Dagang Net Technologies Proposal
for the implementation of the
OIC Single Window

February 26th, 2013
Agenda

OIC Single Window Implementation Proposal

- About Dagang Net Technologies
- Lessons from other Cross Border e-Trade Initiatives
- Requirement Highlights
- Proposal for OIC Single Window
- Benefits
About Dagang Net Technologies
Corporate overview

- Incorporated in **1989**
- Trade Facilitation
- Government-Linked Company
- Malaysia’s National Single Window Operator
Core competencies

**Experience**
- Trade Facilitation Pioneer
- E-Commerce Community Builder
- Private-Public Collaboration

**Infrastructure**
- State-of-the-art Facilities
- Integrated intelligent infrastructure
- Certified ISO/IEC 27001:2005

**Expertise**
- Standards Development
- National ICT Strategic Consultancy
- 240 staff strength
1989
EDI Malaysia established

1994
1st Community System (CS)

1996
CS expansion Nationwide
Electronic Fund Transfer
eManifest

2005
ePermit

2009
ASEAN SW National SW

2011
FAMA 3P - WTO Standards

1991
Aligned Documentation System

1995
Customs-DagangNet System

1998
Free Zone Community

1996
CS expansion Nationwide

2005
ePermit

2007
ePCO

2010
ePermits for Strategic Trade Act 2010

2012
eManifest implementation for smaller ports
“THE LEADING COMMUNITY BUILDER THROUGH E-COMMERCE AND BUSINESS FACILITATION”

NATIONAL SINGLE WINDOW

Government Agencies
Back-Office System

ASEAN Single Window

Forwarders
Importers - Exporters
Shippers

CUSTOMS 173
Permit Issuing Agencies 25
Port Authorities 6
Port Operators 6
Bank 8
ASEAN 7
Lessons from other Cross Border e-Trade initiatives
Lessons from Regional Initiatives

**Business Value**
Some initiatives have focussed on technical and legal areas, at times losing sight of the core value / requirements to be delivered.

**Legal Framework**
While complex due to the plethora of national legislation, some initiatives experience unnecessarily long delays in accepting the validity of cross border electronic documents.

**Does Country B trust Country A’s Trusted National Domain?**

**Governance**
Acceptance of diversity of Member Countries.

- Clear approach on separation between
  - Policy and Implementation
  - National and Regional matters

Dedicated “organizational unit” to drive operation decisions and implementation.

**Technical**
- Result of identified business value and processes, not the driver
- Proven technology is readily available
- “Central” architecture raises questions of:
  - Privacy, confidentiality
  - Liability taken by operator of “central” system
  - Who is the operator of the “central” system
Cross Border Trade – Simplified Overview
Potential Cross Border Business Processes

thru the OIC Single Window

Commercial
Purchase order, commercial invoice, packing list, letter of credit....

Authorized Economic Operator (AEO) programs
Exchange status of AEO's to facilitate "green" lane

Facilitate Preferential Duty Rates on Import - country and rules of origin
e.g. Preferential Tariff Scheme - PRE-TAS

Facilitate pre-arrival clearance on imports
consignment info prior to loading - 24 hour rule; 4 hour rule - house manifest, bill of lading, air waybill
Share export, import details - improve intelligence & risk management

Health, Food, Community Safety
Halal certificates;
Phyto-sanitary certificates; Health certificates
Strategic commodities
Legal Framework for OIC Single Window

Acceptance of electronic documents / signatures with same legal standing as paper, within national borders
In general, or
For specified documents to be exchanged cross border

Mutual Trust between secure National IT Domains of Member Countries
May be supplemented by External Security Audit of agreed security criteria
Similar to “trusting” paper documents issued and submitted by another government

Digital signatures and encryption
for exchange between secure National IT domains, with two or more keys / certificates for each Member Country
OIC Single Window Technical Concepts
OIC Single Window Technical Concept – 1

Distributed

OIC Single Window Concept - Distributed

Member Country A
National IT Domains
Customs
Govt Agencies

OIC Exchange Gateway

Member Country B
National IT Domains
Customs
Govt Agencies

OIC Exchange Gateway

Member Country C
National IT Domains
Customs
Govt Agencies

OIC Exchange Gateway

Member Country D
National IT Domains
Customs
Govt Agencies

OIC Exchange Gateway

Member Country x...
National IT Domains
Customs
Govt Agencies

OIC Exchange Gateway

Member Country y...
National IT Domains
Customs
Govt Agencies

OIC Exchange Gateway

Global Halal Exchange
Registration Certification

OIC Exchange Gateway

OIC Market Place

OIC Exchange Gateway

Market Place Selling and Buying

OIC Coordination Services (e.g. ICDT)
Statistics
Member Country On-Boarding Assistance Testing
Change Management
OIC Single Window Technical Concept – 1

