



Business Climate for Competitiveness in the Americas: Simplification of Procedures to Promote Competitiveness

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Business Climate for Competitiveness in the Americas: Simplification of Procedures to Promote Competitiveness

Single Windows and other instruments that improve a country's business climate

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Abstract

International organizations most often recommend a virtual one stop shop such as the Single Window for Foreign Trade (Spanish acronym: VUCE). This model is undoubtedly the most successful scheme available.

The *Introduction* of this paper presents the general framework for trade facilitation and shows how VUCEs have triggered a new perspective of cohesiveness as countries seek to facilitate trade and influence competitiveness indexes.

The *Diagnosis* section assesses the current situation in countries of the Americas that are starting to or have already taken the first steps in developing a VUCE, such as Costa Rica, Colombia, Mexico, and Chile. In addition, the section provides a description of the Latin American and Caribbean Economic System (Spanish acronym: SELA) forums and present advances in contrast with 2010.

Along those lines, the section *Considerations for Establishing a VUCE* discusses the conditions required to implement a VUCE with the understanding that there is more than one possible model of implementation and every government must choose one that is suitable to its own institutional structure and technological progress. This section examines the experiences of specific countries and how they have structured their Single Windows in relation to the law, the number of entities working on them, and how they are used to exchange information. On this point, strategic importance will be given to the issues of digital signatures, electronic payments, and certification of origin.

Conclusions and Recommendations are provided to prompt further discussion.

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Introduction

The purpose of this paper is to study best practices for simplification of procedures to promote competitiveness. In particular, this paper reviews Single Windows and other instruments that improve a country's business climate.

In recent years, key organizations that promote international trade — such as the World Trade Organization (WTO); the World Customs Organization (WCO); the United Nations Center for Trade Facilitation and Electronic Business (UN/CEFACT) through its recommendations Nos. 33, 34, and 35; the World Bank; and the Inter-American Development Bank (IDB) — and innumerable private entities have recommended the simplification of customs and quasi-customs procedures as an essential step toward making countries competitive. Examples of procedures that need to be simplified include obtaining import permits for products with sanitary requirements or port inspection authorizations, among many others.

The following are definitions of concepts that are used throughout this paper:

- **A Single Window for Foreign Trade (VUCE)** “is defined as a facility that allows parties involved in trade and transport to lodge standardized 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.” (UN/CEFACT, 2005)
- **Customs procedures** relate to the movement, clearance, and temporary treatment of goods. These procedures are carried out by the interested party or contracted out to a third party.
- **Quasi-customs procedures** are customs procedures carried out by non-customs entities that are participating based on a specific legal mandate. These procedures are carried out by the interested party or contracted out to a third party.
- **Customs transit** is the mobilization of goods under customs control within the territory of a country. There are two classes of customs transit. *International transit* moves goods from a point of entry to a point of exit (border to border, for example). *Domestic transit* moves goods from an enclosure that undergoes permanent inspection by Customs and is within the territory of a country.
- **Customs operations** are performed with the purpose of providing a final destination. Customs loses control over the merchandise once the operation has been completed.
- **International trade operations** are performed between two or more parties of at least two different territories (countries), where interested parties agree on delivery, payment, and transportation obligations, among others, for the goods they trade.

Trade facilitation includes the simplification of customs procedures, the harmonization of technical standards (such as those for labeling or weight and measurement units), and regulations between regions (such as sanitary measures). More broadly, trade facilitation also includes the automation of

customs, improvements in ports and roads, and other mechanisms that reduce effective prices for customs¹ and trade (Hertel, McDougall, and Itakura, 2001) operations.

There are standards for measuring the competitiveness of a country's trade system, including the number of documents required, costs, and time to perform customs procedures, with a view to simplifying those procedures and taking into consideration the implementation of a culture of risk management and transparency. Risk management, on the basis of scientific and probability criteria, relieves organizations from exercising physical control over all merchandise, thus releasing clearance flows and improving the management of human resources.

Of all these ways to improve competitiveness, the VUCE is a dynamic initiative that allows for efficient and effective execution of all elements of a country's trade system.

Single Windows gained new momentum with UN/CEFACT's issuance of Recommendation No. 33 in September 2004. Recommendation No. 33 recommends "to governments and traders the establishment of a Single Window, whereby trade-related information and/or documents need only be submitted *once* at a single entry point to fulfil all import, export, and transit-related regulatory requirements. The Recommendation also suggests that participating authorities and agencies should coordinate their respective controls through the Single Window and should consider providing facilities for payment of relevant duties, taxes, and fees." (UN/CEFACT, 2005) This Recommendation is based on international best practices for the development and operation of Single Windows and highlights the importance of using existing international standards for data exchange and electronic documents promoted by the United Nations Economic Commission for Europe (UNECE, www.unece.org/trade) and other organizations.

The first VUCE designs were being developed in several countries in the early 1990s, initially to support exports by concentrating procedures at a single location. Later, with the advances in technology, the modern Single Window structures became the aspiration of any government wanting to take the "competitiveness leap" and be perceived as a modern, secure, agile, and transparent state in terms of conducting business and attracting investments. An example is the establishment of a VUCE in Mexico, where the Secretariat of Economy foresees that the country will climb from 60th position on the *Doing Business* trade facilitation sub-index to 20th position in two or three years.²

Countries have many expectations of a VUCE, but implementation requires more work than just technology, methodology, and legally backed governance reconciling the interests of all users, both inside and outside of government. It requires that the Single Window become an indispensable political pillar for facilitation and competitiveness.

¹ Single Windows gather all procedures prior to a customs operation. The essential difference between a customs procedure and customs operation is that the latter provides a final destination for merchandise, which is then out of Customs control.

