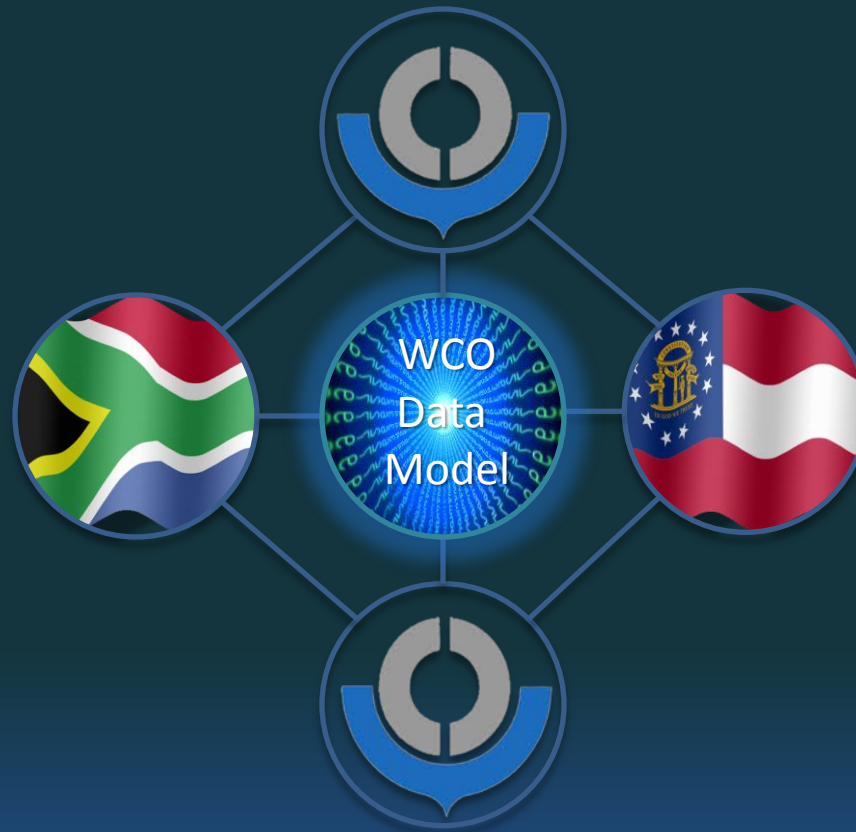# SA Revenue Service

Experience in implementing the WCO Data Model

WCO Data Model

World Customs Organization (WCO) IT Conference & Exhibition

Outline of Presentation

1. Reality facing Customs – Globally, Regionally and Nationally

2. South African Customs - Prior to Modernisation

3. Standardisation – a Single Data Model for Customs Clearance

4. Consolidation of clearance and release requirements

5. E-Commerce engagement with Stakeholders

6. SARS EDI capability and coverage

7. Data Mapping in SARS

8. Fundamentals for Standardisation

9. Conclusion

Global Reality

Increased volumes and complexities of international trade

New business models and requirements

Increased security threats and organized crime

A new approach to the "border"

