



HDM – digital single market between EU and EPa

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Agenda

HDM – digital single market between EU and EPa

Topic presented by:

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Overview:

INFOBALT and LITHUANIA at a glance

Focus:

Digital Single Market

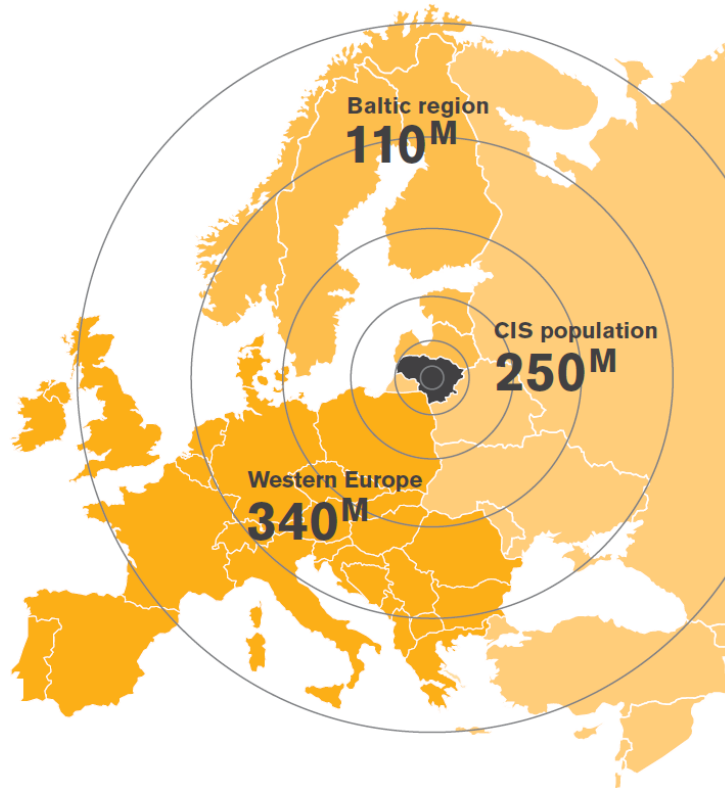
Partnership:

EU and Eastern

Next steps:

Work to be done and quick wins

Lithuania: facts and figures



**JOURNEY FROM ANY MAJOR
EUROPEAN CITY:**



< 3 HRS

1CLICKFACTORY | ABC DATA LIETUVA | ACC DISTRIBUTION | ADEO WEB | ADFORM LITHUANIA | AFFECTION LIETUVA | AGILE LIETUVAAGMIS | ALGORITMŲ SISTEMOS | ALNA BUSINESS SOLUTIONS | ALNA GROUP | ALNA INTELLIGENCE | ALNA SOFTWARE | ART21 | ASBIS | ASSECO LIETUVA | AVAD BALTIC | B-NOVO TECHNOLOGIES | B.G.M. | BAIP | BALTIC AMADEUS | BALTIC AMBER SOLUTIONS | BALTIC CAR EQUIPMENT (BCE) | BALTIC DATA CENTER (BDC) | BALTIC ORBIS | BALTIJOS INFORMACINĖS SISTEMOS (BIS) | BALTIJOS KOMPIUTERIŲ AKADEMIJA | BALTIJOS KOMPIUTERIŲ CENTRAS | BITĖ LIETUVA | BLUE BRIDGE BOND | BLUE BRIDGE CODE | BLUE BRIDGE | BLUE SOLUTIONS | BOD GROUP | BPO HOUSE | BULL BALTIJA | CID LIETUVA | CITRUS | COLUMBUS LIETUVA | COMPSERVIS | CORAL SOLUTIONS | CRITICAL SECURITY | DATA INTELLIGENCE SYSTEMS | DEEPER | DEVBRIDGE GROUPDOCLOGIX | DPA | DUOMENŲ CENTRAS | EDRANA BALTIC ENTERPRISE RESOURCE PLANNINGEDUCTONEIS GROUP LIETUVA | ELEKTRONINĖS LEIDYBOS NAMAI (ELN) | ELSIS GRUPĖ | ESTINA | ETALINKAS | ETRONIKA | EVP INTERNATIONAL | FORBIS | FORTCONSULT | GAUMINA | GRAFTON RECRUITMENT | HERMITAGE SOLUTIONS | HEWLETT-PACKARDHMIT-BALTIC | IBM LIETUVA | IN RE | INFOERA | INFORMACIJOS TECHNOLOGIJŲ MOKYMO CENTRAS | VŠĮINFORMACINĖ RAIDA | INFORMACINĖ KONSULTACIJOS | INFORMACINIO VERSLO PASLAUGŲ ĮMONĖ | ABINFORMACINIŲ TECHNOLOGIJŲ INSTITUTAS | VŠĮINFORMACINIŲ TECHNOLOGIJŲ ORGANIZACIJA (ITO) | INFORMATIKOS IR RYŠIŲ TECHNOLOGIJŲ CENTRAS (IRTC) | INFOSTRUKTŪRA | VĮINITINTEC | INTA | INTENTO | INTERNETINIŲ IR INTELEKTUALIŲJŲ TECHNOLOGIJŲ INSTITUTASINVENTI | IT AKADEMIJA | ITERO IT | ITREE LIETUVA | KAUNO KOLEGIJA |