² <http://www.impulsopanama.gob.pa/adjudican-contrato-para-ventanilla-unica-de-comercio-exterior-en-mexico.html>

Some of the benefits reported by countries that have implemented a VUCE include:³

- Simplification of procedures
- Reduced times for obtaining permits and licenses
- Transparent public and private sector interactions (tracking)
- Reduced costs in mobilizing agents across institutions
- Reduced paperwork and certification costs
- Economies of scale in technology investments and maintenance
- Statistic controls for public and private trade decision-making
- Financial transparency and security of electronic payments

Diagnosis

The original VUCE scheme — a physical structure where entities were assembled — may have improved processing times for users, but it did not solve the problem of the physical transfer of documents. This scheme is evolving such that all procedures have become virtual in countries such as Costa Rica and Colombia. Chile and Mexico are launching pilot programs in August and September 2011, respectively.

As mentioned earlier, most foreign trade single windows arose as a solution to cumbersome customs clearance procedures within models promoting export, which makes attempting to describe a structural model complex. What is clear is that countries must answer some basic questions when starting a change toward a new model:

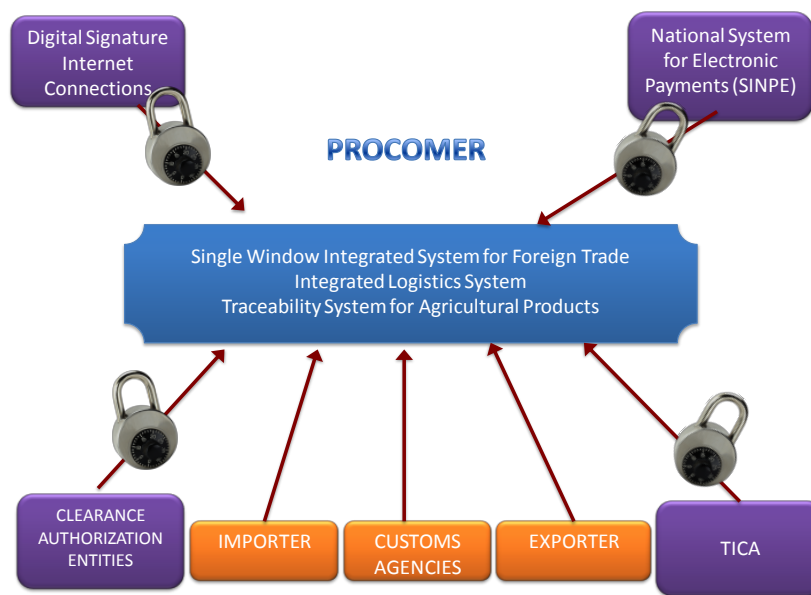
- Is the country prepared to start a VUCE project?
- What type of VUCE is required?
- Who should belong to the VUCE?
- How will participating entities be invited?
- Who will be the project leader or facilitator?
- With what resources will the VUCE be financed and how will it be sustained?
- What actions will have to be taken and in what timeframes?
- What technology requirements, modifications, or improvements will be required?

It is also important to understand that a VUCE in a country, for example, with an agro-industrial or agricultural exports structure will have different priorities than a VUCE in a country, for example, with a poor communications infrastructure or with low technology usage. Each country's VUCE scheme will have to be adapted to the specific needs of its economy and trade.

³ In many countries, the simplification of procedures has taken the form of a legal mandate (a law against excessive procedures, for example), which provides that a government institution cannot demand from a citizen certification that is issued by another government institution. The institution is obliged to search for the certification in the system. For example, a current income tax payment receipt cannot be requested for the registration procedure of a good, when the government can access the information in real time in its database.

The following diagram depicts the Costa Rican VUCE and shows how the interactive system has been conceived and designed for users and authorizing entities.

Figure 1. Costa Rican Integrated VUCE System



Source: Costa Rican Foreign Trade Single Window

The diagram shows the interaction of all stakeholders through a single portal where information is processed and distributed with multiple validations that converge on the final operation selected. All entities can provide online tracking; similarly, users can verify the time it took an authorizing party to complete a procedure.

The four purple boxes (in the four corners) represent the pillars that sustain the logistics functions of the Foreign Trade Services in Costa Rica: use of the digital signature, payments made through the National System for Electronic Payments (Spanish acronym: SINPE), the Costa Rican Information Technology Customs Control System (Spanish acronym: TICA), and quasi-customs (clearance authorization) entities.

In this system, intermediaries and direct stakeholders — importers and exporters — access the portal that connects with three types of systems within the Foreign Trade Corporation of Costa Rica (Spanish acronym: PROCIMER) server:

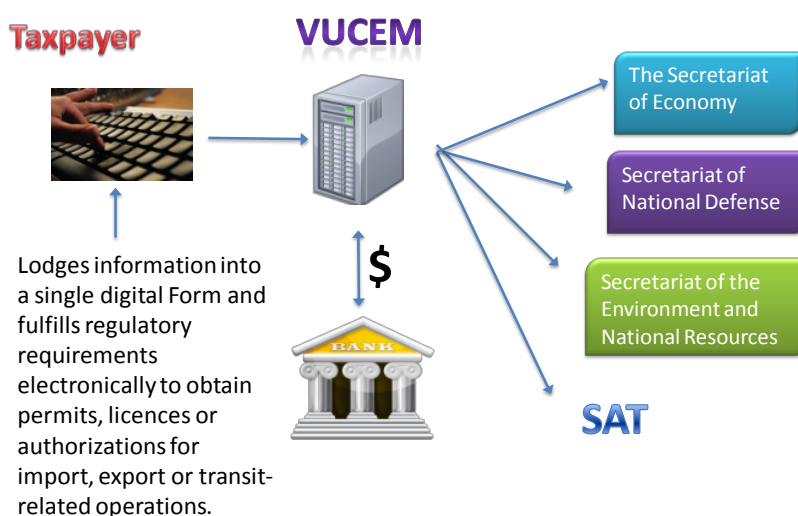
- The VUCE system
- The integrated logistics system that allows stakeholders to verify the offerings of companies that provide export and import services (transport, customs agents, packaging, cargo holds, etc.)
- The tracking system for agricultural products

The padlocks represent the transmissions that encrypt messages so that information is kept secure.

Costa Rica's VUCE uses a single digital form, central or remote, that can be accessed directly by the user. An agent then analyzes and validates the request and transfers the authorization to Customs. The user has no physical contact with the authorizing agent, which positively affects timing, costs, and transparency and has eliminated certain levels of corruption.

