SCM meeting

Interoperability – A key enabler for the delivery of e-Government services

Helsinki, 20 Sep 2013

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Challenges facing Public Administrations

Improved Quality of European Public Administration

- EU
- national
- regional
- local level

Increased competitiveness and productivity for EU businesses

Provision of services to end-users in a

- interoperable
- qualitative
- sustainable
- transparent
- secure way

- Productivity
- Reduced response time
- Lower costs
- Elimination of corruption

Challenges facing Public Administrations (cont.)

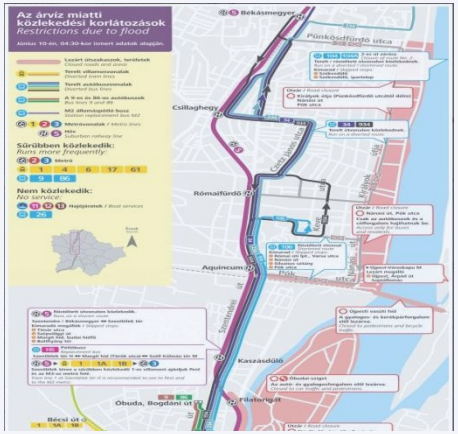
Swift towards an interconnected government model

Develop synergies among institutions, enable effective resource utilisation in public sector agencies, unlock data – all across sectors

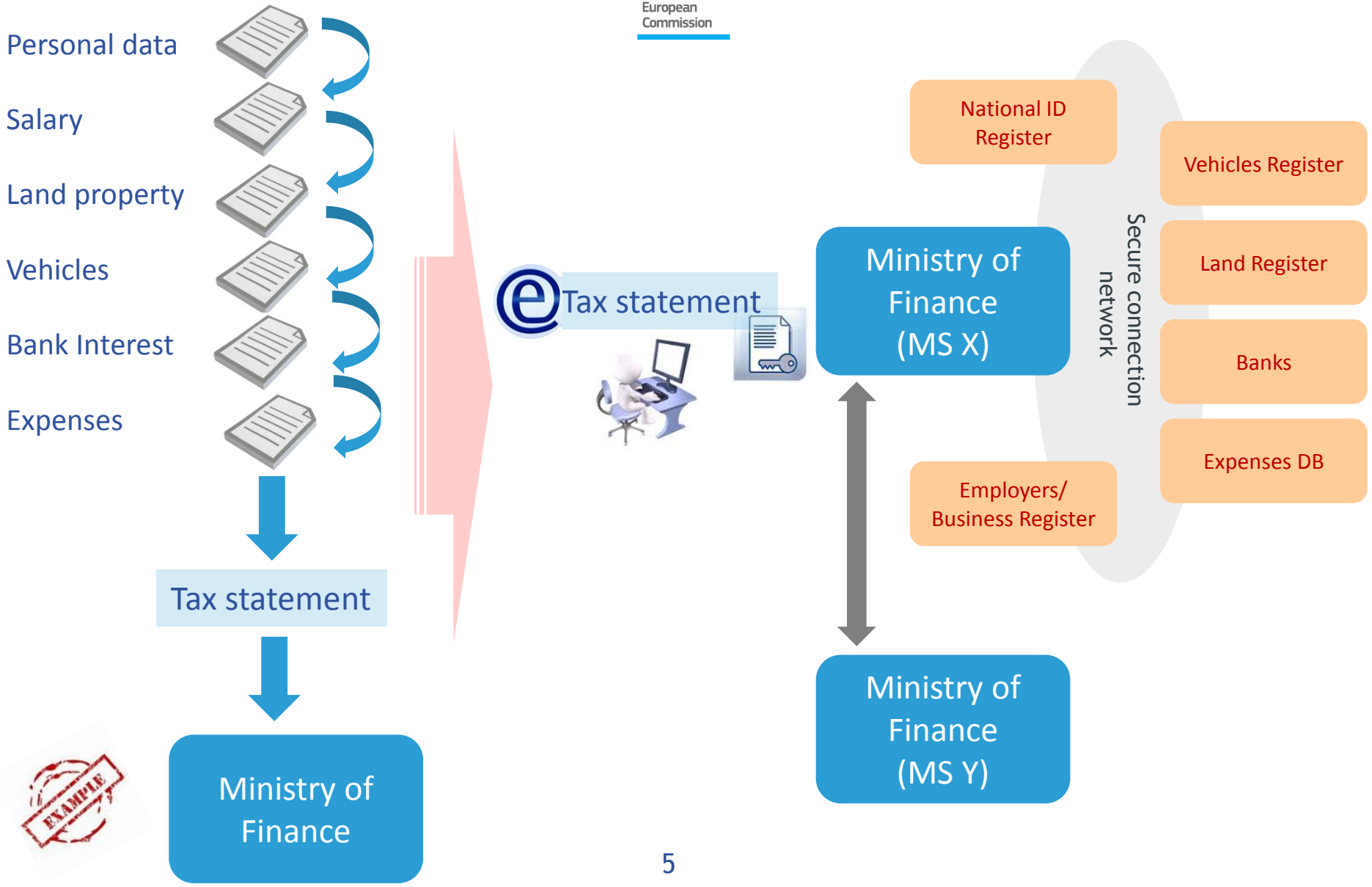
Build transparent public services oriented towards citizens and businesses needs with horizontally and vertically interconnected public administrations departments

