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Single Window – Best Practice and the Way Forward

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Introduction

In 2005 The Recommendation and Guidelines on establishing a Single Window, UN Economic Commission for Europe UN/CEFACT Recommendation 33, was published. The recommendation defines a Single Window as "*a 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.*" At the UNECE Symposium on Single Window Standards and Interoperability held in May 2006 the Symposium delegates requested UN/CEFACT to provide supplementary recommendations with guidelines on the way government information requirements could be harmonised and standardised, and the legal issues to be considered when planning and implementing a Single Window facility. That request has now been fulfilled with Recommendation 34 Data Simplification and Standardization for International Trade (in inter-sessional approval until 11 February 2011) and Recommendation 35, Establishing a legal framework for international trade Single Window (approved 8 October 2010). UN/CEFACT is currently preparing a recommendation on Single Window Interoperability to complete this series of recommendations on best practice for Single Windows.

The notion of a Single Window is not unique to trade. In fact a corner stone in many e-government initiatives is the idea that authorities should share information submitted by companies or individual citizens. Since the 90's this has been explored by many governments, be it called e-government, the 24 hour authority, Ventana Unica, Uniek Loket, or One-stop-Shop. But in few environments has it made so much sense and had such a large impact as in the relationship between traders and government authorities in the connection to border crossings. The reasons for this success can be said to be manifold. In times of budgetary restraint the Single Window makes administrative sense and is a way to save resources both for trade and government. The concept is relatively simple and can easily be explained at policy levels. It has been used in some countries to promote all sorts of trade facilitation, since the political force of the concept makes financing easily available and a number of measures can find room under the Single Window umbrella. When going for low-hanging fruit, the Single Window can quickly prove its worth both in financial and administrative terms. Even more important, from a trade facilitation point of view, the process leading up to the establishment of a Single Window will force authorities to collaborate and streamline their processes, to collaborate and consult with the business community and in the best of cases also lead to coordinated border management, cutting lead time not only in the administrative procedures but also in the actual border-crossing.

Recommendation 33 was accompanied by a number of case studies. In the Guidelines the Single Window solutions of Mauritius, Sweden, The Netherlands and The United States are described. The UNECE and UN/CEFACT have today in the web-based Single Window Case Study Repository 15 case studies from 14 countries. More than 30 countries have today implemented Single Window solutions and the number is rapidly growing. Beside national Single Windows there are also a number of local Single Windows, often linked to a harbour or airport facility, and some attempts at regional Single Windows are being launched, notably by ASEAN and the EU. Not only old industrialised countries like

France and the UK are seeking new Single Window solutions but also newly industrialised countries like Chile, or developing countries like Cameroon or Togo or the countries in East African Community are pursuing this goal. The UN/CEFACT Recommendation has clearly helped spreading the word and giving straight-forward and hands-on advice on the establishment of a Single Window and is one of the most downloaded Recommendations from the UNECE web-page. It is hoped that the following recommendations will have a similar impact.

What will be the way forward finding new simplifications in the way information is transferred to authorities from companies? The model for Single Windows is based on companies extracting information from their supply chains, formatting it to the needs of governments and sending it to the concerned authorities. This method of companies "pushing" information is cemented by the Single Window approach chosen by most countries. In fact the information that authorities require is available in the Supply Chain and is circulating between the concerned companies in forms structured by the companies' business needs and logic. It would make better sense that that information is "pulled" by the authorities in a structured manner. It would be less disruptive to trade and less costly for customs administrations who would be able to access relevant information quickly and avoid redundant information gathering. The concept of Authorized Economic Operators, as introduced by for instance the WCO, where companies are awarded advantages in customs clearance based on the trust established when the companies can prove that they work according to certain standards, opens one way of achieving this, at least in part. The WCO project on Globally Networked Customs is an initiative that will facilitate the development towards a new way of exchanging data between customs and also between customs and businesses. It is probable that in these developments lies a way to future simplifications and this path will need to be explored. A concern with the proliferation of Single Window solutions is that they might be seen as a barrier to more far reaching simplifications in information gathering, even though the investments in that infrastructure would be "sunk cost" if greater simplifications can be achieved in other manners. Many of the hurdles here will be of legal nature, as well as of economical or technical, and this is an area where work will have to be done in order to see how international trade law can promote a greater variety of simplified ways of information collection for border-crossing purposes.

