TIR B2C/B2B Computerization

Status and

Cost Considerations

Geneva, March 9-10th 2011

Agenda

- Computerization of TIR B2C/B2B

  - Overview & recent progress

    - TIR-Electronic Pre-Declaration (TIR-EPD)
    - Real-Time SafeTIR (RTS)

- Cost considerations

  - Categories and approach

  - Investment & operational costs

  - Recommendations

Computerisation of TIR Background

A true public – private partnership since 60 years:

> The IRU has been successfully working with Contracting Parties within the WP-30 and at national level as well as with IRU Associations to reinforce the security of the TIR System

The IRU started computerizing the TIR system 35 years ago:

- By computerising the exchange of TIR carnets termination data and invalid carnets data amongst Customs, Associations and IRU

- By making available for Customs, online and free of charge, the statuses of all TIR carnets (CUTE-Wise)

- By computerising the management of TIR carnets at the levels of the Associations and the IRU
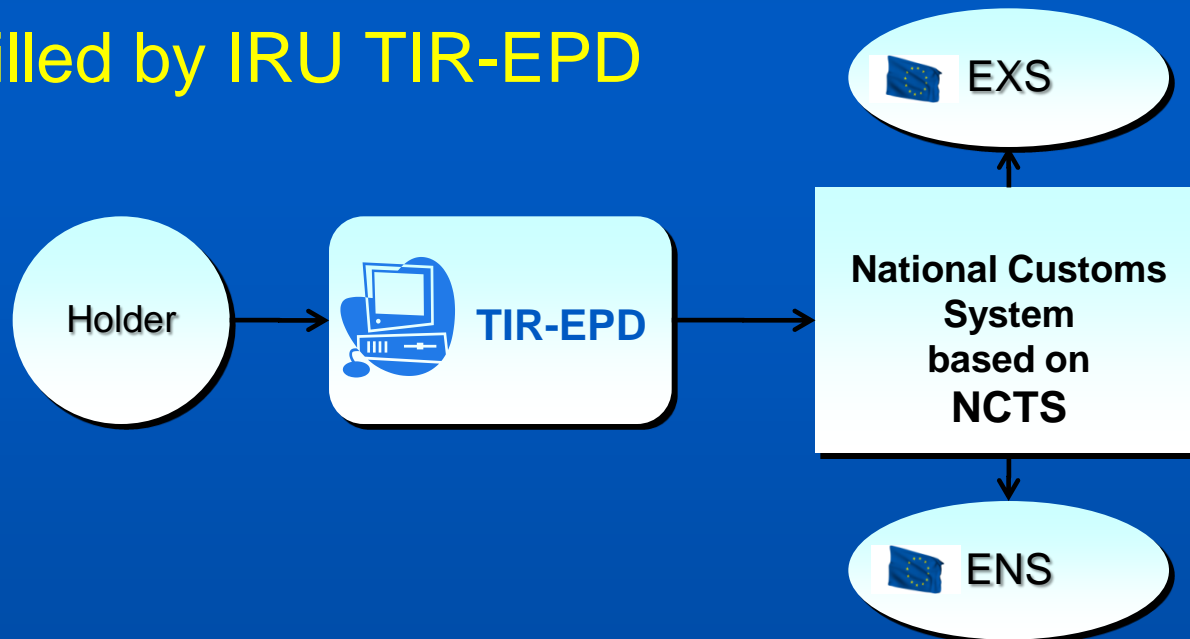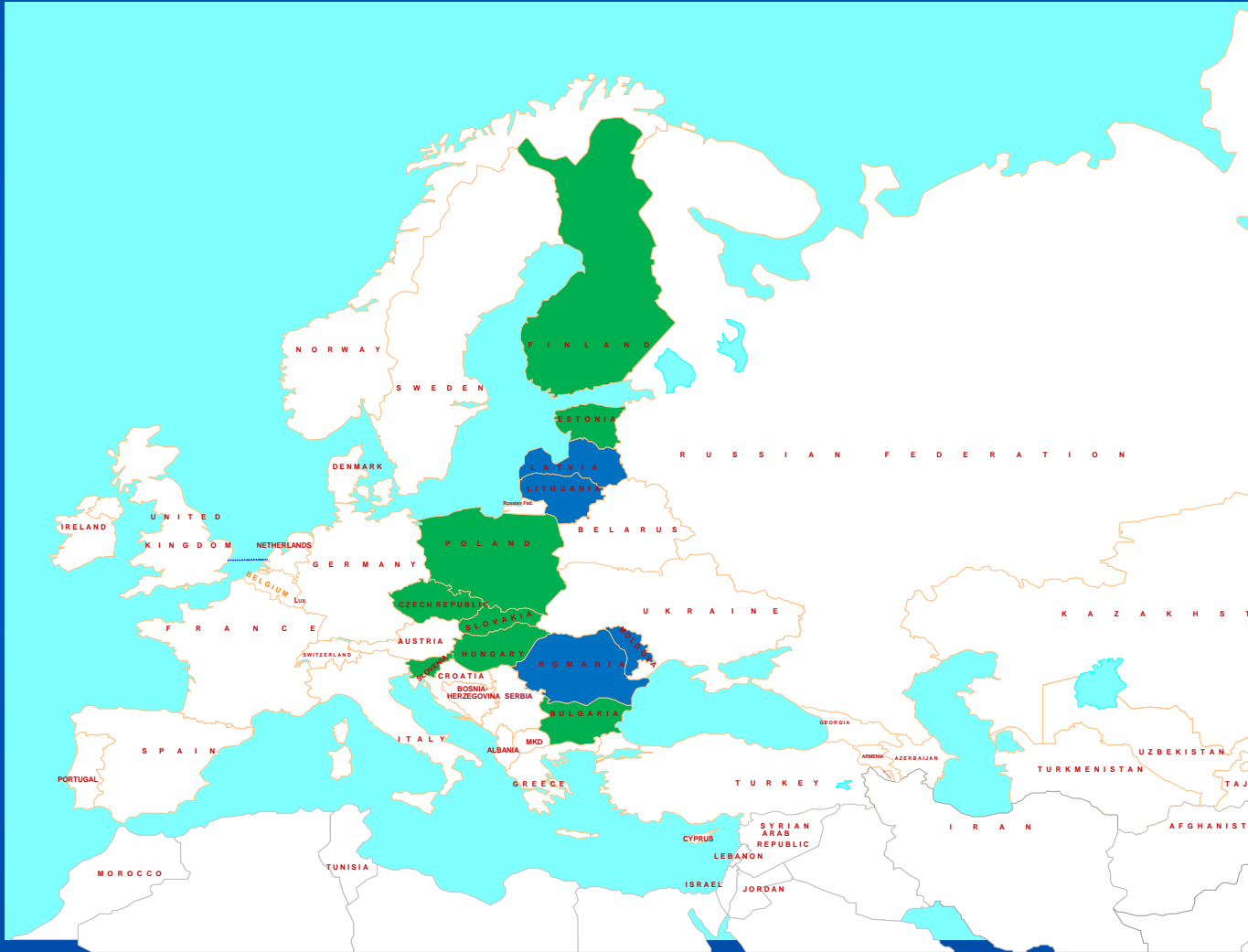
Computerisation of TIR
IRU Current Focus

