



Customs and New Technology

This Special Report is a follow-up to the previous one on Customs Modernisation, since it focuses on new technology to serve Customs. Innovations, pilot projects, automation, paperless procedures, digitization... As borne out by the testimonies

of Customs administrations and the presentation of new technology or strategies devised by the private sector, a "new generation" Customs is gaining ground and is developing into an instrument offering a global competitive edge. ●



Making a success of DELT@ : a technological



During the launch of the DELT@ (on-line automated Customs clearance) programme in 2003, French Customs' immediate objective was to automate clearance procedures at the trader's premises (almost 40% of Customs clearance at import, and 60% at export) as these were still paper procedures. This initial objective very quickly developed into a much broader aim with the high expectation of radically reforming the entire French automated Customs clearance system to meet the challenges of an ever-changing economic, technological and regulatory environment.



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• *At economic level :*

Against a highly competitive backdrop, France, which remains faithful to its tradition of supporting (120) international traders, is duty bound to offer them innovative and effective remote Customs clearance procedures with services with a high added value, in order to ensure faster, more reliable and less expensive Customs clearance and to make national Customs clearance platforms more attractive.

• *At technological level :*

French Customs has opted for an "Internet or nothing" strategy in synch with the approach followed by business, and for communication protocols tailored to commercial transactions. In addition, DELT@ marks a complete transformation of French Customs' information system with a new technical architecture.

• *At regulatory level:*

The European Union has embarked upon the reform and modernisation of the Community Customs Code, the common legal framework that applies to all European Customs administrations, in order to promote the development of electronic Customs clearance, which is likely to become ordinary law in the years to come. Each State must henceforth prepare to make the leap into the paperless world which, in some respects, is akin to a veritable cultural revolution.

The development of DELT@ is a true human and technological endeavour which French Customs is poised to achieve. However, beyond the immediate technical achievement symbolised by the current roll-out, the "transformation" that DELT@ will bring about will only be effective and real if traders and Customs officials take full ownership thereof.

DELTA@ - a technical challenge on the verge of being met

Opting for a modular technical architecture

In terms of Customs clearance, through DELT@ French Customs is moving from a centralised and highly integrated information system, personified by SOFI, which has greatly structured the organisation and activity of operators and Customs services for over 30 years, to a modular system split into several interconnected blocks :

• *Front-end processors:*

- The Pro.dou@ne Internet portal, the future virtual single window for declarations, is opening up access to a range of remote services offered by French Customs to national and foreign trade operators. In this way, operators can complete their Customs and taxation formalities on-line;
- Intranet for Customs officers, who can access remote services, depending on their level of authorisation, from any workstation.

• *Reference systems aimed at sharing essential Customs information between all the application:*

- An operators' reference system and follow up of authorisations (ROSA), which forms the directory of economic players dealing with French Customs. It is also an essential entry point for accessing DELT@;
- RITA is intended to serve as a catalogue of national and Community tariff regulations with a tariff encyclopaedia. It also comprises a tariff search engine for the automated processing of regulations set out in the encyclopaedia for remote Customs clearance procedures, with an assessment of duties and taxes. It can also be used to produce estimates of



and cultural challenge for the French Customs

duties and taxes payable. Thanks to a connection to the TARIC Community tariff database, the Community regulations are updated more rapidly in RITA;

- A reference system for users and services to manage authorisations (RUSH).

• DELT@ remote procedures

.... Requiring close co-operation

The choice of a modular technical architecture has resulted in a high degree of interdependence between the different IT projects and has therefore required close co-operation given the plethora of IT teams and contracting authorities, in order to ensure consistency in the technical and operational choices as well as the schedule.

French Customs has had to upgrade its IT teams' skills and call upon private sector IT specialists.

Operators have been involved in the development work within the user committees.

Finally, the parallel progress in the Community's work in the electronic Customs clearance domain has not facilitated the implementation of project DELT@, as the latter must keep pace with the Community approach.

DELT@ - a wide range of remote procedures being rolled out within a short time frame

DELT@ remote procedures

DELT@ meets a threefold aim :

- meeting France's commitment to implement the reform of the Customs declaration format in January 2007;
- preparing for the reform of the Community Customs Code, which will enter into force in stages between now and 2010. It will take account of the approach followed in the Community's strategic e-Customs programme, aimed at providing the European Union with the requisite IT infrastructures to deal with the growth in electronic Customs clearance;
- guaranteeing optimal Customs clearance, with shorter clearance times and more efficient controls.

DELT@ can be broken down into various remote procedures according to the needs and logistical organization of businesses:

- **DELT@ eXpress** covers Customs clearance in 1 or 2 stages for integrators working in advance, with an automated system for



transmitting declarations and for identification (scanning) and tracking of items;

- **DELT@ Cis** intended to replace the SOFI Customs clearance system. It relates to one step Customs clearance as part of a common law or home clearance procedure;
- **DELT@ D** covers two-step Customs clearance as part of a procedure for clearance at the trader's premises, with the completion of a simplified declaration followed by the lodgement of a periodic summary declaration.

