

UNCITRAL Colloquium on Electronic Commerce

16 February 2011
New York

LEGAL AND REGULATORY ASPECTS OF INTERNATIONAL SINGLE WINDOW IMPLEMENTATION – THE ASEAN EXPERIENCE

Kah-Wei Chong

Deputy Senior State Counsel, Attorney-General's Chambers Singapore
(Views are personal, not official)

Based on paper published at (2009) Global Trade & Customs Journal, Vol 4, Issue 6

1/36

What is a Single Window?

- Facility that allows parties involved in trade and transport to lodge standardised information and documents with a single entry point to fulfil all import, export and transit-related regulatory requirements
- If information is electronic, then individual data elements should only be submitted once
- *Source: UN/CEFACT Recommendation No 33 – Recommendations and Guidelines on Establishing a Single Window*

2/36

Benefits of a Single Window

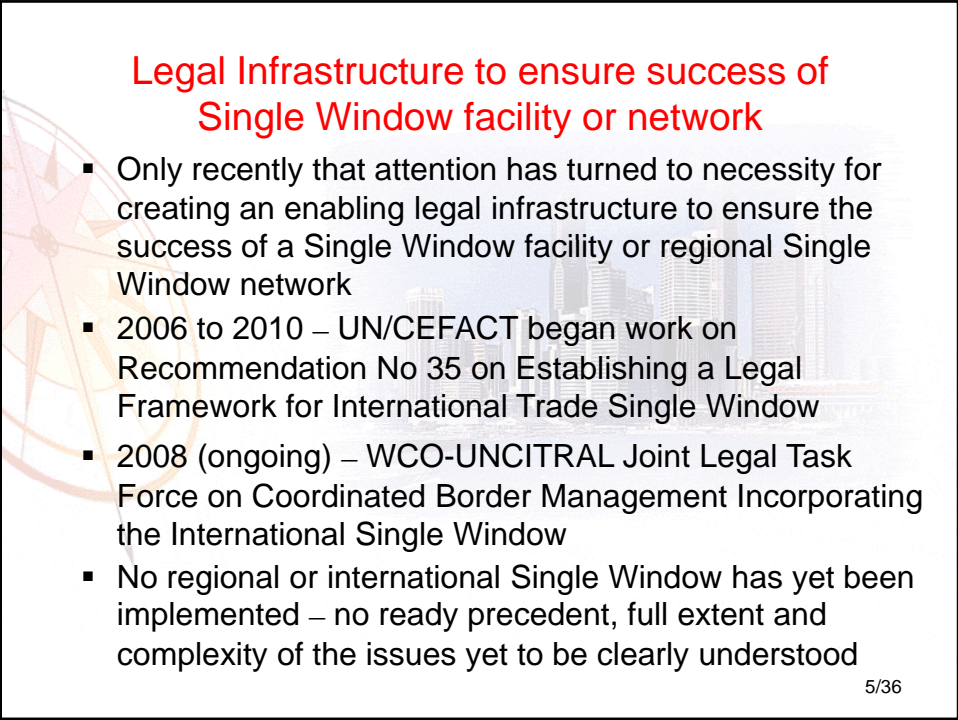
- Traders have to regularly prepare and submit large volumes of information and documents to government authorities to comply with import, export and transit-related regulatory requirements
- This information and documentation has to be submitted through different agencies
- These constitute a serious burden to both governments and the business community
- With a Single Window, trade related information and documents need only be submitted once at a single entry point

3/36

Types of Single Windows

- Electronic Single Window *versus* non-electronic Single Window
- National / domestic Single Window *versus* regional / international Single Window

4/36



Legal Infrastructure to ensure success of Single Window facility or network

- Only recently that attention has turned to necessity for creating an enabling legal infrastructure to ensure the success of a Single Window facility or regional Single Window network
- 2006 to 2010 – UN/CEFACT began work on Recommendation No 35 on Establishing a Legal Framework for International Trade Single Window
- 2008 (ongoing) – WCO-UNCITRAL Joint Legal Task Force on Coordinated Border Management Incorporating the International Single Window
- No regional or international Single Window has yet been implemented – no ready precedent, full extent and complexity of the issues yet to be clearly understood