Demands from society

New trading patterns

Increase in revenue fraud

WTO Trade Facilitation Agreement

Regional and National Reality

Increasing Trade Volume

Increasing Supply Chain Threats

Trader Compliance

CBM

- Trade Agreements
- Port congestion
- Customs workload

- Smuggling
- Terrorism
- Cross border crime
- Unsafe goods

- Lack of transparency
- Under invoicing and
- Mis-declaration
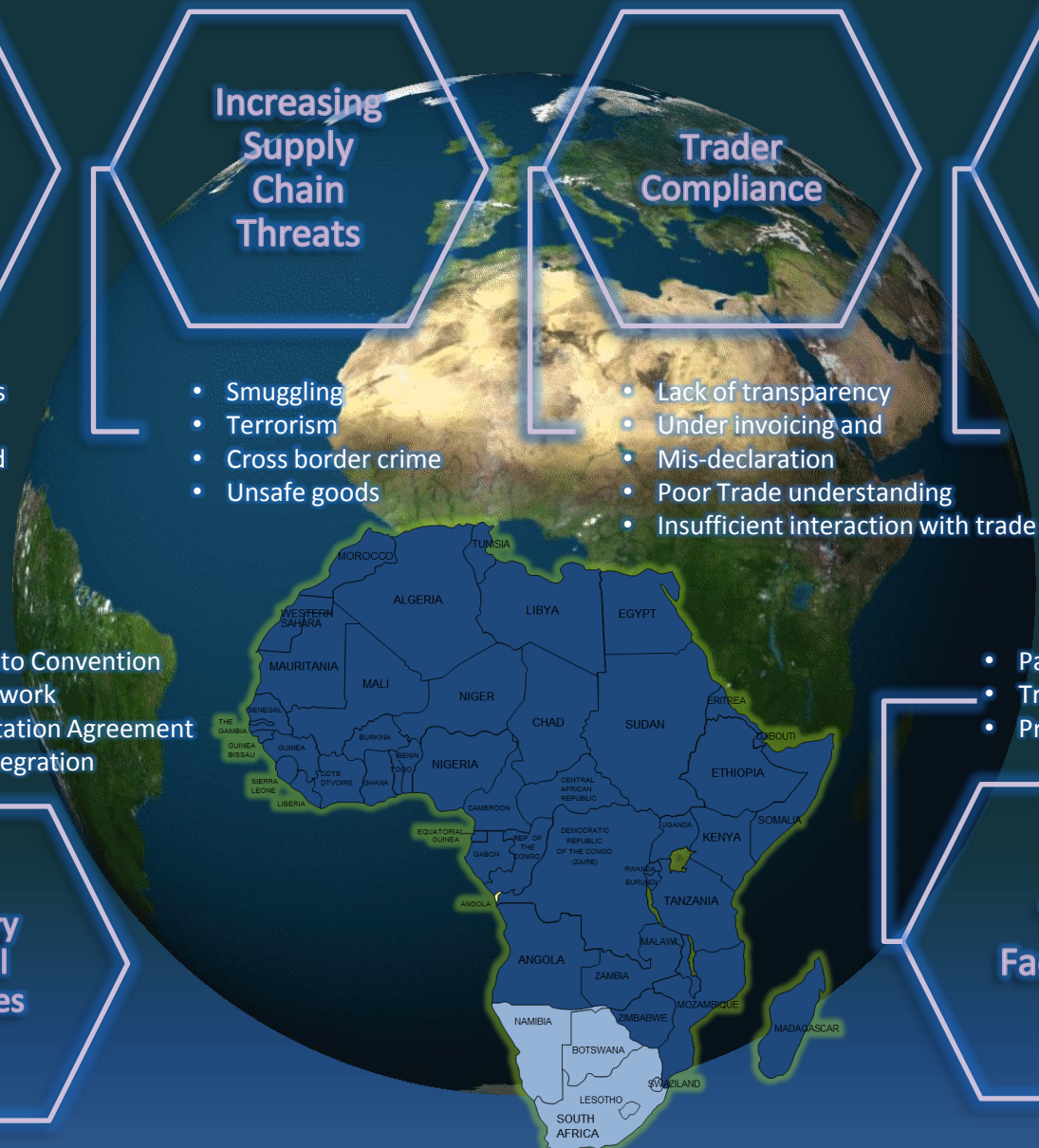- Poor Trade understanding
- Insufficient interaction with trade

- Collaboration & Connectivity
- Requirements and needs
- Single Window

- Revised Kyoto Convention
- SAFE Framework
- Trade Facilitation Agreement
- Regional Integration

- Parity in decision making
- Transactional costs
- Processing time

Regulatory and Legal imperatives

Trade Facilitation

2

SARS

South African Customs – Prior to Modernisation

- Customs Processing characterised by disparate, non-connected systems.
- Reliant on significant human intervention and transactional verification.
- 3 separate data structures (imports, exports and cross-border) – partial alignment with the WCO Data Model.

International Imports
EDI – High industry uptake

- Operated on semi-automated inputs (diskette) between 1981 – 2001
- EDI clearance and release since 2002   **> 95% industry uptake.**
- Well advanced functionality – risk management and electronic deferment