■ To accelerate the computerization of:

- Electronic Pre-declarations of TIR data for all Customs through TIR-EPD

- Online exchange of data between IRU and Customs on TIR carnets status through Real-Time SafeTIR (RTS)

TIR-EPD Introduction

- Advance cargo information submission mandatory in the EU since January 2009

- New EU Safety and Security requirements since January 2011

- Both fulfilled by IRU TIR-EPD

Holder → TIR-EPD → National Customs System based on NCTS → EXS

National Customs System based on NCTS → ENS

2010 Achievements
TIR-EPD

- TIR-EPD: 3 new countries:
  - Lithuania
  - Latvia
  - Romania
  - + Moldova (2011)
- Now: 12 countries in operation
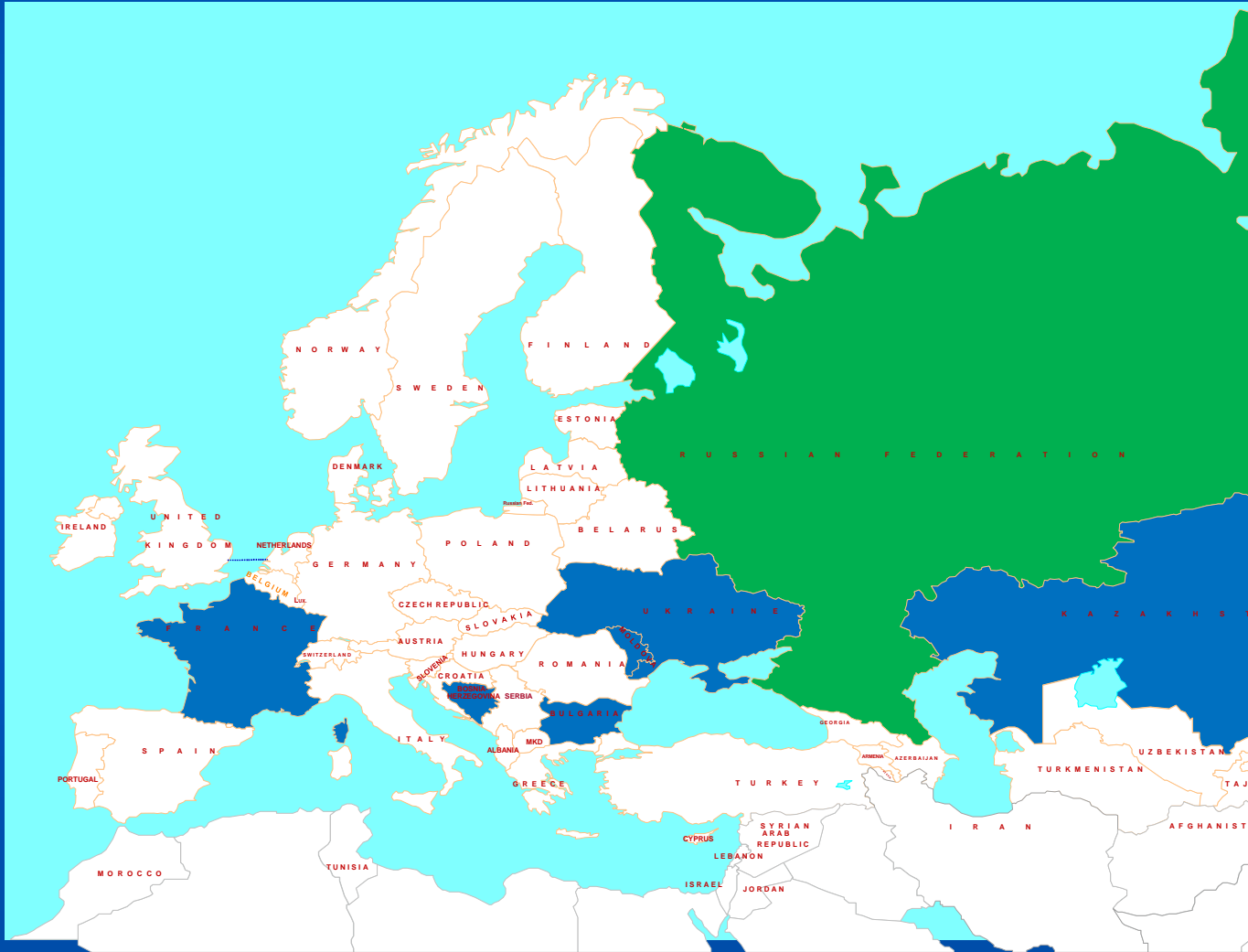- New Safety and Security requirements
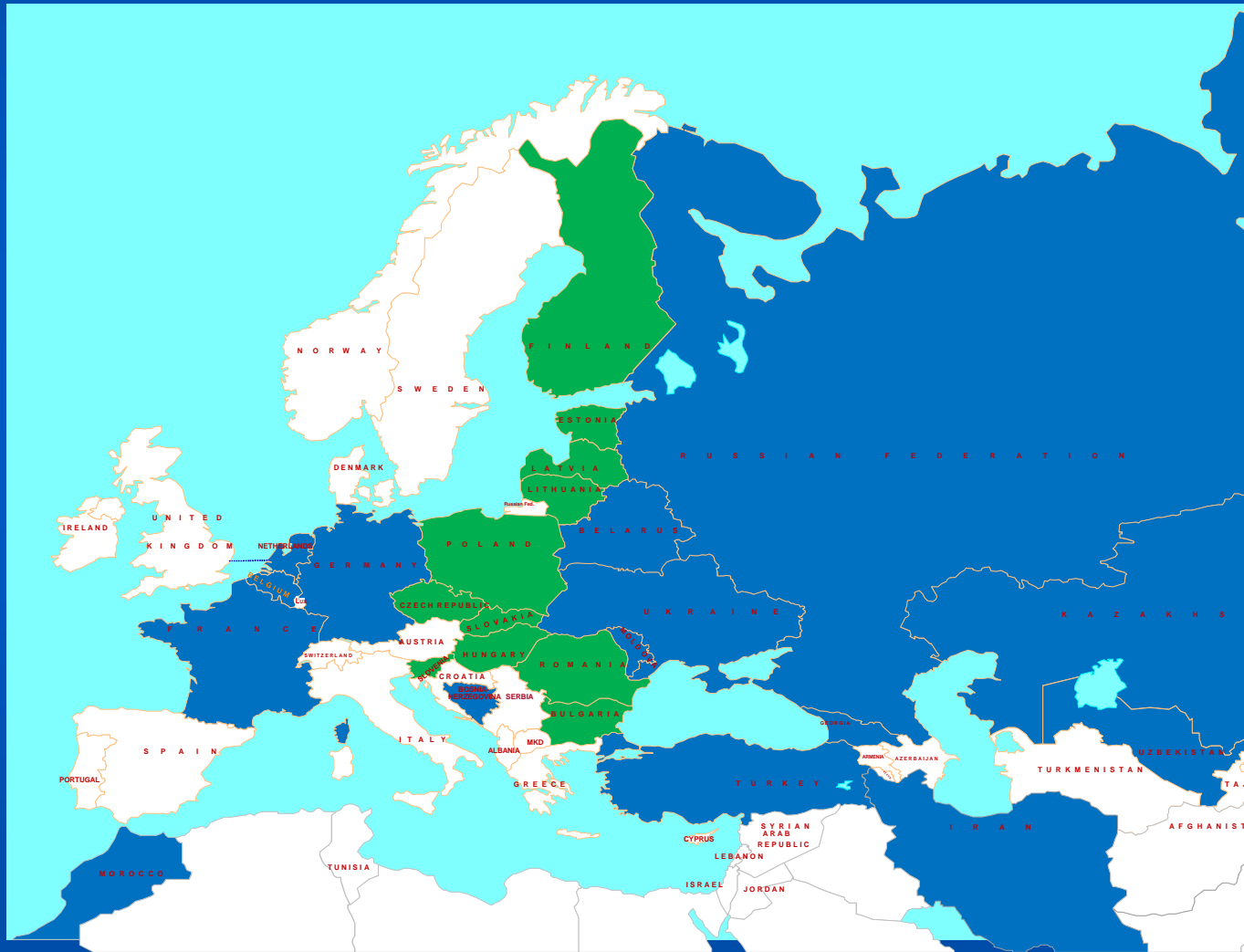
