product Description, Dictionary, Classification and Catalogue.

### 3 - Present standardization situation in the Product Chain

In a separate paper submitted to the EU/DG Enterprise (Strategy Paper

on an International Standardization Process for an integrated "Product Knowledge Chain" - 9/2007) we have dealt in detail with the standardization situation in the product chain. A summary of the state-of-the-art of pertinent standardization is given hereunder and the reader is referred to this paper for further details.

*PS. As an accompanying remark, we want to emphasize the fact that standardization is now a worldwide matter, and many standardization actions do happen on an international basis; we will therefore consider not only the European actions, but, when needed, the global activities. In this connection we also refer to the recommendations of the MoU/MG (Management Group of the ITU-ISO-IEC-UN/ECE Memorandum of Understanding concerning eBusiness standardization).*

- There is an ambitious *project* of ISO to introduce at international level, the **ISO Concept Data Base (CDB)**, a list of many thousands of **standardized properties** of products, terminology, etc. that are now only available at national level in the DINsml repository ([www.dinsml.net](http://www.dinsml.net)). The properties do possess all necessary characteristics as defined in ISO 13584 and IEC 61360 (name, definition,...). For the USA, the ECCMA eOTD dictionary tries to propose a similar list - not based on ISO 13584, and leaves open to the reader which definition he wants to use...

- Since more than 10 years, **dictionaries of products and their descriptions** are standardized on an international level: they should follow the ISO 13584/IEC 61360 standard. However, this standard has not been largely applied to existing dictionaries because of the complexity of the standard (complicated technical approach). ISO has tried to ease the application/reading of the standard by publishing a guide (ISO/IEC Guide 77:2006) nearly fully published. However, efforts to promote these documents and make them easily accessible are not sufficient.

This results in a list of about 10 dictionaries, out of several hundreds, that are today conforming to this standard.

- Dozens of **classification** schemes are used throughout the world. However, not many (5 or 6) are really regional or international and **horizontal**: they cover many or all industry and consumer goods domains. **Three** are international and sufficiently complete (eCI@ss, UNSPSC and GPC/GS1) and are today's *de facto standards*, set up by *independent consortia*. Only one, eCI@ss, conforms up to 96% to ISO 13584/IEC 61360.

Two CEN/ISSS workshops have dealt with the possibility to harmonize the three main classifications at least at the Product level. This very long process is still running. CWAs have been proposed at European level (CWA 15294, 15295, 15556).

CPV - a classification issued by the EC/Internal Market - should be mentioned, as it is mandatory in public tenders. Unhappily, it has numerous drawbacks and should be reengineered.

- It is in **catalogues** that the standardization situation is least favourable. In ISO, the TC 184 SC4 is developing ISO 29002-10, a common "catalogue" exchange format for both ISO 13584 and ISO 22745 (OTD). ISO 29002-10 is the basis for OntoML, (ISO 13584-32, based on CWA 15556 part 3) which specializes common catalogue exchange format for ISO 13584 and provides additional mechanisms for the dictionary exchange.

Apart from some activity from BMEnet regarding the BMEcat standard, no work has been done on a standardized generic catalogue structure, which results in the presence of more than 400 different catalogue providers, each with a different format.

**We have however to note the initiative of the PFI Group in France and of BMEcat in Germany tending to broaden their catalogue format (partly compatible) to many industries in the form of an open catalogue platform (ec@t-nmpi for France and Catpilot for Germany). AFIM (<http://www.afim.asso.fr/e-catalogue/ecat-npmi.asp#pourquoi>) has shown that for France alone **7 billion € could be saved** in a fully automated Product Data Chain!**

*For information, a 4th part of the document mentions the recommendations of policy to be adopted for DG Enterprise, DG Internal Market and DG InfSo, regarding the standardization of the Product Chain*

