What motivated the establishment of your Single Window (SW)?

For reasons of health, safety and protection of the environment, the natural resources and the national production, the following Ministries and Agencies at the National level acts in the foreign trade operations:

- Agriculture and Rural Development Ministry;
- Trade, Industry and Tourism Ministry;
- Social Security Ministry;
- Mines and Energy Ministry;
- Ministry of Transport;
- Ministry of the Environment, Housing and Land Development;
- Ministry of National Defense;
- Ministry of Foreign Affairs;
- Ministry of Culture;
- National Tax and Customs Direction;
- The Colombian Institute of Agriculture and Livestock (ICA);
- The National Institute of Medicines and Foods (INVIMA);
- The National Council of Narcotics;
- Anti-Narcotics Department;
- The Military Industry –INDUMIL;
- Geo-Scientific, Mining and Nuclear Research and Information Institute (INGEOMINAS);
- The Colombian Institute of Rural Development (INCODER);
- Superintendence of Private Security;
- Industry and Commerce Superintendence.

Traditionally, proceedings have existed involving several agencies and each one of them has regulated and control foreign trade operations under different rules of the game, with no agreements being established among them as each one oversees its own interests without establishing the total weight which the whole proceedings mean for business firms.

We found that the various agencies related established unarticulated steps, without limit, having no point in common and with dissimilar schemes. This situation caused the presence of duplicities in the requirements, which due to the absence of interactivity, data handling and language encoding were only
perceptible at the interior of the entity. The above led to timeouts in the conduction of the procedures and reduced transparency and efficiency to public acting.

The chain of public processing related with the foreign trade activity includes 17 public agencies and one or more private (Chambers of Commerce) and occupies at least 30% of the business procedures. These transaction costs which result from the procedures required by the activities related to foreign trade result in increases in the cost structure for businessmen, which eventually have a relative impact on investment or increases prices of goods and services having a negative impact on domestic competitiveness.

**What year was it established?**

In December 2004 by Decree 4149 was issued which constitutes the legal basis required for the operation of the Single Foreign Trade Window (VUCE).

The setting in operation of the Import Module took place in phases, as follows: the electronic processing through the VUCE for 100% of the requests for items under the previous license regime, since November 2005. Electronic processing for 100% of the import registry requests from cities other than Bogotá, since June 20, 2006. As from November 17, 2006, all registration requests or import licenses are electronically made through the VUCE.

The Export Module is set in operation as an option, since November 17, 2006. As from May 2008 all prior requisites to exports must be made through VUCE.

And the Single Foreign Trade Form Module (FUCE) was in operation since September 2008.

**What is the current status of the facility (study, pilot phase, running)?**

The VUCE Is running from the beginning of 2005. The first step was import clearance and in 2006 export procedures and The Single Foreign Trade Form (FUCE).

**Establishment**

**How did the SW interface with already established systems (if any existed)?**

The VUCE was establishing in 2004 by governmental Decree (4149) and It had not previously established systems.

**Did any other SW model serve as inspiration or model?**

Colombia adopted the development of VUCE under its own conception, and it only had an initial approximation to the Export Window of Guatemala.

**What process was followed in setting it up? Was there a pilot project?**

VUCE is based on the definition of strategic information, processing and procedure analysis and customer service; in this regard VUCE departed from three areas for its construction.

Information: Definition of data warehouse where variables of the various entities were identified who participate in foreign trade operations.

Procedures: Identification of procedures both internal and external to VUCE, as well as internal to the sources; that is,
information capture and collection procedures are streamlined and normalized by the source systems, the procedures for the sending and integration of information in order to complete the foreign trade operations.

Infrastructure: Design of an infrastructure that articulates all the necessary information, through the centralization or decentralization of information and articulation by orchestrators according to cost-benefit analysis.

The development of VUCE has implied that all the agencies to which the customer must make payments on account of import or export procedures, will enter into agreements for the electronic payment as set forth at the VUCE as a component of the same and as a value added to the electronic management of the processing. The above is done through the PSE service given by ACH, which groups all the existing banks in Colombia. Additionally, both entities as well as VUCE users need to have the Digital Certificate of the Signature issued by a certifying entity authorized by the Industry and Commerce Superintendency, in order to act before the Window in the process of requesting procedures, approvals, authorizations, certifications or issuance of endorsements as required.