These remote procedures have a common base of functions:

- 24/7 access via the Pro.Dou@ne portal;
- the option of advance lodgement of declarations, up to ten days before the departure or arrival of the goods;
- automated calculation of the Customs value and the assessment of duties and taxes using RITA;
- electronic correction and review of declarations;
- automated targeting of remote declarations based on pre-defined selection profiles;
- access via the DTI¹ or EDI² Pro.Dou@ne window.

DELT@ has provided an opportunity to offer further simplification to operators:

- the latter no longer have to submit the documents attached to the remote declarations as a matter of course, and they may retain these on their premises;
- possibility of centralising the bond and providing a single guarantee covering all the risks.

¹ DTI : Direct Trader Interface – on-line form

² EDI : Electronic Data Interchange

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Roll-out is dependent on the users' opinions

The DELT@ remote procedures have been tested by pilot operators and Customs offices.

These tests have not only validated the defined functional and technical processes, but also tested the training and the quality of user assistance.

Armed with the positive feedback from users, DELT@ D and C are currently being rolled out.

Given France's commitments vis-à-vis Europe, the extension of DELT@ remote procedures will be spread out over the first half of 2007.

Ownership by users – a true measure of thorough and lasting success

Over and above the technical challenge represented by the development of the DELT@ remote procedures, the success of this project must be evaluated in terms of whether users, business and Customs services sign up to it. To that end, French Customs has focused on communication and training.

Communication: a key element

From the very outset of the DELT@ project, French Customs has sought to develop active communication in order to make people understand what is at stake and to share defined objectives.

French Customs has set great store by regularly meeting representatives from operator and IT service provider organisations to explain its functional and technical choices, and also to ascertain their expectations.

Customs services have also been involved in Project DELT@ in the same way.

Economic activity centres, the structures are responsible for steering the economic mission at regional level, have formed important links.

This all-out desire to communicate is aimed at ensuring consistent information and allaying concerns, establishing links and creating trust where possible.

Training: another vital tool for managing change

A major training operation has been carried out for operators and Customs services.

Some sixty or so external trainers have been trained, and tasked with relaying this training to businesses. Almost 3,000 officers within the Customs administration have received training.

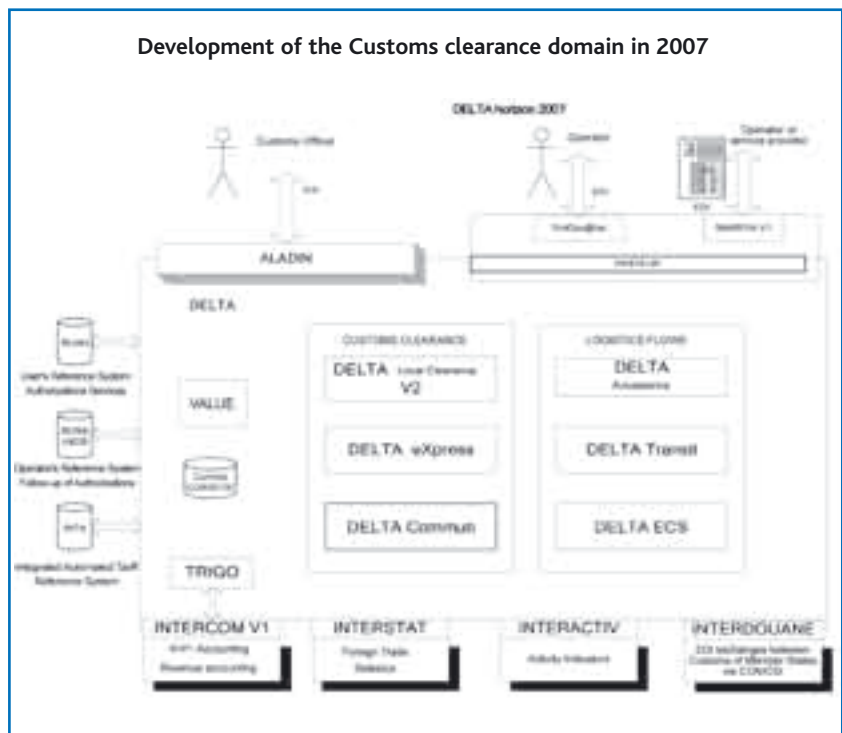
A permanent training site has been set up on the Pro.Dou@ne portal in support of these major efforts.

Remote procedures mark the advent of electronic Customs clearance in France. To that end, they require a review of working methods, of habits relating to the use of paper procedures, and an organizational rethink. This will be a long-term and difficult individual and collective campaign, but it is the price to pay if DELT@ is to be an unconditional success for French Customs.

More information

www.douane.gouv.fr

<https://pro.douane.gouv.fr>





M -TRADE project

Multimodal TRANsportation supported by EGNOS



The European Geostationary Navigation Overlay Service (EGNOS) is Europe's first venture into satellite navigation. EGNOS will achieve its aim by providing better accuracy, availability and continuity respect the positioning signals sent out by the Global Positioning System (GPS), complemented by information integrity, and make it suitable for safety critical applications such as flying aircraft or navigating ships through narrow channels. EGNOS is a joint project of the European Space Agency (ESA), the European Commission (EC) and Eurocontrol, the European Organisation for the Safety of Air Navigation. The deployment of the EGNOS system architecture was finalized during 2006 and initial operations have started.

