



Advanced Cargo Information and Risk Management with TIR

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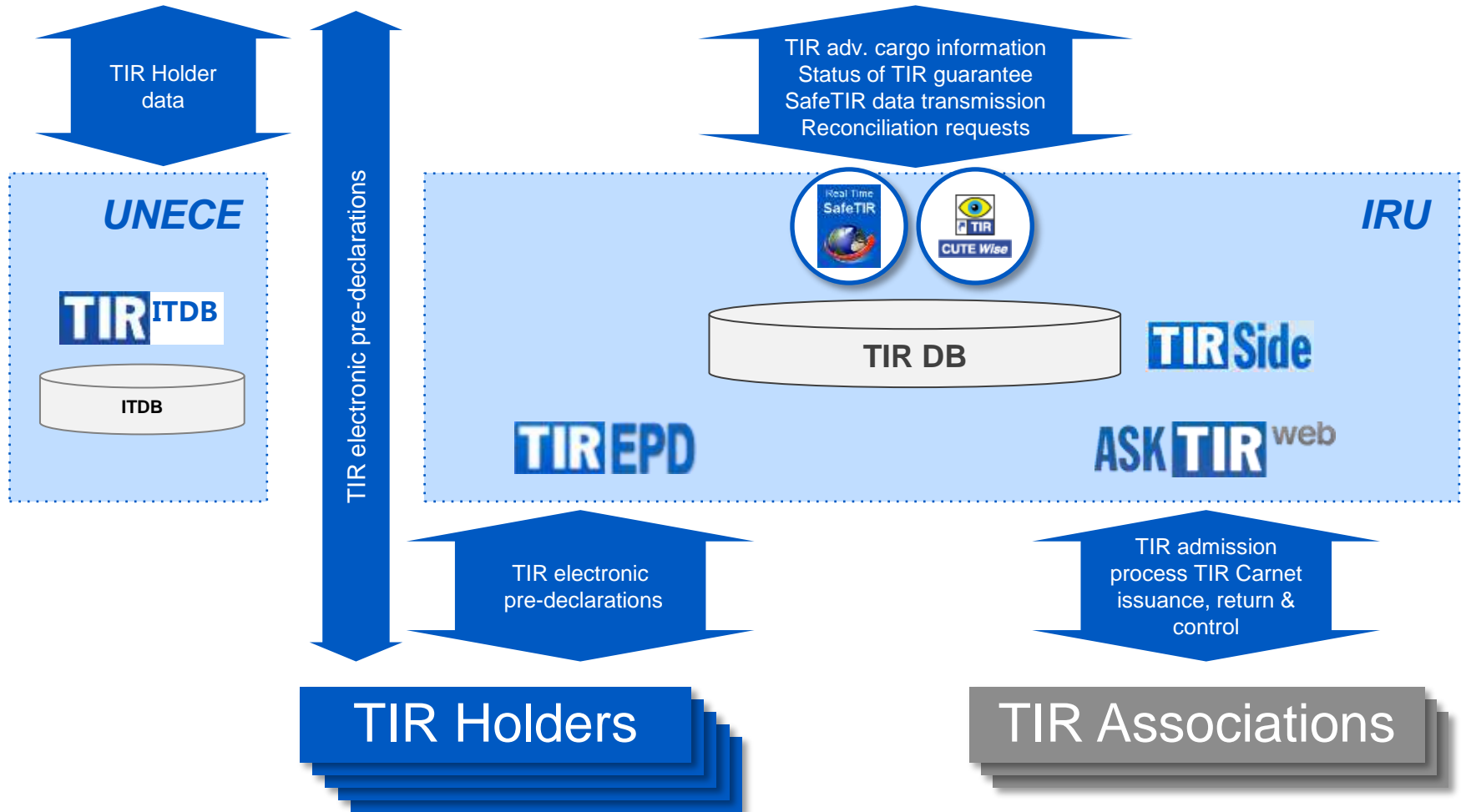
- Advanced cargo information and risk management
- TIR risk management systems
 - TIR-EPD
 - Real-Time SafeTIR (RTS)
- Implementation
 - Secure Connectivity
 - Messages
 - Key challenges
 - Typical roadmap
- Questions & Answers

- Concept promoted by WCO Safe Framework
- Model successfully applied in many countries where TIR is operational:
 - European Union
 - Eurasian Customs Union
 - Turkey / Iran
 - and more
- Benefits for Customs:
 - Advance risk assessment and control decision made in advance
 - Increased security of transit movements (focus on “high-risk” transports)
 - Reduced manual data entry and less errors, faster procedure
 - More efficient use of Customs resources
 - Higher border crossing point capacity

TIR RISK MANAGEMENT SYSTEMS

IRU TIR risk management systems

Customs



IRU TIR Portal for Customs

English

TIR Customs Portal

Consultation Of TIR Carnet Data Download Lists Of Invalid TIR Carnets

View TIR Carnet

TIR carnet number:

Carnet status: The TIR carnet was returned to the IRU

Issuing association: SLOVITE, Slovenia (SVN) Holder details: N/A

Carnet general information: Carnet type: 14 pages Yellow manifest language: Slovenian (SL)
Issued to association on: 11/09/1998

Customs operations (T)

Country	Customs	P/F	OK/NA	Page #	Ledger #	Certificate #	# of packages	Customs comments	Received by IRU
ITA	07110481 AND 1 CONCOREZZO	F	OK	4	00008 14/09/1998	4 001103P 14/09/1998	0		2010/1998

© 2014 IRU Terms and Conditions TIR Customs Portal 1.0.0



- Online control of TIR Carnets' validity and history



- Direct connection via web services (Real-Time SafeTIR) for:
 - Transmission of SafeTIR termination data
 - Verification of TIR guarantee validity
 - Automatic reconciliation requests

IRU TIR Portal for Carnet Holders

<https://tirepd.iru.org>

TIR EPD English Swiss Demo Holder

Jean Dupond Transports

Home EPDs Company Info Help

New EPD - Carnet no. DX51549582

Itinerary

Please list all of the steps in your itinerary in chronological order, even if TIR operations are not performed in those countries.