What is Best Practice?

In the introduction of Recommendation 33 the business case for Single Windows is clearly stated:

> *"In many countries, companies involved in international trade have regularly to prepare and submit large volumes of information and documents to governmental authorities to comply with import, export and transit-related regulatory requirements. This information and documentation often has to be submitted through several different agencies, each with their own specific (manual or automated) systems and paper forms. These extensive requirements, together with their associated compliance costs, can constitute a serious burden to both governments and the business community and can also be a serious barrier to the development of international trade.*
>
> *One approach to address this problem is the establishment of a Single Window whereby trade related information and/or documents need only be submitted once at a single entry point. This can enhance the availability and handling of*

information, expedite and simplify information flows between trade and government and can result in a greater harmonisation and sharing of the relevant data across governmental systems, bringing meaningful gains to all parties involved in cross-border trade. The use of such a facility can result in improved efficiency and effectiveness of official controls and can reduce costs for both governments and traders due to better use of resources.

The Single Window is therefore a practical application of trade facilitation concepts meant to reduce non-tariff trade barriers and can deliver immediate benefits to all members of the trading community."

The recommendation describes three models according to which a Single Window can be implemented: Single Authority, Single Automated System or an Automated Information Transaction System.
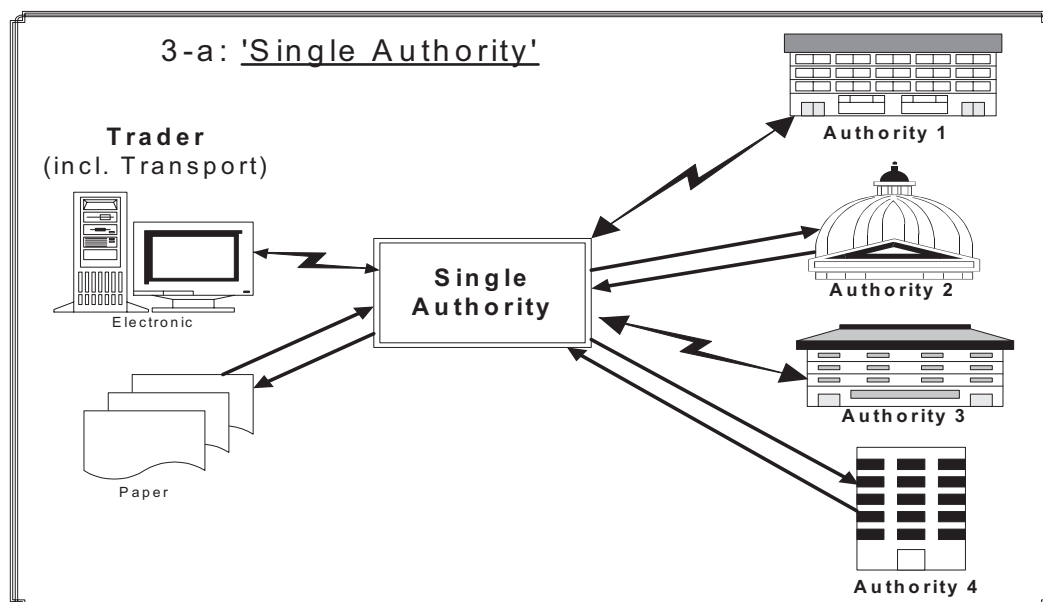

Figure 1. Single Authority.

