Ident-PHF newsletter

The Newspaper to inform the « Non Production Materials Identification » network

Best wishes for a Merry Christmas and a Happy New Year

Editorial

By Jacky COUSIN
(GALIA Manager– Groupement pour l'Amélioration des Liaisons dans l'Industrie Automobile)

The IT connections in the French Car industry

GALIA, the association created in 1984 between the car manufacturers and the French parts manufacturers has a main objective for the improvement of the exchanges between partners of the car sector (the deployment of the EDI, Exchange of Computerised Data, in particular). About twenty Project groups work under its auspices, under the control of 3 functional committees: Logistics, Engineering and B2B. It is in this context that the project of exchange of data catalogs on the Industrial Products of Functioning, initialised in 2000 by Renault and PSA Peugeot Citroën, received the support and the partnership in 2002 of GALIA, with, in particular the hosting of the meetings of the committee PFI, and the finalisation of these works by a recommendation PFI-GALIA formalised in May, 2004. This recommendation is of use as a base for European activities within Odette (grouping of the car manufacturers and the European motor parts manufacturers today working on these same subjects); the French member of this European body is GALIA. These European works under the naming NPMI will give place to a recommendation by the end of 2007. The current participants are: Audi, BMW, Câbleries SAB, Comau, Legris, Michelin, PSA Peugeot Citroën, Renault, Schneider Electric, ZF, Webasto, etc. ...

J. Cousin

KEY EVENT

Within the framework of the 11th annual ODETTE Conference which took place on November 28th and 29th in Munich, of notoriety was the session: **" Streamlining Non-Production Material Procurement "**
The state of promotion of the workgroup of identification, characterisation and classification of the industrial components initialised within ODETTE since September, 2006 was held on

Wednesday 29th November from **10:30 - 12:30** in the International Conference Centre in Munich

ODETTE

Odette International is an organisation, formed by the automotive industry for the automotive industry. It sets the standards for e-business communications, engineering data exchange and logistics management, which link the 4000 plus businesses in the European motor industry and their global trading partners

THE REPORT…

PLib – Plib - Plib - Plib - Plib - Plib

A formal model of ontology for engineering, e-commerce and semantic Web: the model of the PLIB semantic dictionary   **(continuation of the previous number)**

2 The notion of ontology in the PLIB standard
The word "ontology", traditionally described as one "explicit and formal specification of a conceptualisation being the object of a consensus", brings out very different realities. Many ontologies refer to words indeed more than concepts. They aim, for example, at allowing

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KEY EVENT

"Streamlining Non-Production Material Procurement" Conference

(continued from page 1)…,
… This 11th conference and international exhibition collected during 2 days more than 500 participants. Coming from all Europe, as well as Asia and America. This conference included plenary strategic sessions where motor leaders shared their visions of the opportunities and the threats to which the car industry is confronted and the profits to be pulled of a bigger collaboration. These sessions were completed by three interactive operational streams of presentations taking place in parallel, where speakers of manufacturers, parts manufacturers and suppliers announced their experiences of improvement of the collaboration in their respective business sectors

So the problem of the identification of spare parts and other articles or consumables was presented on Wednesday morning in a sequence of 2 hours under the name of "Streamlining Non-Production Material Procurement ". On this very specific subject, four speakers succeeded one another:

➤ **Friedhelm Hausmann**, manager of Purchasing Department organisation in **Audi**, and also chairman of eCl@ss board, presented the will of synergy between Germany and France on this subject of the identification of Non-Production Materials, and the implementation of, since September 2006, inside Odette, a workgroup dedicated to this subject, and baptized "NPMI Working Group" (Non Production Materials Identification)

➤ **Gérard Chaumond**, project leader of the Identification of the PHF in **Renault**, and "leader" of the NPMI workgroup, explained the initial problem to be resolved, the reserved concepts and the concrete solutions in the course of deployment

➤ **Laurence le Garlès**, of the company **Legris Industries,** then gave the point of view of a manufacturer of industrial components, suppliers of data catalogs in such a process. She insisted on the specific stakes for industrial companies supplying data of their catalogs: *« EAN codification and ecl@ss enable suppliers to structure their own data system, to create and update*