Country	Load goods	Unload goods	Start TIR	End TIR	Remove
Step 1 Germany (DEU)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="button" value="X"/>
Step 2 Poland (POL)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="button" value="X"/>
Step 3 Belarus (BLR)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="button" value="X"/>

Mandatory fields

< Previous Next >

English Swiss Demo Holder

Company info Help

DX51549582

present to the following countries

Customs union	Unload / Destination / Exit	VPN #
EU	Poland (Exit): AUGUSTÓW / AUGUSTÓW OC (PL313C)	1-2
CIS	Belarus (End TIR / Unload): / Selwe (14905)	3-4

Movement reason:
Import of goods to Belarus from other

Mandatory fields

< Previous Next >

IRU TIR Portal for Associations

ASK TIR web **KAZATO** Теория ИТЛ. | EN RU

Carnet list XB 72 413 488 Control Carnet

Control Carnet Enter a Carnet number

- Carnet summary

Carnet # XB 72 413 488	Ack. on 06/09/2013	Used <input checked="" type="checkbox"/>
Type Ordinary - 14 pages	Expiry date 30/12/2013	HVG -
Issued to 417 - TOO "Omega Stry Group"	Issued 31/10/2013	SafeTIR Available
Current location Almaty	Declared -	Control <input checked="" type="checkbox"/> - Further transportation of the national procedure
Current status Controlled by Association	Returned 25/12/2013	Packaged in 10155
IRU return limit 25/04/2014		Incident Create

- Safe TIR termination : 1

Country	P/F	OKR	VPN	Customs office	Customs ledger	CL date	Certificate	Certificate date	Comment	Reception date
LTU - Lithuania	F	<input checked="" type="checkbox"/>		0 LTVR3000	13LTVK1000	09/12/2013	13LTVK100013B0	09/12/2013	-	

Control Transport Reconciliation Documents

Carnet state

Used yes no

CMR attached? yes no CMR OK? yes no

Start date (departure) Termination date (destination) 09/12/2013

Control result : 2

Result	Comment(s)	Used	CMR OK?	SafeTIR	Controlled by	Date
<input checked="" type="checkbox"/> - Further transportation	дальнейшая перевозка по ТД	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	abaimukham	21/08/2014
<input checked="" type="checkbox"/> - Further transportation	дальнейшая перевозка по ТД	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	abaimukham	21/08/2014

- TIR Holder admission process
- TIR Carnet issuance and return
- Risk management
- Available in national languages (Mandarin coming soon)