In the Single Authority approach one authority receives information, either on paper or electronically, and disseminates this to the other involved authorities. In some cases, this authority also coordinates the physical inspection of the goods at the border. See Figure 1.
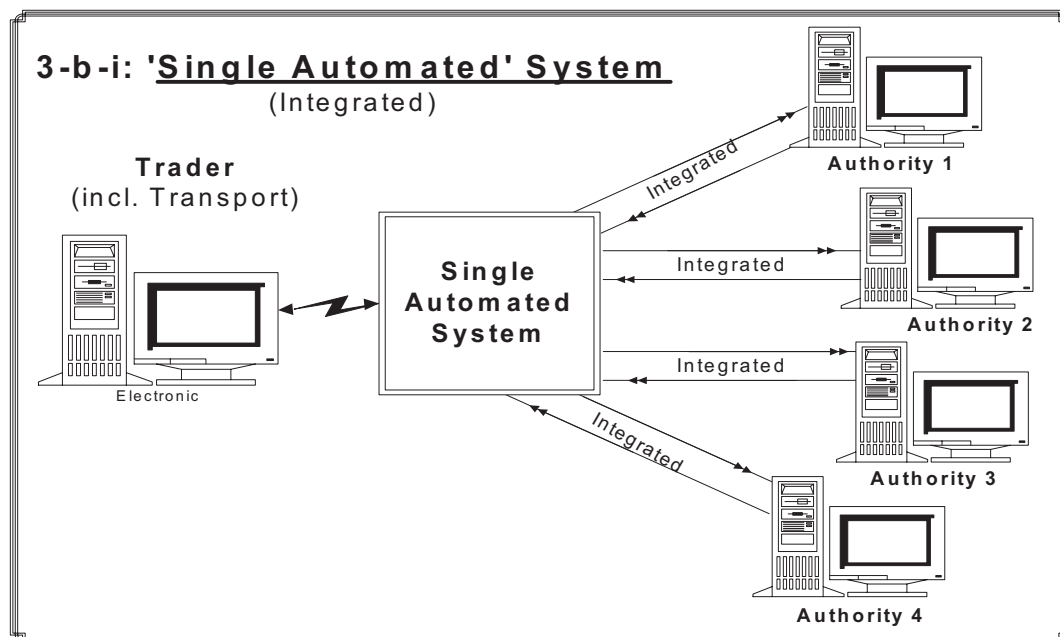
Figure 2. Single Automated System.

The second model described in the Recommendation is a Single Automated System for collection and dissemination of information. Such a system will permit the traders to submit data only once and the system processes and distributes the data to the authorities concerned. See Figure 2. This model exists in two versions. In the Integrated System the data is processed through the system and in the Interfaced System data is sent to the agency for processing. It is also conceivable to have combinations of the two systems.
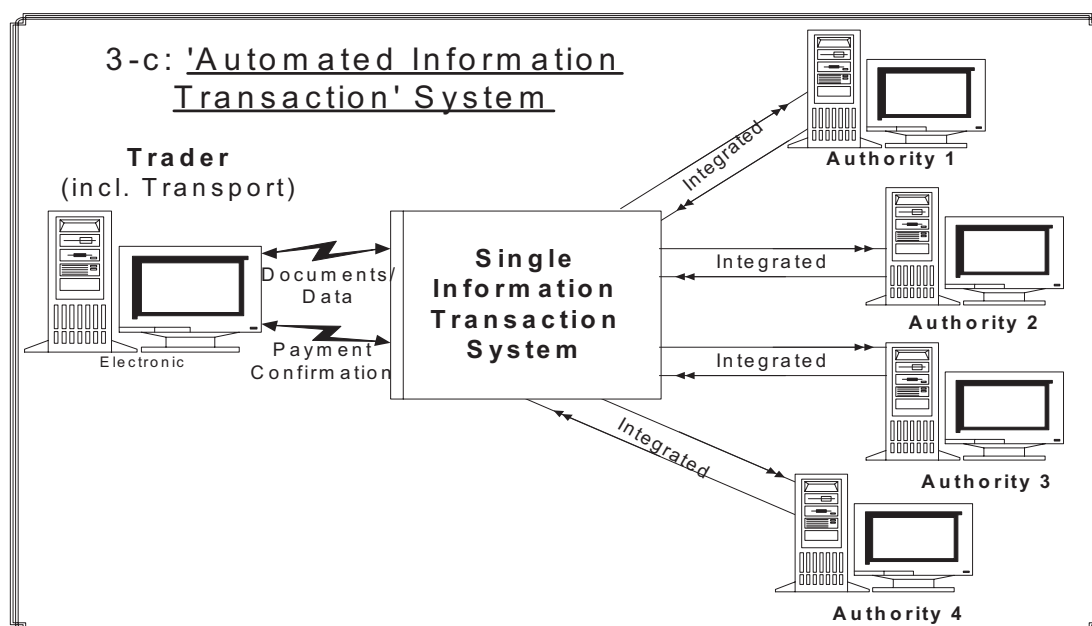

Figure 3. Automated Information Transaction System.