140+

Members

Software development

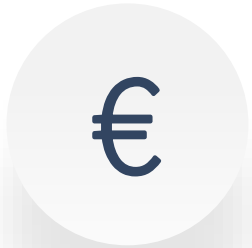
Telecommunications

Data centers

Electronics wholesale

KAUNO TECHNOLOGIJOS UNIVERSITETO INFORMATIKOS FAKULTETASKAZIMIERO SIMONAVIČIAUS UNIVERSITETASKOPIJAVIMO SISTEMOS KTU E. MOKYMO SI TECHNOLOGIJŲ CENTRAS (KTU EMTC) | LABBIS | LEKSIKOVA | LEMA | LEXNET | LIETUVOS INOVACIJŲ IR TECHNOLOGIJŲ INSTITUTAS LITI | VŠĮLIETUVOS KABELINĖS TELEVIJOS ASOCIACIJA (LKTA)LIETUVOS KOMPIUTERININKŲ SAJUNGA (LIKS)LIX SOLUTIONS | MATEMATIKOS IR INFORMATIKOS INSTITUTASMERAKAS | METIDA | ADVOKATĖS REDOS ŽABOLIENĖS KONTORA | MICROSOFT LIETUVA | MIDPOINT SYSTEMS | MITSOFT | MOBILI PREKYBA | NETVISION SDC | NEVDA | NEW VISION BALTIJA | NO MAGIC EUROPE | NORDCODE | NORTAL | NSOFT | ORACLE EAST CENTRAL EUROPE LIMITED FILIALAS | PHANTOM GROUP | PRALO | PROACT LIETUVA | PROFECTUS NOVUS | PROKODAS | PRORINGAS | PROTOTECHNIKA | RUBEDO SISTEMOS | RUPTELA | SANTA MONICA NETWORKS | SATGATE | SEKASOFT | SERTIFITSEERIMISKESKUS | ASSISTEMŲ INTEGRACIJOS SPRENDIMAI | SKAIDULA | SKAITOS KOMPIUTERIŲ SERVISAS (SKS) | SOCIALINIŲ MOKSLŲ KOLEGIJASOFTDENT | SOFTNETA | SOUNDEST | SOURCE BRIDGE | SYNERGY CLOUD | TECHNOPSIS | VŠĮ TELEMA | TELESOFTAS | TEO LT | ABTERRA IT | TIETO LIETUVA | TILDE INFORMACINĖS TECHNOLOGIJOS (TILDE IT) | UŽUPIO KŪRYBINIS KLASTERISV | VDU INFORMATIKOS FAKULTETAS (VDU IF)VGTU ELEKTRONIKOS FAKULTETASVGTU FUNDAMENTINIŲ MOKSLŲ FAKULTETAS VILNIAUS KOLEGIJA VILNIAUS UNIVERSITETAS KOMUNIKACIJOS FAKULTETAS VILNIAUS UNIVERSITETO MATEMATIKOS IR INFORMATIKOS FAKULTETAS VILNIAUS VERSLO KOLEGIJAVISORIŲ INFORMACINIŲ TECHNOLOGIJŲ PARKAS (VITP) | VŠĮVTEX | WILIBOX |

Member Base Facts



1.2 billion in revenues



9.2K employees

Fields of interest

Naval CS
SmartCity
BigData/IoT
E-Commerce
E-Government
E-Energy
OpenData
E-Health
FinTech
Crossborder E-Solutions
Digital Construction
Industrie 4.0
GameDev
EdTech
SmartHouse
E-logistics

and much more...