IRU TIR-EPD

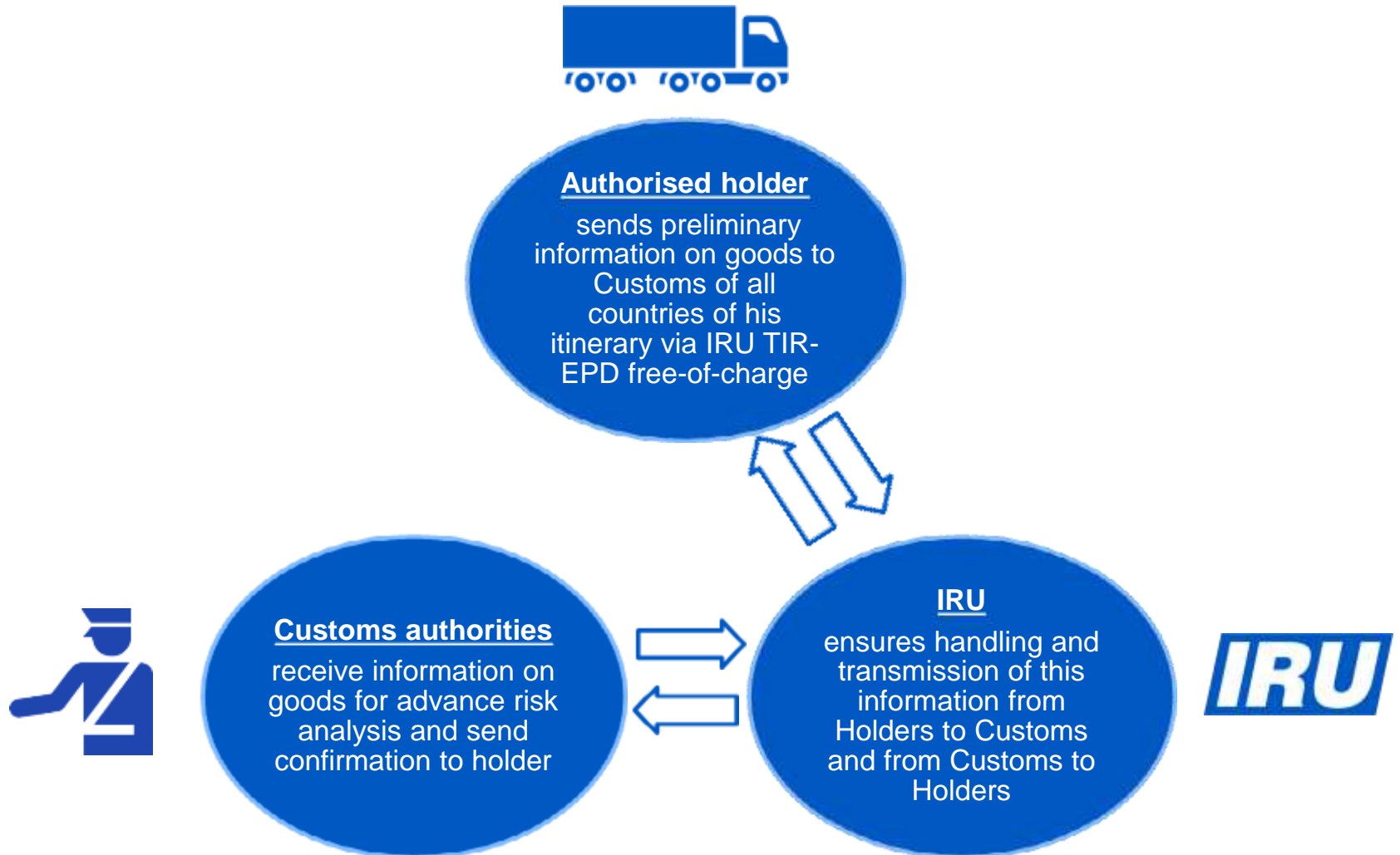
ADVANCE CARGO INFORMATION FOR CUSTOMS

IRU IRU TIR-EPD: Context

- Advance cargo information and risk analysis: key elements of WCO SAFE Framework
- Electronic pre-declaration mandatory:
 - In European Union since 2009
 - In Eurasian Customs Union since 2012
 - In Ukraine (electronic data submission) since 2013
 - In Iran since 2014
 - In Turkey – expected soon
- Model progressively expanding to other countries



TIR- EPD satisfies all national laws requirements of all countries connected to TIR-EPD.



IRU Value for Customs

Operational

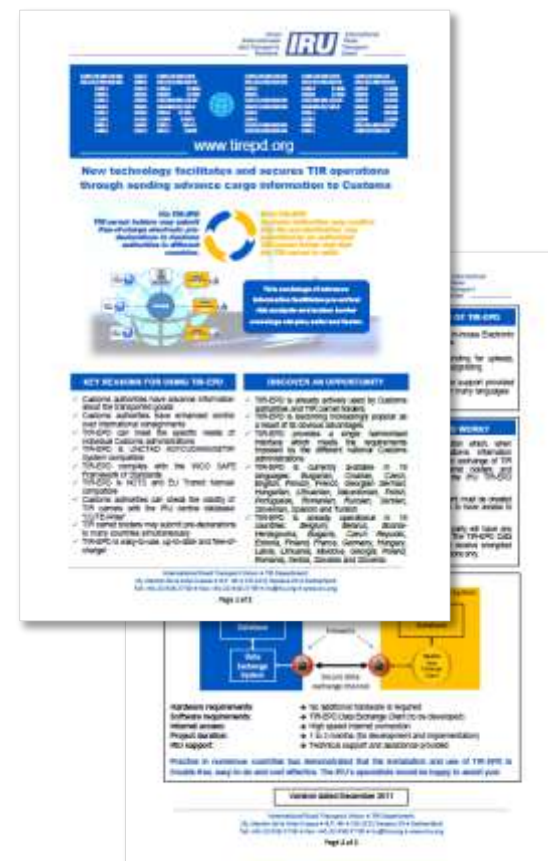
- ✓ Advance cargo information enables advance risk analysis, in line with WCO SAFE Framework
- ✓ No need for manual data entry

Security

- ✓ Only valid TIR Carnets can be submitted with TIR-EPD and only by authorised holders
- ✓ Identical information goes to all Customs

Simplicity

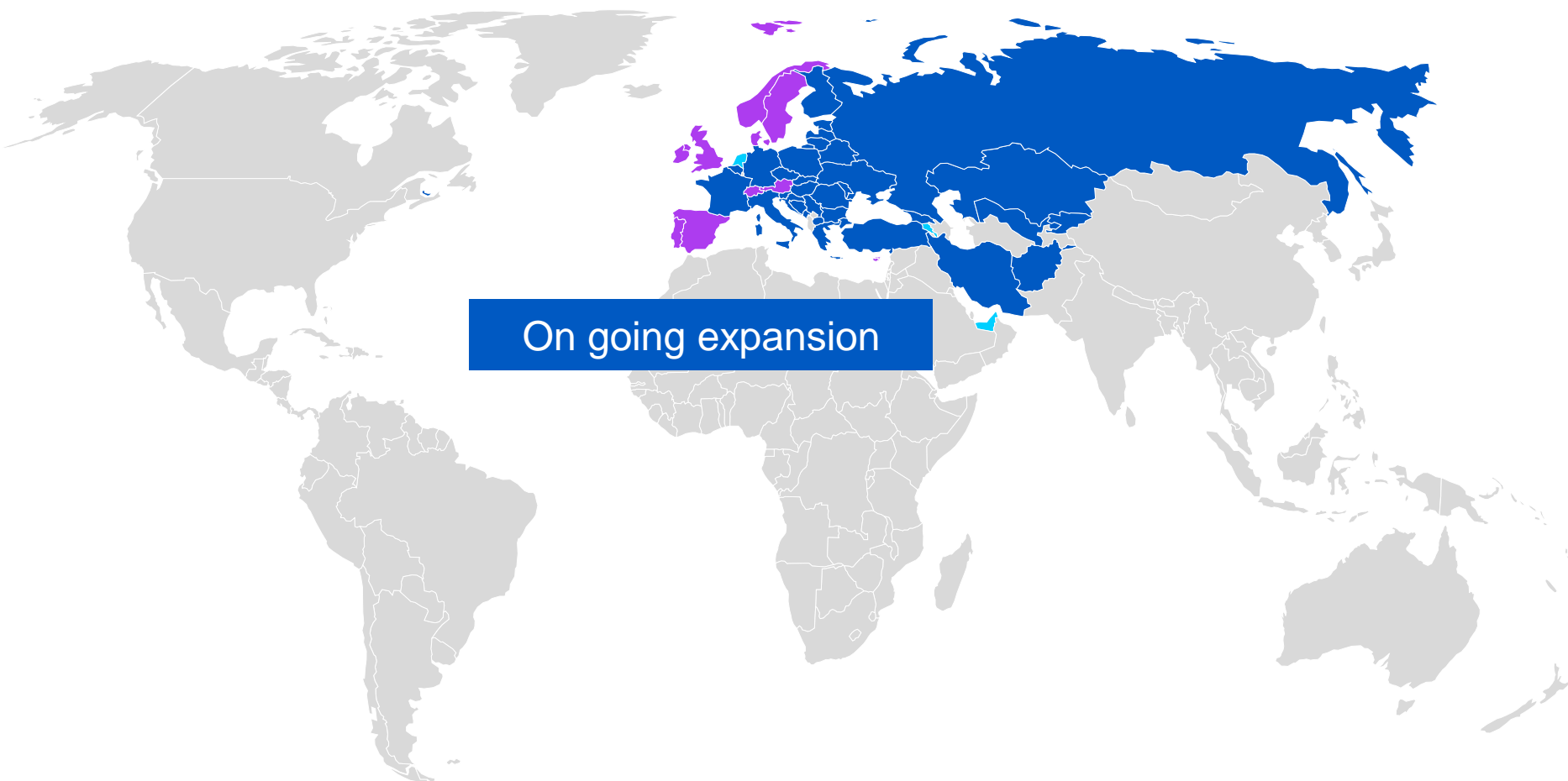
- ✓ Limited impact on Customs systems
- ✓ TIR-EPD adjusted by IRU to national Customs requirements, and compatible with WCO reference data model