The third model described in recommendation 33 is an Automated Information Transaction System. In this approach a trader can submit electronic trade declarations to the various authorities for processing and approval in a single application. Approvals will be transmitted electronically from the government authorites to the trader's computer. There is also a possibility to attach functionality permitting fees and duties to be calculated and drawn from the trader's bank account. The later is, of course, a more complex process, but has numerous advantages, among them a possibility to limit the scope for corruption. See Figure 3.

Recommendation 34 Data Simplification and Standardization for International Trade and Recommendation 35, Establishing a legal framework for international trade Single Window build on these models giving concrete advice in their different domains. Recommendation 34 addresses the needs of policy makers and managers to understand the process of data harmonization by recommending a simple, easy-to-use and cost effective 4 stage process to achieve the objective of a national simplified and standardised dataset. Recommendation 35 provides a checklist of legal issues that might be considered while establishing a Single Window. Recommendation 35 will be treated in greater detail in a separate presentation by William Luddy during this UNCITRAL Colloquium.

The presentation above might lead the reader to conclude that these are easy models to set up and work. As easy as the intellectual concept is, however, as difficult is the practical implementation. It would be easy to assume that the technichal or legal provisions constitute the difficult parts of implementation. However, it is often the streamlining of processes that authorities will need to perform in order to to create an efficient and successful Single Window that is the greatest hurdle to overcome. The difficulties are often linked to organisational issues.

Best practice shows that political will and commitment is crucial for a successful implementation. The "business case" for authorities to cooperate and share information must be made clear. To find a lead organisation, that will see sufficient benefits to take on the cumbersome task of coordinating other agencies and also consult with the business community can be a challenge. For many government authorities cooperation with others is new and not a logic that has previously paid off. Indeed, some authorities have had strong reasons to preserve their integrity and work as stand-alone units. Traditions, habits, tribalism, prestige and unclear instructions can make collaboration difficult or even totally undermine any attempt to streamline procedures between two authorities.

The business community has diverse interests and is an important partner that needs to be engaged during the whole process in order to verify that the potential gains are realised. The government authorities need to have respect for the diverse interests of different industries and the need of a certain degree of transparency as a minimum condition to allow the business community to coordinate and prepare for consultations. In order to build the business case for a Single Window the partners must identify the documents that are frequently used by two or several authorities and that are used often enough to allow for a return on the investment. These are the low hanging fruit for a Single Window.

Combined with coordinated border management there are real gains in trade facilitation to be reaped from this process. And indeed this is a process. A process that each country must go through on its own in order to be able to identify in which processes their possible gains are hidden. In the marketplace there are a number of plug-and-play modules for customs administration software. It is important to understand that without the preparatory work of streamlining processes between

authorities there is a considerable risk that slow paper-based procedures will be transformed to slow electronic procedures.

Many existing Single Windows have grown in a step-by-step approach simply because collaboration has made sense to the authorities involved. An example close to home is the Swedish Single Window Solution that started to develop as early as in 1989, when Customs developed the Customs Information System for the export process and forwarding statistics electronically to Statistics Sweden. For governmental agencies in Sweden the Single Window means that less time has to be spent on tasks requiring lower skills and resources can be allocated to processes or procedures that are more complex or not possible to computerise. The agencies also experience that the quality of information submitted by traders has improved. With a Single Window, Customs and other border agencies can improve its efficiency while at the same time improving the level of service offered to the customers (traders).

The set up of the Single Window was managed gradually by introducing customs procedures in sequence, starting with export, then transit and finally import. The collection of revenue, simplified procedures and supportive systems such as the customs tariff were introduced at different times allowing a staged set up. This means that technically speaking, there is not one Swedish Single Window. There are a number of technical solutions allowing traders to file their information once and linking the information to the relevant authorities. This is a clear example of Single Window as a process, reaping the profit of low-hanging fruit.

In a growing number of countries Single Window solutions have been established. The implementation of Single Windows is happening on all five continents and it is not evident that it is easier to achieve this in developed countries than in developing countries. A number of countries in the European Union have no Single Window or have only recently started to work on Single Window implementation while a number of countries in Africa, Asia and Latin America have established successful Single Windows. That a Single Window can be a competitive advantage has been shown by Ghana which partly thanks to their Single Window seems to have taken over a certain amount of trade from neighbouring Nigeria. Single Windows are also used in port communities or airport communities. The WTO negotiations on Trade facilitation are also considering wording that would suggest Single Windows to be implemented in the member countries. It is safe to say that the National Trade Single Window is a concept that has been established in the minds of policy makers and implementers of trade facilitation. At the same time it is important to remember that there needs to be a sufficient number of documents and transactions to provide for real return on investment.