Mexico uses a simple scheme that includes electronic payments, as do Costa Rica's and Colombia's schemes. The convergence of entities with high level mandates is clear in Mexico's scheme.

Figure 2. Mexican VUCE System



Source: SAT México

The left column shows that the citizen or representative, having already made a payment to the bank, uses the Mexican Foreign Trade Single Window (VUCEM) system to submit a virtual form to which he or she attaches digital images. Once the form is received, the entities that grant licenses and permits verify and authorize the information in the VUCEM platform. The user later checks for approval messages and proceeds in accordance with an authorization, request for correction, or rejection of procedure.

In these models, quasi-customs entities maintain their controlling authority and/or the right that the law grants them to charge service fees to users.

In the Americas there are models that encourage two different trends. One model locates the Single Window within the Customs structure as a module that is integrated into the existing information systems. The second model establishes the single window outside of Customs as an independent government entity with its own information system that interacts with but is not dependent on the Customs office. The results of both models are practically identical if compared in terms of export facilitation, and it is still too early to assess the effects on import and transit operations in the region.

There are variations between these two models, especially with regards to governance, understood as the way decisions are managed. For example, in Costa Rica, a mixed, public–private Executive Board appoints management. In Mexico, the VUCE is administered by the public sector through an Inter-Sectoral Commission, with private sector entities invited to contribute in their area of responsibility and thus provided a voice without a vote. In both cases, the VUCE operates outside of Customs. The Dominican Republic’s VUCE, which is in the early stages of development, operates within Customs.

The following table summarizes the characteristics of both models.

Table 1. VUCE Governance and Structural Trends, 2011

Inside Customs	Outside Customs
Mixed governance	Mixed governance
Governance with Customs as coordinator	Governance with a single high-level political entity as coordinator
Dependent on Customs technology	Independent of Customs technology

Source: Author

These operational and governance structures affect the implementation speed of a VUCE and the methodology varies once the government has decided which one it will apply.

The following table highlights the bottlenecks found in both models, some of which are similar.

Table 2. Inconveniences of VUCE

Inside Customs	Outside Customs
Resistance to coordination by Customs due to the hierarchical sphere of influence of the quasi-customs entities	Resistance to coordination by an entity outside Customs’ sphere of influence
Differences in the interests and purposes of Customs and quasi-customs entities	
Resistance to providing information	
Resistance to the simplification of processes with customs parameters	Resistance to the simplification of processes
Risk analysis applied to Customs interests	Lack of application of risk analysis
Technological asymmetries between Customs and quasi-customs platforms and developments	Technological asymmetries and problems with databases and manual processes
Non-inclusion of private entities that participate and should have platforms to interact	

Source: Author

All stakeholders need to understand that, even when the purpose of each one of their controls is different, the controls can be reconciled to create a single form that groups the data required for an authorization. However, the required simplification of processes is derived from an information survey, its analysis, and the subsequent application of risk analysis profiles using variables determined in accordance with the coordinating entity's control objectives and interests. Similarly, the inclusion and interaction of private users is fundamental to verify that the design of processes corresponds to operational reality.

There is no question that there are differences between what is planned and what is implemented; consequently, continuous feedback is necessary. Because the private sector is involved on a daily basis with the reality of the systems and sees the challenges that arise, it is in a position to contribute information about reasonable simplification.

Moreover, it is important to note that the technological asymmetries of quasi-customs institutions are a real inconvenience that persists in all countries because some institutions use manual databases that are not updated in real time. It is often stressed that quasi-customs entities are not putting enough effort into cooperation on risk management and technological modernization, as demonstrated by the following examples.

In Costa Rica, about 40% of import authorization requests for products requiring sanitary controls are rejected because of the time lag between authorization on behalf of the relevant ministries and the time it takes to update the data tables in the VUCE.

In the Dominican Republic, the Customs Office and the Bureau of Drugs and Pharmacies in the Ministry of Public Health and Social Assistance, which controls pharmaceutical products, agree to issue an authorization without paper or electronic forms, instead using the automated verification in the Integrated Customs Management System (Spanish acronym: SIGA), which is updated in real time. However, in the Food Control Division of this ministry, the databases continue to be fed manually and everything has to be started from scratch. The ministries of agriculture and livestock in many countries also, surprisingly, continue to use manual processes that involve endless amounts of paperwork.

Obviously these asymmetries need to be eliminated, otherwise the reliability of the data and the security of the system would only be trustworthy on the basis of encryption, however because of the different technology can be adequate response time to a request. Cases where VUCEs are seeing some success, such as those in Costa Rica and Colombia, and those underway in Mexico and Chile, share a common method of working in stages and stressing those factors essential to achieving success.

The Colombian and Costa Rican models differ on a few points. For example, the Costa Rican model supports exporters and importers by providing both physical offices and Internet coverage, while in Colombia, the model is entirely virtual. In Costa Rica, the VUCE has been led by private enterprises and thus is not considered a public entity. In Colombia, the VUCE is a public organization with private sector committees. Costa Rica is in a second stage of its Single Window and is modernizing its information

systems, while the Colombian system is being designed from scratch. In Costa Rica, the VUCE has successfully tested data interchange with Guatemala and Honduras and is moving toward a data recognition scheme.

Hence, the following are elements of the evolution of a VUCE:

- A willingness, by political mandate, to establish a VUCE that from the outset defines the participation of entities involved and addresses sustainability and modernization.
- The reconciliation of the objectives of all stakeholders, while not losing the sight of the purpose of each entity's control powers, focusing on simplification and facilitation.
- The ability to measure growth in the number of procedures and requests, and the technological capacity to grow and handle increased volumes of requests.
- Constant communication with the productive private sector and the services private sector, while addressing their needs and without losing the scope of public entity control.
- The periodic rethinking of processes to simplify and improve them, while taking advantage of technology resources and trade negotiations that support technology and information exchange.
- A method of assigning initial resources for developing a VUCE and an adequate design that is made sustainable by charging system users.