International Exports
EDI – low industry uptake

- Operated since 1995
- Basic clearance and release functionality
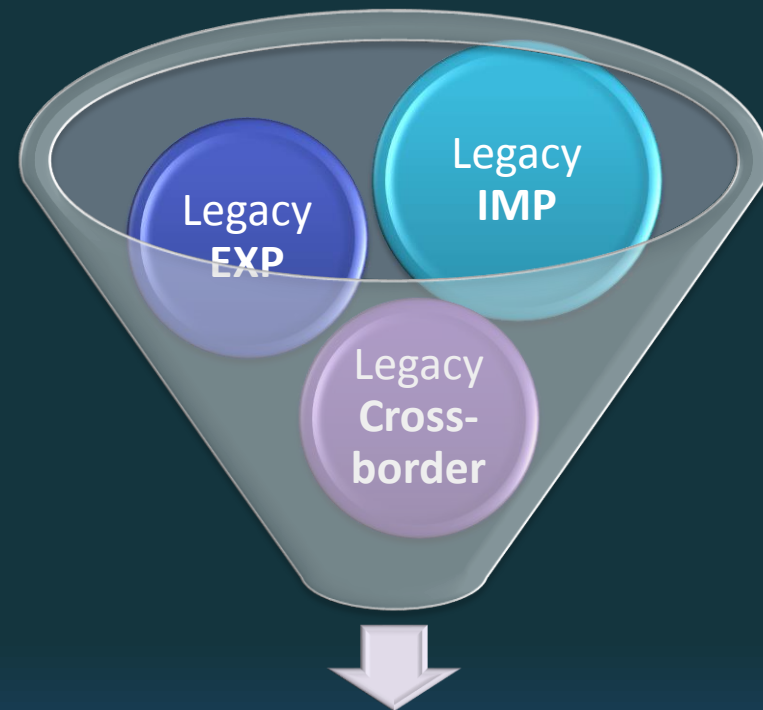- EDI since 2005 **< 50% industry uptake**

SA Customs Union Movements
Manual Capture – unstructured data = poor data quality

- Legacy System Operated since 1997
- Centralised data capture.
- Limited to VAT control.

3

Standardisation – a Single Data Model for Customs Clearance

- **Consolidate** all legacy system data fields – imports, exports and cross-border - into a single data table.

- **Map** all declaration data fields to the WCO Data Model.

- **Derive** a declaration (CUSDEC) sub-set from the WCO Data Model.

- **Define** code lists.

- **Define** data conditionality's for usage across customs procedures (CPCs).

Legacy EXP

Legacy IMP

Legacy Cross-border
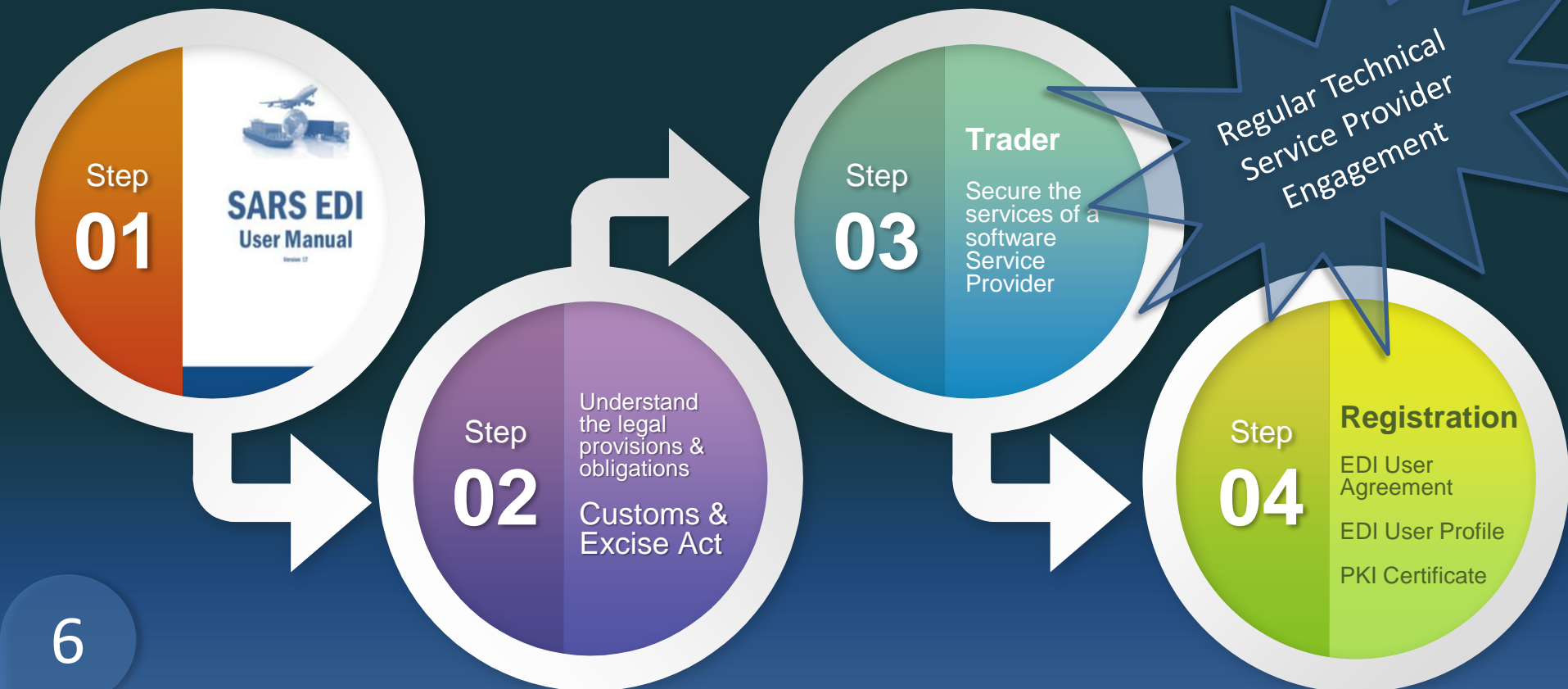
New SA Customs Data Model