- Many new countries to come
- Total operational countries planned to double to more than 20 by end of 2011
- Countries currently in process:
  - Albania
  - Belarus
  - Belgium
  - Bosnia and Herzegovina
  - France
  - Georgia
  - Germany
  - Iran
  - Kazakhstan
  - Moldova (in production)
  - Morocco
  - Netherland
  - Russia
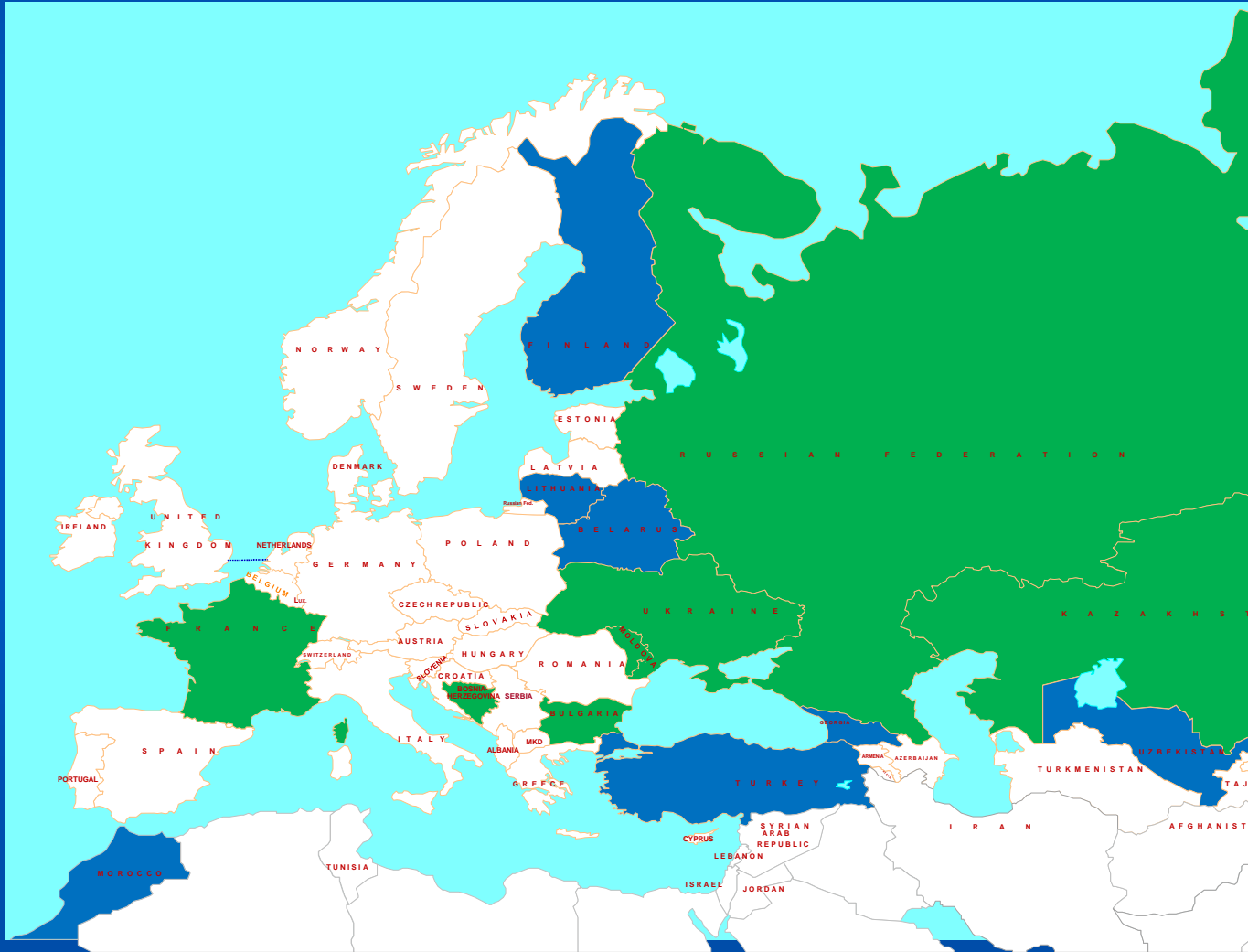 - Turkey
  - Ukraine
  - Uzbekistan