Training, permanent improvement, and publications are indispensable factors in a VUCE, but special consideration should be given to smaller countries in which users interface with a point of contact physically installed at a Customs or government facility. This means that to reach the micro, small, and medium-sized enterprises (MSME) that export and import, it is necessary to install machines that connect them with the system and provide the corresponding access key to preserve the security of their data when using these special transmission modules. In Central America alone about 89.6% of all trade is carried out by micro enterprises and 9.8% by small and medium-sized enterprises (SME).⁴

The modern VUCE is a storage center for all public services associated with foreign trade and, therefore, the system should include the digital certification of forms such as the Certificate of Origin, the Health Certificate, and the Free Sale Certificate, among others.

The VUCE also becomes a statistical information center because it merges the quasi-customs services, but such work should go beyond the import and export chain of countries. That is why it is of utmost importance to perform an analysis and review of the current methodology to obtain a representative and dynamic model of the needs of the sector and have a VUCE that helps industries and countries become more competitive. The following two sections study the possible breadth of Trade Single Windows in greater depth.

⁴ International Bank for Reconstruction and Development/World Bank. MSME Development, support policies and CAFTA in Central America, p. 5. Washington, D.C.

Considerations for Establishing a VUCE

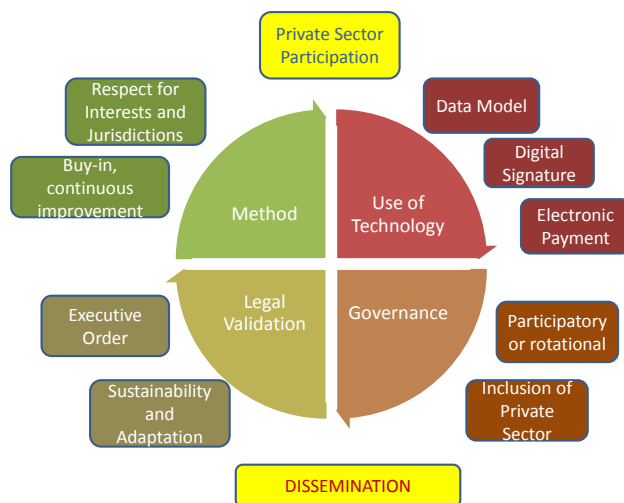
Generally, VUCEs are established in stages, from the selection of entities that will participate to implementation. Within the framework of the whole process, all stakeholders and those factors generating competitiveness should be included.

Figure 3 summarizes actions that may be considered in designing and developing a VUCE. The diagram places participation (public and private) at the top and dissemination at its base. The core is divided into four quadrants: Use of Technology, Legal Validation, Governance, and Method, which undoubtedly must include integrated process reengineering. From the outset, everything implies actions, which are shown as satellite boxes next to every quadrant.

The satellite actions must follow best practices for high-level technology businesses, but with the equal participation of all stakeholders under a leadership model that can initially involve one leader, and later become shared or rotational.

All of the above is only possible if decision-making is concentrated at a high level and all procedures relating to foreign trade are at a single location — physical, virtual, or both. It is important that simplifying procedures does not go against the fulfillment of the security and control objectives of government institutions.

Figure 3. Base Structure and Contents for VUCE Virtual Project



Source: Author

With the implementation of the above process, the effect of an “illumination of corners” should take place.⁵ this effect occurs when all the dimensions of a process and all intervening actors become visible to the user, in the most transparent exercise, both governmental and private.

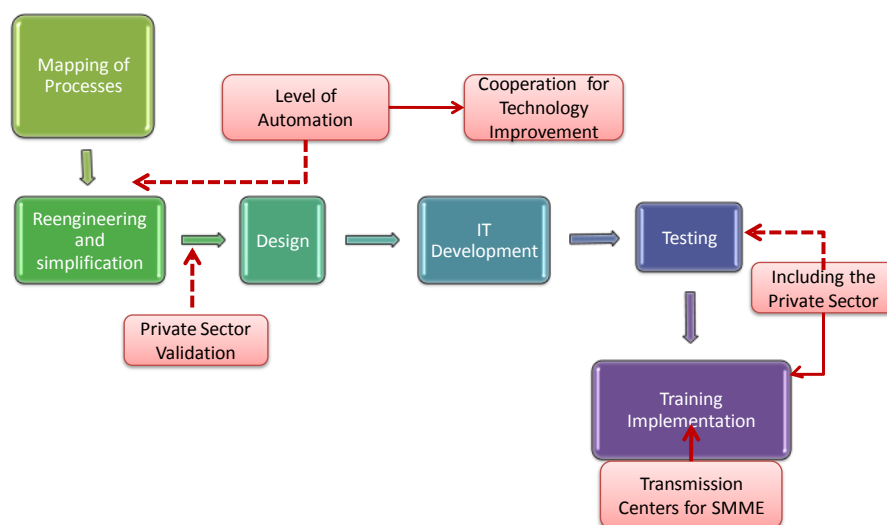
⁵ Margarita Libby, Second Meeting of Central American VUCE’s, Costa Rica.

It should also be noted that inter-institutional inter-connectivity is totally dependent on technological symmetries. For example, technological convergence should allow for participating entities to generate XML files in a secure data environment. For this purpose, XML files are defined as the group of specifications that allow companies of any size to perform commercial transactions online from any location. With the use of an XML file, companies have a standardized method for exchanging messages, performing operations, communicating data under common terms, and defining and registering operational processes. This is an important point since it has been proven that asymmetries generate higher implementation costs and reliability conflicts.

Figure 4 describes (using similar terms) the implementation stages of Colombia's and Mexico's VUCEs, which are basically the same as the stages currently being executed in Chile.

The Government of Costa Rica funded its new information system and reengineering process, which is currently being tendered for modeling. The Dominican Republic is developing this process with the support of international technical cooperation funds, which are currently being tendered. The Dominican Republic's Customs agency is already in the advanced stages of designing the information system; however, additional entities must be added and there is still no political instrument supporting it.