Galileo will be Europe's own global navigation satellite system, providing a highly accurate, guaranteed global positioning service under civilian control. It will also be inter-operable with GPS and GLONASS (the Russian radio-based satellite navigation system).

Introducing the EGNOS/Galileo in Customs and border control applications

With the EGNOS system close to operational readiness and the go-ahead for Galileo, an important new phase in the development of Europe's contribution to Global Navigation Satellite Systems (GNSS) has started. With improved availability, accuracy, integrity and continuity, EGNOS and Galileo will open opportunities for the development of improved new services and applications.

The M-Trade (Multimodal TRANsportation supported by EGNOS) project investigates and demonstrates the added value of the introduction of EGNOS and Galileo in the area of multimodal freight transport including the commercial and institutional users such as transporters and Customs administrations.

M-TRADE

M-TRADE's main goal is to promote the use of the European Geo-stationary Navigation Overlay Service (EGNOS) and future Galileo services in the multi modal transport sector. M-TRADE is managed by the European GNSS Supervisory Authority (GSA) through EU 6th Framework Programme funds.

Based on an analysis and assessment of the multimodal freight transport user community, it was concluded that the use of GNSS technology is promising as it satisfies the UC demands from a technological and economical point of view. In particular EGNOS (and the future Galileo) provide differentiators that allow the meeting of liability requirements.

Several applications were selected as promising applications for GNSS, such as terminal yard management and supply chain monitoring and "door-to-door" delivery. These applications have been demonstrated in real-life demonstrations, consisting of four pilots/feasibility cases over European freight chains combining maritime, road, rail and rivers (see figure):

- **Pilot 1** – Bologna Freight Village: Remote monitoring of locomotives position and manoeuvres during shunting operations.
- **Pilot 2** – Rail (Brescia-Modena) and Road (Bologna Modena) chain: Tracking & tracing, and monitoring the temperature of a reefer carrying perishable goods.
- **Pilot 3** – Danube River (Vienna-Budapest round trip): Tracking & tracing of a river vessel loaded with petrol, through three European countries (Austria, Slovakia, and Hungary).

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- **Pilot 4** – Rail chain Genoa-Ferrandina-Dordrecht Seaport: Tracking & tracing of a tank rail wagon loaded with oil products, through four European countries (Italy, Switzerland, Germany, and The Netherlands).

All real-life demonstrations were successfully performed and the results were used for the validation of the M-TRADE service. The involved users, representing the user community, described the results as very effective and straightforward in terms of training and awareness. They were enthusiastic about the possibility to track transportation during the entire journey, especially in the case of dangerous goods and in combination with sensor information such as temperature. Moreover, they also provided guidelines and recommendations for enhancements and other interesting operative scenarios: tracking of international shipping and use in regulated freight services (such as those involving “quality contract” and liability requirements). Although successful the cross-border pilots revealed several key problems to solve due to the lack of standardisation in RFID-technology and the exorbitant GPRS-roaming costs (General Packet Radio Service).

Customs and border control

M-TRADE is mainly focussed on commercial users in the multimodal freight transport domain. However, in this domain Customs and border control plays a major role. As this was underlined during the project, an analysis focussed on this institutional side of the multimodal freight transport domain was introduced. The aim of this analysis was to evaluate the added value of introducing EGNOS/Galileo in Customs and border control applications to optimise the multimodal freight transport.

Based on a practical methodology, such as desk research and interviews with Customs and commercial users, the Customs and border control domain has been explored to identify the needs and requirements. The outcome was, amongst others,

that accuracy is not considered as an important need (less than 10 m accuracy is considered sufficient). On the other hand, service guarantee is considered as a fundamental requirement. Security and liability are also considered as needs. Finally trust is one of the key elements, as Customs wants to make sure that others cannot manipulate the information received.

Moreover, the use of satellite positioning systems combined with other non-intrusive load status detection and pre-screening technologies (X-Ray, RFID, etc.) have been identified as suitable techno-

logies for Customs purposes. In addition, GNSS can contribute to the establishment of simplified Customs procedures and the Green Lane concept and in the identification of “secure” user certificates (e.g. for the European AEO concept).

GNSS opportunities for Customs

Currently GNSS is hardly used in the Customs and border control domain. However, considering the international dimension of freight traffic, such as more emphasis on security and the introduction of eCustoms, a combination of GNSS and ICT (Information & Communication Technology) is perceived as a key element for global trade facilitation:

1. GNSS could support law enforcement-

GNSS enables technological solutions and services supporting law enforcement to enhance the early, “upstream” sharing of information on the identity, status and consignments of goods can alleviate time-consuming delays for these purposes at border crossings and in terminals. Moreover, the fight against counterfeiting and frauds can benefit by GNSS by means of better risk analysis.