Optimize and simplify across ministerial boundaries and tailor workflows to citizens' and businesses' needs

European Commission

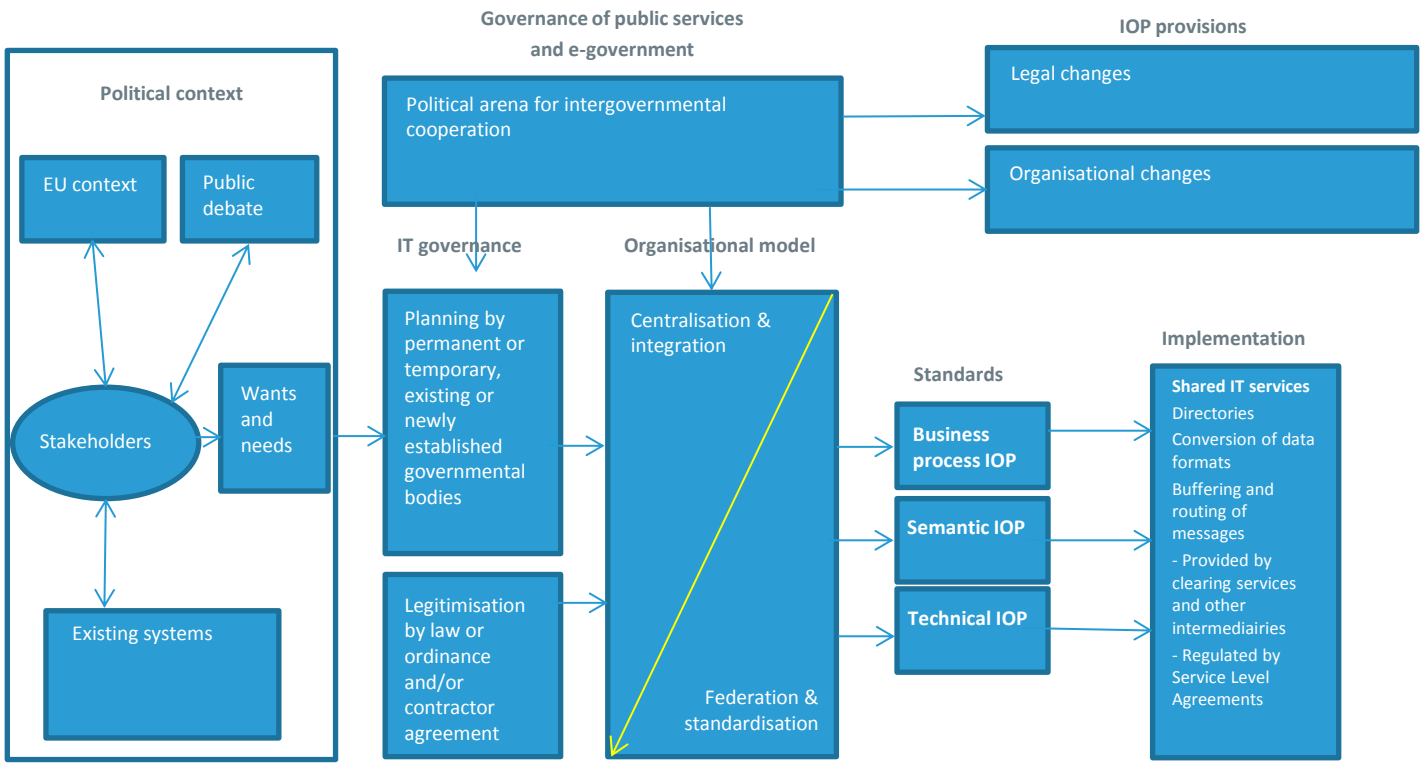


EXAMPLE


European Commission
Personal data
Salary
Land property
Vehicles
Bank Interest
Expenses
Tax statement
Ministry of Finance
EXAMPLE
Tax statement
National ID Register
Vehicles Register
Land Register
Banks
Expenses DB
Employers/ Business Register
Secure connection network
Ministry of Finance (MS X)
Ministry of Finance (MS Y)