**Raymond Betz**

# In Brief...

Access the **prototype**

## Catalogue on the AFIM portal

Whether you are a manufacturer, a distributor, a user of industrial components, do not hesitate! Connect (free trial) to the site [www.afim.asso.fr](http://www.afim.asso.fr) and click the link "ecat-npmi" under the heading " e-catalog " (left column) or access directly via the link <http://www.afim.asso.fr/e-catalogue/ecat-npmi.asp>

## REINFORCEMENT of the CORE of LARGE COMPANIES of the PFI COMMITTEE

Since September, a membership CHARTER for the "Projet de Place Communautaire de Données Techniques de Catalogues de Produits Industriels », was the object of a draft by the members of the PFI Committee. With 2 parts, one entitled " common convictions " putting in headlines the individual, collective and strategic economic interests of the actors, the other about the " commitments of the engaging parties (membership in the community, the need of a community platform, financial implication, enlargement of the community, calendar and legal entity), this document aims at strengthening, then at widening, the core of founder members and partners of the Project. A meeting of the signers took place on December 11th, 2007 for a 1st discussion around this charter ...



**CERN**  
(European Organization for Nuclear Research) based on the

French-Swiss border, at Geneva, confirmed its interest for the PFI initiative with the aim of the identification of its spare parts and industrial components (those of the power converters, in particular).

As such, a meeting (organized by Christophe Mugnier, manager methods, is scheduled in the premises of CERN on February 5th ,2008: it will allow to present the concepts and the concrete realizations of PFI to a group of managers from CERN concerned by this problem of centralized management of spare parts.



**INTERNATIONAL MAINTENANCE FORUM** : This 2007 edition, which was held in Villepinte from 13 to 16 November, during the Maintenance Expo 2007 contained one complete afternoon about the technical e-catalogs of industrial components and on the PFI initiative.

A succession of European speakers about the stakes which these catalogs represent for the profession of industrial maintenance also took place:

- Introduction by C. Pichot, chairman of AFIM
- eCI@ss standard by R. Pohn (Austria) and F. Hausmann (Germany)
- The PFI initiative by G. Chaumont (Renault) and L. le Garlès (Legris Ind.)



On the occasion of the **10th**



**INTERNATIONAL FORUM of MAINTENANCE 2007**, contacts were established or confirmed with several other manufacturers. Let us note, particularly, a restart of contact between PFI committee and CERN (Centre d'Etudes et de Recherche Nucléaires) - see specific topic on this subject



But a first contact was also established with the Group DANONE, through Matthieu Page (Manufacturing Team Leader)



# FOR FURTHER NOTE....

On the **RENAULT** side, for the mass generation of product data, the request towards 450 manufacturers of industrial components bringing the expected results only very slowly, and at the price of tedious follow-ups, it has been decided that the accent in **2008** would be put on an **individualized accompaniment** of these manufacturer suppliers of data. So, by individual follow-ups, they are going to be asked to formalize their **agreement** to realize the **requested work**, as well as the **delivery time** expected for the realization of their work. In return, Renault will undertake to supply them with the required **help** by telephone, web conference, even in meetings, so as to minimize the impact and the load to be dedicated by their company to satisfy the need.

Operation initialized at the end of 2007, the following companies, in meetings with Renault, have already benefited from assistance and explanations on behalf of Renault on the process to be realized:

- Thermo-Est on September 26th
- Rockwell Automation on October 24th
- Blickle on November 6th
- Baumer-Bourdon on November 7<sup>th</sup> and December 18th
- Leroy Somer on November 23th
- Wago-contact on November 27th

To know more: [pfi@renault.com](mailto:pfi@renault.com)

Inside RENAULT, the **Direction of the Renault IT Systems** (Manufacturing Domain) is henceforth very implicated in the subject "Renewal of the internal repository of Non Production Materials (PHF)" intended to replace the current SACIM system, in place for more than 35 years and thus at the end of life, and its codification MABEC, specific to Renault. Also the orientations of the new repository were imagined in 2007: Feeding of the Renault repository by the future data pool, that repository being able to, why not, be a privatized space of the same data pool, interconnected in the Renault IT application software (SAER-PHF: purchasing & procurement, FC-PHF: flow and PHF stocks, SIMON: bills of materials and operational management of maintenance, etc.) and allowing the management of data specific to Renault in addition.