IRU Advantages for Transport Operators

- ✓ Free of charge - no need for broker assistance
- ✓ No access to confidential commercial data by third parties
- ✓ **Exclusively with TIR-EPD:**
 - ✓ EPD sent simultaneously to all countries of itinerary
 - ✓ User interface in all national languages
- ✓ Accessible via Internet from anywhere
- ✓ **Simpler and faster border crossing procedures**
- ✓ **Saves money and increases competitiveness**

IRU TIR-EPD Geographic extension



On going expansion

- TIR-EPD operational
- TIR-EPD implementation in progress
- Other EPD system

TIR-EPD operational in: Afghanistan, Belgium, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iran, Italy, Kazakhstan, Kirgizstan, Latvia, Lithuania, Macedonia, Moldova, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Turkey, Ukraine and Uzbekistan

REAL-TIME SAFETIR

REAL-TIME RISK MANAGEMENT

IRU Why SafeTIR?

To confirm at any time and in real-time the validity of the Customs stamp (at destination) on the TIR counterfoil

The image shows a TIR counterfoil (SOUCHE N° 2) with the following details:

- Reference: RX30420720
- Page: PAGE 8 du CARNET TIR
- Section 1: Arrivée constatée par le bureau de douane de _____
- Section 2: Scelléments ou marques d'identification reconnus _____
- Section 3: Décharge _____ colis ou objets (comme stipulé sur le manifeste)
- Section 4: Nouveaux scelléments apposés _____
- Section 5: Réserves _____
- Section 6: Signature de l'agent et timbre à date du bureau de douane

The stamp area (Section 6) contains a circular customs stamp from MILANO with a red question mark overlaid on it, indicating a need for verification.



SafeTIR data: electronic equivalent of Customs stamp transmitted in real-time

IRU SafeTIR objectives

TIR Customs Portal



Provide a database of terminated TIR Carnets (TIR Customs Portal) – TIR Carnets are tracked electronically

TIR Customs Portal



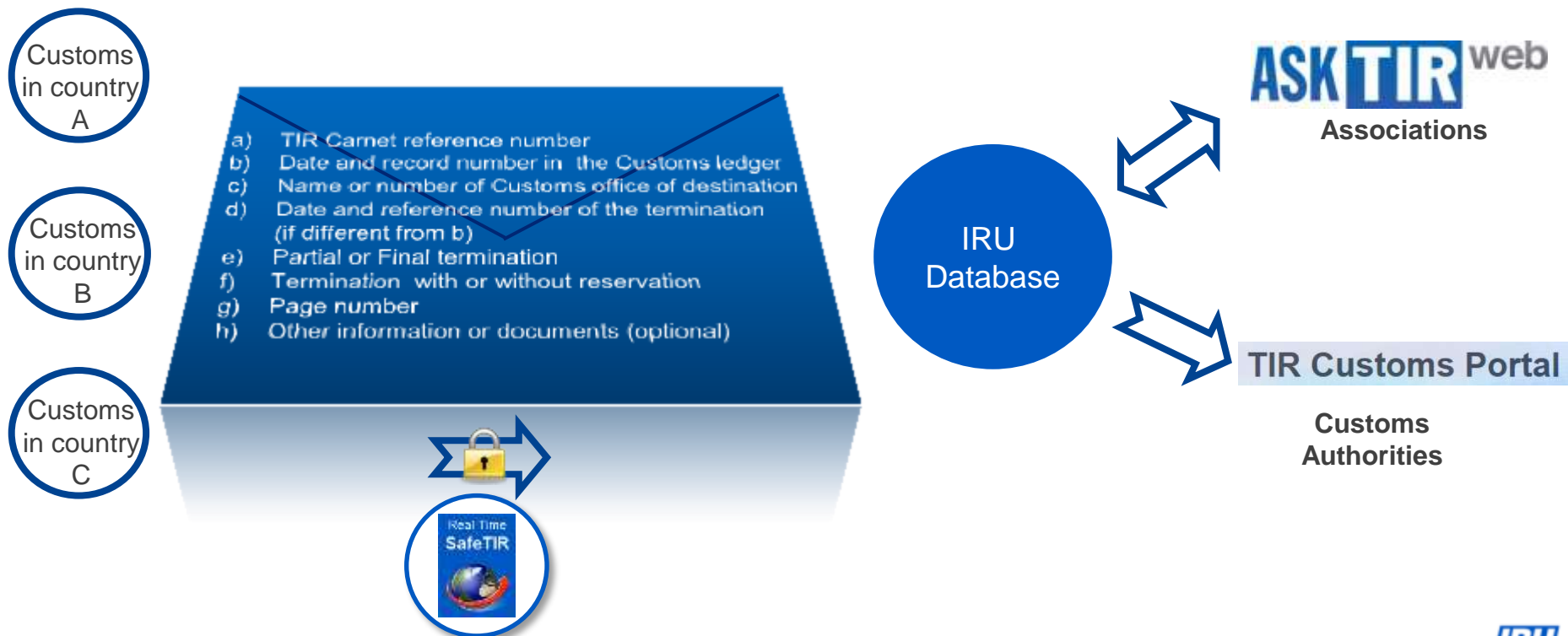
Enable early detection of fraud → By providing Customs with up-to-date information on the validity of TIR carnets (TIR Customs Portal, RTS)