2. GNSS could enable continuous supervision of the movements of goods-

Use of GNSS tracking devices enables continuous and remote supervision on the movement of goods during their transshipment, along with their status and integrity if combined with suitable technologies such as biometrics, e-tags, and active sensor devices.

3. GNSS could improve the efficiency of Customs processes-

Customs processes and regulations could be improved in efficiency if the position of the goods is transmitted to the office of destination at periodic intervals by certified positioning services. This can lead to a relevant improvement in Customs

offices control planning and executions, to an optimisation of Customs procedures and to a reduction of clearance time. It can also lead to improved trade flows (e.g. through the Green Lane concepts) and improved Customs revenues.

4. GNSS could improve the efficiency of mobile work-force processes

Safety and security procedures could be improved significantly, thanks to the capability of tracking and tracing the goods during their movement, at their arrival and transiting towards national and international destinations.

Customs and border control applications

Based on the analysis and opportunities, the following applications were identified (see figure):

- Goods tracking and tracing: this application is of relevance because of the possibility to implement continuous goods tracking and tracing, route deviation and load/unload status checking systems for Customs work efficiency improvements and anti-fraud activities, as well as goods monitoring systems within Ports and "certified" goods border crossing notifications. New Debts Guarantee regimes can also be established based on GNSS (EGNOS/Galileo).
- Risk Management: this is currently performed through static pre-arrival declarations, while pre-departure declarations are foreseen. Risk management based on dynamic information concerning the position and load/unload status can imply a relevant improvement for security and environmental protection.
- Mobile work-force management/support: Goods inspection by border guards are carried out for goods identified at risk; this application offers the opportunity to use the border guards effectively and efficiently and is done by providing the nearest mobile work-force team with the shortest path between the current position and the position of the goods to be inspected.

The way forward

As stated, the introduction of GNSS has many opportunities for Customs and border control, but there are also many issues that need to be addressed before the introduction can be successful.

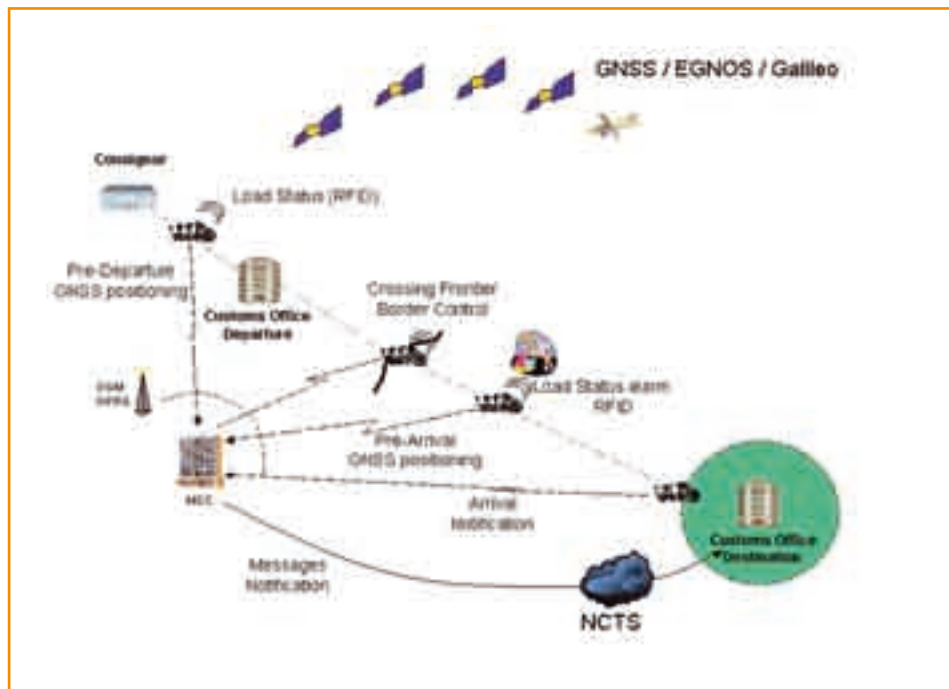
Specifically, M-TRADE was identified as a main enabler to gather consensus among the main stakeholders. Examples of issues include:

- *Providing clear responsibilities for Customs and commercial users; how should the roles/responsibilities be divided between commercial users and Customs?*
- *Detailing investments for the use of GNSS; who is going to pay for the equipment and operative costs, the communication costs and the communication network?*
- *Defining a comprehensive cost-recovery mechanism; what are the detailed costs/benefits for Customs and commercial users?*

Real-life pilots, such as those done for the commercial users, could be a possible solution to overcome these issues. Besides real-life pilots, more research needs to be done relating to the full use of Galileo features, the current and future Customs systems (e.g. ASYCUDA, NTCTS, ECS, etc) and the combination of electronic seals with GNSS.

