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# Open Trade Technical Model using ebXML for FTA with China and Korea

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#### Abstract

China and South Korea have effectively reached a free trade agreement. The deal now faces legal and parliament reviews in the two countries. We need to discuss the recommendations on XML conversion with UN / CEFACT electronic documents. To solve this problem of interworking between these standards, Two kinds of translation rules is proposed for exchanging to UN / CEFACT Tag smoothly. For development and distribution of electronic documents to be conformed to international standards, it is enough to have the role of international activities continue to supply part of the domestic industry and the trends in participation and international standard. Our principal focus is on facilitating national and international transactions, through the simplification and harmonization of processes, procedures and information flows, and so contributing to the growth of global commerce. The agreement with South Korea will be China's ninth bilateral FTA.

Keywords: FTA, Trade Facilitation, UNECE, UN/CEFACT, ebXML

### 1. Introduction

Korea and China have nearly come to the end of negotiations on a bilateral free trade agreement (FTA), which have so far lasted nearly 30 months. Ahead of a presidential summit scheduled for today between Korea and China, trade officials from both governments made last-minute efforts yesterday in Beijing, where the Asia-Pacific Economic Cooperation (APEC) conference is being hosted, to conclude the 14th round of talks on the Korea-China FTA. The officials are expected to continue negotiations overnight to narrow differences on a few issues: when to open both countries' agricultural and fisheries markets; what types of commercial goods will be freely traded; how to open the service market; and how to set product-specific rules of origin, among others.

While, Trade facilitation involves the simplification, standardization and harmonization of procedures and associated information flows required to move goods from seller to buyer and to make payment. As this encompasses both commercial and regulatory processes, it should be approached on a partnership basis between governments and trade in order to ensure that practical and implementable solutions are developed. UN/CEFACT Recommendation Number 4 addresses this issue by suggesting that Governments establish and support national trade facilitation bodies or committees with balanced private and public sector participation. Many of its current work projects involve developing ecommerce standards such as better online security for financial transactions, XML standards for financial

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transactions and standards to reduce the cost and delays of international financial transactions.

### 2. National Trade Facilitation bodies

# 2.1 Applied Technology Group (ATG)

The purpose of the Applied Technologies Group (ATG) is to be responsible for the creation and maintenance of the trade, business and administration document structures that are based on a specific technology or standard. The function of the ATG is the design, assembly and production of syntax specific solutions based on identified business and/or technical requirements from the empowered groups of UN/CEFACT. Membership is open to experts with broad knowledge in the area of various implementation syntaxes, protocols and mechanisms for the packaging of data for exchange, the functions of UN/CEFACT, and its groups. In addition Heads of Delegations may invite technical experts from their constituency to participate in the work. Experts are expected to contribute to the work based solely on their expertise and to comply with the UN/CEFACT Code of Ethics. [N.B. This text is subject to approval by the UN/CEFACT Plenary]

## 2.2 Forum Management Group

UN/CEFACT is in the unique position to create Global eBusiness standards for the purpose of facilitating trade world wide. In cooperation with OASIS it has created the ebXML standard, which is leading the world into a new era, where business will be done over the Internet and businesses and governments will collaborate at a higher level to achieve the largest cost savings. The FMG is to provide the overall operational management of the UN/CEFACT Forum and is determined to accelerate delivery of standards the world is waiting for. The FMG will provide the Project Management to ensure that new project proposals are assigned to the appropriate permanent group to prevent duplication. The FMG will launch a Sponsorship programme to provide for the necessary funding of the work. The FMG membership is comprised of the chairs of the five permanent UN/CEFACT groups plus two additional members of TBG. The FMG Chair and Vice-Chair have been elected by the UN/CEFACT Forum. The semi-annual UN/CEFACT Forum is the concurrent meeting of all permanent UN/CEFACT Groups at one time in the same location to facilitate close liaison and full interaction as a single working body.

# 2.3 Multi-Agency Working Groups on Trade Facilitation (TFWG)

In addition to national trade and transport facilitation bodies which have been set up in many countries, there exist also other forms of a dialogue on trade facilitation issues. Thus, in the framework of the WTO negotiations on trade facilitation, the issue of agency coordination and consultation has come back to the forefront of country's preoccupations. Multi-agency or sectoral working groups, task forces or committees can provide the required expertise and technical backstopping during the negotiations and provide a platform for dialogue with private sector. UNCTAD and UNECE are developing a repository on national experiences with setting up and sustaining an institutional coordinating mechanism. The objective is to share experiences of such trade facilitation working groups (TFWG) and identify common challenges and solutions to these challenges. The received information can be consulted at the relevant pages of the UNECE and of the UNCTAD websites, respectively.

UN/CEFACT, a subsidiary intergovernmental body of the UNECE Committee on Trade, is mandated to develop a programme of work of global relevance to achieve improved worldwide coordination and cooperation in the areas of trade facilitation and electronic business, covering both commercial and government business processes that can foster growth in international trade and related services. It encourages close collaboration between governments and private business to secure the interoperability for the exchange of information between the public and private sector.

