European Commission

From ISA to ISA²

ISA² Conference

3 March 2016

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European Commission

eHealth

Reduce administrative burden

Seamless, end-to-end digital public services

Industry 4.0

Digital Single Market

Public sector modernisation

Security

Interoperability

Efficiency and effectiveness

Implementation of EU policies

Once-only principle

Cross-border by default

Internet of things

Standards

High Performance computing

Open data

Tackling global complex challenges

Single access point

Transparency

Accountability

European Commission

Interoperability
Solutions for
European public
Administrations

2005 – 2009
IDABC

2016 – 2020
ISA²

1995 – 1999
IDA

Interchange of Data
between Administrations

2000 – 2004
IDA II

IDABC
European
eGovernment Services

2010 – 2015
ISA

From ISA

Where we stand ...

To ISA²

*I*nteroperability *S*olutions for European public *A*dministrations

Efficient

… and effective electronic
cross-border and cross-sector
interaction between European
public administrations.

European public administrations

… share and re-use existing successful or new Interoperability solutions, common services and generic tools.

Flexible and interlinked

…IT systems allow smooth implementation of Community policies and activities.

European
Interoperability
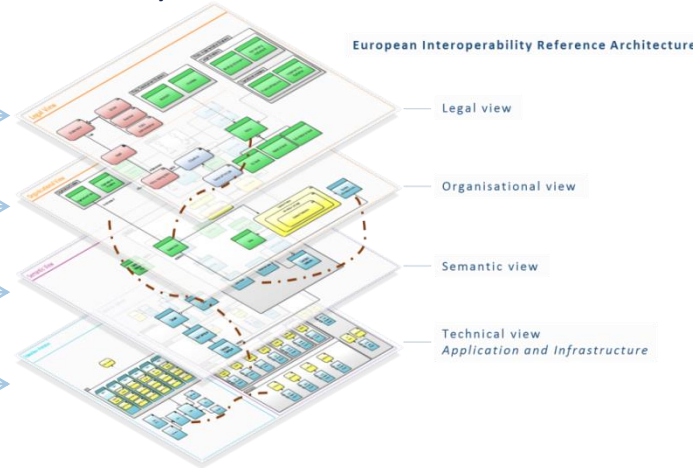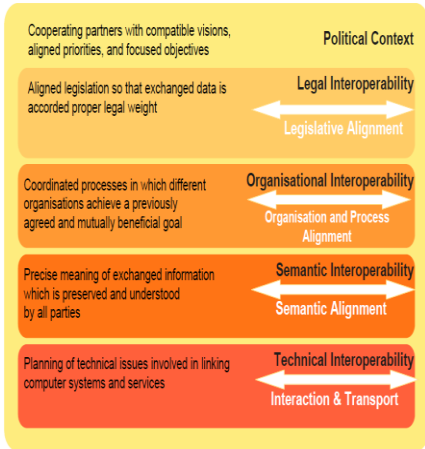Framework (EIF)

EIRA

European Interoperability Reference Architecture

A reference architecture for delivering digital public services (across borders and sectors).

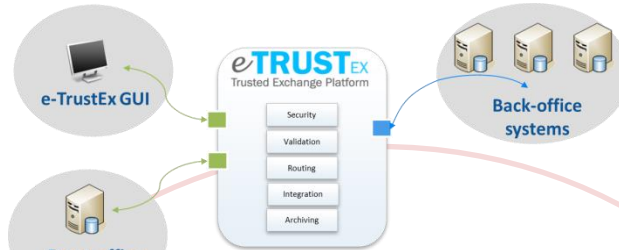# EICart

European Interoperability Cartography

A mapping of IOP solutions to the Building Blocks of the EIRA.

Political Context	Cooperating partners with compatible visions, aligned priorities, and focused objectives
Legal Interoperability	Aligned legislation so that exchanged data is accorded proper legal weight
Legislative Alignment	
Organisational Interoperability	Coordinated processes in which different organisations achieve a previously agreed and mutually beneficial goal
Organisation and Process Alignment	
Semantic Interoperability	Precise meaning of exchanged information which is preserved and understood by all parties
Semantic Alignment	
Technical Interoperability	Planning of technical issues involved in linking computer systems and services
Interaction & Transport	