**Luc Goulet**, manager of the unit "Domain Maintenance and Equipment efficiency" within the service "Manufacturing Domain" of the IT Systems Department, worked a lot on these orientations, in contact with the ownership of the Maintenance Information Systems (Engineering Service of the Maintenance and Equipment efficiency). He will participate henceforth in the sessions of the PFI Committee within the framework of the process of call for tender, analysis and selection of the solution "Place Communautaire de Données Techniques de Catalogues de Produits Industriels" (Pool of Catalogue Technical Data for Industrial Products)

As usual, some periodic points were held between **PSA Peugeot Citroën** and **Renault**: on **September 6th** and **November 14th**. With Didier Willem, J.Paul Mougin and Agnès Wintz, on the PSA side, and Th. Géniteau and G. Chaumond, on the Renault side, fruitful exchanges took place, resulting in the implementation of a common dashboard concerning the actions of deployment of the PFI initiative (generation of data, elaboration of models) and on the willingness to implicate the respective IS Departments and for them to exchange information.

## Terminology

**PHF** (Produits Hors Fabrication) : Non Production Materials (**NPM**), *named also PFI* (produits de fonctionnement Industriels)

**EAN** : European Application Number ; **PLib** (Parts Library) : standard concept of ISO 13584 ; **LMPR** (Liste des Matériels Préconisés Renault) : List of Renault recommended components ; **AFNOR** (Association Française de Normalisation) : French Association for Normalization ; **ISO** : International Standards Organization

## Contacts & useful links

**Internet Sites**

- about **PFI** initiative : [www.galia.com](http://www.galia.com) (=> groupes de travail => PFI), [www.afim.asso.fr](http://www.afim.asso.fr) and [www.odette.org](http://www.odette.org)
- about concrete operations : [www.afim.asso.fr](http://www.afim.asso.fr) (=> ec@t-npmi => e-catalogue)
- about **PLib** : [www.lisi.ensma.fr](http://www.lisi.ensma.fr) or [www.plib.ensma.fr](http://www.plib.ensma.fr) or [www.toplib.com](http://www.toplib.com) (Toshiba)
- about **eCI@ss** : [www.eclass-online.com](http://www.eclass-online.com) or [www.eclass.de](http://www.eclass.de) or [www.eclass.eu](http://www.eclass.eu)
- about **EAN** : [www.gs1.org](http://www.gs1.org) ou [www.gs1.eu](http://www.gs1.eu) ou [www.gs1.fr](http://www.gs1.fr)

## Aide-mémoire of working groups (currently in place)

**NPMI Working Group** (within ODETTE, group of European vehicle and automotive parts manufacturers): elaboration of a European recommendation for the automotive field on the basis of the 3 PFI concepts.

**Enlarged Committee IDE@** (Gifec-Fenetec) –**Mosaïc** (Alcan, Arcelor, EDF, Alstom, Renault, St Gobain, ..) – **PFI** (Renault, PSA, Arc International, EDF, TOTAL, Schneider Electric, AFIM,) + Gimelec: French interprofessional committee for the promotion of the convergence of e-catalogs (purchasing and technical).

**Normalization Commission Afnor CN-DSTI GT2**: Elaboration of a French experimental standard XP Z99-005 reusing the contents of the PFI recommendation published by Galia in 2004..

**PFI Working Group** for elaboration of **ontologies for electric materials for safety** and **specific consumables for car-body manufacturing**: started in June 2007 (animation by Renault);

**Working Group** between IDE@, and eCI@ss: animation by GIFEC, participants SAF-Air Liquide welding (manufacturer)

**Working Group** for the elaboration or improvement of **ontologies for automatism components** : PSA Peugeot Citroën animation with participation of Renault, PSA, Schneider Electric, Siemens, IFM Electronic, Woodhead,... : in stand-by

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