Digital Single Market – why we need it?

315 million
Europeans
use the
Internet
every day



A Digital Single Market

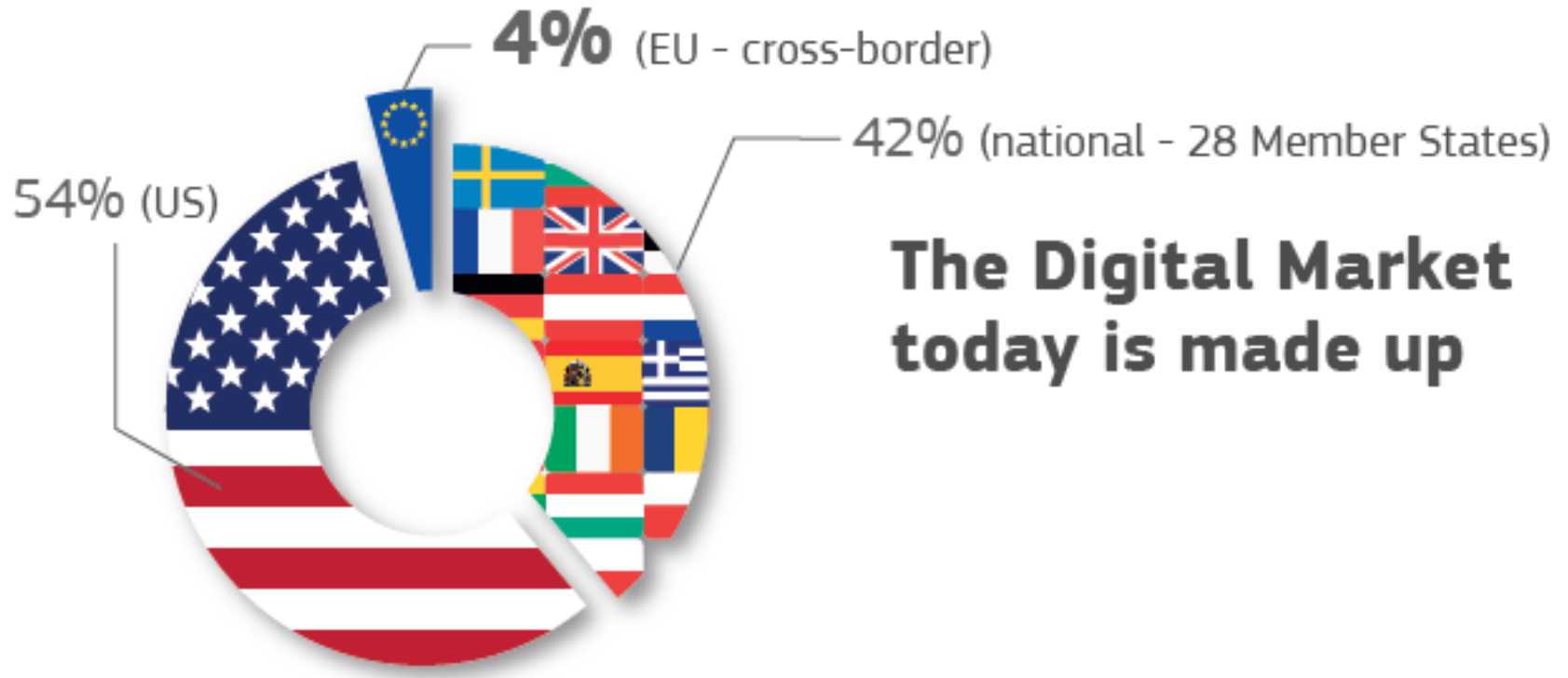
can create up to

€415 billion in additional growth,

hundreds of thousands of new jobs,

and a **vibrant knowledge-based society**

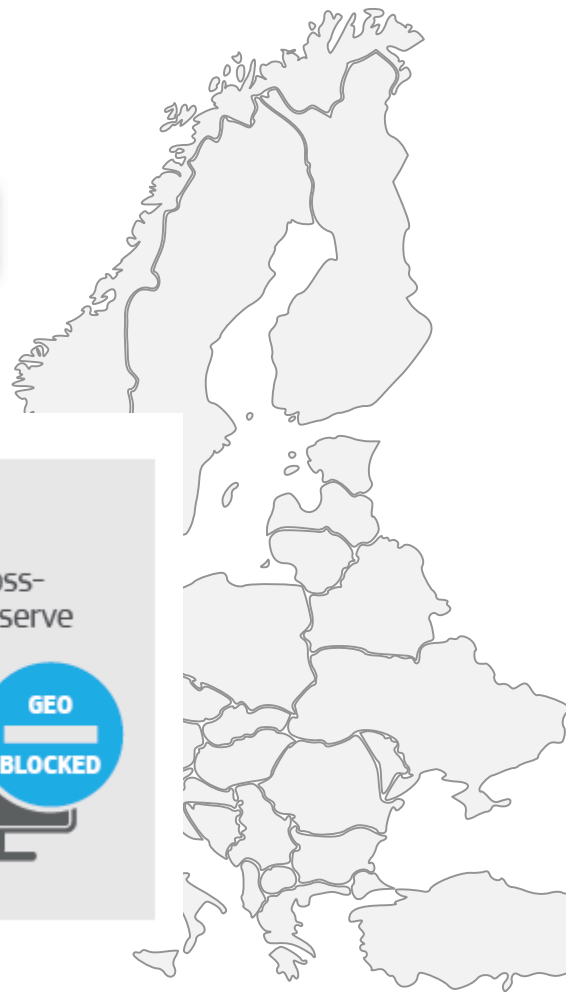
Digital Single Market – whats it is made of?



The Digital Market today is made up

What solutions are needed?

1 Better access for consumers and businesses to digital goods and services across Europe



Unlocking e-commerce potential

Affordable parcel delivery costs



More than **90% of e-shoppers** consider **low delivery prices** and **convenient return options** as important when buying online

62% of companies that are willing to sell online say that too high delivery costs are a problem

Tackling geo-blocking

In **52% of all attempts** at cross-border orders the seller does not serve the country of the consumer

→ less clients,
less revenues
for companies



What solutions are needed?

2 Shaping the right environment for digital networks and services to flourish

Strong data protection rules to boost the digital economy



Rolling out fast broadband for all

Take-up of fast broadband is low: only **22.5% of all subscriptions** are fast ones (above 30Mbps) and Europe has witnessed significant time lags in the roll-out of the latest 4G technology due to the non-availability of suitable spectrum

Spectrum reforms can decrease prices of mobile services and boost productivity over time (estimated EU-wide GDP increase **between 0.11% and 0.16% over 5 years**)



What solutions are needed?