European Interoperability Reference Architecture

Legal view

Organisational view

Semantic view

Technical view
Application and Infrastructure

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e-TrustEx GUI

e-TRUSTEX
Trusted Exchange Platform

- Security
- Validation
- Routing
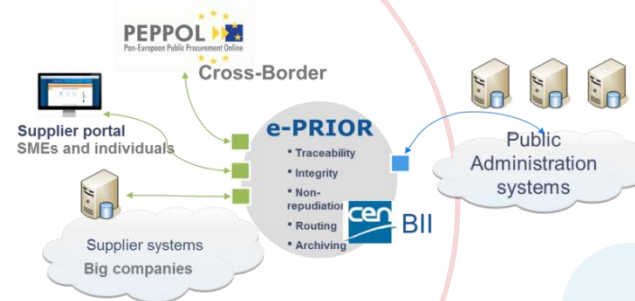- Integration
- Archiving

Back-office systems

Front-office systems

- Secure exchange of documents between the EU Institutions and with the MS
- "Open" version exists
  Large documents handling
  Documents bundling
  Multicasts
  Time stamping

- "Open" version exists
- The Belgian Federal Government has opted for reusing e-Prior for e-invoicing:
  - Rapid
  - Savings (7,5€ for PA and 2€ the suppliers) /annum

- Secure IP based private network interconnecting Public Administrations

PEPPOL
Pan-European Public Procurement Online
Cross-Border

Supplier portal
SMEs and individuals

e-PRIOR
- Traceability
- Integrity
- Non-repudiation
- Routing
- Archiving

cen BII

Public Administration systems

Supplier systems
Big companies

s-TESTA

European Citizens' Initiative

MT@EC

IMI NET

- 3 European Citizens initiatives on "Right2Water" "Stop vivisection" and "One of Us" hit more than 1.000.000 signatures
- 6 other initiatives are still on-going

- IMI counts 7247 registered authorities in 31 EEA Member States, and +14.000 users (status in 2015)
- Supports 11 sectors extendable to support additional domains

- Automatic Machine Translation in 24 EU languages - available to the Commission staff as of Jun 2013 + opening to the MS:
  - Automatic machine translation – statistical based
  - 24 EU languages – 58 pairs – 552 combinations
  - Built on EU documents for EU documents
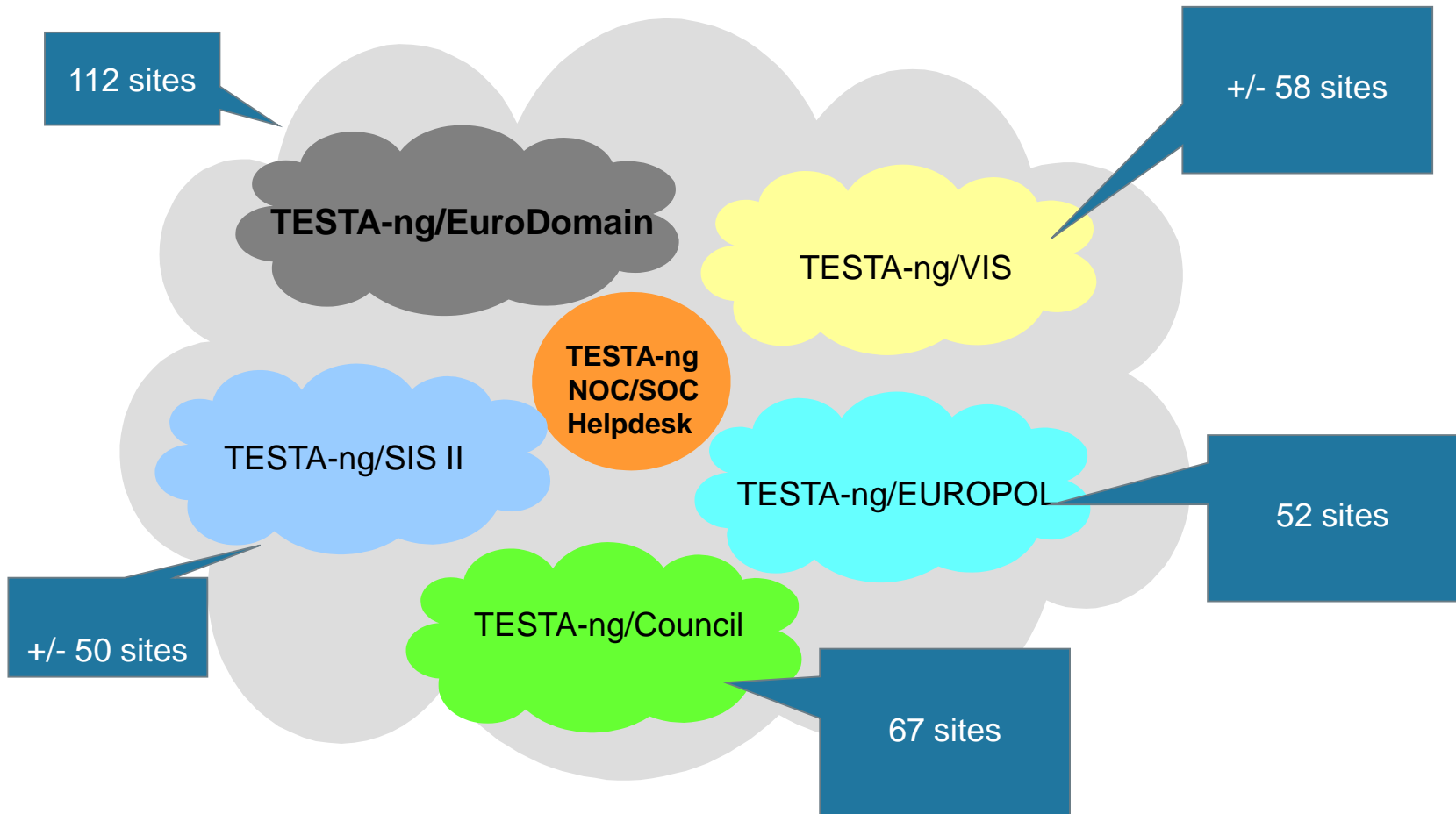 - Translated documents maintain their original format