Furthermore, through the VUCE, electronic access has been developed both to the Tax Single Record kept by DIAN, to the Business Single Record, and to the Legal Representation and Existence Certificate issued by the Chambers of Commerce, for which such entities have provided the Web Services as required.

Training was approached in different ways: on a customized basis for officers of entities attending the processing; practice workshops in the various cities of the country for importers and exporters and training on submission and solving of queries for all users.

Implementation begun in 2005, with the Import Module and as from 2007 the Export Module and the Foreign Trade Single Form (FUCE) were set in operation. Implementation has therefore lasted about three (3) years.

Services

The Single Foreign Trade Window (Ventanilla Unica de Comercio Exterior- VUCE) is a tool of electronic system to provide facilitation on process of authorizations, certifications or approvals as demanded by the respective Government Agencies in charge control of specific imports and exports operations.

The VUCE guarantees the technological and legal safety of the various procedures by integrating the digital signature and the electronic on-line payment. VUCE is comprised by three modules:

- **Imports**: Electronic processing of import registration and import licenses;
• Exports: Electronic processing of prior authorizations for export;
• The Single Foreign Trade Form (FUCE). Electronic processing for prior registration before the various entities. It has three (3) components:
  ➢ RUE: Identification and classification of the person (Legal or natural);
  ➢ Common Component: Identifies the process and standardizes product information;
  ➢ Mission Component Own Information and of particular interest for each entity.

**How many transactions per day are handled? What percentage of total transactions?**

Five hundred eleven thousands (511,000) annual transactions take place, thousands four hundred (1,400) daily average.

**How many clients does the SW have at the present time?**

In December 2009, they are registered thirty thousand (30,000) users.

**Operational Model**

**How does it work? What is the operational model for the SW (describe the business process model)?**

Having as guideline the established by the On-Line Government Program, it may be stated that the Single Foreign Trade Window constitutes an initiative without precedent for the Colombian foreign trade containing a high component of processes and procedure coordination among the 19 agencies currently involved, which has implied the intensive use of technological tools of information and communication, the Digital Certificates of safe server, the data encryption technologies, Web Services, Electronic Forms with information exchanges in XML, dedicated links through INTERNET established through VPN’s.

Likewise, the implementation of the Single Foreign Trade Window promoted and imposed the use of electronic trade technologies such as the Signature Digital Certificate and the Electronic Payments. As to the Signature Digital Certificate, this had only been implemented privately by the Colombian Central Bank and its massive use by the foreign trade entities and customers has marked a milestone in the e-commerce development in Colombia.

**Who are the main clients?**

Importer, exporters and agent or customs broker.
Which public and private agencies are involved in the facility?

Public Agencies are:

- Agriculture and Rural Development Ministry;
- Trade, Industry and Tourism Ministry;
- Social Security Ministry;
- Mines and Energy Ministry;
- Ministry of Transport;
- Ministry of the Environment, Housing and Land Development;
- Ministry of National Defense;
- Ministry of Foreign Affairs;
- Ministry of Culture;
- National Tax and Customs Direction;
- The Colombian Institute of Agriculture and Livestock (ICA);
- The National Institute of Medicines and Foods (INVIMA);
- The National Council of Narcotics;
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- Superintendence of Private Security;
- Industry and Commerce Superintendence.

Private agencies are:

- CERTICAMARA: Provide the digital signature;
- CONFECAMARAS: Provide form the all Camera Chambers the legal information of the importers and exporters.

Business Model

The model belongs to the e-Government program and the Department that has the management and made its directives, is the Foreign Trade Direction.

The VUCE is auto financed with fees establish by the Foreign Trade Direction.
What were the costs of establishment of the facility?

