

APEC Data Harmonization towards Single Window Paperless Environment

APEC-endorsed Project

Co-sponsored by APEC Member Economies
(Thailand, China, and Chinese Taipei)

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Project Background

- Report to APEC Leaders [ABAC: 2003] recommends APEC to “implement paperless trading through the development of a single-window system”

- APEC’s Strategies and Actions toward a Cross-Border Paperless Trading Environment [ECSG: 2004] endorsed at the 16th APEC Ministerial Meeting suggests implementation timelines as follow:
 - 2006:** Interested member economies implement **ECO and e-SPS Pathfinders** for the cross-border transmission of electronic certificates of origin as well as electronic sanitary and phyto-sanitary certificates.

 - 2010:** Most member economies establish a domestic paperless trading environment and implement pilots for **the cross-border electronic transmission of customs clearance data**.

 - 2020:** APEC establishes a comprehensive paperless trading environment that enables **the electronic transmission of trade related information across the region**.

Objectives

- To build information framework that enables the creation of **semantic interoperability** among Single Windows based on:
 - WCO Data Model (customs data requirements)
 - UNeDocs (trade and transport data requirements)
 - Data requirements from the Asia-Pacific region

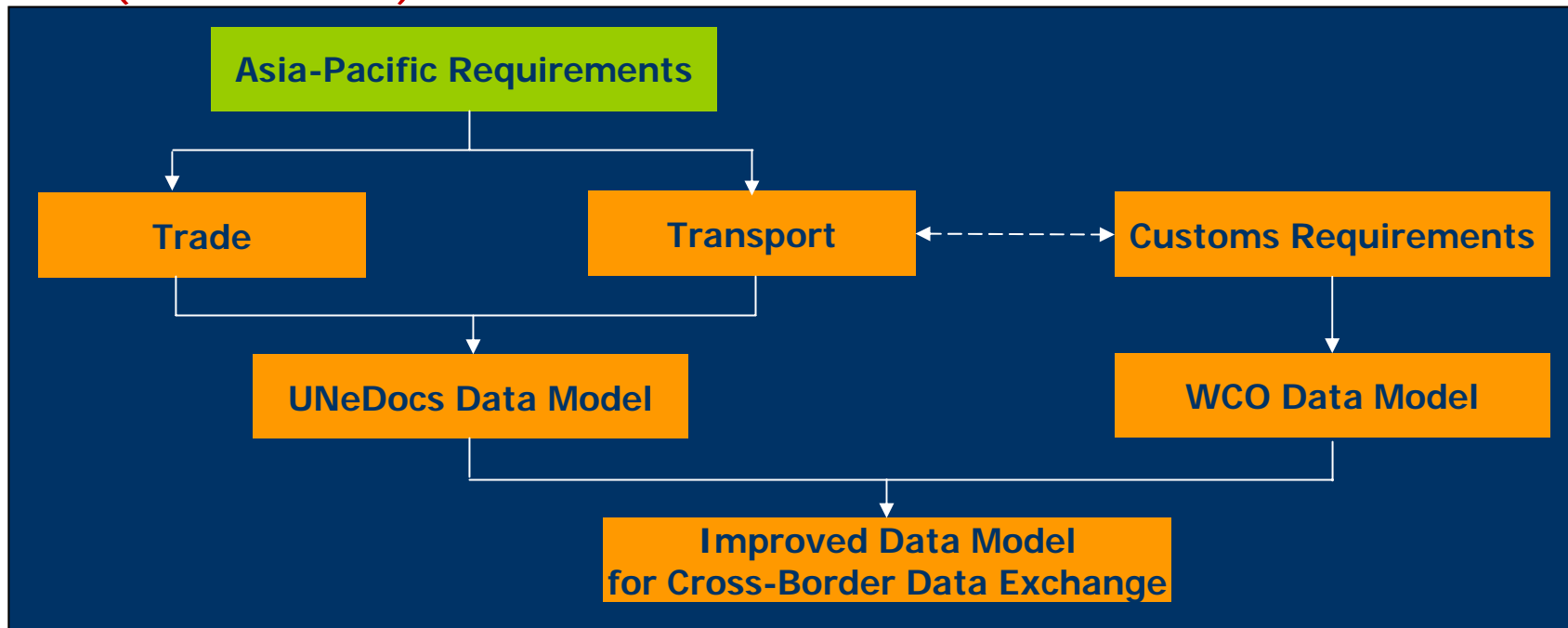
- To facilitate APEC member economies and enhance their capacity in the following areas:
 - Documents simplification
 - Data harmonization
 - Standardized data set development at both individual and regional level

- To reinforce the adaptation of internationally accepted standards essential for the development of interoperable Single Windows

- To formulate the network of practitioners with expertise in message assembly using UNeDocs

Principle Activities

- Integration of **WCO Data Model (version 3)** and **UNeDocs (Mexico version)** with the incorporation of *data requirements from the Asia-Pacific region*
- Development of holistic data model for cross border data exchange using **UN/CEFACT Core Components (CCL07A)** according to **ISO 15000-5: ebXML Core Components Technical Specification (version 2.01)**



Principle Activities

- Proof-of-concept demonstration
 - Develop a set of electronic messages used in international trade transaction based on the integrated data model in XML format
 - Develop a set of digital paper documents using the United Nations Trade Documents Toolkit