Interoperability is a key enabler for the provision of efficient e-Government services at national and EU level

Interoperability Governance



From « Organisational Interoperability in E-government », Herbert Kubicek, Ralph Cimander, Hans Jochen Scholl

Interoperability Solutions for Public Administrations - ISA

Efficient

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

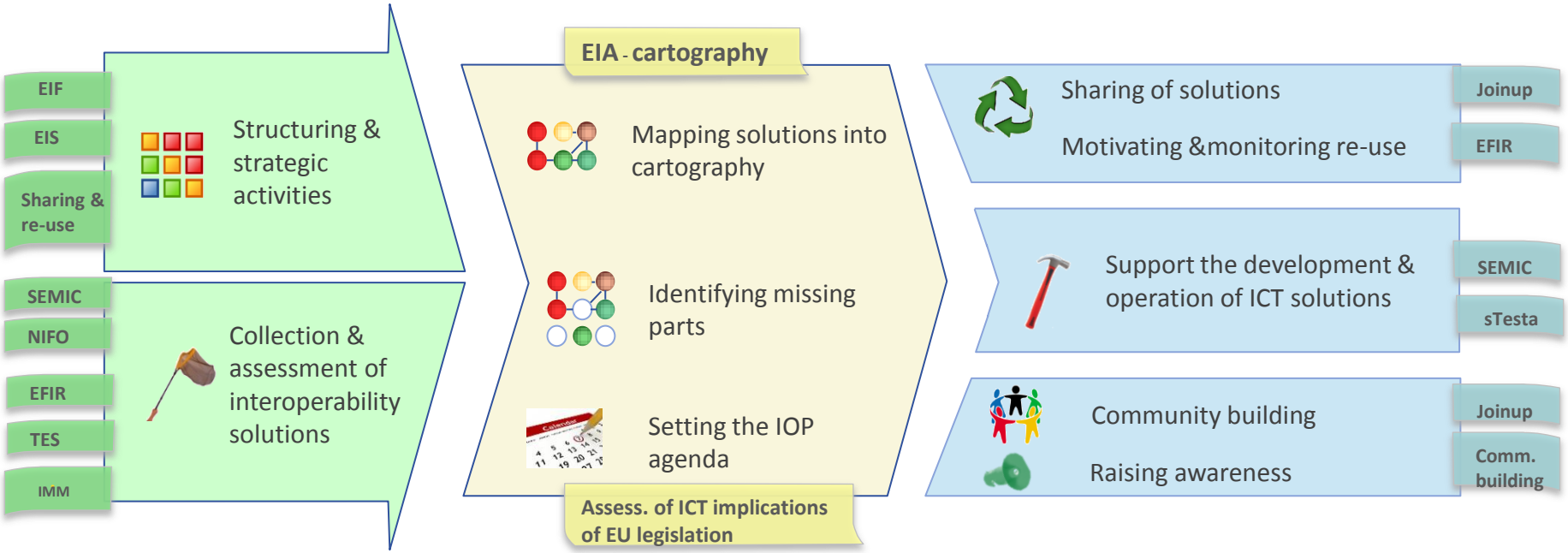
European public administrations

… 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.

Programme Coverage



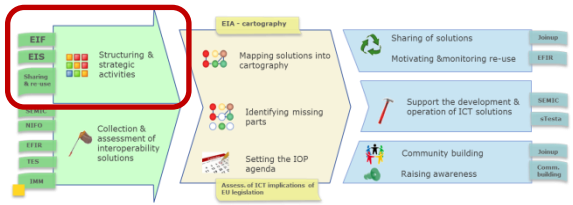
Structuring and strategic activities

- Digital Agenda:

  "A key action to promote interoperability between public administrations will be the Commission's adoption of an ambitious European Interoperability Strategy and the European Interoperability Framework to be drawn up under the ISA programme (Interoperability Solutions for European Public Administrations)"