Conclusion

From the M-TRADE project it can be concluded that GNSS (and in particular EGNOS/GALILEO) has undoubtedly interesting opportunities for Customs and border control. However with the introduction of GNSS for Customs and



NCTS : New Computerised Transit System ; MCC: Mission Control Centre ; GSM : Global System for Mobile Communications ; GPRS : General Packet Radio Service





border applications, the needs and requirements of commercial users need to be taken into account. When both user-needs and requirements are met, GNSS could be introduced successfully in the multimodal freight transport area. This would enable controlled shipments with recognised secure operators (AEOs) to pass with "Green Lane" clearance, which makes both Customs and commercial user processes more efficient and effective. ●

More information

- **Author:** Suzanne.Smit@LogicaCMG.com
- **Contributors:** Antonella.difazio@Telespazio.com
rcapua@sogei.it

Websites

- **M-TRADE:** <http://www.newapplication.it/mtrade>
- **GSA:** http://ec.europa.eu/dgs/energy_transport/galileo/index.htm
- **EGNOS/Galileo:** <http://www.esa.int/esaNA/index.html>



Technology enables smart and secure Canadian borders

Exploding volumes of international commerce, North American free trade revolutionary advances in transportation and containerisation, a new value-added tax, unprecedented demands on the immigration and refugee system, new threats to public health and agriculture (SARS & BSE), 9/11, and then an integrated border management agency!

The evolution and application of automation was critical in managing Canada's vast borders in the context of these late 20th and early 21st century pressures.

Continued innovative technology and thinking will be absolutely vital in the continued success of the Canada Border Services Agency (CBSA). Leading-edge science and technology will continue to enable and transform border management operations, creating a smarter, more secure and more efficient 21st century border.

Foundations for the future

The application of technology to support Canadian border management began in the 1970's, with early systems to process Customs data and provide operational support to immigration officers. Through the 1980's, more functions were automated and older systems were upgraded. Computer-to-computer electronic data interchange (EDI) realised true productivity gains and facilitated risk analysis prior to the arrival of goods and people at the border.

By the 1990's, the majority of customs entries were electronic, and when Canada implemented an electronic release system in 1996, the commercial import process was revolutionised. Importers and brokers could cost-effectively centralise their operations, while border officers were able to shift their focus from administrative functions to risk management. By 2000, over 80% of imports were release using EDI.

It is from this foundation that science and technology helped transform border management in Canada over the past 5 years. The attacks of 9/11 added urgency, and change was enabled

"We are taking advantage of the best science and technology available to increase our use of evidence- and science-based solutions that will lead to improved border security and accessibility"
 ...Alain Jolicoeur,
 CBSA President

by the 2003 decision to integrate Canada's border management mandates of Customs, immigration, and plant and animal inspection into a single agency, the CBSA, as part of the Public Safety Portfolio.

Innovation is the key

With the vision and the success of leveraging automation and innovative programmes to achieve "smart" border management, the CBSA has become an innovative, science and technology-enabled organisation. In fact, within the Agency's strategic framework, science and technology-based innovation is a core programme activity in parallel with the security and access activities.

The CBSA has a dedicated Innovation, Science and Technology Branch, which brings together major project development and delivery expertise, systems, technology and science and employs an integrated, enterprise-wide business transformation approach. Multi-disciplinary project teams include planners, program specialists, system architects, business and technology specialists, statisticians, mathematicians, scientists and engineers. This approach has allowed the CBSA to successfully pursue a proactive innovation agenda resulting in modernised and effective border management and recognition as a leading innovative organisation both at home and around the world.