Distributed

Regional OIC Exchange Gateway in trusted National IT Domain of each Member Country
Reliable, secure once-and-only once exchange over the Internet Security
(digital signatures, encryption, certificate management)

Integrates with National IT Domains / Applications - choice of integration mechanisms

Statistics to OIC Coordination Services

Document format translation
Audit trails
Tracking and Reporting
OIC Coordination Services

Collate and report on Statistics
On-board Member Countries and profile management
Optional Mapping on behalf of Member Countries
OIC Document Structure Adoption and Promulgation
Coordination of Interoperability Testing
Change Management
OIC Single Window Technical Concept – 2

Central

OIC Single Window Concept - Central

- **Central Architecture appears simpler for each Member Country**
  - Only one party to exchange with
  - Can perform central translation

- **Each Member Country**
  - Still needs OIC Exchange Gateway functionality
  - Needs to assist in the definition of the central mapping
  - May not want to share trade exchanges with an unrelated party

- **“Central” architecture questions**
  - Privacy, confidentiality?
  - Liability taken by operator of “central” system?
  - Who is the operator of the “central” system?
OIC Single Window
Governance and Implementation Approach
Challenges

• Decision Making and Collaboration amongst diverse Stakeholders
  – Defining Business Value and Investment for Cross Border Exchange
    • Infrastructure and Policy
    • National
    • Regional / Cross Border
  – Acceptance of electronic documents / signatures
    • National
    • Cross Border
Suggested Governance Structure for OIC Single Window Implementation

- **OIC COMCEC**
- **OIC Single Window Steering Committee**
- **OIC Single Window Policy & Legal Committee**
- **OIC Single Window Project Management Office (e.g. ICDT)**
- **OIC Single Window Process & Technical Committee**
- **OIC Member Countries**
- **OIC Single Window Implementation Contractor**
- **OIC Member Countries**
OIC Single Window Project Management Methodology
OIC Single Window Implementation Approach

- Plan and Execute Technical Pilot (August 2013)
  e.g. PRE-TAS – Turkey, Indonesia, Brunei, Malaysia

- Conduct Feasibility Study (December 2013)
  Business Value, Readiness, Challenges, Implementation Plan

- Process Analysis, Design, Testing, Implementation

- Conduct Parallel Run and Business Pilot (December 2014)

- Establish Legal Framework

- OIC Single Window Rollout (Electronic) (March 2015)

- OIC Single Window Ongoing Operations
  Onboard new cross border processes
  Onboard new Member Countries
Benefits
Example Economic Impact
Electronic Certificate of Origin
Korea ➔ Chinese Taipei (APEC Study ¹)

<table>
<thead>
<tr>
<th>Korea Export</th>
<th>US$/TEU</th>
<th>Document preparation</th>
<th>Customs clearance / technical control</th>
<th>Ports and terminal handling</th>
<th>Inland transport/ handling</th>
<th>Totals</th>
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</thead>
<tbody>
<tr>
<td>Before e-CO</td>
<td>$210</td>
<td>$175</td>
<td>$284</td>
<td>$584</td>
<td>$1,253</td>
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<tr>
<td>After e-CO</td>
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<td>$84</td>
<td>$284</td>
<td>$584</td>
<td>$979</td>
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<td>Improvement</td>
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<td>$0</td>
<td>$0</td>
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<td>52%</td>
<td>0%</td>
<td>0%</td>
<td>22%</td>
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</tbody>
</table>

¹APEC Study August 2011 - Reducing trade transaction costs in APEC through electronic commerce: A case study of Electronic Certificate of Origin (ECO)
Example Economic Impact
Electronic Certificate of Origin
Korea 🔄 Chinese Taipei (APEC Study ¹)

<table>
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<th>Chinese Taipei– Import</th>
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<tr>
<td><strong>US$/TEU</strong></td>
<td><strong>Document preparation</strong></td>
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<tr>
<td><strong>Before e-CO</strong></td>
<td>$179</td>
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<tr>
<td><strong>After e-CO</strong></td>
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<tr>
<td><strong>Improvement</strong></td>
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<td><strong>Improvement %</strong></td>
<td>49%</td>
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¹APEC Study August 2011 - Reducing trade transaction costs in APEC through electronic commerce: A case study of Electronic Certificate of Origin (ECO)
Together we can achieve

FUTURE

To facilitate trade growth
Together we can achieve

- **Member Countries**
  - Reduced Trading Transaction Costs and Clearance Time
  - Improved Trading Efficiency and Transparency
  - New Opportunities

- **Traders**
Thank you