Figure 4. Diagram of Processes Parallel to the Stages for Creating a VUCE



Create awareness and disseminate information throughout all stages of process

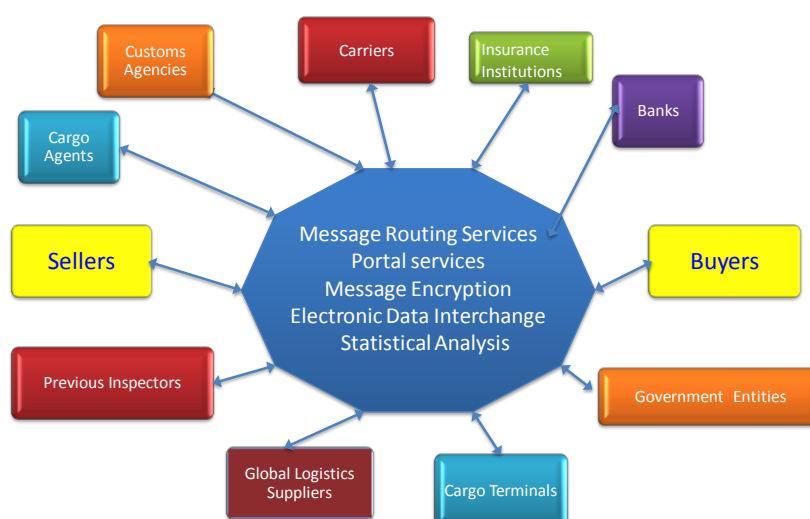
Source: Author

The model in Figure 4 has are six stages: Mapping of Processes, Reengineering and Simplification, Design, IT Development, Testing, and Training Implementation. The model is adjusted by the processes marked in red, which are the logical instances where actions should be initiated or actors should become involved. For example, if a weakness is detected in the technological platform, action should be

initiated immediately to resolve the problem. In addition, there should be budget provisions to establish problem-solving centers to support MSMEs in locations where users with no access to technology have access to the system.

Figure 5 represents the complexity of interactions among stakeholders that rely on the VUCE. The figure is based on Axway, a transnational French company that is presently developing VUCEs for Hong Kong, Malaysia and Thailand, and whose model is based on UN/CEFACT Recommendations 33 and 34.

Figure 5. Interaction of Stakeholders Participating in Trade



Source: Tristan Corsi, Vice President Latam, Axway Conference, Viña del Mar, Chile, December 2010.

To establish the definition of an ideal framework, we must point out that, while there is convergence from the outset in the sense of the political will to create a VUCE, the stages may occur at different times depending on a country's particular circumstances. Therefore, there is not a single way to develop and implement a VUCE. However, we can draw a few similarities from successful designs to provide an ideal framework and help identify whether or not a country has the political and technological conditions to create a VUCE.

Naturally, a country's desire to improve competitiveness is probably sufficient motivation to change a political paradigm, assuming that a change in political convictions is a matter of transience or perceptions. The technological situation is a matter of finding reimbursable or non-reimbursable cooperation.

Recent Efforts to Develop VUCEs in Latin America

At the beginning of 2011, the statistics in studies prepared by the Latin American and Caribbean Economic System showed the following development status for VUCEs in its member countries.

Table 3. Status of VUCE Development in SELA Member Countries

VUCE Under Development or Improvement	VUCE in Project Pipeline	No Official Data
Brazil, Chile, Colombia (already operational), Costa Rica (already operational), El Salvador, Guatemala, Honduras, Nicaragua, Panama, Paraguay, Peru, Dominican Republic, Mexico (starts in October 2011)	Argentina, Bolivia, Ecuador, Uruguay	Bahamas, Barbados, Belize, Cuba, Grenada, Guyana, Haiti, Jamaica, Surinam, Trinidad and Tobago, Venezuela

Source: SELA, 2011

Table 4. Single Windows Profiles

Country	Start date	Scope	Model	Plan to include imports
Colombia	2004	Import Export	Public	Ready
Costa Rica	1996	Import Export	Public/Private	Ready
Mexico*	2009	Import Export	Public	2011
Chile*	2007	Import Export	Public	2012
Dominican Republic	1998 2009	Export IMP/EXP	Public/Private Public	SIVUCEX 2012
Guatemala	1986	Export	Private	Ready
Nicaragua	1994	Export	Private	No data available
Honduras	1987	Export	Public	Ready
El Salvador	2000	Export	Public	Ready
Panama	1985	Export	Public	Ready
Peru	2006	Import Export	Public	2012

*Taken from the business model, VUCE in process

Source: Author

To make the models identified in the previous table current, it is important to know the evolution of VUCE in terms of interoperability and data interchange security.

Table 5. Data Security and Interoperability Analysis of VUCE

Country	Data Exchange	VUCE 100% Virtual	Country Has Electronic Signatures	VUCE Using Digital Signal
Colombia	Yes	No	Yes	Yes
Costa Rica	Yes	No	Yes	No
Mexico*	Yes	No	No	No
Chile*	Yes	No	Yes	No data available
Dominican Republic*	Yes	No	Yes	Yes
Guatemala	Mixed	No	Yes	No
Nicaragua	Yes	No	Yes	No
Honduras	Yes	No	No	No
El Salvador	Yes	No	Yes	No
Panama	No (unique database)	No	Yes	No
Peru	Mixed	No	Yes	No

**Taken from the VUCE in process business model*

Source: Author

It is surprising that advances made in digital signatures have not yet reached VUCEs because the use of data security and data origin is of capital importance to trade. For example, digital Certificates of Origin require high-quality technology controls.

Another example is databases, which in most cases are not stationed in a single location but use electronic data exchange. This is functional for the purpose of programming, but if data is not input within a technologically safe environment, it will be penetrable and, additionally, the information will be corruptible. In the case of products with high levels of sanitary risk, for example, exchange is highly dangerous.

One of the more salient concerns that countries do not expressly mention in their case studies is the level of technology used by institutions participating in Single Windows for their daily procedures. A recent article in *El Economista de México* makes the point: “According to information from the General

Customs Administration and Secretariat of Economy, export and import firms currently face a series of regulatory complexities: 161 procedures, submission of 40 documents, interaction with 30 different government employees, 200 pieces of data with a 60 to 70 per cent recapture rate.”⁶

The level of complexity that an importer can face is the tip of the iceberg when it comes to the internal complexity of institutions, that is, a VUCE only solves one part of the trade storyline. When a product needs to be authorized for exporting or, especially, for importing, the importer has to send the product to the registry of the entity controlling the good. In most countries it is a lengthy and complex procedure that is oftentimes handled manually and involves huge files with papers, seals, signatures, and authentications.