Regional developments

Despite the successful implementation of paperless (or significantly less paper) trading with Single Window facilities at the national level, many physical documents, both business and trade are generated to fulfill the requirements of trading partners, counterparts and authorities across the international border. These requirements decrease the effectiveness and efficiency of Single Window as traders must prepare the physical documents and governments need to process the information in order to fulfill international obligations. To maximise the benefits of the national Single Window facility, coverage should be extended to include cross border electronic data exchange of document-based information. Consequently and increasingly many governments supported by their business

community are demanding interconnectivity between Single Windows facilities, whether bilaterally or at the regional level.

The process of developing a bilateral or regional Single Window is complex, complicated and time consuming. At the initiation of any interoperability project most emphasis is usually placed on the technical requirements needed to transmit the data accurately, timely and perhaps most importantly in a secure manner. However, interoperability is a process considerably more multifaceted. Government, the trading community and other interested parties involved need a model of operation through the development of new laws or the amendment of existing legislation. The model should also ensure the coordination among the different authorities and agencies with their respective cultures, objectives and agendas. Equally the system must take into account the views, opinions of other stakeholders to ensure it meets their business requirements. This final point is very important for systems developers and vendors that may produce the interface applications to ensure interconnectivity and interoperability.

The UN/CEFACT is now preparing a new recommendation in its suite of Single Window products, Recommendation 36 – Single Window Interoperability – which will provide guidance on the mechanism and systems required for the interconnectivity and interoperability of two or more national (or regional) Single Windows. The recommendation addresses the need for cross-border trade data transfer required for the exchange of information beyond the domain of the national Single Window.

In the Guidelines to the Recommendation a number of possible models will be presented and explained in detail including a dedicated interconnection between national Single Window facilities, or a network of NSWs interconnected, or individual NSWs connected to a central secure hub, or a network of networks such as private sector Value Added Networks (VAN) or Local Area Networks (LAN). Clearly legal and business requirements are at the core of these models. However other issues are discussed such as technical and systems interface, good communications, use of reference groups and other written sources and the essential need for an effective consultation process.

The increasingly felt need to communicate between Single Window facilities across borders, or indeed between national Single Windows such as port, airport and customs oriented Single Windows has translated in some concrete initiatives. Already in 2005 the ASEAN Single Window initiative was launched setting timelines for the establishing of national Single Windows in the region and preparing an ambitious agenda for legal and technical integration by 2012. The ASEAN secretariat describes this process in a paper from 2007: *In the ASEAN Single Window environment, a non-ASEAN user submits a request electronically to clear a shipment of goods and the relevant information is automatically shared among the concerned National Single Windows through a secure interface (shown by the lightly-shaded ring). This facilitates simultaneous processing. Once the request is approved, the non-ASEAN user will be notified.* This was the original text to Figure 4. In order to succeed with this ambition there needs to be substantive legal integration between the countries that is not yet in place and the issues on what information from an export declaration can be carried to an import declaration needs to become clearer, see below. It will be interesting to see what the full implementation of this single window will bring, since it is a very ambitious outline and the use of state of the art technology supports the goals. It would however, be prudent to assume that the first

implementations would focus on exchanging supporting documents between the member states. Preferential Certificates of Origin are being exchanged between some ASEAN countries already now.

Figure 4. Source: ASEAN

Another regional initiative is the EU-initiative on Single Window. This is a less ambitious approach where an expert group is currently looking into how a first embryo of a pan-European Single Window can be set up after 2013. The EU-initiative takes its starting point in interoperability between Single Windows in all EU-member states and focusing in first hand on two specific documents; the Common Veterinary Entry Document (CVED) and Agricultural documents/licenses.

How do we retrieve information?

Having painted a picture of where Single Window implementation has taken us thus far it is now time to discuss what new administrative and technology developments can do to help further trade facilitation in the domain of information gathering and if the Single Windows really is the end of history.