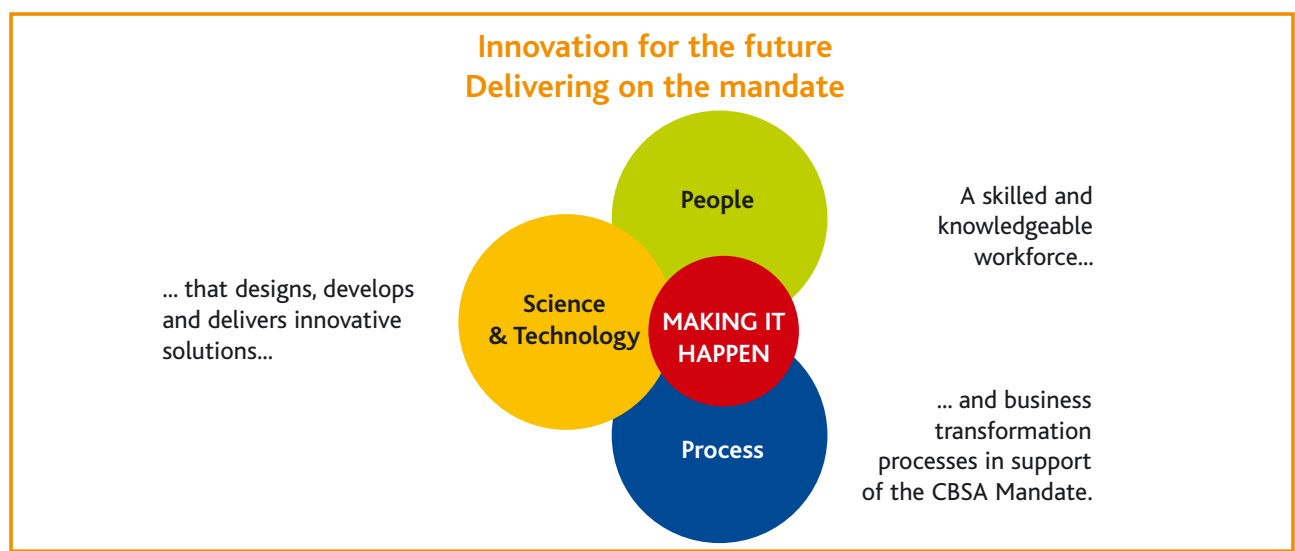
Technology is imperative

This decade has been characterised by the evolution of science and technology's influence from being primarily tactical to becoming a fundamental strategic element. The CBSA's 3 border strategies are enabled by modern technology: receiving advance electronic information on who and what is coming to Canada; turning information into intelligence using sophisticated risk-assessment systems; and using advanced programs and technology to facilitate the passage of low-risk, trusted travellers and traders. Meanwhile, the CBSA's scientific capacity, nurtured by world-class scientists and a progressive laboratory, fortifies its border enforcement posture and positions the Agency to fully leverage leading science and technology opportunities.

Technology is now an integral part of border management. The CBSA receives advance information from airlines and uses this information to apply automated risk screening. Biometrics forms the basis for leading-edge trusted-traveller programmes, including a multi-modal, joint Canada-US program called NEXUS. NEXUS Air members step up to a small kiosk where an innovative iris recognition tool can verify the traveller's identity based on 266 characteristics. "Our use of iris recognition technology is on the leading edge" says Mr. Jolicoeur. NEXUS - now available at three Canadian airports - will be expanded to five other major Canadian airports by the end of 2007.

"Every organisation needs one core competence - innovation"
 ...Peter Drucker,
 Management Theorist

The CBSA has invested significantly in detection technologies to meet the demands of securing Canada's border. Effective, non-intrusive inspection technology includes the applica-





evidence recovery (CSERs) to support investigations of commercial fraud. Since child pornography has evolved from magazines and videotapes to computer files and DVDs, the CSERs also support interdiction efforts by examining computers and other electronic devices at ports of entry.

Border process innovation is continuing. The Advance Commercial Information (ACI) Programme is about getting the right information, at the right time, to make informed decisions. The ACI system is one of a few automated commercial and risk assessment systems in the world, receiving over 6 million annual air and marine electronic import transmissions to pre-assess security and health threats. The number of the

tion and development of Ion Mobility Spectrometry, Mass Spectrometry and other techniques to identify trace amounts of narcotics and explosives; density meters to discover hidden walls; counterfeit detection equipment; and remote operated vehicles to inspect the hulls of ships.

The mobile Vehicle and Cargo Inspection System (VACIS), a truck-mounted, gamma-ray scanning system that scans marine containers, rail cars or trucks quickly and safely, helps officers to detect hidden compartments, contraband, weapons and other potentially dangerous goods.

This year, installation of a portal radiation detection network called RADNET will be completed at Canada's major seaports, increasing the ability to quickly mass-screen marine containers to detect illicit shipments of radiological materials. The portals used are unmanned, and as such, this sets the architectural framework for the CBSA to include other remote sensor applications in the future.

Technology has also become a critical tool for searching and acquiring evidence of criminal offences. As international commerce and communications are now largely conducted through the use of computers and other electronic devices, a specialized group of investigators are trained in computer search and

CBSA's EDI transactions will increase dramatically over the next five years with the development and deployment of eManifest - the expansion of the ACI programme to the highway and rail modes.

All CBSA border systems must include appropriate security controls and respect Canadian and international privacy laws. CBSA has long recognized the importance of data quality and data harmonisation, and has played a leading role advancing international data standards with a focus on the WCO. Through the implementation of the WCO Customs Data Model, Canada has demonstrated its commitment to the goal of a secure international supply chain.





Effective partnerships with international organisations, the trade community, law enforcement agencies, the private sector, other Canadian federal and provincial governments, and other border administrations are another foundation for CBSA's innovation agenda. It is under the aegis of the Security

and Prosperity Partnership of North America (SPP) that the next generation of smart border management is advancing through projects such as eManifest and NEXUS Air. ●

"As we look ahead to the future, we know we need to keep pushing the borders out, moving processes away from the border, using innovative thinking and proven advanced technologies to create a smarter and more secure border. My goal is to continue to transform the Canada Border Services Agency into an innovative, highly dynamic science- and technology-based learning organisation that keeps pace with the public need"

...Alain Jolicoeur, CBSA President

More information

www.cbsa-asfc.gc.ca

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The UCR under the spotlight



In international trade, traceability requirements become ever more stringent. Using a unique identification system for trade and transport units becomes a necessity to enable supply chain security and to combat cross border fraud. It also provides an efficient tool to exchange information between all stakeholders.

The GS1 SSCC (Serial Shipping Container Code) is well established as a unique identifier of logistics units amongst trading parties. This will reduce the compliance costs of trading parties when implementing SSCC as a unique consignment reference (UCR). It will also simplify the integration of data by any stakeholder: customs authorities and trading parties all benefit from a single reference.