The advantage of the VUCE system is that, in theory, it offers real time information on an applicant that makes a request for authorization since the applicant’s information already exists in the system as an individual authorized to make requests. If the applicant’s information does not exist in the system (in the case of samples, personal imports, non-commercial imports), and even if he has to follow a separate process, at least he is registered as a taxpayer and citizen.

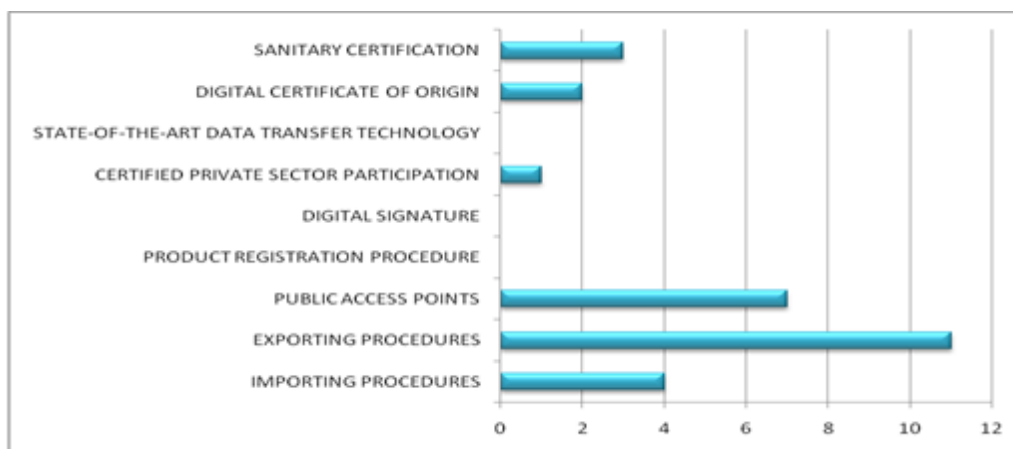
If the VUCE databases are a repository of information in transit and subject to changes that must be fed into a database that transfers data on a daily basis, and that database comes from manual data entry performed by the entity because the origin of VUCE data is not automated, the possibility of errors is high. For example, as mentioned earlier in this paper, in Costa Rica, about 40% of import authorization requests for products requiring sanitary controls are rejected because of the time lag between authorization on behalf of the relevant ministries and the time it takes to update the data tables in the VUCE.

A VUCE program must provide high level automation for the entity sending information, its secure delivery, and the use of digital signatures, and the interface must immediately update changes made to the status of merchandise. For example, if a registration is granted or expires within the institution, an instant creation or expiration warning should be sent to the VUCE database.

Figure 6 shows those activities that should be in the VUCE system for there to be a positive effect on the country’s competitiveness and that are currently included in VUCE systems or are in the process of being designed or implemented.

⁶ Lilia González, *El Economista*, Mexico. June 5, 2011.

Figure 6. VUCE Activities and Services that Have an Impact on Competitiveness



Source: Author

A VUCE facilitates and simplifies access to foreign trade procedures. The previous figure compares the VUCE services that have been considered in this paper. Results of this comparison indicate that, despite the fact that most countries studied have laws on digital signatures, the VUCEs do not use them. Despite increasing free trade agreements in those countries, the digital Certificate of Origin is not a service developed by many of them.

So far, the VUCEs under study have concentrated on simplifying import and export procedures and investing in public access points, but they have neglected to include the private sector in decisions and electronic sanitary certifications. Including the private sector is important if progress is to be representative.

The idea is not to replicate the Costa Rican model of the Mixed Council, but to have working committees that meet monthly to analyze cases. The feedback provided by case studies and, for example, the timely notification of the private sector regarding a required international guideline that the government has not yet received, possibly due to poor communication, are vital for the redirection of a process.

Another advantage of interacting regularly and systematically with the private sector is the creation of an agenda for situations that require development or follow-up, since the private sector can often provide equipment, infrastructure, or funds for specific improvements.

For private sector inclusion to be successful it is important to recognize that the sector has two interests whose objectives often do not coexist: services and production/trade. Productive participants contract services such as transportation, customs clearance, warehousing, etc., that are provided by traders. The interests of both groups must be represented and reconciled in the VUCE. Therefore, these two environments must be managed carefully and effectively to avoid conflicts of interest.

An example of potential compromise is being developed in Costa Rica's VUCE, which has implemented a "case validation help desk." The intention is to accept complaints and comments from the private sector and redirect them to the pertinent entity or entities involved, even in those cases where the accompaniment of the stakeholder is required. It is worth recalling that from a private sector perspective, all institutions that appear in the VUCE intervene in trade facilitation.

The VUCE should not be seen as an activity that is triggered by a non-tariff procedure, but conversely should be viewed as an "entity specializing in trade facilitation through the simplification of procedures relating to foreign trade."

A logical consequence of establishing a VUCE is the facilitation of real operations at border entry and exit points, something that Colombia has developed through a single electronic request for inspection. The single request reaches all entities and, when a physical inspection is required, all authorizing entities perform it simultaneously.

With that in mind, the One Stop Shop⁷ or the correspondent single inspection is essential for a VUCE's coordinating effect to transcend its electronic and virtual essence so that it may become dynamic. The reason is simple, there are VUCEs where actions take minutes to process, but when a physical inspection is carried out it can take hours to over two days to process. These delays are divided within the public sector and the private sector.