3

Creating a European Digital Economy and society with growth potential

Big data and cloud

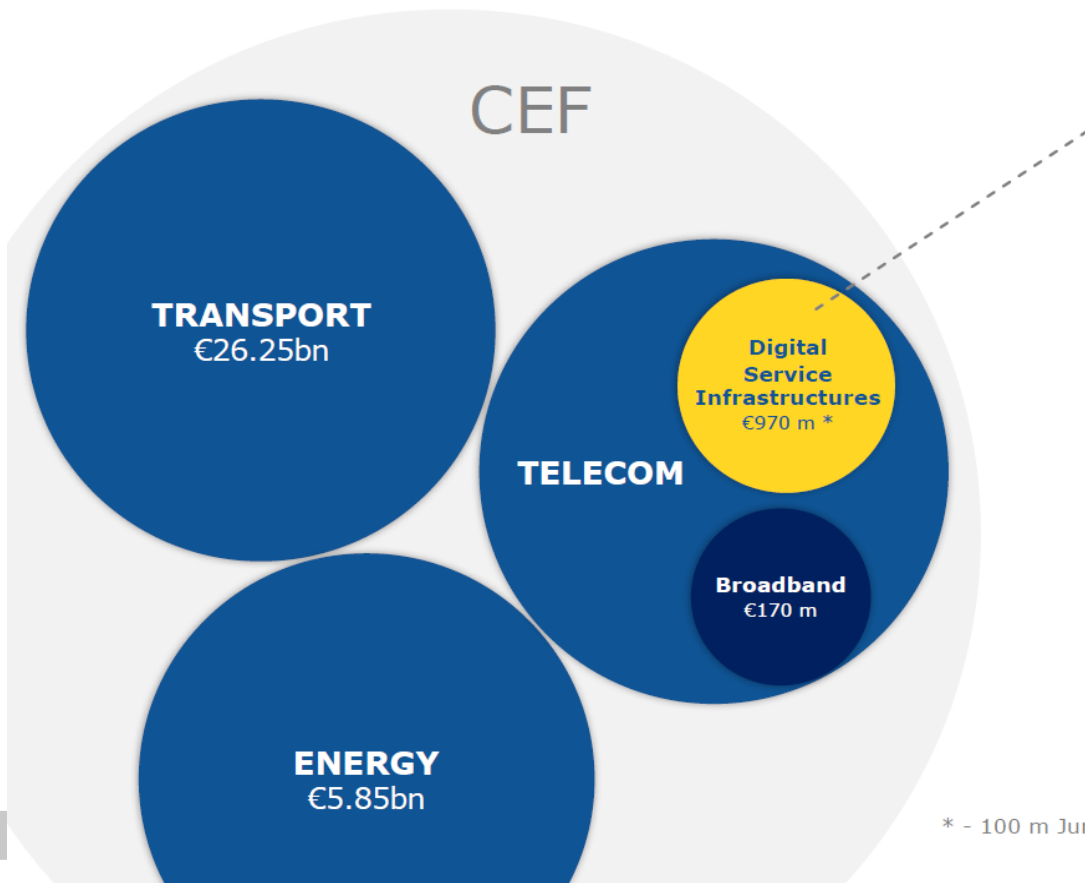
An inclusive e-society

Almost half the EU population (47%) is not properly digitally skilled, yet in the near future, **90% of jobs** will require some level of digital skills

A strategy of 'digital by default' in the public sector could result in around **€10 billion of annual savings**



What is CEF



The **Connecting Europe Facility (CEF)** is a regulation that defines how the EU Commission can finance support for the establishment of trans-European networks to reinforce an interconnected Europe.

HOW IS IT REGULATED?

eIDAS regulation

Provides a predictable regulatory environment to enable secure and seamless electronic interactions between businesses, citizens and public authorities, underpinning the CEF DSI.

eGovernment Action Plan 2016-2020

The Commission will lead by example and adopt the CEF DSI as an early adopter. This has been stipulated in the Commission's latest eGov Action Plan.