5/36



Legal & Regulatory Aspects of Implementing a National Single Window – Singapore experience

6/36

Singapore TradeNet

- First nationwide electronic trade clearance system (1989)
- Electronic means of submitting trade documentation to all relevant government authorities
- 100% of trade declarations are submitted via TradeNet
 - 9 million applications per year
- Electronic response from the relevant authorities within 10 minutes after submission

7/36

Legal basis of national Single Window

- S 25(1) Electronic Transactions Act 2010 (formerly s 47(1) ETA)
 - Any public agency that, pursuant to any written law, accepts the filing of documents, or obtains information in any form ... may ... carry out that function by means of **electronic records or in electronic form**
 - Any such public agency that, pursuant to any written law, issues any permit, licence or approval, may issue such permit licence or approval by means of **electronic records or in electronic form**

8/36

Legal basis of national Single Window

- S 86 Customs Act
 - Authorises Director-General to establish and operate a **computer service** and make provision for any manifest, return, list, statement, declaration, direction, notice, permit, receipt or other document required or authorised under the Customs Act to be **made, served or submitted by electronic transmission** (“electronic notice”)
 - A registered user may make and serve an electronic notice to the computer account of the Director-General, and vice versa
- S 8 Regulation of Imports and Exports Act contains similar provisions
- S 42 Goods and Services Tax Act contains similar provision

9/36

Validity of Electronic Transactions

- Electronic Transactions Act 2010 is based on the UNCITRAL Model Law on Electronic Commerce and the UN Convention on the Use of Electronic Communications in International Contracts
- Electronic Transactions Act 2010 provides legal recognition for electronic functional equivalents of
 - Written documents (s 7 ETA)
 - Written signatures (s 8 ETA)
- Validity of a transaction entered into by electronic means is determined by substantive law of the transaction
- Information shall not be denied legal effect, validity or enforceability solely on the ground that it is in the form of an electronic record (s 6 ETA)

10/36

Ensuring Enforcement Functions not hindered

- Customs and other controlling agencies administer and enforce the regulatory regime set out in the legislation under their purview
- Need to ensure that these agencies are able to carry out their enforcement functions effectively, after implementation of national Single Window
 - Electronic evidence (s 35-36 Evidence Act)

11/36

Confidentiality of information submitted

- Information submitted by traders may include commercially-sensitive information, trade-sensitive information, financially sensitive information etc.
- Legal protections and constraints on use of such information are necessary to prevent misuse.
- Higher risk of misuse and abuse of information submitted and maintained in electronic form.
- Such protections provide traders with confidence to use the Single Window facility.

12/36

Confidentiality of information submitted

- Law of confidence
 - No particulars, information or document furnished for purposes of Customs Act shall be published or communicated or disclosed to any person (s 89 Customs Act)
 - Except for purposes of enforcement of Customs Act or Goods and Services Tax Act
 - Except with prior consent in writing of the person having control, management or superintendence of the goods

13/36

Confidentiality of information submitted

- All persons having any official duty or being employed in administration of Goods and Services Tax Act shall deal with all documents and information relating to the business, the value of the supply of any goods or services ... as secret and confidential (s 6 GST Act)

14/36



Legal & Regulatory Aspects of Implementing a Regional Single Window – ASEAN's experience

15/36

Legal aspects of Regional SW – ASEAN experience

ASEAN Single Window

- Dec 2005 – ASEAN Member States signed Agreement to Establish and Implement the ASEAN Single Window
- Dec 2006 – Protocol to Establish and Implement the ASEAN Single Window
- Specified deadlines for operationalisation of national Single Windows
 - ASEAN Six – by 2008
 - ASEAN Four – by 2012
- ASEAN Single Window defined as “environment where National Single Windows of Member Countries operate and integrate”