About the SSCC pilot

A pilot project is ongoing to demonstrate the use of the GS1 SSCC as a UCR number and to prove the benefits for all parties involved. Within this pilot, the SSCC number is used in the wine and spirits supply chain between the United Kingdom and Australia amongst the following parties:

- HM Revenue and Customs (UK);
- Australian Customs Service;
- Constellation Europe;
- Hardy Wine Company;
- Diageo;
- Trans Ocean Distribution (TOD).

The pilot consists of two flows of goods: transportation of bulk wine from Hardy Wine Company (Australia), to Constellation Europe (CEL), the UK; and transportation of cased spirits from Diageo Scotland to Diageo Australia. The WCO, the UK Wine and Spirits Trade Association and GS1 have joined forces together with these parties to support the pilot project. The project started in March 2006 and will run until June 2007.

In an interim report, one HM Revenue and Customs audit officer commented: "By using the SSCC number it was very easy to trace this to the import file which contained the full details

of the import. The SSCC number was stated on the majority of the key import documents and this allowed the import to be traced from the SSCC number, import entry number, bill of lading, and Hardy Wine Company invoice or purchase order number. With the way the stock control system has been set up at Constellation Europe, the adoption of the SSCC as the UCR would provide a unique identification code for audit, consignment tracking, and verification and reconciliation purposes".

Furthermore, the participating trading parties have confirmed that the interim results of the pilot meet their initial expectations:

- SSCC is already a well established and utilised tool within the global trading environment and can facilitate the global adoption of the UCR within the regulatory environment;
- SSCC provides an adequate level of uniqueness for the identification of shipments and supports critical requirements for Customs risk management and audit purposes;
- SSCC provides the potential for access to comprehensive and timely information for the Customs authorities, by linking commercial and customs information.

The SSCC pilot in operation

Before the pilot, Hardy Wine Company was already using the GS1 SSCC in their manufacturing and distribution processes. They have since extended it to international transactions and to the legally mandated declarations to Customs. When they allocate the SSCC for their ready-to-export "flexitank" of bulk wine,



this number is logged in the internal system and on commercial documentation that accompanies goods in transportation. The SSCC - UCR information is now also sent to the Australian Customs Service as part of the export declaration. When goods are ready for dispatch, the SSCC is sent to their logistics service



provider (TOD - Trans Ocean Distribution), and to the importer (Constellation Europe). The Australian Customs authorities email the SSCC numbers to HM Revenue and Customs in the UK. This means that they are now all using a single reference for the same transport unit.

Also, TOD records this information in their internal system, allowing the status to be queried during its transportation to the UK. SSCC-UCR information is included in the import Customs cargo declaration submitted for clearance of goods. HM Revenue and Customs verifies trade information with the Customs information by referencing SSCC and shipment data. When released, Constellation Europe cross references the SSCC of incoming shipments to the initial purchase orders and to lot/batch numbers, ensuring complete traceability from order until delivery.

About the SSCC

SSCC is the GS1 Identification number that uniquely identifies logistics units: pallets, cases, crates, etc. During the manufacturing or packaging process, the logistics unit is created and identified with an SSCC. This number identifies a shipment during its entire life cycle of transportation, distribution and management throughout the supply chain. In its structure, it is a non-significant fixed-length 18-digit number. It is constructed from a company prefix, a serial number of a shipment, an extension number designated by a company, and a check digit.

The structure of the SSCC



According to the WCO UCR Recommendation, the UCR should align with the requirements of the ISO/IEC 15459, called the "License Plate" or an equivalent proprietary number. GS1 is an authorised issuing agency under this standard. The SSCC is the only "License Plate" identifier with a full numeric structure that provides additional security thanks to the check digit. ●

More information

www.gs1.org/sectors/transportlogistics/sscc_ucr/
yuliya.shevchenko@gs1.org

GS1 is a leading global organisation dedicated to the design and implementation of global standards and solutions to improve the efficiency and visibility of the supply and demand chains globally and across sectors. The GS1 system of standards is the most widely used supply chain standards system in the world. GS1 operates in more than 20 industries and sectors in 104 countries and addresses all aspects of the supply chain, enabling a million companies of all sizes to execute more than five billion transactions a day.

Customs metrics and measurement

Introduction

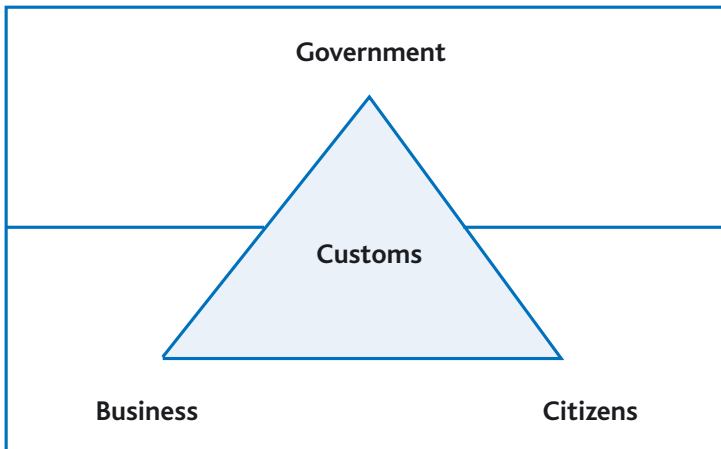
Customs services worldwide are facing a wide range of changing demands and expectations from their governments, the business communities, and their citizens.