* - 100 m Juncker Package

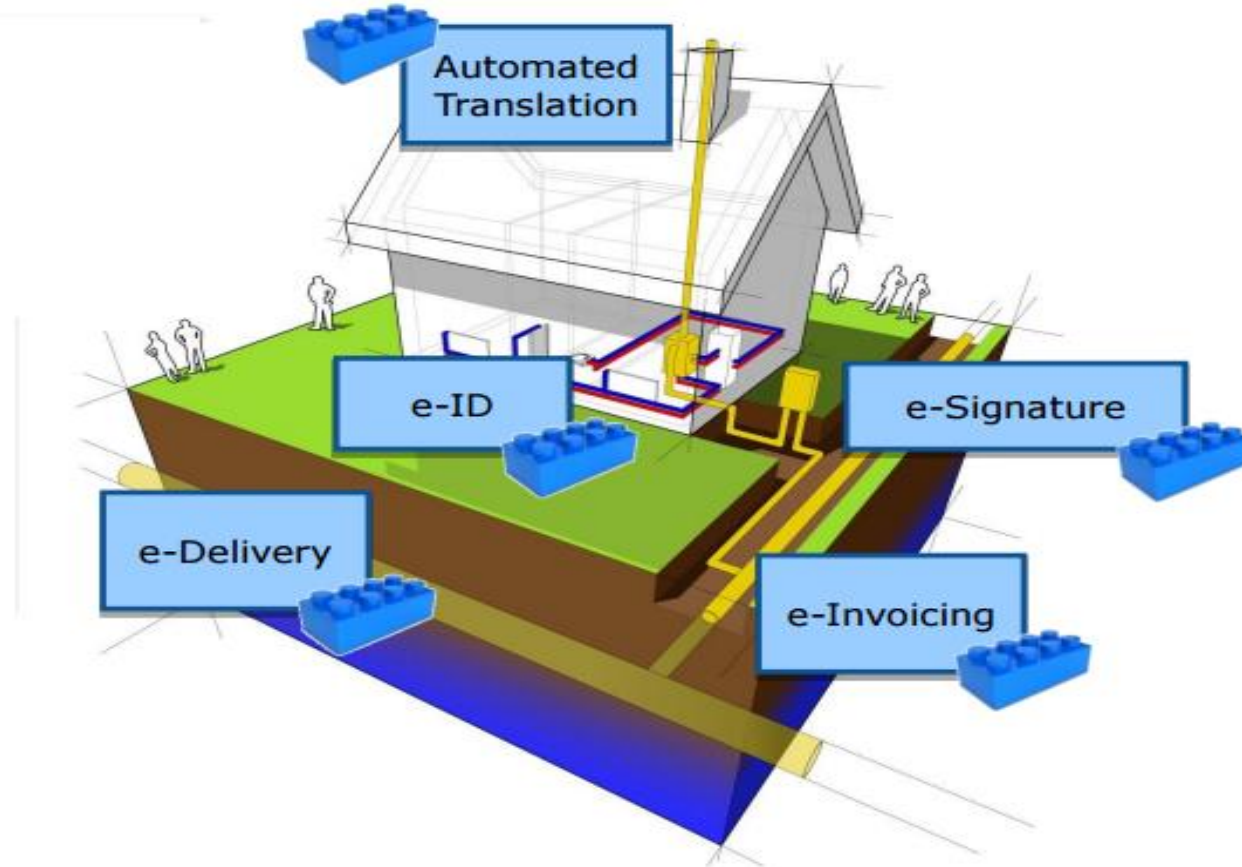
HDM

Topic no.	Topic	Coordinator	Action no.	Action title	Action Leader	Key Contributors
1	eTrade	BY-Valery Virkovski	1.1	Develop a framework for cross-border eTrade for the partner countries, taking into account EU and international best practices	BY	AM,AZ,GE
2	eCommerce for SMEs	BY- Vladimir Anishchanka	2.1	Create a regional online trust-mark scheme based on EU best practice	MD	GE
			2.2	Create a regional online dispute resolution system	UA	GE
			2.3	Develop interoperable eCommerce trading platforms in partner countries	AZ	GE,MD,BY
3	eCustoms	AZ- Igbal Babayev	3.1	Create interoperable anti-counterfeiting and anti-piracy systems in partner countries	BY	LT,GE
			3.2	Create in partner countries national systems for registered exporters	AZ	GE
			3.3	Setup a regional exchange mechanism of Summary Declarations	LT	BY,UA,GE
4	eLogistics and Digital Transport Corridors	LT- Risardas Bedulskis	4.1	Develop a framework for Digital Transport Corridor development from the Black Sea to the Baltic Sea	UA,BY	BY,LT,UA,GE, MD
5	Infrastructures for ICT Research&Innovation	AZ-Jalal Rahimov	5.1	Establish a regional network for cooperation between ICT-related techno-parks	AZ	BY,GE,AM,UA,MD
6	Digital Skills	AM-Naira Nikoghosyan	6.1	Measure and forecast national digital skills gaps and define priority actions	UA	UA,MD,GE
			6.2	Create national coalitions in partner countries, using EU's Grand Coalition model	LV	UA,PL,GE
			6.3	Develop and implement a framework to promote HDM key enabling skills for SMEs	LV	