16/36

Legal & regulatory aspects of implementing ASEAN Single Window

- A regional or international Single Window contemplates cross-border exchange of information
 - Laws and legal systems of more than one jurisdiction are involved
 - Possible need for alignment of laws and policies relating to the national Single Window and the regional / international Single Window
- Study of legal and regulatory issues arising from implementation of regional / international Single Window may influence / dictate the technical design of the regional / international Single Window network
- Choice of technical design may address or avoid certain legal or regulatory issues

17/36

Legal & regulatory aspects of implementing ASEAN Single Window

- WCO-UNCITRAL Joint Legal Task Force on Coordinated Border Management Incorporating the International Single Window
 - Jointly established by WCO and UNCITRAL
 - Work still at early stages
- UN/CEFACT Recommendation No 35 on Establishing a Legal Framework for International Trade Single Window
 - First Edition issued in Oct 2010
 - Identifies various legal topics that should be considered

18/36

Potential legal & regulatory issues identified

- Enabling legislation for Single Window (including regional / international Single Window)
- Legal recognition of electronic transactions (including possible harmonisation of laws)
- Authentication, identification and access control (including cross-border recognition of electronic signatures)
- Data protection (access, integrity and accuracy of data), data retention and limits on re-use of data (including possible harmonisation to satisfy rules on admissibility of electronic evidence)

19/36

Potential legal & regulatory issues identified

- Information security
- Confidentiality of trade data and information
- Ownership of data flowing through the regional / international Single Window
- Liability of domestic and regional / international Single Window operators (e.g. data processing errors, data breaches, inaccurate data)
- Enforcement issues (e.g. declarant outside jurisdiction, foreign evidence, electronic evidence issues)

20/36

Validity of electronic transactions in cross-border context

- In cross-border context, national laws of different countries may provide for different rules relating to electronic transactions
 - Possible need for harmonisation to the extent that these rules may be relevant in a cross-border context
- National laws based on UNCITRAL Model Law on Electronic Commerce may not have been enacted uniformly
- UN Convention on the Use of Electronic Communications in International Contracts is the new global standard
 - Singapore has ratified Convention and aligned its Electronic Transactions Act accordingly

21/36

Ensuring Enforcement Functions not hindered

- In cross-border context, enforcement of laws takes on higher level of complexity
 - Equally important to ensure that Customs and other controlling agencies are able to carry out their enforcement functions in the context of an operational regional / international Single Window

22/36

Ensuring Enforcement Functions not hindered

- Illustration of intersection of law and technology through hypothetical technical architecture and business process flow for a regional / international Single Window
 - “Submission flow-through” model
- Trader wishes to ship goods to Country A, and thereafter re-export goods to Country B
- Trader submits all necessary trade submission information required by Country A & Country B in a unified submission to Country A’s national Single Window
 - Country A’s national Single Window transmits relevant portion of data to Country B’s national Single Window

23/36

Ensuring Enforcement Functions not hindered

- In this “Submission flow-through” model, if Country B needs to take enforcement action, the following would be required:
 - Country B officials need to prove that trader had indeed submitted the information alleged to be false
 - Officer from Country A’s national Single Window may need to testify in Country B’s courts as to operations of Country A’s national Single Window, and may need to submit a copy of the electronic submission actually received by Country A’s national Single Window from the trader
 - Electronic evidence resides in country A’s national Single Window

24/36

Ensuring Enforcement Functions not hindered

- Evidence relating to authentication of electronic submission and identification of trader as the person who electronically signed the submission
 - If certification authority in Country A had issued the certificate used by trader, evidence from the certification authority may be required
- As trader was not within the jurisdiction of country B, the enforcement officials of country B would first have to identify and locate the trader
 - Obtain the trader's cooperation with investigations

25/36

Ensuring Enforcement Functions not hindered

- From above, “Submission flow-through” model for a cross-border Single Window implementation raises significant difficulties for the efficient and effective enforcement of laws of Country B
- Heavy dependence on foreign evidence from Country A and difficulties due to trader being outside jurisdiction
- If “Country A's national Single Window” were substituted with “ASEAN Single Window” in the hypothetical scenario, such that all traders must submit trade submissions to a hypothetical ASW facility, and ASW facility would unpack the submission and re-transmit relevant portions to national Single Windows of relevant countries
 - the difficulties would be multiplied manifold