Laurence
Le Garlès

Sté
LEGRIS

e-catalogues in a shorter time because the same e-catalogue will be shared by several customers. "

She Underlined besides that

" EAN codification and ecl@ss will also allow customers and suppliers to save a considerable amount of time and money.!…"

➤ **Joerg Schmidt** , **Siemens AG** – Automation & Drives company, presented the Siemens action of supplying data products in conformance with eClass

➤

For more information about this conference which was held last month, please go to www.odette.org

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OTHER EVENTS

NPMI European Working Group (Non Production Materials Identification) –Odette ÷ Two other working sessions took place during this last quarter 2007: **October 25th** on one hand, with a session in Web-conference dedicated to the analysis of the distances of eCl@ss with regard to our needs and with regard to the PLib structure.: 10 participants were so able to express themselves on their points of view. Another session was held in a face to face meeting on **October 21st and 22nd**, in the premises of GALIA to Boulogne Billancourt: besides a presentation of the concepts PLib, this session consisted essentially of a "brain-storming" which allowed to prepare the subjects to handle in each of 4 parts of the Odette recommendation in progress; the work of 1st draft of these 4 parts was shared between 4 persons: "general" by G. Chaumond, "codification" by L. le Garlès, "classification / characterization" by A. Wintz and " data exchange standard " by R. Exell, and will be realized by the end of January, 2007

IDE@-Mosaïc-PFI Steering committee : A session held **October 26th** allowed to review the point on the document of centring " Community Base " as well as to review economic model surrounding areas of different such as Catpilot, Cadenas, Traceparts, Komerko, Quadrem, and the presentation of the solution **Voltimum** by his General manager Bruno Hamon. Another session, on **November 22nd**, was the occasion to welcome **EDF** in our committee (Francis. Defranoux), to clarify the document of centring henceforth baptized " Expression of Functional Need of a community place of data for catalogs " and to agree of its 1st finalization by December 19th to launch a consultation " to see " with the main listed solutions providers and to have so quickly an idea of economic global model of such a place of catalogs. A presentation detailed by the solution **Komerko** was also presented by Jack Morice. A 3rd session held December 19th has let us validate the document which will be sent to 7 solutions providers for a first approach tender before the next meeting of 1st February; decision also has been taken to launch, in march 2007, a synchronized operation between PSA Peugeot Citroën, Renault and Arc International for feeding 200 to 300 000 articles in a first time to begin the contents of the community base

French Experimental Standard XP Z 99-005 : Sessions of the workgroup CN-DSTI GT2 (Committee of Normalization - Scientific Technical Data and Manufactors - Workgroup 2) took place on October 20th, in **November 08th** and **December 07th** in the premises of the Afnor (St Denis + web-conference). The end of the validation of the translation in French of the guide ISO-IEC CD77 (guide of normalized elaboration PLib of ontologies) which will be integral part of the French experimental standard as well as remarks on the original version were so achieved; the session of December allowed to begin again to reflect about the contents of the experimental standard and about its added value and its location with regard to other documents (standards and recommendations)

Video-clip...in English,

The video-clip "the problem with catalogues" (7min film made during the convention on June 10th 2005 at Renault, and viewed many a time since in different conferences (also available on-line on the site of the AFIM), now exists in a version dubbed in English. This voice dubbing was made with the help of Dominic WALTON (GALIA / PSA Peugeot Citroën) to whom we repeat our deep thanks.

Siemens in Munich:

on the occasion of the annual Odette Conference, a meeting between G. Chaumond (Renault / PFI committee) and representatives of Siemens France (D. Coito and F. Drouart) and Siemens Germany (H. Tauscheck and Joerg Schmidt) was held in the premises of Siemens at Munich airport. The object was to clarify concrete contributions with this well known manufacturer of industrial components in the PFI and NPMI actions in progress

During the **MAINTENANCE FORUM** held in the Parc D'Expositions - Paris Nord Villepinte, 7th – 9th November 2006, a sequence on the PFI initiative allowed to review the promotion of its activities: the announcement by Cl. Pichot, president of AFIM,of the entry of EDF to the PFI committee and a link with Alstom Transport were 2 landmarks of this session

EDF (électricité de France) joined the PFI committee. Francis Defranoux, logistics director for the Direction of Production Engineering, who participated in the session on November 22nd, announced the interest of EDF for this initiative and his will pursue collaboration by implying his colleagues in the roles concerned.