7	eID, Trust Services	EE-Siim Krispin	7.1	Create a regional framework for mutual recognition of eIDs and harmonization of rules for trust services	AM	GE,BG,MD
			7.2	Pilot interoperable, cross-border eSignature in the region	LT	BY,UA,GE
			7.3	Create regional framework for cross-border eServices for businesses	BY	AM,UA,GE
			7.4	Setup a regional knowledge sharing network and demonstration/information centre	LT	GE
8	NIS, Cyber-security	MD-Pavel Sincariuc	8.1	Define a regional framework for data protection through network resilience	MD	AM,GE
			8.2	Build national CERT capacities, including through cooperation with ENISA	AM	MD,GE
			8.3	Define national cyber-security policies in line with EU's cybersecurity strategy	BY	GE, AZ
9	Telecom Rules	UA-Olena Minitch	9.1	Define national models for rural broadband implementation in partner countries, taking into account best practices in the EU and the partner countries	AM,MD	GE
			9.2	Complete 112 Emergency Service implementation in partner countries	MD	GE
			9.3	Develop synergies with EaPeReg's Expert Working Groups on Spectrum, Benchmarking and International Roaming.	BY,MD	LV,GE
			9.4	Establish harmonised targets for high-speed broadband access in partner countries	MD	BG
10	eHealth	GE-Michael Janiashvili	10.1	Develop a regional action on eHealth	GE,LV	AM

Country or Organisation	Institution/Organisation
Partner Countries	
Armenia	Ministry of Economy
Azerbaijan	Ministry of Communications and High Technologies
Belarus	Association INFOPARK
Georgia	Ministry of Economy and Sustainable Development
Moldova	Ministry of ICT
Ukraine	Ministry of Economic Development and Trade