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112 sites

+/- 58 sites

TESTA-ng/EuroDomain

TESTA-ng/VIS

TESTA-ng NOC/SOC Helpdesk

TESTA-ng/SIS II

TESTA-ng/EUROPOL

52 sites

+/- 50 sites

TESTA-ng/Council

67 sites

Semantic Standards

ADMS
ASSET DESCRIPTION METADATA SCHEMA

Give **visibility** to existing solutions

CORE VOCABULARIES

Establish agreements on **basic** semantics

DCAT
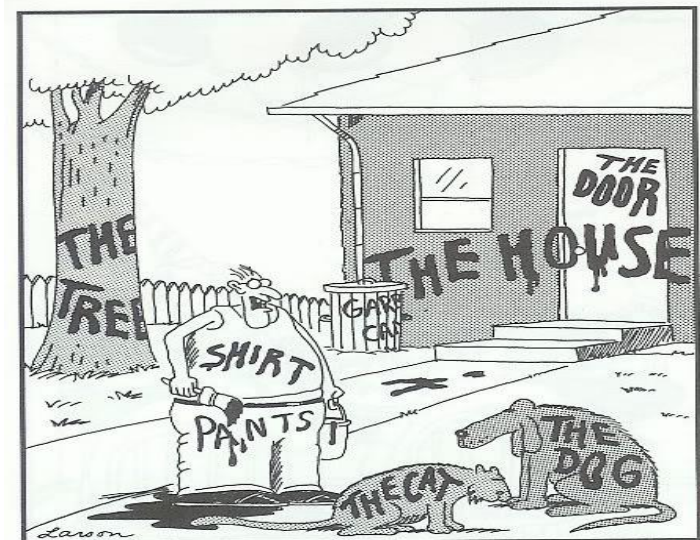APPLICATION PROFILE FOR EUROPEAN DATA PORTALS

Improve availability of **Open** Data

"Now! ... *That* should clear up a few things around here!"

Raise **awareness** on semantics

Communities → Studies → Visits

From ISA

Where we go ...

To ISA²

European
Commission

Programme on interoperability solutions and common frameworks for European public administrations, businesses and citizens as a means for modernising the public sector

Proposals from Member States and Commission services

~131M Euros 2016-2020

Execution by the European Commission

- Develop, maintain promote a holistic approach to IOP
- Implement the EIF
- Monitor EIF's implementation

- IOP cross-border or cross-sector
- Administrations, businesses and citizens
- Target all administrative levels including regional and local administrations

- Identify, create and operate IOP solutions to support EU policies

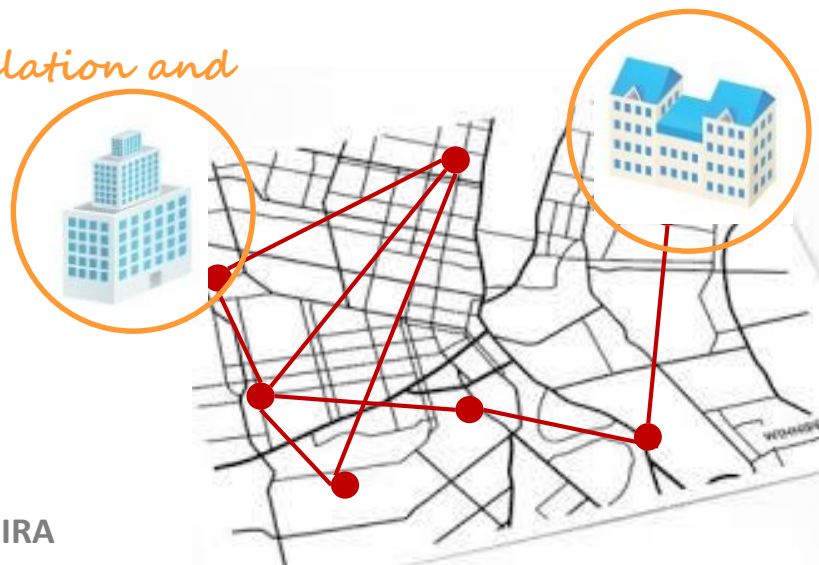- Facilitate re-use of IOP solutions by the EU public administrations