Ontologies Tools

Developments of tools to allow to develop or to propose evolutions of the eClass ontologies (classes and properties) are being considered. Specifications of a tool based on an application developed in Visual Basic by the PILZ company (supplier of components) were put together by Renault.
Another tool ONTO-tools is also envisaged by COMAU (supplier of Production Equipments in Castres).

PLIB

… to recognise the abstract resemblances between various words. For many authors, for example Berners-Lee about semantic Web, ontology gathers in the same time some elements, some concepts or words and some rules allowing to manipulate these elements or to make certain number of inferences. From the point of view of PLIB, an ontology's only purpose is to define, but in the most precise way possible, the categories and the properties which characterise the objects of a domain of the real world and the abstractions that the various communities can make from it.

For us, ontology is thus a collection of explicit, complete and consensual descriptions of concepts:
- In the widest context where these concepts have a precise sense, and
- Without any limitation or rule corresponding to a particular use.
The objective of precision means that in front of a materiel object or a given artefact belonging to the domain targeted by ontology, a human user of ontology must know how to decide;
- To which categories the object belongs and does not belong,
- Which properties apply to the object, and
- Which sizes or characteristic values correspond to every applicable property

Any object belonging to the domain targeted by PLIB ontology can be then characterized in machine in terms of categories and properties of the ontology, the IT agents can then have a dialogue on this object in the concepts of the ontology.
PLIB ontology possesses the following characteristics. It is:
- Abstract: every entry is a unique only and completely defined concept, the words which appear in its description are only clarifying the sense.
- Multilingual: every entry is associated to a code which constitutes a universal identifier allowing indication of the corresponding concept. The textual aspects of the description can appear in a number of languages
- Formal: the ontology is defined in the formal language of specification of EXPRESS data. This one being modular, the definitions of concepts, the references to concepts and constraints of integrities that the authorities of the concepts have to respect are treatable by machine.
- Modular: an ontology fear to reference another ontology to import its categories and/or properties without needing to duplicate them.
- Multi-representation: once defined, a concept can be associated to an unlimited number of representations. The point of view which characterises every representation is also a concept represented in the ontology.
- Consensual: the abstract model of the PLIB ontologies was the object of an international consensus and is published in the form of ISO and CEI standards. The ontologies corresponding to this model are quite developed either through a normative step which requires an international consensus on the contents, or by industrial consortiums including a large number of partners.

We shall not handle here notions of modularity (relation is-case-of) and of multi-representation (relation is-view-of). The next number will approach the plan of dictionary semantic as a model of PLib ontology.

Guy PIERRA (**Laboratoire d'Informatique Scientifique et Industrielle, E.N.S.M.A. 86961 Futuroscope Cedex** pierra@ensma.fr) *to continue …*

Briefly…

IDE@ towards eCl@ss
Activities emanating from IDE@ and from Gifec resulting in propositions towards eCl@ss through the committee PFI-IDE@-Mosaïc have just started. Indeed, SAF-Air-Liquide-Welding within the framework of activities at European level wished to connect their products (welding and electric, electronic, mechanical spare parts connected to the welding) with a European classification and a characterisation, in this particular case, eCl@ss. The objective announced is to work in 1st period of 2007 to be able to present concrete propositions to eCl@ss to be integrated before the end of 2007.
For more information :
ndagonneau@gifec.org

Students helping us …
 Thomas DUFOUR, part-time apprentice on a course in the IUT of Cergy (GEII), joined the Renault team for 1 year working on PFI activities (ontologies towards eCl@ss and catalogue databases) …**Esma YAHIA**, trainee of the ENSAIT Roubaix (09/2006 - 02/2007), attends B. Leprêtre of AIF in the realisation of the inventory for the PFI repository of AIF and the preparation of the new system .