4

SARS

Consolidation and Standardisation – developments post 2009

- Accession to **RKC** in 2005 – recognised **need to modernise**.

- Recognised need to **standardise and streamline clearance and release** processing.

- Automated **end-2-end processing** - elimination of unnecessary manual interventions through **enhanced risk management**.

- Focus on **innovation** to bring about trade benefits in the clearance process.

STEP 01
- Consolidate all clearance and release requirements.
- Single data model for import, export & cross border clearances
- New procedure coding system

STEP 02
- Enhanced automated Risk Management
- e-Supporting documents

STEP 03
- Integrated end-2-end processing.
- Automated case management and workflow,
- Mobile inspection capability and
- '*Proceed-2-border*' functionality

STEP 04
Consolidate and standardize
- Trade Statistics,
- Reserve Bank reporting, and
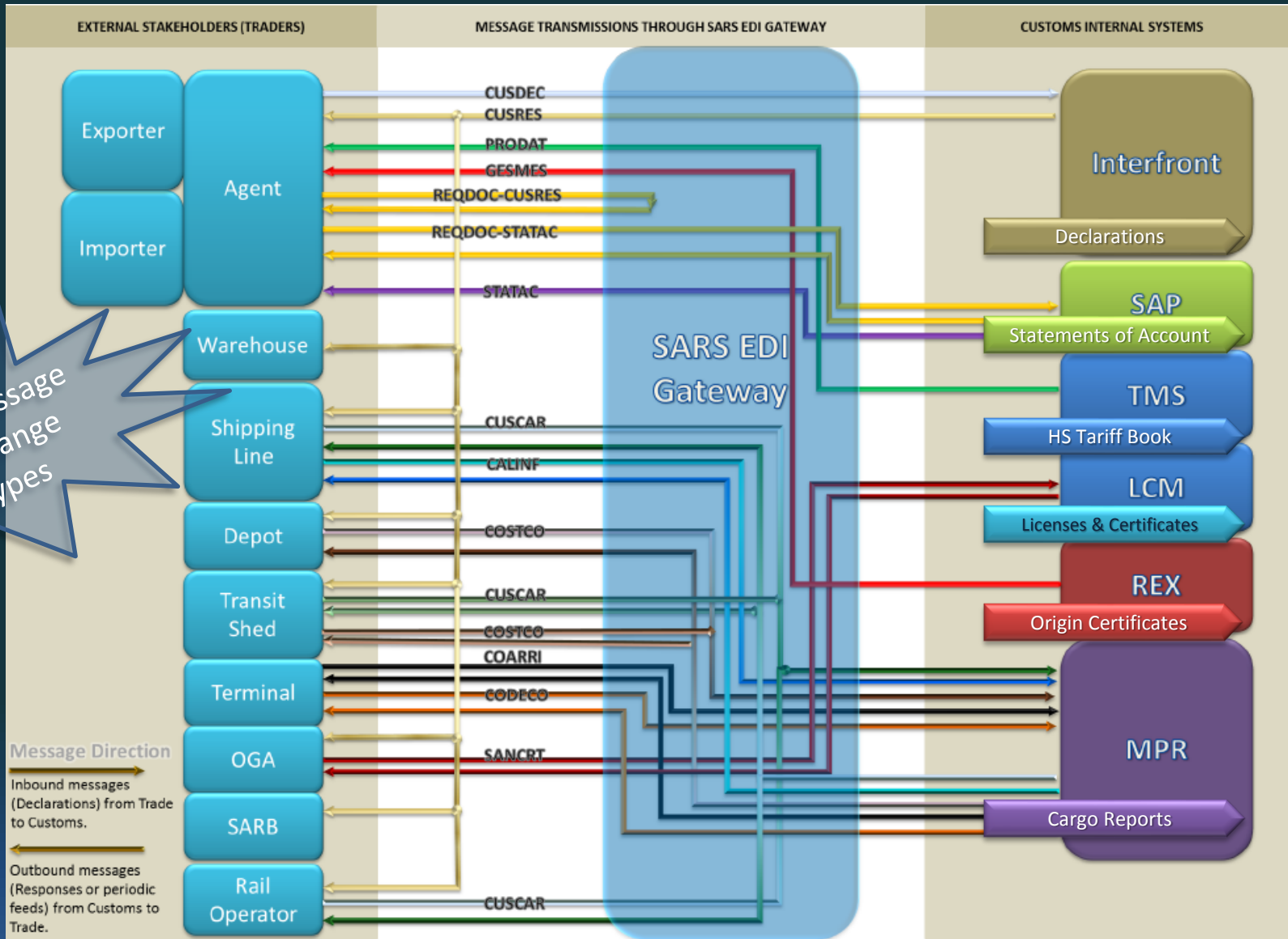- development of C-2-C cross-border data exchange