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>USD COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Servers, equipments and Peripherals of communication.(Hardware)</td>
<td>350,000</td>
</tr>
<tr>
<td>Application implemented for imports (Software)</td>
<td>285,000</td>
</tr>
<tr>
<td>Application implemented for exports (Software)</td>
<td>860,000</td>
</tr>
<tr>
<td>TOTAL INVESTMENT</td>
<td>1,495,000</td>
</tr>
</tbody>
</table>

What was the difference between estimated costs and real costs?

Any difference.

What are the ongoing operational costs (annual)?

The operational costs is approximately three hundreds thousands (USD $ 300,000.00) from the beginning until December 2009.

What are the user fees (if any) and annual revenue? Model of payment (fixed price per year, price per transaction, combination, other model)?

The Model of payment is on line per transaction and the fees are:

- Clearance: USD $15.00 for 1800 bites;
- Certificate of Origen USD $ 5.00.

The annual revenue are USD $6,200,000.00.

How will the SW be sustained over the coming years?

The VUCE is sustained with the fees establish by the Foreign Trade Direction.

Do the revenues generated cover operational costs or do they make a profit?

The revenues generated cover the normal operations, sustain others activities of the organization and the actualizations of the software.

Are the revenues (if any) reinvested in the SW?

Always the revenues are reinvested in the VUCE to be used in actualizations of the software.
Technology

What technology is used?

The solution was implemented as a model of Agency hosted on Intel servers clustered with redundancy, the relational data bases with SQL-SERVER motor and the data entry was made based on NET products of Microsoft; communication of entities and customers is made through the INTERNET broad band channels, connections are established through the VPN’s (Virtual Private Networks) to provide the data transmitted with safety and integrity; additionally data base servers are ensured with digital certificates that guarantee the reliability of the information.

In the implementation process of VUCE, progress has been made in terms of the coordination possibilities among entities: all entities have begun to benefit from technological improvements which were not envisaged within their processes such as the digital signing and electronic payments; gains in productivity and efficiency of procedures when carried out electronically have become evident.

How are data submitted (electronically – what type of format/language, paper – what forms, combination – what kind of combination)?

The VUCE application is technically leveraged in a series of services (WEB-SERVICES) which we have connected to DIAN (National Tax and Custom Direction) with the data base of the Single Tax Registry (Registro Único Tributario, RUT) and the Single Business Registry (Registro Único Empresarial, RUE) kept by the Chambers of Commerce, which permits the consultation and validation aligned with basic tax and trade information of the System users. The entire solution is supported on WORK FLOW architecture, leveraged by the security provided by VPN (SSL) and the digital certificates (electronic signatures with PKI standards, certified with standard X.509).

The system has provided safety and integrity to the trade transactions conducted, as well as a more real statistic of the foreign trade quantities and volumes of procedures.

In order to make use of the electronic request system through the VUCE the following process must apply:

Processing of Requests

The Import Module is built with two possible forms of transmission of applications, aimed at satisfying the needs of two distinct types of users:

a) Web VUCE System: operates directly over the Internet, from where user may consult the tariffs, clearances, file
applications, sign digitally, make on-line payments and do follow-up to procedures so as to establish the state of the same;

b) VUCE Application: used in the conversion, digital signature and transmission of electronic applications sent by users from their information systems. It is targeted to satisfy the massive transmission needs for registration applications or import licenses.

In making the electronic payment of the import document before the Ministry of Trade, Industry and Tourism, the importer must have a bank account in one of the financial entities included in the Electronic Services Supplier of *ACH de Colombia* (a Chamber of Payment Compensation created for the banking operations).

At completion of the procedure the document is put at disposal for consultancy by customer, DIAN and the control entities so requiring it.

As to the Export and the Foreign Trade Single Form Modules, upon digitation of user and password, the system is automatically connected to the Single Tax Registry (Registro Único Tributario – RUT) of DIAN (a mandatory requisite for the filing). The system is then automatically connected to the Single Business Registry (Registro Único Empresarial – RUE), showing the mercantile enrollment of each importer or exporter. Upon completion of these verifications, the system sets forth the different options of the proceedings or enrollments that may be performed at each of these Modules.