Keep your bookmarks
You wish to find basic information about the concepts of the initiative PFI, or to know more about it?
Do not hesitate to connect to the following sites:
➤ **www.galia.com** (working groups, then PFI)
➤ **www.afim.asso.fr** (left column: gestion des actifs, then pièce/composant)
➤ **Http://komerko.traceparts.com/kce_renault/connect.ap**: catalog LMPR-2005: request password from: gerard.chaumond@renault.com

ODETTE : B2B FC (Madrid) & Logistics FC (Munich) *The PFI initiative, transposed into the workgroup ODETTE'S NPMI WG (Non Production Materials Identification) was the object of presentations and discussions in Odette's functional committees :*
On October 19th, by Web conference with the B2B committee which took place in Madrid (Spain), and on November 30th during the Logistic Functional Committee in Munich (Germany): the participation of Sweden in the NPMI WG was the main point of discussion in the latter.

FOR FURTHER NOTE....

The migration of the ontologies PFI towards ecl@ss (continuation) : further to the sending of a first lot of PFI ontologies (used in the LMPR-2005 operation), as well as of a certain number of propositions of general order (basic properties, terminology) to the organization ecl@ss to enter the official process of integration, exchanges between eCl@ss and the PFI committee followed to bring precision and to allow the concerned experts side eCl@ss to work on these propositions of evolutions, the consideration of which, let us remind it, should become a reality in April, 2007.

Within the framework of the pursuit of a **workgroup** to develop or improve the **ontologies** of the **Programmable Controlers** and other components of electric **automatisms** of eCl@ss, PSA Peugeot Citroën, under Agnès WINTZ's animation, continues to pilot a concrete work on all the articles managed by the Schneider Electric and Siemens brands, in link with the list of articles managed by Renault and Arc International France (AIF), implying the respective Technical Pilots of these 2 groups, and naturally the companies quoted above. Some other companies also such as IFM electronic and Woodhead has been involved recently . Let us remind that a similar process (on the global nature of repository active PSA, AIF and Renault) also started with the components of the Legris Company (pneumatic and hydraulic domains); several sessions face to face or in Web-conf have already taken place …

On the occasion of one of its recent sessions, the PFI Steering Committee decided to be equipped with a new
Logo PFI, to replace that used since 2004, but which missed a little of originality. It is the Arc International France company which was in charge of elaborating some sketches and of proposing a palette of one dozen possible logos. The committee finally adopted the logo shown here.

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 favourites 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 (=> groupes de travail => PFI)
- about **LMPR-2005** operation : www.afim.asso.fr (=> gestion des actifs => pièce/composant)
- about **PLib** : www.lisi.ensma.fr or www.plib.ensma.fr or www.toplib.com (Toshiba)
- about **eCl@ss** : www.eclass-online.com ou www.eclass.de
- about **EAN** : www.gs1fr.org ou www.gs1.org

Aide-mémoire of working groups (presently in place)

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

Enlarged Committee IDE@ (Gifec-Fenetec) **–Mosaïc** (Alcan, Arcelor, EDF, Alstom, Renault, St Gobain, ..) **– PFI** (Renault, PSA, Michelin, AFIM, SYMOP) + 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 resuming the contents of the recommendation PFI published at Galia in 2004.

PFI **Working Group** for elaboration of **ontologies** on the **electric materials for safety** : animation by Renault ; participants : PSA Peugeot Citroën, Renault, Pilz, Euchner, Schneider Electric, Omron, Sick, Schmersal, Rockwell Automation, Heinrich, JLP Automatisms, Coutier, Troax, Leuze, …

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

Working Group for the elaboration or improvement of **ontologies** on the **programmable controllers** : Citroën Peugeot PSA animation with participation of Renault, PSA , Schneider Electric, Siemens, …

Working Group for the elaboration of ontologies on the specific tools for automotive sheet metal workshop (Body framing) (spot welding, fastenings, index tools): animation by PSA Peugeot Citroën; participants: Renault, PSA …

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The Editorial staff committee of the IdentPHF Newspaper wishes you a merry Christmas and a happy new year 2007.