Can IT assist with the challenges involved in much closer coordination amongst border agencies including Customs?

The Answer is YES!

The best possible example of this are National Single Windows for Trade
WB working definition**

- **Single Window “Lite” or Regulatory SW**
  - A single point of electronic entry to facilitate the lodging of standardized information once to fulfill all import, export and transit-related *regulatory* requirements. This includes the submission and processing of regulatory requirements prior to the arrival (or notification of arrival) of goods

- **A Trade Facilitation Single Window**
  - A single point of electronic entry to facilitate the lodging of standardized information once to fulfill all import, export, and transit-related *regulatory* and *commercial logistics* requirements

**Siva & McLinden – World Bank, 2007**
A trader submits electronic trade declarations to the various authorities for processing and approval in a single electronic application. Approvals are transmitted electronically from governmental authorities to the trader's computer. Fees, taxes and duties are computed automatically and deducted from the traders' bank accounts.
A trader submits electronic requests for all trade-related licenses and permits. The information at each stage is captured once, stored and reused as needed. Once the initial permits stage is passed and the trader lodges a specific trade declaration to import or export goods, the processing and approval for this declaration is done in a single electronic transaction from the trader's perspective.

Approvals are transmitted electronically from governmental authorities to the trader's computer. Fees, taxes, and duties are computed automatically and deducted from the trader's bank accounts.
What a Single Window for trade is not..

- **A Customs Declaration Processing System**
  - May be heavily customized to accept permit and license information from OGA systems, but still will require that the application process is done independently
    - Not a single submission with reuse of information

- **A Port Community System**
  - Generally an efficient collector and distributor of port logistics related information between multiple stakeholders, but generally has no ability to manage regulatory processes
    - Not a single submission with reuse of information for regulatory permits and licenses
Modern Border Management Systems

*ICT is just the tip of the iceberg*

**Reach**
- Service Delivery Standards & Improvement
- Data Exchange and Enhancement

**Richness**
- Confidentiality
- Data Security
- Internal & External Partnerships

**Sustainability**
- Cultural, Legislative, Policy and procedure change processes

Trader On-Line/ Multi-Channeled Access
- Case-Flow & Content Management: Work Flow Management
- Enterprise-Wide Solutions: Business Process Improvement
- Security & Authentication, Technical Interoperability
- Organization & Process Change and Transition Management

Trader & Citizen Relationship
Factors in NSW Implementation

- Legal and Regulatory Framework
- Governance and Operational Model
- User Fees and Cost Recovery
- Intra Agency SLA’s
- Business Process Re-Engineering and Continuous Change Management
- Organizational & HR ICT management
- Functional & Technical Architecture

ICT is only one small factor, that is readily solved. The other factors at play in an NSW implementation are not so simple…
Legal & Regulatory Framework

- Eagerness for government service delivery to migrate from inline to online often overlook complex social, regulatory and legal issues.

- Regulatory reform is crucial for e-government success, both in terms of affordability and long-term sustainability -> is a “must do” to guide most single window applications.
  - A range of suitable legal and regulatory measures is needed for integrating and sharing data systems within and among administrations - and the use of this public information by third parties, especially the private sector, safeguarding privacy and security issues.
  - Legislation should also identify types and standards for electronic signatures and electronic authentication and allow, but regulate, electronic record keeping.
Governance Model

A clear governance mechanism is needed to:

- Oversee the operating entity for the national single window
- Provide policy oversight for the national single window operating entity
- Protect the government’s policy interests in the national single window
- Oversee the success of the national single window in meeting government policy objectives
Operational Model

- Needs to cover everything from obtaining and establishing technology and infrastructure platforms to the management, operation, and provision of services through the national single window.

- Public-private partnerships, state owned enterprises, or a specialized government agency—as well as other arrangements or combinations of arrangements—should be explored.

- The strengths, weaknesses, and risks of each option, specifically within the national environment, should be identified and understood.
Fee Structure

- User Fees are expected to cover at least the costs of operation and maintenance, plus any incremental costs to government agencies participating in the national single window
- Compliance with WTO & GATT
- Determining and gaining agreement on a revenue sharing model—to ensure that all participating stakeholders are reimbursed for administrative expenses incurred through participation—is key
Service Level Agreements (SLA)

- To meet the timeliness and predictability objective, a generalized framework of service levels and overall service level for the national single window need to be prepared.
- Service level agreements have most value when they can be monitored.
- Monitoring and enforcement of service level agreements are critical to national single window governance.
“Modernization” not “Automation”

Driver – What needs to be done – not the “how”

The business change approach should:

- Describe the main change phases and activities for the modernization program.
- Identify key performance indicators to measure the impact of reforms.
- Outline times for each phase, including key deliverables and milestones.
- Identify dependencies among modernization program tasks.
- Estimate resources required.
- Continually communicate—to agency staff and to external stakeholders—the reform program’s management expectations, present status, and successful outcomes to date.
Functional & Technical Architecture

- Access and usage security architecture (identification, authorization, encryption, non-repudiation, audit trails).
- Physical security architecture (transaction logging, restart journals, backup sets, restart methods, recovery methods).
- Performance monitoring model (data logging and analysis).
- Infrastructure resilience features (data storage, data access controllers, servers, processors, communications channels) and identification of single points of failure.
- Scalability policy, plans, and features.
- Software architecture.
- Data quality controls (field validation, referential integrity).
- Data standards (United Nations electronic Trade Documents [UNeDocs], national trade data element dictionary, WCO Data Model, World Trade Organization reference tables).
- Message standards (XML, other standards).
Functional & Technical Architecture

- Internationalization (language requirements in messages, all traded currencies for World Trade Organization members).
- Harmonized Commodity Description and Coding System codes (may require agency data set harmonization).
- Implementation support (usage manuals, training, help desk).
- Commercial infrastructure (server equipment providers, communications equipment providers, other hardware providers, infrastructure software providers, support and maintenance providers).
- Software development toolset.
- Software development method.
- Software development artifacts (requirements specification, design specifications, source code, configuration tables, testing plans and results).
- Version control and configuration control methods.
- Development plans (anticipated roll-out, functional expansion, ongoing work and time scales).
TFSW Architecture
Thank you...