26/36

Confidentiality of trade data & information

- Information submitted by traders may include commercially-sensitive information, trade-sensitive information, financially sensitive information etc.
- Singapore laws prohibit the recipient of such information from disclosing the information without trader's prior consent
- The technical model for the ASEAN Single Window can achieve compliance with these restrictions by:
 - Requiring the trader to share his trade submissions directly with another country if so required
 - Requiring the trader's prior consent before the government authorities are permitted to share the information with another country

27/36

Information security

- Modern threats to security of information systems
 - Malware, computer hacking, data breaches
- Information security should be a key design principle in the technical design of the ASEAN Single Window
- Appropriate laws should be put in place to address information security

28/36

Information security

- **Appropriate laws should be put in place to address information security**
 - **Appropriate laws criminalising unauthorised access and modification of computer material**
 - **Laws relating to appropriate access control and authentication**
- **Need for some harmonisation of penalties for such criminal offences and enforcement policies**

29/36

Information security

- **Information security should be a key design principle in the technical design of the ASEAN Single Window**
 - **Much riskier to centralise and aggregate the processing and storage of trade data of all ten ASEAN Member States in a single centralised location**
 - **Single point of failure**
 - **Single point of attack**
 - **Well-known cases of cyber attack that have occurred in other countries**
 - **If a cyber attack paralyses a centralised ASEAN Single Window facility, the economic losses would be enormous**

30/36

Intersection of law & technology – choice of technical model

- Lawrence Lessig – “Code” and “code” govern human behaviour where information technology is concerned
- Early debate in ASW Working Groups on technical model for the ASEAN Single Window
 - Centralised / federated model
 - Bilateral / virtualisation model
- Centralised / federated model – centralised ASW facility through which all information transmitted by NSWs would flow through, and to be routed to destination NSWs
- Bilateral / virtualisation model – no centralised facility, with NSWs exchanging information with one another using standardised ASW protocols and ASW data model

31/36

Intersection of law & technology – choice of technical model

- Both technical models were intended to achieve the same result – to enable traders to conveniently make trade submissions to more than one country
 - But the two technical models raised different legal and regulatory issues
- Centralised / federated model
 - Issue of ownership of mixed data in centralised database
 - Potential liability of ASW operator to users from all ten ASEAN Member States
 - Confidentiality of trade data hosted at facility outside control of country owning the data

32/36

Intersection of law & technology – choice of technical model

- **Centralised / federated model**
 - Issue of control and supervision over the operations of the centralised facility
 - Over-concentration of data in a single point for purposes of enforcement and electronic evidence, resulting in complexity and impracticality of enforcement
 - Single point of failure
- **Bilateral / virtualisation model**
 - Raised fewer legal concerns

33/36

Intersection of law & technology – choice of technical model

- **At least partly to address the above concerns, it has been decided that the ASEAN Single Window pilot project technical model:**
 - Will not be based on a centralised / federated model in its true sense
 - Will be based on a model featuring technical infrastructure that merely carries out transmission functions but does not retain or maintain any trade data transmitted through it
- **Such a model will avoid many of the identified issues**

34/36

Intersection of law & technology – choice of technical model

- This is an illustration of how the choice of a technical model or a technical design can serve to address or avoid certain legal or regulatory issues
- In deciding on the technical design of a regional / international Single Window, policy makers and designers need to take into account not only technical requirements, but also:
 - Legal and regulatory requirements
 - Security requirements
 - Other policy considerations

35/36

Concluding Thoughts

- The legal and regulatory perspective is a critical aspect that must be taken into account when designing a regional or international Single Window
- Where does UNCITRAL Working Group IV come in?
 - The harmonisation of laws which is needed in order to support the proper functioning of regional or international Single Windows will be even more challenging if regional Single Windows were to connect with each other
 - UNCITRAL's mandate is the harmonisation of laws to facilitate international trade
 - Working Group IV as a repository of IT law expertise, can provide valuable contribution to this area

36/36