### 3. Methods and Materials

### 3.1 Speaking Tag Method

UN / CEFACT is the basis for the MIG, which is open to the public when it was first developed to be a reference to all of the specifications. By default, the MIG has a lot mainly Qualifier Default value or qualifier is to define the Data Format. These values are already on XML over MIG Data Conversion Rule fixed value if it is reflected by the

thorough conversion without sending MIG Rule will be possible to convert. In this study, Speaking Tags are presented using the mapping rules.

```
<simpleType name="2380_DATE_TIME_PRD">
<restriction base="string">
<maxLength value="35"/>
</restriction>
</simpleType>
```

Figure 1 Message example related Date and Time

In addition, the EDI is basically XML Tag Naming Function of Each Segment generated based on the values of one or Qualifier. To create a meaningful Naming, no spaces between words and the first letter of the word are capitalized if more than one word.

**Table 1 Tag Naming example** 

TAG Code	Qualifier	TAG Naming
2005	2AA 272 38	IssueApplicationDate DocumentPresentationPeriod ShippingDate

In order to comply with MIG, Segments are designed according to XML Schema. In addition, EDI and XML/EDI start from linking information for each of the EDI Segment Rule. Elemant declarative MIG provides information on the location, Remarks.

```
<!--BGM[DE1001=460].C002[01].DE1001[01]-->
  <element
                                   name="MessageIdentifierClass"
type="wvd:1001_MSG_COD">
  </element>
  <element name="MessageName"
                                    type="wvd:1000_MSG_NAM"
minOccurs="0"/>
  <element name="MessageNumber" type="wvd:1004_MSG_NO"/>
  <element
                                   name="MessageFunctionCode"
type="wvd:1225 FUN COD" minOccurs="0"/>
  <element name="ResponseTypeCode" type="wvd:4343_RES_COD"</pre>
minOccurs="0"/>
  <!--BUS.DE4487[01]-->
  <element name="DocumentaryCreditFormCode">
  <simpleType>
  <restriction base="wvd:4487_FIN_TRN_COD">
  <enumeration value="5"/>
       <enumeration value="7"/>
  </restriction>
  </simpleType>
  </element>
```

Figure 2 Message example generated by Speaking Tag

If Segment Elements are belonging to the same case, they do not provide the location information in the Type Dictionary Tag people on the basis shown in Figure 2.

### 3.2 UN/CEFACT Tag Method

UN/CEFACT Tag method is applied to a multi-year basis to verify that the existing use of EDI. It is demonstrated through the verification process efficient. Other possible advantages of EDI is XML as much as possible. By default, the XML Tag Name of the UN/CEFACT follows the EDI Tag. In other words, UN/CEFACT and XML messages

mapped to the rules of the draft standard as well as making new tags. In accordance with the UN / CEFACT Message, compatibility is characterized by the use of Tag. The latest development rules are underlying UN/ CEFACT message definition, which conforms to the fourth edition of ISO9735.

Order EDIFACT have information on its own, but, XML Element Tag Name of the nature of the information to each because Parsing Structure Elements are repeated on each of the information that it does not know the real meaning. Therefore, Structure for Repeated Element in the need to distinguish between the will For example, APP700 TSR Segment of the C233 (SERVICE) is repeated in the DE7273. Each of these partial shipment and transshipment allowability information indicating whether to allow. Suffix in the Message Type and Segment Group Segment s, Segment in the Composite Data Element, Segment Data Element in the, Composite Data Element Data Element in the information because it indicates the order, Sequence identification number is increased.

```
<element name="SG2">
<annotation>
<documentation>SEGMENT GROUP 2</documentation>
</annotation>
<complexType>
<sequence>
<element name="NAD_001" type="dic:NAD">
<annotation>
<documentation>NAME AND ADDRESS
</documentation>
</annotation>
</element>
<element name="COM 001" type="dic:COM" minOccurs="0">
<documentation>NAME AND ADDRESS
</documentation>
</annotation>
</element>
</sequence>
</complexType>
</element>
```

Figure 3 Message example generated by UN / CEFACT Tag

### 4. Discussion and Conclusion

Pending a successful arrangement, Korean Trade Minister and his Chinese counterpart will conduct a ministerial meeting prior to the summit to officially conclude negotiations. Korea wants to categorize its agricultural products and some commercial goods manufactured by small businesses as super-sensitive items in order to protect those markets, while China wants Korea to fully open them. China also wants to keep its commercial goods market from being exposed to competition with strong Korean manufacturers. Officials had anticipated earlier last week that FTA negotiations between Korea and China would conclude without issue, in part due to a favorable atmosphere between the two governments. We could put forward a proposal that China and Korea strengthen cooperation in three areas: First, make efforts to explore ways of sustainable development so as to promote exchanges and cooperation in climate change, new energy and renewable energy, energy conservation and efficiency, and environmental protection, etc. Second, expand cooperation in such areas as electronic information, communication technology, tap potentials for new- and high-tech cooperation projects, strengthen cooperation on application of new- and high-tech, further improve new- and high-tech exhibitions of the two countries, and actively explore the establishment of Sino-Korean New- and High-tech Hatch Park. Third, provide better services to enterprises, and promote two-way investment.

Both sides, Korea and China, agreed to make some concessions: Korea agreed to reduce the number of agricultural items it wanted to protect from tariffs over a certain period, and China also conceded to reduce the number of its commercial goods that would receive certain protections. Korea requested that China recognize Korean-made products that are assembled with parts or materials made in China as Korean exports. China is currently both the largest export and import market for Korea. Last year, Korea exported \$141.3 billion worth of goods to China, which

accounted for as much as 26 percent of its total export volume, according to data from the Korea International Trade Association. Korea's exports to the United States stood at \$60.1 billion last year, while those to the European Union posted \$47.3 billion. The country imported \$80.8 billion worth Chinese goods, outstripping those of other countries.

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