Country or Organisation	Institution/Organisation
EU Member States	
Belgium	FPS Economy
Bulgaria	Ministry of Transport, IT and Comms
Cyprus	Ministry of Transport, Comms and Works
Czech Republic	Ministry of Industry and Trade
Estonia	Foreign Ministry
Finland	Ministry for Foreign Affairs
France	Ministère de l'Economie, de l'Industrie et du Numérique
	Ministère de l'Economie, de l'Industrie et du Numérique
Germany	Federal Ministry of Economic Affairs and Energy
Hungary	Prime Minister's Office, State Secretariat for EU Affairs
Latvia	LIKTA
Lithuania	Association INFOBALT
	Office of the Government
Portugal	FCT-Portuguese Foundation for S&T
	Ministry of Foreign Affairs
Slovakia	Ministry of Finance of the Slovak Republic
Slovenia	Ministry of Education, Science and Sport
Spain	Cabinet of State Sec. for Telecom and Info Society
	Permanent Representation of Spain to EU
Sweden	Ministry for Foreign Affairs

Five building blocks – what are they?



Five building blocks – why does it matter?

Five building blocks – why does it matter?



**Increase
Interoperability**

**Reduce
Technical Risks**

CEF building blocks

e-Delivery

e-ID

e-Signature

e-Invoicing

Automated
Translation

What is it about?

Examples of use?

What can be reused?

CEF building blocks

e-Delivery

e-ID

e-Signature

e-Invoicing

Automated
Translation

What is it about?

Transport layer for delivering electronic documents (and data in general)

Examples of use?

PEPPOL (11 Countries), e-Codex (16 Countries)

What can be reused?

Access Points, Discovery Service, Specifications (e.g. ebMS 3.0)

CEF building blocks

e-Delivery

e-ID

e-Signature

e-Invoicing

Automated
Translation

What is it about?

Transport layer for

Solution Description

data in general)

Examples of use?

PEPPOL (11 Countries)

The eDelivery building block is based on network of nodes that rely on standard transport protocols and security policies.

What can be reused?

Access Points, Discovery Service, Specifications (e.g. ebMS 3.0)

CEF building blocks

e-Delivery

e-ID

e-Signature

e-Invoicing

Automated
Translation

What is it about?

Mutual recognition of electronic identification (eIDAS)

Examples of use?

STORK 1.0 (14 Countries)

What can be reused?

Pan European Proxy System (PEPS), EU PEPS (ECAS-STORK)

CEF building blocks

e-Delivery

e-ID

e-Signature

e-Invoicing

Automated Translation

Solution description

What is it a
Mutua

Introduction to the eIDAS solution.

Examples of
STORK

Proxy to Proxy

User from a proxy country accessing a service in another proxy country.

What can be
Pan European Proxy System (PEPS), EU PEPS (EUAS STORK)

Middleware to Proxy

User from a middleware country accessing a service in a proxy country

Proxy to Middleware

User from a proxy country accessing a service in a middleware country

CEF building blocks

e-Delivery

e-ID

e-Signature

e-Invoicing

Automated
Translation

What is it about?

Creation and validation of e-signatures (eIDAS)

Examples of use?

Implementation of the Services Directive (DG MARKT)

What can be reused?

Trust List Manager, Digital Signature Services (DSS)

CEF building blocks

e-Delivery

e-ID

e-Signature

e-Invoicing

Automated
Translation

What is it about?

Creation and validation

Use Cases

Examples of use?

Implementation of

Create an electronically signed document and

Receive and validate an electronically signed

What can be reused?

Trust List Management

document

CEF building blocks

e-Delivery

e-ID

e-Signature

e-Invoicing

Automated
Translation

What is it about?

Electronic transfer of Invoices

Examples of use?

PEPPOL (11 Countries), e-PRIOR (55 EU Bodies)

What can be reused?

Reusable tools (test, validate, transfer e-Invoices)

CEF building blocks

e-Delivery

e-ID

e-Signature

e-Invoicing

Automated
Translation

What is it about?

Electronic trans

For public administrators

Examples of use?

PEPPOL (11 Cou

Use case on elnvoicing for public administrators

For solution providers

What can be reused?

Reusable tools

Use case on elnvoicing for solution providers

CEF building blocks

e-Delivery

e-ID

e-Signature

e-Invoicing

Automated
Translation

What is it about?