Paper Document Aligned to UN Layout Key

Electronic Editable Form

Message Guideline and XML Schema

```
UNEDOCs Ship BIM, Header, Header, Document
├── Header, Document, Identification, Identifier
├── Header, Document, Issue, Date Time
├── UNEDOCs Ship BIM, Cross-Border, Transport Means, Cross-Border, Transport Means
├── Cross-Border, Transport Means, Type, Text
├── Cross-Border, Transport Means, Journey, Identifier
├── Cross-Border, Transport Means, Crossborder, Date Time
├── Cross-Border, Transport Means, Attached, Cross-Border, Transport Equipment
├── Cross-Border, Transport Equipment, Identification, Identifier
├── Cross-Border, Transport Equipment, Gross Weight, Measure
├── Cross-Border, Transport Equipment, Characteristic, Code
├── Cross-Border, Transport Equipment, Fullness, Code
├── Cross-Border, Transport Equipment, Information, Text
├── UNEDOCs Ship BIM, Cross-Border, Consignment, Cross-Border, Consignment
├── Cross-Border, Consignment, Consignee, Referenced_Party
├── Referenced_Party, Name, Text
├── Cross-Border, Consignment, Carrier, Referenced_Party
├── Referenced_Party, Name, Text
├── Cross-Border, Consignment, Carrier Agent, Referenced_Party
├── Referenced_Party, Name, Text
├── Cross-Border, Consignment, Specified, Cross-Border, Address
├── Cross-Border, Address, Line One, Text
├── Cross-Border, Address, Line Two, Text
├── Cross-Border, Address, Line Three, Text
├── Cross-Border, Address, Line Four, Text
├── Cross-Border, Address, Line Five, Text
```

Electronic Message in XML format

```
<?xml version="1.0" encoding="UTF-8" ?>
<UNEDOCs:CertificateOfOrigin xmlns:UNEDOCs="urn:UNEDOCs:CertificateOfOrigin:1.0a">
  <TransportContract/Consignment>
    <ConsignorParty>
      <Name languageID="th">STAM Quality Industries Co.,LTD.</Name>
      <SpecifiedAddress>
        <LineFive languageID="th">Thailand</LineFive>
        <StreetName languageID="th">1 Banbuastrong Loobnuastrong Rd.</StreetName>
        <CityName languageID="th">Nonthaburi 11150</CityName>
      </SpecifiedAddress>
    </ConsignorParty>
    <ConsigneeParty>
      <Name languageID="th">Power Sirich Groupy, INC.</Name>
      <SpecifiedAddress>
        <LineFive languageID="th">Philippines</LineFive>
        <StreetName languageID="th">2211 RM, 411 Dagupan Street, TONDO</StreetName>
        <CityName languageID="th">Metro Manila</CityName>
      </SpecifiedAddress>
    </ConsigneeParty>
    <PhysicalShippingMarks>
      <Description languageID="th">Text description</Description>
      <MarkingInstructionCode languageID="th" listAgencyName="listID" listName="listID">
        Manila</MarkingInstructionCode>
      </PhysicalShippingMarks>
    <OriginCountry>
      <Name languageID="th">Thailand [TH]</Name>
    </OriginCountry>
    <ExportationCountry>
      <Name languageID="th">Thailand [TH]</Name>
    </ExportationCountry>
    <FinalDestinationCountry>
      <Name languageID="th">Philippines [PH]</Name>
    </FinalDestinationCountry>
    <MainCarriageTransportMovements>
      <ActualDepartureDateTime>29052006</ActualDepartureDateTime>
    </UsedTransportMeans>
    <Name>HYUNDAI CONCORD</Name>
    </UsedTransportMeans>
    <LoadingLocation>
      <Name>North Manila</Name>
    </LoadingLocation>
    </UnloadingLocation>
  </TransportContract/Consignment>

```

Principle Activities

- Development of **application guideline** to suggest necessary steps towards data harmonization and single window development

- Organization of a back-to-back two-day high level conference for policy-makers and three-day technical **capacity building workshop**

- Establishment of internet portal to assist APEC member economies through the process of data harmonization:
 - Relevant resources
 - Newsgroup for an exchange of experiences and ideas
 - Virtual working environment for **regional expert group**

Outputs

- ❑ Improved UNeDocs [UNeDocs (Mexico version) + WCO Data Model (version 3.0)]
- ❑ UNeDocs application guideline
- ❑ A set of digital papers and electronic messages
- ❑ Awareness raising and capacity workshop
- ❑ Virtual working environment for a network of experts

Outcome

- Increased capacity of APEC member economies in harmonizing data requirements and developing electronic messages for cross border data exchange using UNeDocs
- Increased UNLK aligned paper and electronic forms resulting from the use of United Nations Trade Documents Toolkit
- Increased harmonization of trade and transport related data requirements among APEC member economies and development of electronic messages based on UNeDocs
- Increased number of experts that are willing to make contribution for others in this area

Proposed Timelines

- ❑ Jan 2008 – Detailed Scope & Plan Developed
- ❑ Feb 2008 – Approved Project Plan by APEC ECSG/SWWG (SOM I), Lima, Peru
- ❑ April 2008 – UN/CEFACT Forum –
[UNeDocs Mexico Version]
- ❑ 30 April 2008 – Expert Meeting in Jeju, Korea
[Draft UNeDocs Application Guide reviewing]
- ❑ 8-12 December 2008 – Capacity Building Workshop,
Bangkok
- ❑ Feb 2009 – Final Report to APEC ECSG/SWWG (SOM I)

Thank you

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