5

SARS e-Commerce and Stakeholders

- EDI User Manual > including data mapping guides, branching diagrams for technical service providers supporting industry.

- Law > Section 101A , Customs & Excise Act – obligations for "Electronic Communication with SARS"

- Registration Process > Application as an Electronic User with SARS and "User Agreement":

  – Specifies transaction types to be exchanged – declarations, cargo reports, certificates...

  – Creation of Client EDI user profile and PKI signature

Step **01**

SARS EDI User Manual

Step **02**
Understand the legal provisions & obligations
Customs & Excise Act

Step **03**
Trader
Secure the services of a software Service Provider

Regular Technical Service Provider Engagement

Step **04**
Registration
EDI User Agreement
EDI User Profile
PKI Certificate

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SARS EDI capability – a broad industry coverage

7

WCO Data Model & Data Mapping in SARS

For Customs

- **GEFEG.FX** used for WCO Data modelling and mapping.
- WCO derived data subsets supporting:
  - **B-2-C** Customs clearance and Cargo reporting requirements
  - **C-2-G** Regulatory permits and balance of payments requirements
  - **C-2-C** Currently involved in data exchange initiatives with Swaziland and Mozambique
- Output for Users – SARS EDI Users Guide.

For Tax

- Messaging capability developed to support:
  - **FATCA** (Foreign Account Tax Compliance Act) – RSA ⟷ USA
  - **C-b-C** (Country-by-Country reporting) under the OECD BEPS Action report.

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Data Exchange requires reliable 'Big' Processing Power

Customs Modernisation culminated with increased reliance on automated messaging :

- megabytes became gigabytes

- redundancy and reliability are critical to 24/7 operations

- a modern e-Commerce gateway:

Management Component (B2B interchange)
- Transaction based processing
- Trading partner agreement management
- Version control
- Real-time view of processing volumes

Data Transformation Component
- Any-2-Any format transformations.
- Many inputs-2-Many outputs can be referenced
- Rapid deployment of international standards
- Graphical drag and drop interface

Communication Component
- Highly secure
- High availability, fast and efficient
- Multiprotocol gateway setup - different protocols

A NEW B2B GATEWAY
Future-proofing SARS
data exchange needs

Fundamentals for Standardisation

SARS recognises as an imperative the following -

- Ongoing and active participation in :
  - data exchange standards development at WCO
  - developments concerning Globally Networked Customs (GNC)

- Proactive lead in:
  - national trade community fora (Technical Stakeholder Forum)
  - other government agency cooperation (Dept. of Agriculture & Fisheries)
  - bi-lateral engagements with neighbours (SACU, Mozambique)
  - other regional and continental trade regionalisation initiatives (SADC, AU)

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Conclusion

Connectivity enabling Data Analysis for 'Effective Border Management'

National
CONNECTIVITY

- B-2-C
- C-2-C (internal)
- C-2-G

Regional
CONNECTIVITY

- C-2-C

International
CONNECTIVITY

- C-2-C

CONNECTIVITY

"Connectivity encompasses people-to-people, institutional & information linkages that underpin and facilitate the achievement of Customs"

(Secretary General: WCO)

DATA ANALYSIS

Data Analysis empowers customs officers and contributes to establishing a level playing field

"Data Analysis for Effective Border Management'

(Secretary General: WCO)

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Thank You

Varsha Singh - South African Revenue Service

WCO Data Model