RTS Implemented in Partnership with National Authorities

➢ Allows real-time transmission of data and immediate detection of irregularities

➢ Allows real-time check of the validity of the TIR Carnet at any Customs point through Customs query mechanism

➢ First implemented in pioneer country Russian Federation in 2006: Allowed decrease of irregularities from 1'600 per year down to 10!

➢ 7 countries operational today: implemented in Kazakhstan, Ukraine, Bulgaria, France and Bosnia Herzegovina in 2010, and Moldova in 2011

➢ Great interest to implement RTS expressed by many additional countries!

2010 Achievements
Real-Time SafeTIR

- Real-Time SafeTIR: 5 new countries
  - Bosnia-Herzegovina
  - Bulgaria
  - France
  - Kazakhstan
  - Ukraine
  - + Moldova (2011)
- Now: 7 countries in operation

2011 Objectives
Real-Time SafeTIR

- Many new countries to come
- Total operational countries planned to double to more than 12 by end of 2011
- Countries currently in process:
  - Albania
  - Azerbaijan
  - Belarus
  - Finland
  - Georgia
  - Latvia
  - Lithuania
  - Morocco
  - Turkey
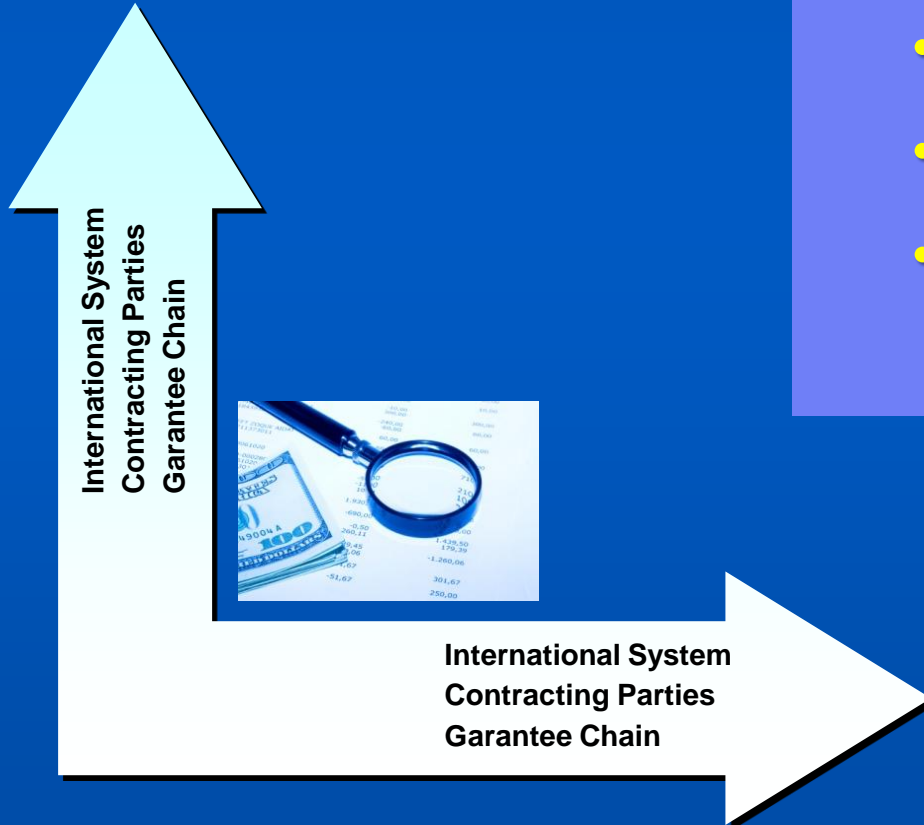 - Uzbekistan

Benefits of approach

- Sovereignty of national Customs Authorities
  - fully preserved and guaranteed
- Pragmatic and easy to implement
  - Both TIR-EPD and RTS can be implemented in outstanding countries, where requested, in a short timeframe of between 1 to 3 months
- Flexibility
  - Until harmonisation is achieved, each countries' IT security and technologies, data elements required, communication methods and protocols, message formats and structure can be accommodated through the existing public – private partnership

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  - Recommendations

Cost Elements
Main Categories and Approach

Investment Costs

International System
Contracting Parties
Garantee Chain

International System
Contracting Parties
Garantee Chain

How To:

- Ballpark

- Budget / Top down

- Definitive Estimate / Bottom Up (WBS based)