Automated translation of content into any relevant EU language

Examples of use?

Commission Machine Translation service (MT@EC)

What can be reused?

MT@EC system

CEF building blocks

e-Delivery

e-ID

e-Signature

e-Invoicing

Automated
Translation

What is it about?

Automated tra

Public Administrations

age

Examples of use?

Commission M

Offering a web user interface for direct use by human users.

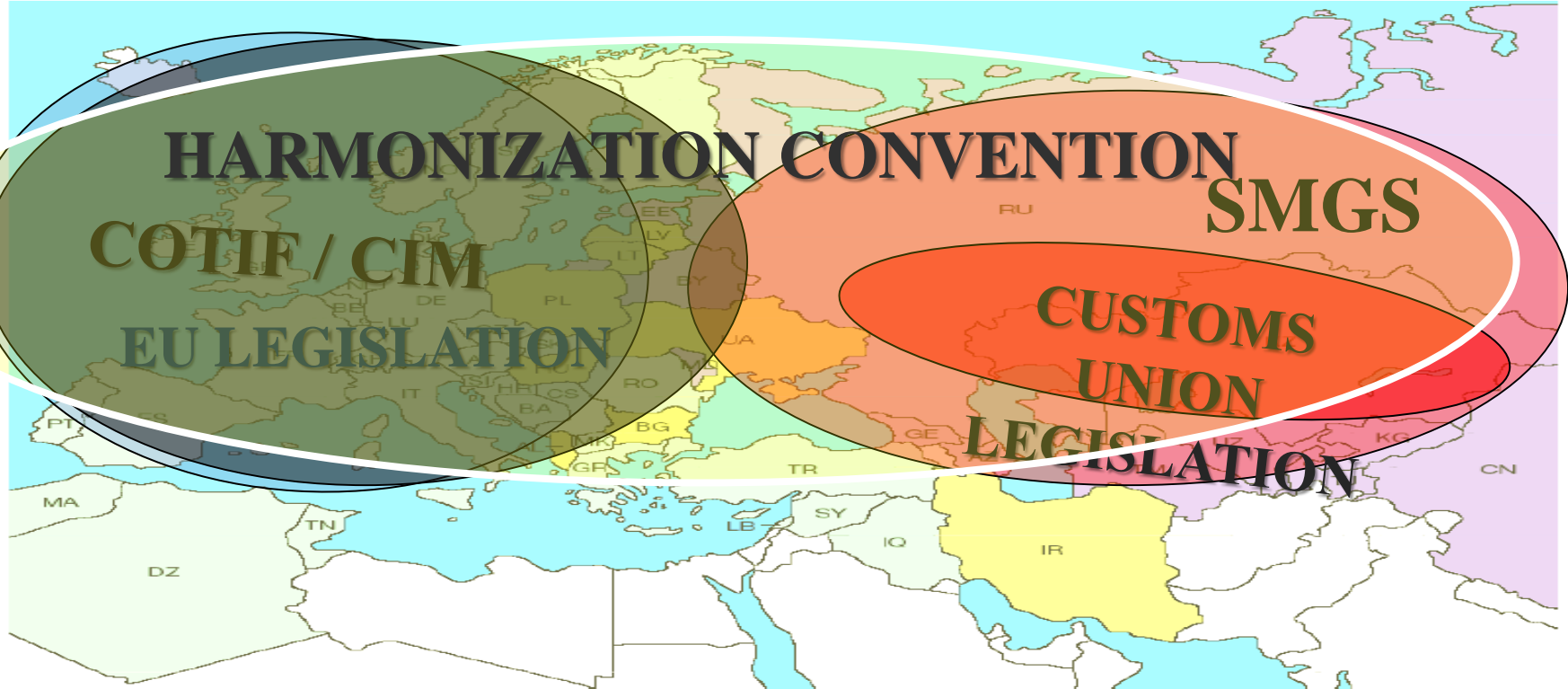
What can be reused?

MT@EC system

Services (domains)

- **eTrade**
- **eLogistics**
- **eHealth**
- **eCustoms**
- **eGovernment**
- ...

Harmonization



Next steps

- Workshop
- Case studies
- HDM framework

**“ Today’s competition takes
place not between companies
but between supply chains. ”**

Martin Christopher

Emeritus Professor of Marketing and Logistics at Cranfield School of Management in the UK, co-founded the *International Journal of Logistics Management* and was its joint editor for 18 years.

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