Instil trust in the TIR System

SafeTIR Control System for TIR Carnets :

Annex 10 to the TIR Convention since 12 August 2006



IRU SafeTIR Objectives



Provide a database of terminated TIR Carnets (CUTE-Wise) – TIR Carnets are tracked electronically



Enable early detection of fraud → by providing Customs with up-to-date information on the validity of TIR Carnets (CUTE-Wise, RTS)



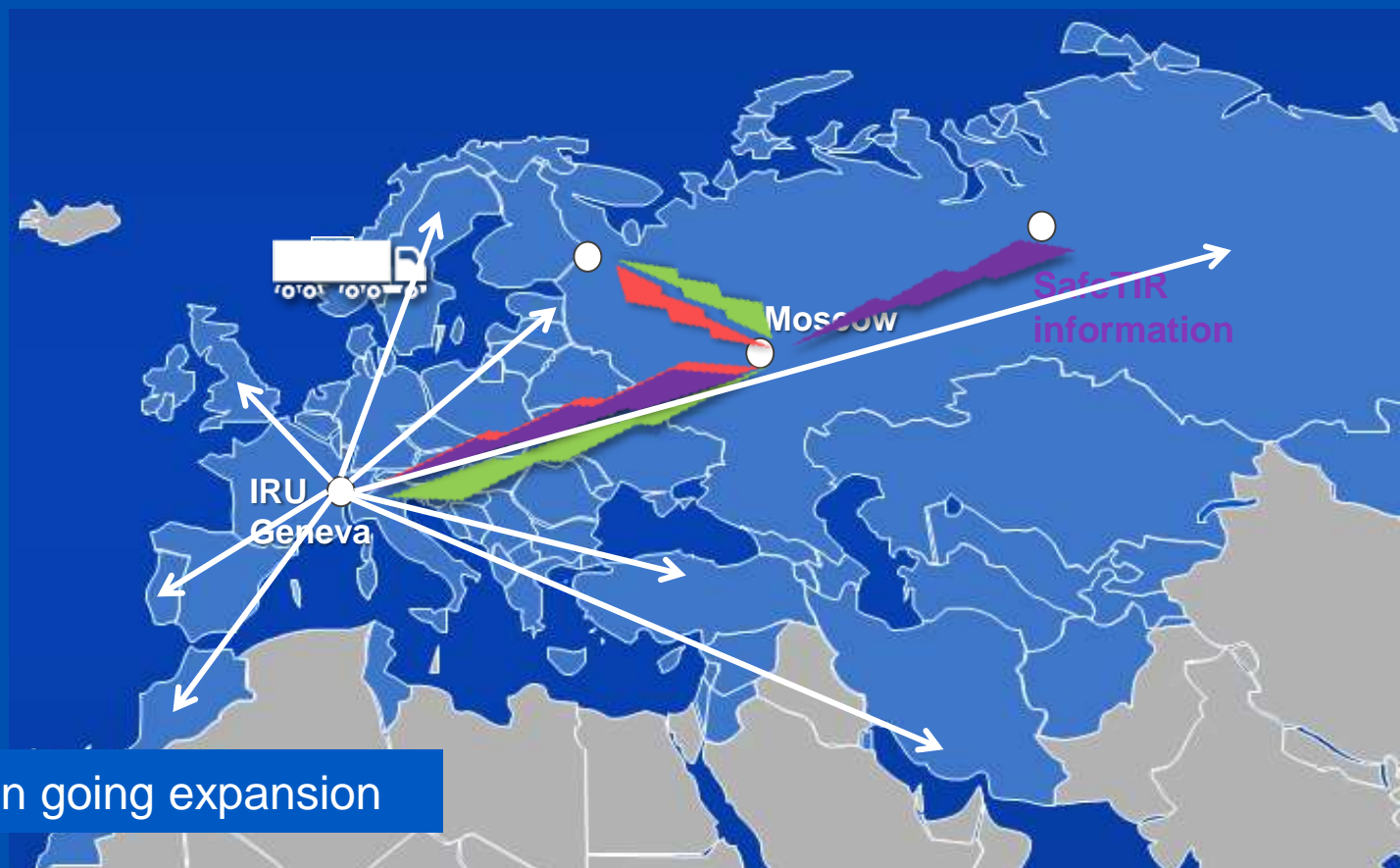
Instil trust in the TIR System

IRU RTS: How Does it Work?

What is the status of the TIR Carnet ?