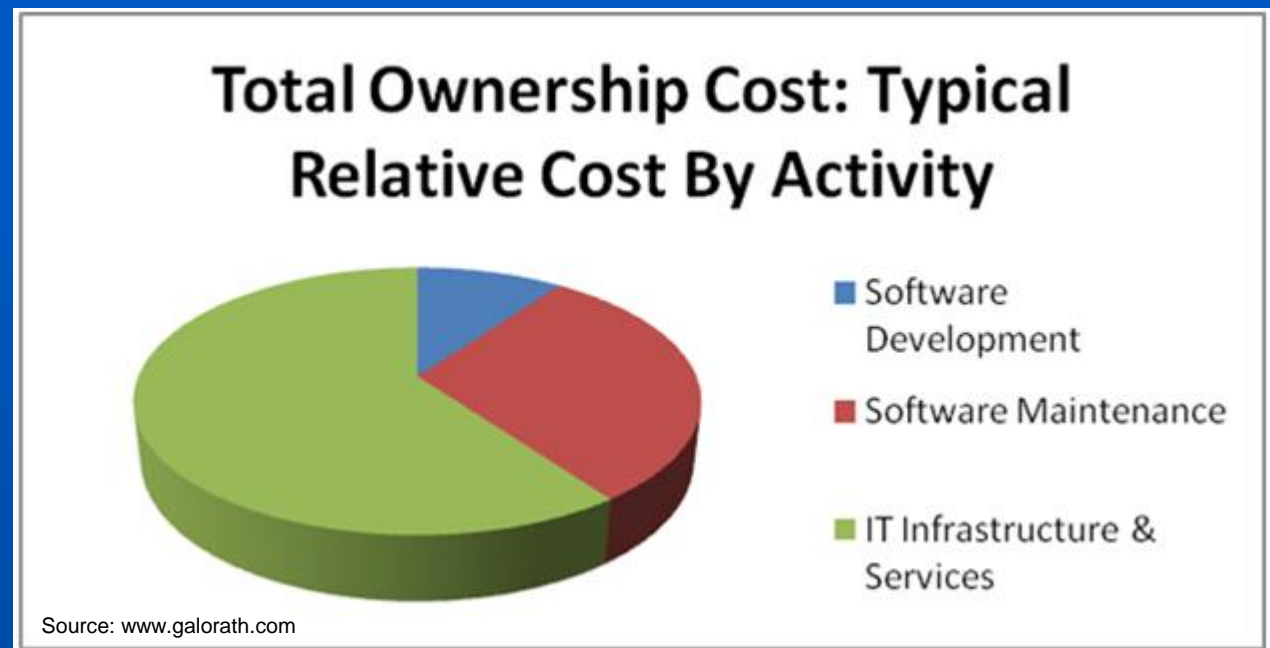**Operational Costs (running / recurrent)**

Amortization

Cost Elements
Thoughts 1/2

- The IRU is focussing on B2C and B2B aspects

- Cost are spread within the IRU and National Associations

- IT application software development and infrastructure are important aspects but to also consider are:

  - Set up the organisation

  - Manage non-harmonized data elements, communication methods and protocols, message formats and structure, technologies and security aspects

  - Integrate each Contracting Party

  - Manage data synchronisation issues

  - Operate and support (incl. help desk)

- Costs budgeting must be extensive

  - Studies have shown that IT services outside the software development and maintenance can account for over 60% of the total ownership costs

Total Ownership Cost: Typical Relative Cost By Activity

Software Development
Software Maintenance
IT Infrastructure & Services

Source: www.galorath.com

Cost Elements
Investment (CAPEX) WBS

- Typical investment costs elements
  (high level work break down structure):
  - Application Software Development
    - analysis, design, development, test, rollout, project management
  - Infrastructure
    - hardware, software, network
  - Telecommunication / Internet access
  - Facilities
    - buildings, desks, air conditioning, anti-fire, etc
  - Staff
    - hiring, team setup, training
    - Management, functional experts, technical specialists, helpdesk staff
  - Documentation
    - technical documentation, user guides, deployment guides, training guides
  - Organisation (governance) and legal (liability, contractual aspects)
  - Coordination with Contracting Parties & Training

Cost Elements
Operational (OPEX) WBS

- Typical recurrent costs elements
  (high level work break down structure):
  - Application software
    - Maintenance and support
    - Rollout of new versions
  - Infrastructure
    - Operations (hardware, software, network)
    - Maintenance and support (hardware, software, network)
  - Telecommunication / Internet connectivity
  - Facilities running costs
    - rent, electricity, heating, insurance, security,…
  - Staff (salaries, social)
    - Management, IT staff, business experts and support, call centre & helpdesk staff (heavy if 24/7 SLA and multilingual support)
  - Documentation
    - Keeping all documentation up to date
  - Governance and legal fees
  - Coordination with Contracting Parties & Training
  - Not to forget: assets amortisation (ongoing financing of infrastructure renewal)

Cost Elements
Recommendations « checklist »

- Harmonize data elements required, communication methods and protocols, message formats and structure
- Clarify governance, organisation, responsibilities & legal aspects
- Identify dependencies and assumptions
- Evaluate risks and establish mitigation strategies
- Plan for contigencies
- Take complex deployment into consideration
- Take operations (incl. Helpdesk) into consideration
- Further evaluate costs:
  - Continue evaluate similar C2C comprehensive initiatives: e.g. NCTS, WCO GNC)
  - Establish comprehensive work breakdown structure
  - Consider investment and operational costs
  - Consider international system and contracting party costs
  - Evaluate financing aspects and amortisation principles

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