Holistic approach towards IOP in the EU

› eliminating fragmentation in the IOP landscape
› common understanding and global picture of IOP
› Instruments
  • Strategy
  • Framework
  • Architecture
  • Cartography
› Legislation Gaps

Scope

› Public administrations
› Business
› Citizens

Modernise PA at all levels

› EU and national level
› Drill down to regional and local

Links with other EU initiatives

› Connecting Europe facility (CEF)
› Horizon2020
› European Structural and Investment Funds
› ...

Measure Impact

- Develop mechanisms that measure the benefits of interoperability solutions including methodologies for assessing cost-savings

- Quantifiable and qualifiable impact of the interoperable ICT-based solutions

- Monitoring the impact of the programme's actions based on identified needs

Engage stakeholders

- Put in place a platform to disseminate interoperability solutions, allow exchange of best practises and collaboration and raise awareness
- Facilitate community building
- Develop a communication strategy to raise awareness targeting businesses, SMEs and citizens

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Holistic approach towards IOP in the EU

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  • Cartography

› Legislation Gaps

1. Supporting instruments ("City planning")

2. Key interoperability enablers ("City utilities")

3. Support EU legislation and initiatives

- **European IOP Strategy & Framework (EIS and EIF)**
- **European Interoperability Reference Architecture – EIRA**
- European IOP Cartography – EIC

- Data exchange
- eID – eSignature
- Data semantics
- **Base registries**
- Catalogue of Services

- Digital Single Market
- **INSPIRE**

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Holistic approach towards IOP in the EU

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  • Strategy
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› Legislation Gaps

National Interoperability Frameworks Observatory (NIFO)
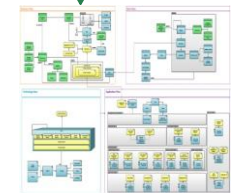
Member States

Standardisation bodies

Industry

joinup

Sharing & reuse policy

EFIR
IOP assets

ADMS

EU Cartography
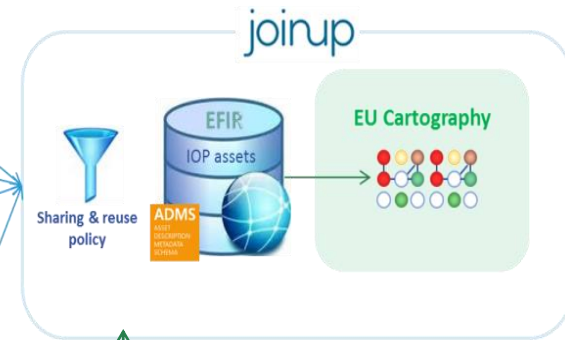
(make the link …)

• What exists?
• What is still missing?

EIRA
European Interoperability Reference Architecture

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Scope	Modernise PA at all levels
› Public administrations › Business › Citizens	› EU and national level › Drill down to regional and local

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ABOUT THIS ISSUE

The six cover features in this issue highlight the technical, semantic, syntactical, organizational, and legal aspects of Europe's e-government interoperability challenges, as well as success stories.

25 Promoting Interoperability in Europe's E-Government

Konstantinos Bovalis, Vassilios Peristeras, Margarida Abecasis, Raul-Mario Abril-Jimenez, Miguel Alvarez Rodríguez, Corinne Gattegno, Athanasios Karalopoulos, Ioannis Sagias, Szabolcs Szekacs, and Suzanne Wigard

Europe's Interoperability Solutions for Public Administrations (ISA) program has created a model for implementing interoperability solutions across technical, semantic, organizational, and legal levels.

See www.computer.org/computer -multimedia for multimedia content related to the features in this issue.

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Join ISA² initiatives at: http://ec.europa.eu/isa/index_en.htm
and @ http://joinup.ec.europa.eu

http://goo.gl/eK1EY   @SEMICeu   http://joinup.ec.europa.eu
ISA