The status of the TIR Carnet is :

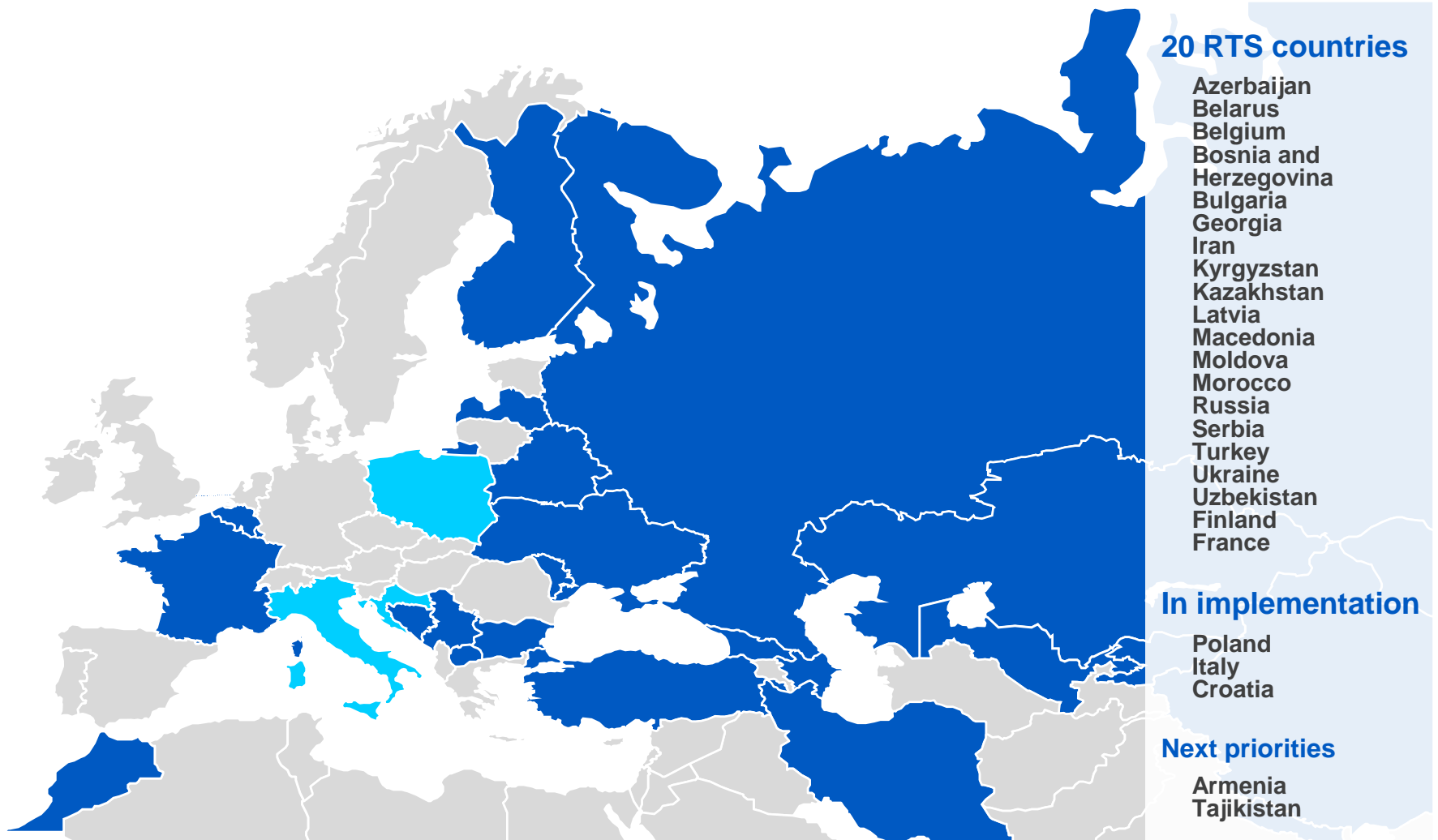
- Valid (with the following details: Holder ID, validity date, Issuing Association name)
- Invalid
- Not issued/ false/ other situations