These changes are based upon several dynamics, including a new focus on supply chain security, in the face of precipitous rates of growth in the volume and pace of international trade. The rapid increase of free trade provisions, the emergence of national concerns for protecting intellectual property rights, and preventing trade in unsafe, unhealthy or ecologically damaging goods are other dynamic elements. In the midst of all this change, there are increased demands on Customs programmes for the uninterrupted flow of goods.

Booz | Allen | Hamilton

Booz Allen Hamilton has been at the forefront of management consultancy for businesses and governments for more than 90 years, providing consulting services in strategy, operations, organisation and change, and information technology. Booz Allen is the one firm that helps clients solve their toughest problems, working by their side to help them achieve their missions. Booz Allen is committed to delivering results that endure.

Governments expect a world class Customs service capable of improving its effectiveness and efficiency in terms of processing and controlling the increasing trade volumes and work load, often with less resources. The business community, however, expects



predictability and speed in the way Customs is conducting its business. This well known Customs dilemma requires Customs services to measure critical processes and functions in order to be able to validate their effectiveness and efficiency, to compare their performance against international best practices, and to set development and improvement targets as part of Customs reform and modernisation programmes.

While the saying "What is not measured, cannot be managed" also applies to Customs, the focus for Customs management has to be to measure those functions and programmes that are mission-critical and a priority. Nothing creates more bureaucratic overhead than the administrative nightmare of measuring functions that don't matter and no one uses.

Metrics programmes

There are two basic categories of performance metrics that should be considered by Customs managers as essential to their understanding of operations and programmes.

The first programme is *operations metrics*, which includes volume information set by time period and geographic location. These are basic metrics that already exist for most Customs functions and are applied to all common Customs operations. They include such measures as release time, the number of declarations filed, the amount of revenue generated, the number of transportation arrivals and departures, the number of inspections performed, the number of seizures, the rate of compliance, etc. - all according to time periods and location of activity.

Traditionally, countries accumulate these metrics for large categories and over lengthy periods of time to satisfy government statistical reporting requirements for quarterly, semi-annual, or annual reports. However, to be useful as a management tool that provides for trend analysis, the allocation of personnel and

facilities for performing Customs operations or comparing changes in productivity, collections, and revenue or enforcement, such information needs to be available on demand, at a more detailed level and capable of being flexibly displayed for a wide variety of variable categories over short periods of time.

To establish such metrics it is recommended that they-

- cover entire Customs clearance operations;
- define clearly which functions are most important for evaluating effectiveness and efficiency;
- keep the matrix of requirements simple and in concert with the process flows;
- engage a wide range of managerial experience and operations in defining the choices;
- build a methodology for periodic maintenance and updating of the metrics programme right from the beginning; and
- establish an objective means for collecting, analysing, and reporting the information to users.

The second, and probably more difficult metrics programme, refers to *programmatic or goal-oriented metrics* that are necessary to be considered during the planning and implementation of new programmes. It is critically important for senior Customs managers to actively oversee the measurement and decision-making process for new Customs programmes. Measurements for new programmes are, by definition, related to the strategy and objectives of the programme. The measures should be applied to all factors: planning; cost; development; testing; training; implementation; operation; review and maintenance; as well as the planned retirement or improvement of the programme.

The essential questions to be answered are:

- Are we on schedule and within cost?
- Is operational development meeting the prescribed objectives of the original intent of the programme?
- Are considerations for testing, training and implementation being considered?
- Have we engaged stakeholders at every review step of the process?

It is always recommended that, to the extent possible, the metrics should be produced, analysed, and displayed through the use of information and communication technology, preferably integrated in existing operational IT systems. Through the use of IT, the results are likely to be available faster and on demand, more accurate, and provide a wide range of flexible choices for reporting the information.



Conclusion

The existence of a metrics programme cannot and should not be confused with managing the administration. The existence of metrics in the absence of sound management is useless. Likewise the existence of good managers without sufficient metrical tools has proven to create uneven and often chaotic results.

A well defined and operated measurement programme is constructed and operated under the direction of Customs managers responsible for the programme. It must be well maintained and adhere to either legislated mandates or operational realities and must be adjusted as conditions change. Measurements are only a means for aiding the management process; they are not a substitute for reasoned decision-making. They should be limited to only those operational requirements

where metrics clearly and continually contribute to improved and consistent results.

There are only a few international standards available for Customs measurement. Customs services are encouraged to take advantage of the Time-Release Study of the World Customs Organization as a world-class source for guidance on the issue of measurement programmes. Also, consulting with other national Customs experts on their measurement programmes will produce sound guidance especially in the area of actual experience. ●

Robert W. Ehinger and Dietmar Jost, Booz Allen Hamilton

More information

jost_dietmar@bah.com

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