The technical and economical development is leading towards greater complexity and integration of the supply chain. The fragmentation of the value chains, that is that the production of complex goods is split into many parts and those parts are manufactured in different locations all over the globe, the increased specialisation of industries and nations as well as the increased capacity of transmitting vast quantities of information electronically and the following complexity will all drive solutions where processes are automated and done virtually in specialised applications far from the end-user. In this context it is well worth asking ourselves if the solution by which authorities ask traders to submit information by means of pushing it to the authorities is a viable long-term solution? It is the solution upon which the Single Window is constructed. The information is today available in the

supply chain and treated many times by the traders and their partners. What are the possibilities for authorities to tap into that information stream and thus making compliance as easy as possible?

Three developments point to a future where information streams between companies and authorities are structured in a different way: Cloud computing, AEO and Globally Networked Customs.

Cloud computing is the development where applications are customised by service providers for the use of their clients and carried out on line in applications that from the clients perspective is in the clouds – on the internet somewhere. These applications can integrate many companies and operate at a 24/7 basis thus performing non-core business activities around the clock. Many Single Windows especially in Asia already make use of this technology and information between the actors in the supply chain will in an increasing part go through so-called cloud-based solutions. The fact that the applications themselves will not be owned by the actual traders or authorities but by a non-interested third party will make it possible to set up solutions where information from many companies is transmitted to authorities in batches.

The Authorised Economic Operator (AEO) concept was introduced by a number of Customs Administrations in the 90'ies seeing that there is call to treat well-known operators in a differentiated way. With the security reasoning attached to the concept and the publication of the WCO SAFE Framework in June 2005 the concept has gained universal recognition and a large majority of the WCO member states are now implementing AEO-programmes giving advantages to traders who can demonstrate that they live up to a fixed set of standards. In some countries and notably the EU this is a development that makes it possible to have agreements between companies and customs that customs have access to certain parts of the companies bookkeeping electronically. In that way the company can by changing status in the bookkeeping move a good from customs storage, or set it in free circulation. This opens the way to a different way of collecting data, that will perhaps not be open to all companies, but to a large part of the goods circulating, since large companies with good relations with customs and a high level of compliance are responsible for a large part of world trade.

In the past there has been no real "business-case" for a customs administration to link to another. This explains why there is considerable technical difficulties initially and why there is no global customs network in the way that for instance banks are networked over the globe. The WCO has now launched a project on Globally Networked Customs. It expresses its vision with the following: *"A Globally Networked Customs (GNC) is an inclusive, interconnected Customs-to-Customs information-sharing system to support and improve the functioning of the international trading system, national economic performance, and the protection of society and fiscal management. A GNC will support the goals of the ten C21 building blocks, reduce the compliance burden for legitimate traders, and enhance enforcement through the sharing of information and intelligence."*[1]

In fact Noël Colpin, the Director General for Belgian Customs and Ad Hoc Chairman of the High Level Globally Networked Customs working group in his presentation to the European freight forwarders

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[1] Presentation by Noël Colpin, Director General Belgian Customs at Clécat, Brussels 101130.

association Clécat, in November last year, envisaged the streamlining of information between customs going through a trade hub where a lot of the data can be re-used and re-transmitted.

It is often said that an export declaration cannot be turned into an import declaration and that a pre-departure declaration cannot become a pre arrival declaration. Analysis shows that there is far from a 100 % overlap of information. Some studies suggest that as little as 30-40 percent of the information might be re-usable. However it would be highly desirable to make information flow easily with the goods and into the various systems of authorities. Many of the problems that will emerge when individual declarations are compared might not be hurdles in a world where there is a consensus on what information is needed for a trade transaction and where it can be best retrieved. Transmitting information from, for instance, the export declaration, opens up questions of the integrity of the information, the responsibility for the use, information about trade patterns for both countries and companies being in the hands of third parties, and so on. This is an area where trade law will play a significant role in the near future. There is scope for further facilitation and smarter solutions, both Single Window based and based on authorities pulling information from the supply chain.

From my comments above the conclusion might be drawn that there is a risk that we cement our thinking in companies pushing information to authorities when we prepare for Single Windows. The indisputable merits of Single Window solutions should not make us refrain from even more innovative ways of thinking about compliance and documentation. All information is in the supply chain and there needs to be even more innovative and legally sound methods to allow customs and other government organizations to harvest this, to pull it from the chain, at least for trusted traders. This is an area where legal solutions may be most needed and sought for in the next 10-15 years. The legal issues are far from the only issues to be solved but this is an area where I believe solutions and guidelines will have a large impact. On top of all of this a transition economy and developing country perspective can be put.