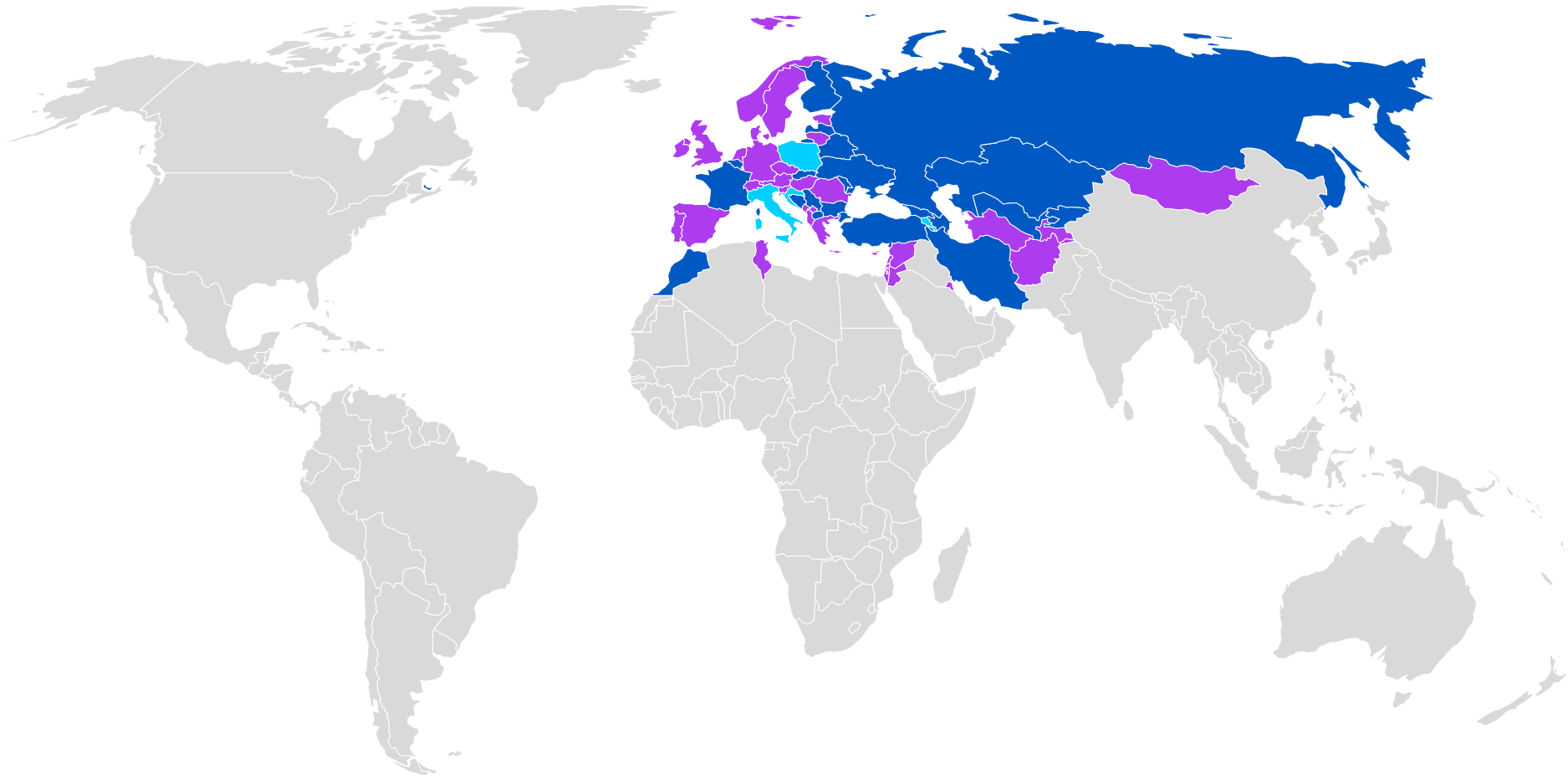
On going expansion

With Real-Time SafeTIR:

- Customs can check in real-time the validity of TIR Carnets presented to them
- Infringements are detected early as information confirming the proper termination of TIR operations is made available quickly and electronically to all stakeholders involved



IRU RTS Geographic Extension



- RTS operational
- RTS implementation in progress
- Other SafeTIR countries

RTS operational in: Azerbaijan, Belgium, Belarus, Bulgaria, Bosnia-Herzegovina, Finland, France, Georgia, Iran, Kazakhstan, Kyrgyzstan, Latvia, Macedonia, Morocco, Moldova, Russia, Serbia, Turkey, Ukraine, Uzbekistan

For Customs:

- Automatic electronic entry and exchange of SafeTIR data, facilitating the work of Customs officers
- Confirmation in real-time of the validity of TIR Carnets
- Effective risk management tool
- Simplifies SafeTIR reconciliation procedure
- Allows for early detection of possible infringements

For the Guarantee chain:

- Effective risk management tool
- Data on the termination of TIR operations available to associations in real-time
- Simplifies SafeTIR reconciliation procedure
- Allows for early detection of possible infringements



Real-Time SafeTIR brochure

IMPLEMENTATION

TIR-EPD connected to 31 Customs systems as of November 2015

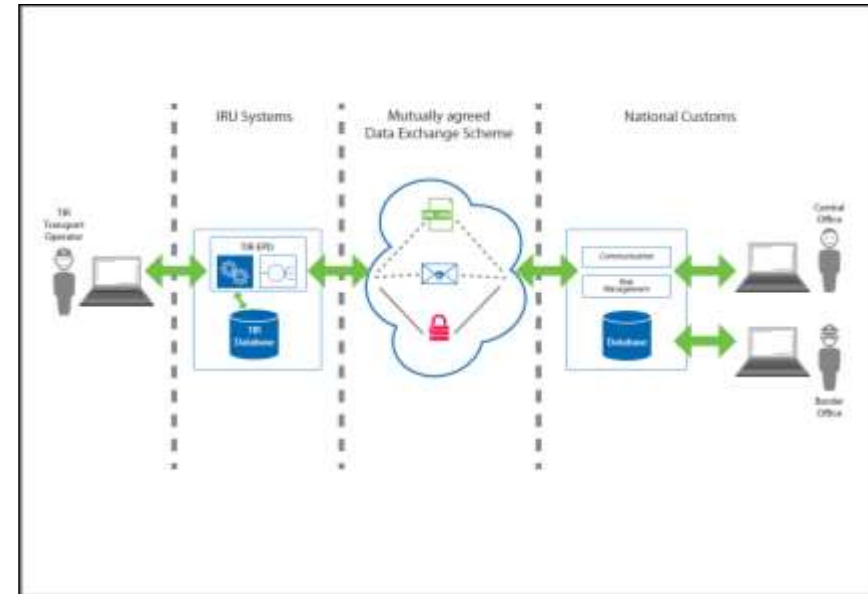
IRU adapts to national technical specifications

SOAP web services (XML) over HTTPS connection

Highest level of security and robustness to network outages

Encryption and signature using certificate and private keys

Example code available in Java and C# for key services (free of charge)



VPN

- ☞ Hard to maintain (requires highly available network technical specialist). Some solutions even require expensive extra-hardware
- ☞ Not more secure than HTTPS (new types of VPNs are based on HTTPS or SSL)
- Only needed for persistent connections or unsecure protocols (HTTPS is none of these)

File Exchanges

- FTP or shared volumes
- ☞ Not secure, requires a VPN

Email

- ☞ No message delivery guarantee
- ☞ Not secure, unless high cost solutions are put in place