Where data are sent and lodged (government or private entity)?

All the data is received by the government entity.

The model or approach adopted for the operation of VUCE was based on the concept of a lodged agency, where information reaches a single repository which is shared and updated by the entities intervening in the procedure through Internet, by using a standard exchange of documents through the XML format.

Interveners in the functionality of the system:

![Diagram](image.png)

System actors created are listed below:

*Customer*, Importers, Exporters, Customs Intermediation Companies (*Sociedades de Intermediación Aduanera, SIA*),
Permanent Customs Users (Usuarios Aduaneros Permanentes, UAP), Highly Exporter Users (Usuarios Altamente Exportadores, ALTEX).

Banking Entities. Electronic Payment in conducting on-line transactions. PSE (Business Service Supplier) of ACH was used which permits the conduction of preliminary electronic payment transactions.

Certifying Entity. Company authorized by the Superintendence of Industry and Commerce, in charge of providing security and guarantee to electronic transactions and communications, through the issuance of Digital Certificates, in conformity with the established in Law 527, 1999 which gives life and protects electronic trade in Colombia.

Entities Involved. Eighteen entities verify the fulfillment of the standing regulations for the import and export of merchandise into the country, according to their field of competence.

The Ministry of Trade, Industry and Tourism. The Administrative Entity of the VUCE system that exerts control, verification and approval of procedures.

DIAN and the Entities of Control. The National Tax and Customs Direction (Dirección de Impuestos y Aduanas Nacionales – DIAN) and the entities of control verify, on line, through the VUCE system, the authorizations approved by the Ministry of Trade, Industry and Tourism, in exercising control at the entry or exit of merchandise and in subsequent fiscal procedures.

Who can submit data (importer, exporter, agent, customs broker)?

The importer, exporter, agent or customs broker submit the data.

Promotion and communication

How did you promote the facility?
The Government and the exporters and importers associations, promotes the VUCE

How all stakeholders were kept informed about the facility’s progress?
The importer, exporter, agent or customs broker were informed with conferences, workshops and officials communications.

What kind of training was provided for users?
Workshops, conferences and e-learning software.

Do you provide any helpdesk or customer service?
The VUCE has a call center to provide any helpdesk or customer service.

Judicial aspects

Is use of the facility obligatory or voluntary?
The utilization of the VUCE is mandatory.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do participants need to sign a contract with provider/agency in order to participate?</td>
<td>In conducting the procedures at any Module or making consultation before VUCE it is indispensable to have previously registered at the System, for which a specific and duly regulated procedure is followed. The system assigns each customer a key and a password in order to access the various Modules.</td>
</tr>
<tr>
<td>Was specific legislation (or change of old legislation) necessary?</td>
<td>The law of the electronic commerce, decree created the VUCE and instructions to regulate it.</td>
</tr>
<tr>
<td>How is the privacy of information protected?</td>
<td>The system has an access by profiles and digital signature.</td>
</tr>
<tr>
<td>What is the role of international standards (UN/EDIFACT, UNLK, UN LOCODE, UN/CEFACT Single Window Recommendation, etc) in your SW?</td>
<td>The VUCE was establishing with the international standards and the UN/CEFACT Single Window Recommendations.</td>
</tr>
<tr>
<td>What are the benefits to clients and to participating agencies?</td>
<td>VUCE benefits the universe of users of the Colombian foreign trade, as it permits attacking costs related with timeouts in which they currently incur with the physical processing of their export or import operations. Consequently, the online and network processing enables a cost reduction both in time and human resources assigned to the development of tasks such as the physical displacements nowadays required, as well as in stationery and implement expenses required in the physical processing. If we consider that OCDE has estimated that in average bureaucratic costs in international trade represent 10% of the value of the goods, the implementation of VUCE may be representing a significant cost reduction for businessmen. In average, times of response to users have had a reduction of about five (5) days, as the processing documentation, previously received at territorial offices, which approval required the centralized acting by any one of the 17 entities, had to travel physically so as to obtain the corresponding authorization and return again resorting to the physical messenger services. As to the processing filed at the central level, timings have generally not been altered.</td>
</tr>
<tr>
<td>How did it benefit trading community and the Government?</td>
<td>The Single Foreign Trade Window benefits the universe of Colombian foreign trade users (importers, exporters, customs agents), by acting upon transaction costs related with dead time in which they currently incur with the physical processing of their export or import operations. Consequently, Web and online processing, permit a cost reduction both in terms of time and in human resources assigned to the development of tasks such as</td>
</tr>
</tbody>
</table>
the displacements today required and the expenditures on stationery and implements required for the physical processing. The following benefits have been identified for users:

- Cost reduction in physical transfers for the completion of the process;
- Cost reduction in mail;
- Cost reduction in stationery;
- Cost reduction in procedure;
- Elimination of privileges and unjustified preferential treatments;
- Elimination of steps or documents attached to procedure;
- Reduction in the times of response to customer;
- Permits access, 24 hours a day during 365 days per year;
- Allows for follow-up to the state of procedures.

Furthermore, for the 18 entities involved, VUCE has meant benefits in terms of improving internal processes and streamlining their procedures, as, in the first place, re-engineering and re-accommodating processes of their operative tables have been developed and, secondly, requests for information from users have been eliminated who previously had to be attached to the physical documents and now are electronically consulted with other entities or bodies such as the Chambers of Commerce. To such effect, in many cases their equipment has been updated so that the efficiency of the new electronic processes will not be blocked due to obsolescence thereof, which is considered a benefit for the technological infrastructure which these entities now have. Other benefits to be mentioned for the entities:

- Savings in stationery costs;
- Savings in transport and filing of documents;
- Increase in the number of users for the Entity;
- Increase in the geographic scope of the procedure.
- Satisfaction by users with procedure and the Entity.

What was the impact on Customs revenues?

The VUCE facilitated the customs control of the import and exports.

What problem did it solve?

Both the officers in charge of the processing, and importers and exporters were resistant to change. This was overcome given the model of staged entry for the various Modules of VUCE, each featuring transition periods, and with a training and disclosure effort carried out permanently. Likewise, the private sector became involved in a testing process previous the entry in operation of the various electronic procedures, which permitted the advantages in the use of TIC to become evident for the
carrying out of these procedures.

**PENDING PROBLEMS:** It is worth mentioning that the continuous improvement process of the VUCE, has identified the need for system information developments that will improve processes and procedures of the entities linked to this Window, since processes carried out at the interior of these entities in many occasions is not been automated, thus interrupting the automation chain and producing inefficiencies in the flow of the proceedings.

For this reason a project is underway that includes the raising of Information of the processes and procedures with which entities currently operate who are part of the Single Foreign Trade Window, the proposal of information system developments as required, and its implementation in the respective entities; all the above in order to optimize the processes and activities currently being executed at the VUCE.

**Lessons Learned**

*What were the crucial success factors?*

- Rejection to the change from the paper to electronically system;
- Legal base to act;
- The Team works continuity;
- Collaboration between Public and Private sectors;
- New strategies of communication and training;
- The positive consequences.

*What were the greatest obstacles?*

To obtain the agreement with the involving entities.

Rejection to the change from the paper to electronically system

*What are the main lessons learned?*

The solution provides security, transparency and effectiveness.

*Future Plans What are the plans for further development of the SW?*

Continuous improvement and updating of the solution.

*What are the biggest obstacles to further development of the SW?*

Neither for now.

*Do you intend to make agreements concerning SW cooperation on the regional level?*

The VUCE is ASEAL observer member and the Foreign Trade Director works at the UN/CEFACT-TGB15.

*Are you planning to have agreements for exchange of data with SW running in other countries?*

VUCE are working with France in a project of paperless cross-border.

We have in operation digital certification of origin with Mexico and Chile and working with other Latin-Americans countries.
### Source for further information

**Contact details**

Rafael Torres  
Foreign Trade Director  
Ministry of Trade, Industry and Tourism  
Bogotá, D.C  
Republic of Colombia  
Tel. (+57) 1 606 76 76