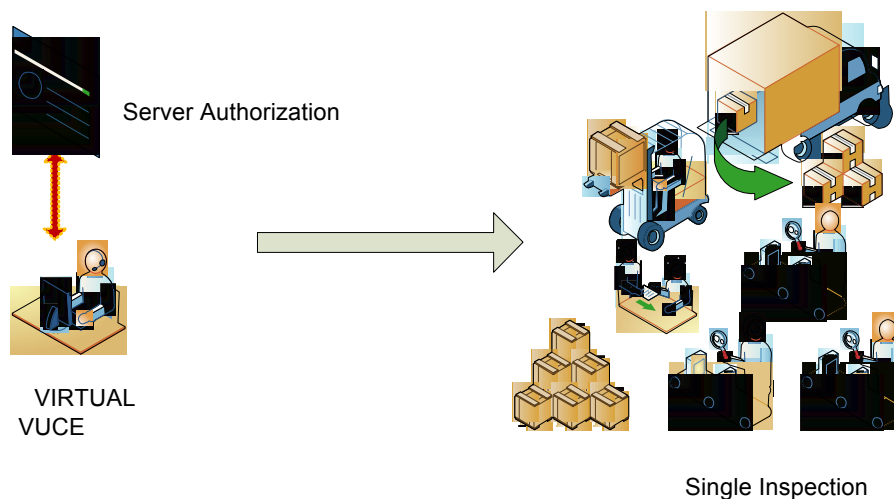
It goes without saying that a VUCE must have a non-virtual mirror during the performance of the physical inspection by different authorities with diverse objectives. Reconciling these objectives is only viable through a risk analysis and security program that encompasses all stakeholder interests in a reasonable and balanced manner.

A culture of risk management involves the creation of a system according to the needs of each institution's control. Traditionally, in many health institutions, risk analysis is not proactive, but reactive in response to regional or global alerts. Proper management requires the creation of a system for normal cases in a control flow, and like all parameter-based systems, warnings when required. The power of databases and their associated alerts is to respond to scientific and objective criteria at all times, even when it is a regional or global alert, and to cover not only goods that are imported and exported but also found in transit or special regimes in each country.

⁷ The term Single Window takes its origin in municipal government in the United States in the seventies, when centers for improving the administrative services most solicited by citizens were created. These centers have evolved, including transactions and permits granted by governments to incorporate and operate businesses. Originally, single windows were conceived as a single center or location for SMEs, with the purpose of enabling them to obtain all of the information on government entrepreneurial services at a single point.

Figure 7 illustrates a model that can add value to the import and export clearance process.

Figure 7. Ideal VUCE Situation and Single Inspection



Source: Author

The location of windows is also critical. While Colombia's system is completely virtual, in other countries there is physical infrastructure where individuals can go to complete procedures. Costa Rica, Peru, and Guatemala have established several offices at exit points, where an importer or exporter can be assisted by an officer that will answer any questions.

What is virtual is considered modern, necessary, elegant, and sells. However, in some countries the communications infrastructure is concentrated in capital cities, and thus advanced technology is not accessible to all companies. Therefore, alternative solutions need to be created. In Latin America more than 60% of SMEs participate in foreign trade.

It is a challenge to train small entrepreneurs to use electronic technology transmission if they lack Internet access due to poor telecommunications where they are located or for economic reasons that impede the procurement of the necessary equipment. The solution is placing modules in public spaces so that MSMEs can access the system from these locations and can scan images with sufficient levels of security.

Lessons Learned to Date

The lessons learned from the VUCEs in many countries can be summarized as follows:

- Need political will, leadership, and spirit of cooperation
- Any political agenda that includes the subject of competitiveness should include a VUCE
- Resistance to change exists but can be resolved by reconciling the different interests of the various stakeholders

- Simplicity must be maintained during continuous improvement
- State-of-the-art technology is necessary as much as is the infrastructure to use it, but it must be designed to measure growth
- Private sector stakeholders are not as committed to country objectives
- Non-customs institutions that participate in the clearance of goods often lack proper infrastructure
- The socialization of a VUCE is fundamental
- Other subjects should be included in the VUCE system, such as trade facilitation, Certificate of Origin, help desk, help with subjects related to the requirement of using digital signatures

What's Next?

Our conception of a future VUCE is one of a virtual center with a physical annex from which a country's trade is facilitated, monitored, guaranteed, and verified.

Future VUCE services:

- Import and export authorizations of products with non-tariff requirements
- Verification of Certificates of Origin
- Registration center for products with non-tariff requirements
- Product Certificate of Free Sale Center
- Sanitary Certificate for export products
- Center for reception, validation, referral, and support for all users (importers, exporters, transportation companies) and those entities providing information and receiving complaints and queries regarding imports and exports

Ideally, a VUCE should be able to internally coordinate every export and import record so that it immediately obtains the corresponding tariff fraction, an anticipated Certificate of Origin, and information about the commercial opportunities of the product in target markets.

In an ideal VUCE, the interaction with Single Windows for Government Service, for example, would be fundamental to being able to start programs such as the Authorized Economic Operator.⁸ Moreover, if the government decides to hand over a government service to the private sector, it should be allowed to screen reliable and efficient companies that have demonstrated the best and most accurate behavior in terms of best practices and legality.

A repository of this information should be made available in the VUCE and the Single Window Government Service tying up all loose ends and creating a true competitive profile for the country.

⁸ A provision granted by Customs to an enterprise following a rigorous process of inspections. The enterprise is then granted advantages and facilities over the customs operations it performs.

Conclusions

- There is no ideal model or rigid series of steps to follow in developing a VUCE because the scheme depends on the idiosyncrasies and political organization of a country.
- The VUCE must continuously be reinvented, adapted, and energized, otherwise it will collapse, whether due to an increase in procedures or to the lack of standards modernization.
- The commitment of entities to rapidly join the VUCE initiative remains uncertain without a high level government directive.
- Without the leveling out of the asymmetries and risk management culture of internal procedures for each entity participating in a VUCE, there will always be gaps in the quality and accuracy of information.
- A VUCE requires that every entity adapt their operations and regulations according to agile and secure clearance practices through a single macro procedure.
- The impact of a VUCE is limited without an executing mirror for the Window, that is, without implementing a single inspection visit.
- Without the commitment and joint collaboration of the public and private sectors, the impact of a VUCE and its facilitation remain partial.
- Every country must analyze the strengths of its technology structure and information security; every corner must be illuminated and objectivity must prevail from the outset.
- The location of the VUCE may depend on the institution with the greatest technological capacity, although ideally it should come from a government digital project.
- At some point all government and private windows should interface with the VUCE. Likewise, VUCEs in different countries should interface, beginning with the main trading partners.

