Recommendation 36 Discussion papers Semantic working group

Conference call on July 2014, the 23rd

The conference call started in time and its duration was one hour.
The participants were: E = apologies received.

Mr.	Lance	THOMPSON	X
Mrs.	Paloma	BERNAL TURNES	E
Mrs.	Mary-Kay	BLANTZ	E
Mrs.	Angela Jeaneth Ospina	ENCISO	E
Ms.	Estelle	IGWE	E
Mr.	Eric	OKIMOTO	E
Mr.	Moudrick M.	DADASHOV	X
Mr.	Remy	MARCHAND	X
Mrs.	Sue	PROBERT	X
Mr	Hisanao	SUGAMATA	X
Mr.	Satya Prada	SAHU	X

Introduction by Lance reminding the timescales for delivering results.
He also pointed out that the other three groups will limit their scope to the regulatory SW including SW related to systems involving government authorities especially in the agriculture domain (EU TRACES system for example) and in the maritime domain (IMO, FAL Forms, e-Maritime of the EU). Port Community systems or IATA e-Freight is out of their initial scope.
The semantic WG took another approach including activities such as the program of work of AFACT, IATA e-Freight in order to estimate the semantic issues raised when systems overlap.
Remy reminded that the semantic aspects will be the subject of a Discussion paper to be ready for the New Delhi Forum, knowing that the ultimate goal is a white paper to be used during the SW Interoperability conference in 2015.

1. **UNe-Docs as an input for this group.**

Sue Probert proposed to remind to this WG the work done on UNe-Docs.
She went through the document and clearly explained what had been progressed and recommended not to forget the results obtained before the dismantlement of the UNeDocs activity.
Action:

- To upload the document presented by Sue in the Confluence site
- To remind the conditions which justified the closure of the UNeDocs activity
- To summarize the benefits of this work

2. **AFACT approach of Semantic activities**

Hisanao explained the reason why Japan, followed by AFACT decided to construct a system which will give fairly simple indications and provide tools to be used by the developers.
The trigger events were the earthquake, the tsunami and the big flood in Bankok, which revealed the weaknesses of the Supply Chain management.

For managing supply chain, especially for manufacturing, Japan recognized that there is a need for ae global wised information platform supporting their supply chain, which would be interoperable among related countries.
A Supply Chain Platform Study Group has been established under the UN/CEFACT Japan Committee to redesign the system used for developing and promoting eBusiness focused on the global supply chain especially in Asian region.
Hisanao commented the document “WhitePaperUNCEFACT CCL Utilization in Japan” presented on the screen.
The result of the Japanese work was presented:
The Cross-Industry EDI Specifications V2.0 consists of the "Cross-Industry Data Library" and the "Message Library" based on the mechanism (framework) that consists of both the specifications common among industries and the specifications specific to the industry. The "Cross-Industry Data Library" covers both the specifications common among industries and the specifications specific to the industry and is a subset of UN/CEFACT CCL.
The "Message Library" stores EDI messages by each business process that is defined using information entities registered in the "Cross-Industry Data Library," by specific business area. The basic Message Library defines basic messages common in among industries as reference specifications.

The lessons learned where the following:

- UN/CEFACT CCL is getting too big for covering many domains. It is getting difficult to find the suitable CCs/BIEs in CCL for message designers, and there are concerns about the computer performance using the big XML Scheme modules always.
- There are several data model libraries other than UN/CEFACT CCL, such as GS1, OAGI, WCO, UBL and local implementations in Asian region. Many of them are developed using CCTS, but there are no interoperability.
- The Cross Industry set is Japan a simplification of the UN/CEFACT CCL, and it is a reference for dedicated specifications suited to different industrie
- Based upon the Japanese work, AFACT develops its own use of the CCL as follows:
  Work items:
  Analyze the actual problems around CCL.
  Prepare the framework for utilizing CCL.
  Define the packaged CCL for Asian Region.
  POC for utilizing CCL.
  Prepare the guidelines for utilizing CCL.
  Deliverables:
  CCL Framework (based on CCTS V3 and NDR V3)
  Pilot packaged CCL for Asian Region
  Guidelines for utilizing CCL

Hisanao explained that business process will be relatively free for each country.

Action:

- To upload the White Paper UNCEFACT CCL Utilization in Japan in Confluence
- To extract from this document, from the AFACT annual report a summary of findings to be used in the discussion paper
- To discuss CCL issues at the light of the AFACT experience. Is it wise to load the CCL with too many CC. Is it wise to have three CCL (If I make a mistake, Sue Mary-Kay please correct me).
- To understand why the CCTS 3.0has been the option retained

3. SP Sahu about the role of WCO

The question that we should have is : What are our goals when seeking interoperability ? (Note this is addressed by the Business needs WG, but it has also to be considered under a different angle).