Others

- **Other options possible, in alignment with Customs requirements**

IRU Customs-IRU Secure connection - examples

HTTPS: Turkey ^{*)}, Iran, Morocco ^{*)}, Serbia, Croatia, Macedonia

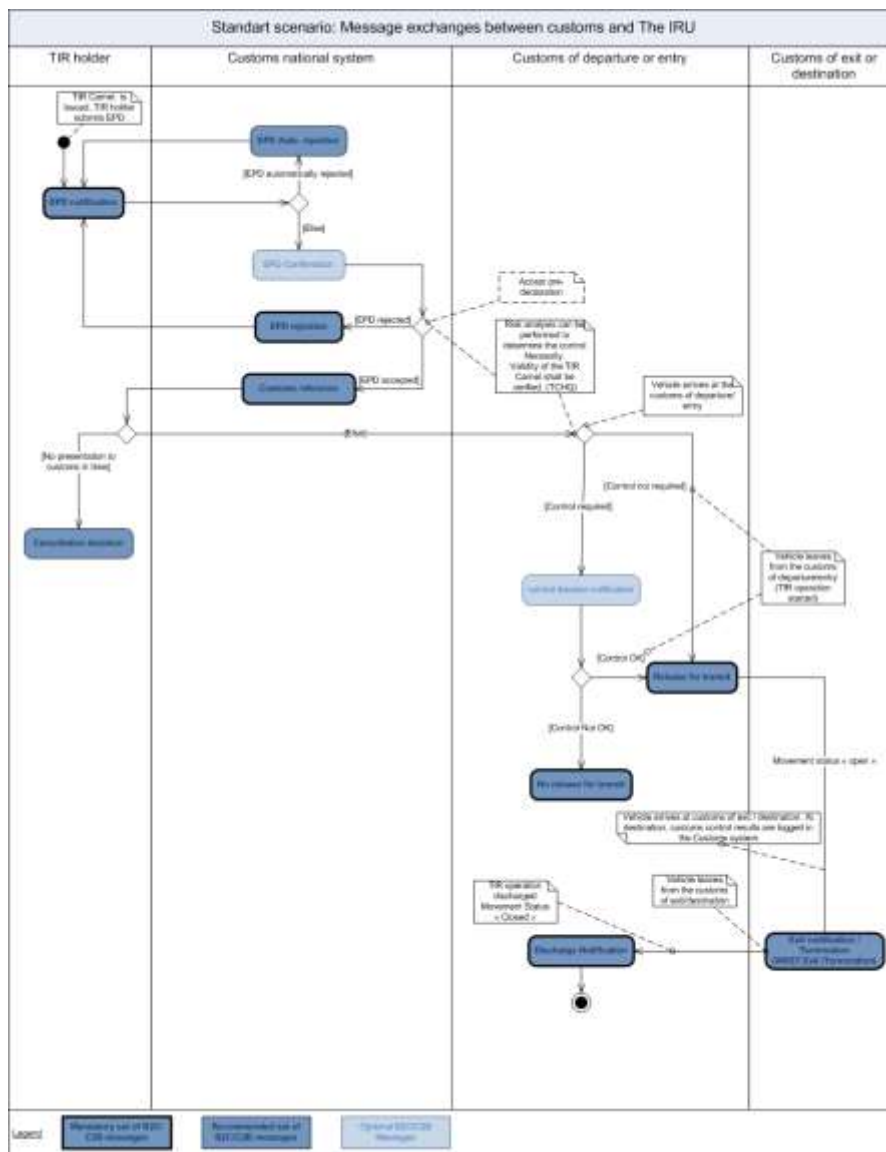
HTTP over VPN: Russia, Belarus, Ukraine,

FTP: Italy, Finland

SMTP: Belgium

^{*)} Previously using VPN

IRU Message Flow



IRU TIR Messages (1/2)

Message	Purpose
EPD Notification	Submission of advance cargo information
Customs Reference	Customs confirmation, including Customs unique reference
Release for Transit	Transit operation refused (at Customs of departure or Customs of entry), usually because of a control or declarations documents issue
No Release for Transit	Transit operation refused (at Customs of departure or Customs of entry), usually because of a control or declarations documents issue
Cancellation Decision	If a Customs Reference was allocated and not used by the Customs office of entry at the border (for import or transit) or at the Customs office of departure in the country (for export) during determined period of time (generally 1 month), a Cancellation Decision message is generated automatically by the Customs system

IRU TIR Messages (2/2)

Message	Purpose
EPD Rejection	Rejection of submitted advance cargo declaration
Discharge Notification	Confirmation of clearance of transit procedure
Exit /Termination Notification *	Notification of end of TIR Operation (the transport has left the Customs territory, or reached the Customs of destination)
TIR Carnet Holder Query *	Control of validity of TIR guarantee in TIR System
<i>EPD Confirmation</i>	<i>Technical confirmation of message reception</i>
<i>Control Decision Notification</i>	<i>Customs may optionally inform the Holder that the vehicle will be physically controlled</i>

* RTS messages

Key Technical Challenges

Communication issues

- Change of technical point of contact at Customs IT
- More than one departments or external supplier involved in IT
- Change of HS codes or codes of Customs offices
- Service interruptions

Absence of TIR focal point at Customs

Tax numbers of consignors/ees, transport operators

VPN instabilities

Exchanges of certificates

- Certificate expirations and renewals

Lack of understanding of transit specificities

Absence of fallback procedures

IRU registration when required

Typical Roadmap (2 to 3 months)

Stage / Activity	Deliverables
Preparation and signing a framework Cooperation Agreement for implementation of the IRU TIR-EPD application	Cooperation Agreement
Harmonisation of technical requirements for the electronic data exchange between the IRU TIR-EPD application and the Customs IT system	<i>Web Services Interface specification between IRU TIR-EPD application and the Customs IT system.</i> Catalogue of the message formats, Code Lists and XSD schemas
IRU developments of software module	Programme Code and Documentation
Customs development of TIR-EPD module or adjustments to the Customs IT system	Programme Code and Documentation
Definition of joint testing procedures	Test protocol agreement
Preparation for testing	Exchange of the certificates and test systems addresses
Testing , debugging and pilot running of the TIR-EPD system at Customs	Report on tests and pilot exploitation of the system
Acceptance testing	Acceptance testing report
Preparation for production of the TIR-EPD system	Exchange of the production certificates and production systems' addresses
Definition of joint production support procedures	Exchange of the IT Support contact details
Deployment to the production environment	Agreement on Production Start
Project closure and go live	Monitoring and reporting on Production System

QUESTIONS & ANSWERS