Recommendations

To create awareness and commitment among institutions requires that technology provide secure inter-connectivity with data models that allow information exchange with other countries.

Grounded in reality, the private sector role is fundamental for making the user a part of the system and a follower of best practices, including transparency and participation according to each industry's needs.

The recommendations for the future growth and development of VUCEs are as follows:

- Promote the continuous improvement of existing VUCEs and the creation of new ones with the same philosophy, while using best practices found both in the public and private sectors.
- Establish centers where MSMEs can execute their electronic transmissions.
- Generate a guide that serves as a parameter for the type of structure that a country chooses for creating a VUCE.
- Understand that the scope of work of a VUCE transcends non-tariff requirements.
- Create a permanent group within some international organization to record the progress made by VUCEs and for their scenarios and situations to serve as an information source for the entire system.
- Interconnect the VUCEs by regions and then through Latin American nodes with the objective of exchanging information between trade partners.
- Use digital signatures to guarantee the security in electronic data interchange.
- Predict an increase in procedures by scaling the technology infrastructure so that it may expand its capacity to continue responding, in due time and form, to the growth of trade.

Acronyms

IDB	Inter-American Development Bank
MSME	Micro, small, and medium-sized enterprises
PROCOMER	Foreign Trade Corporation of Costa Rica (Spanish acronym)
SELA	Latin American and Caribbean Economic System (Spanish acronym)
SIGA	Integrated Customs Management System (Spanish acronym)
SINPE	National System for Electronic Payments (Spanish acronym)
SME	Small and medium-sized enterprises
TICA	Costa Rican Information Technology Customs Control System (Spanish acronym)
UN/CEFACT	United Nations Center for Trade Facilitation and Electronic Business
VUCE	Single Window for Foreign Trade (Spanish acronym)
VUCEM	Mexican Foreign Trade Single Window (Spanish acronym)
WTO	World Trade Organization
WCO	World Customs Organization

Bibliography

- Anaya Rojas, J. 2010. "Design and Instrumentation of the Foreign Trade Single Windows in Mexico." Paper submitted to the First Latin American and Caribbean Regional Meeting on International Trade Single Windows. Santafé de Bogotá, Colombia.
- Cornejo, R. 2010. "Foreign Trade Single Windows and Digital Certificates of Origin." Paper submitted to the First Latin American and Caribbean Regional Meeting on International Trade Single Windows. Santafé de Bogotá, Colombia.
- Fuentes, L.F. 2010. "Single Window for Foreign Trade – VUCE- Progress and Projects." Paper submitted to the Second Latin American and Caribbean Regional Meeting on International Trade Single Windows: Advances and Pending Challenges. Valparaíso, Chile.
- Germán Pérez, D. 2000. "The Dominican Republic Case in Implementing an Integrated Single Window System for Foreign Trade." Paper submitted to the V International Congress of CLAD on State and Public Administration Reform. Santo Domingo, Dominican Republic.
- González Fuentes, M.M. 2010. "The Mexican International Trade Single Window." Paper submitted to the Second Latin American and Caribbean Regional Meeting on International Trade Single Windows: Advances and Pending Challenges. Valparaíso, Chile.
- Heieck, S., Matarrita, R., and Polo-Cheva, D., editors. 2009. *Commercial Policy in Central America. Perspectives of the Association Agreement with the European Union and Challenges for the Small and Medium-sized Enterprises*. Alajuela: INCAE Business School.
- Hertel, T., McDougall, R. and Itakura, K. 2001. "GTAP Model Version 6.0." GTAP Resource #576. Center for Global Trade Analysis, Purdue University.
- International Bank for Reconstruction and Development / World Bank Group. 2006. *Development of MSME, supporting policies and CAFTA in Central America*. Washington, D.C.: World Bank.
- León Abad, S. 2010. "An International Trade Single Window for Ecuador. Advances and Challenges." Paper submitted to the Second Latin American and Caribbean Regional Meeting on International Trade Single Windows: Advances and Pending Challenges. Valparaíso, Chile.
- Salas, M. 2010. "The Foreign Trade Single Window. Strengths and Lessons Learned: The Costa Rican Case." Paper submitted to the First Latin American and Caribbean Regional Meeting on International Trade Single Windows. Santafé de Bogotá, Colombia.
- SELA (Latin American and Caribbean Economic System). Final Report of the First Latin American and Caribbean Regional Meeting on International Trade Single Windows.
http://www.sela.org/attach/258/eventos/2010/IE-VUCE/IE-VUCE.HTML#INFORME_FINAL.
- SELA, International Trade Single Windows (VUCE) in Latin America and the Caribbean: Advances and Pending Challenges. Permanent Secretariat. Caracas, Venezuela: February 2011. SP/Di No. 4-11.

Toledo Cabrera, J. 2010. "Single Window for Foreign Trade. Strengths and Lessons Learned: The Chilean Case." Paper submitted to the First Latin American and Caribbean Regional Meeting on International Trade Single Windows. Santafé de Bogotá, Colombia.

Torres, R. 2010. "Methodological Survey, Best Practices and Lessons Learned in the Design and Development of Foreign Trade Single Windows." Paper submitted to the Second Latin American and Caribbean Regional Meeting on International Trade Single Windows: Advances and Pending Challenges. Valparaíso, Chile.

UN/CEFACT: Simple, Transparent and Effective Processes for Global Commerce.
Available at: <http://www.unece.org/cefact/> [accessed in September 2010; search "recommendations"]

Villarroel Ríos, F. 2010. "Inter-Agency Management of Government for the Effective Governance of the VUCE." Paper submitted to the First Workshop: Foreign Trade Single Windows. Considerations and Proposals for Regional Action within the Framework of the Latin American Pacific ARCO Forum. Valparaíso, Chile.

Sources

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