Different systems co-exist and should exchange data flows.
Applications need to interoperate.
Leading providers of ICT solutions should be aware of the work done by the CEFACT on semantic
The principles and guidelines of Rec 34 should be more promoted.
The stakeholders when contracting should recommend to the developers to consider using the existing standards and the methodology to produce them : UMM, TDED, CCL etc..
What could be done to assist the developers?

As recommended in the WCO presentation "How to use the WCO data model" the concept of context (sectoral, regional, national) is introduced.
Various adoptions of the WCO data model now exist. New-Zealand has elaborated national guidelines to implement the WCO data model. Is it an example to follow? Are there other examples?
Examples of SW interoperability in regions need to be studied to see how they represent different cases to be studied and casually classified.
AFACT - UNnEXT – ASW - EU SW Regional approach are to be in the recommendation.
Action:

- To investigate different adoptions of the WCO data model (which ones ?)
- To determine how various SW implementations interact with customs and OGA. The example of IATA e-Freight is interesting, but other examples can be found.
- To work on the concept of context.

4. IATA e-Freight discussion

This project started many years ago and delivered outstanding results, such as e-Freight handbook, presented at the occasion of the UNCEFACT Forum of April 2013.
IATA deliberately took the decision to discard EDIFACT based material and justified this option by different arguments.
IATA has a governance policy and the stakeholders associated in the e-Freight program are:
1. Shippers
2. Freight Forwarders
3. Carriers
4. Ground Handling Agents
5. Customs Broker/Agent
6. International and National Organizations
7. IT Service Providers (as Observers)

These stakeholders are associated in other programs and business processes. There is a need to reduce as far as it is possible the discrepancies between the different information systems in the transport domain.

IATA e-Freight standards are aligned with WCO data model, an important goal of IATA being that e-freight trade & transport messages should "feed" Customs messages, reducing manual entries and increasing quality.
Therefore e-Freight standards encompass customs, security and transportation and other relevant documents that are part of the freight transportation process.

e-Freight standards rely on e-Document standards and common business processes (defined in e-freight Operating Procedures – e-FOP) that are aligned with international standard setting bodies (WCO, UNCEFACT, ICAO, etc.)

Action :

- Lance Thompson (CONEX) has experienced using e-Freight and will give the name and address of a contact who might express views on semantic issues in coordination with WCO, UNCEFACT and multimodal transport related standardization programs (EU Common framework, MMT).
- Analyze of the Country-specific functional specifications:
  - Intra-Customs Regime Functional Specifications
  - China Domestic e-freight Functional Specifications
  - Domestic Korea Functional Specifications
  - US Domestic e-freight Functional Specifications
- Attempt to develop recommendations regarding the specialization of standards by reference to the context in which they are used (Sue Probert "Context is a key issue"; also said by SP Sahu of WCO)

5. Business processes with the banks

In the past, business processes were defined by the TBG 5, the mandate of which was limited to the exchanges other than between banks.

This TBG does not exist any longer, but there is a set of banking messages in EDIFACT syntax such as PAYORD, PAYEXT, PAYMUL etc.

After the departure of the banks from UNCEFACT, the development of messages needed according to the Buy Ship Pay model has been done by the ISO 20022. These messages are a reduced subset of the ISO 20022 production of standards which comprise :

A large quantity of models and concepts developed by ISO 20022 concern concepts also used by UNCEFACT: Party with Person and Organization, Location, Account.

The ISO 20022 Business Model offers:

- ISO 20022-1: Metamodel
- ISO 20022-2: UML profile
- ISO 20022-3: Modelling
- ISO 20022-4: XML schema generation
- ISO 20022-5: Reverse engineering
- ISO 20022-6: Message transport characteristics
- ISO 20022-7: Registration
- ISO 20022-8: ASN.1 generation (Note: ASN1 is an alternative syntax to EDIFACT and XML, ASN1 is also used by UBL 2.1 and IATA).

Concretely, the users are provided with:

- standardized business concepts across all ISO 20022 message definitions (alignment across business areas)
- clear definitions of industry business concepts and their relationships (not just for external communication, also for internal enterprise communication)
- a foundation for communication between industry players (not just for messaging, also for databases and regulatory reporting)

- easy mapping with other standards (not just external standards, also internal proprietary formats).

ISO 20022 has created a Data directory and the production of ISO 20022 is uploaded in a Registry.
Action:

- To determine which liaison exist between ISO 20022 (history after the closure of TBG5)
- To define the set of banking messages needed for the Buy Ship Pay model
- To see where banking exchanges have been developed (example : between Singapore and Thailand)

6. **Semantic and legal aspects (in particular regulatory)**

Enabling legal environment is “forcing” semantic interoperability

Action : To explore this idea with Lauri Railas WG