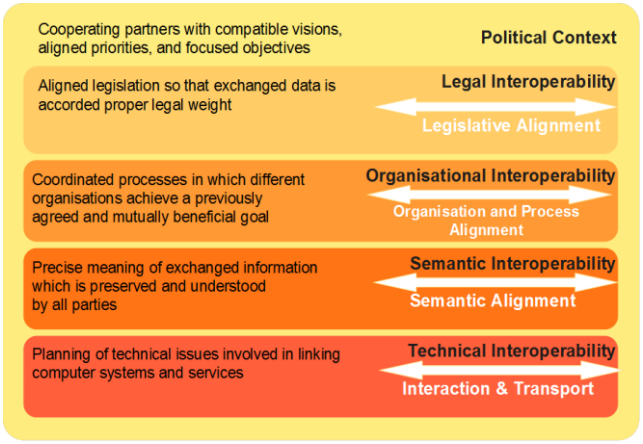
- The Commission adopted the Communication "Towards interoperability for European public services" in December 2010:

  - European Interoperability Strategy (EIS)
  - European Interoperability Framework (EIF)



Structuring and strategic activities (cont.)

The European Interoperability Framework - EIF



Interoperability levels

An agreed approach on

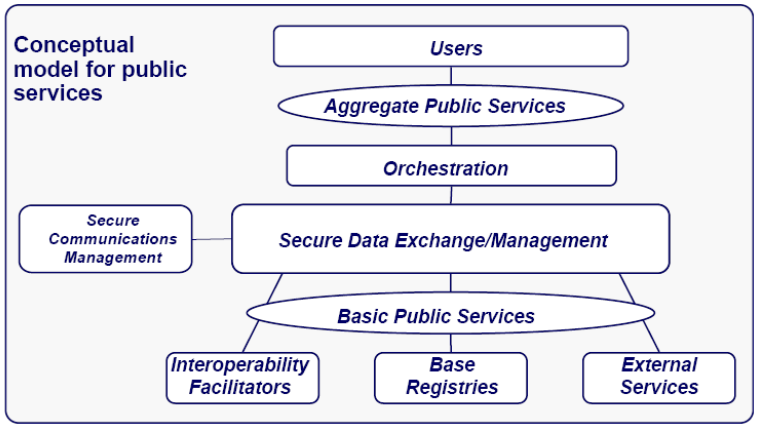
EIF recommendations for organisational interoperability

Recommendation 15: Public administrations should document their business processes and agree on how these processes will interact to deliver a European public service.

Recommendation 16: Public administrations should clarify their organisational relationships as part of the establishment of a European public service.

Recommendation 17: Public administrations working together to provide European public services should agree on change management processes to ensure continuous service delivery.

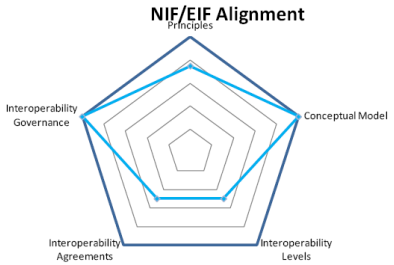
Underlines principles & recommendations



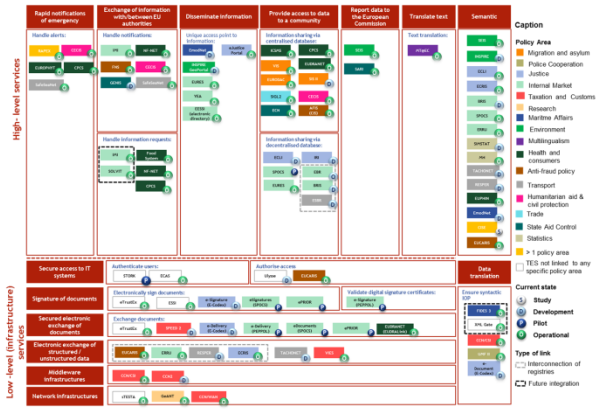
Conceptual models

Collection and assessment of IOP solutions

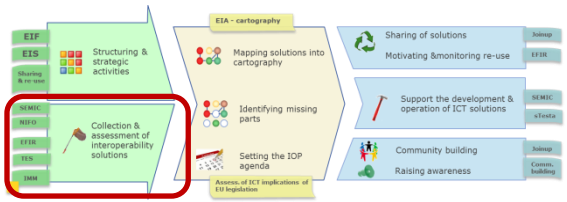
National Interoperability Frameworks Observatory (NIFO)

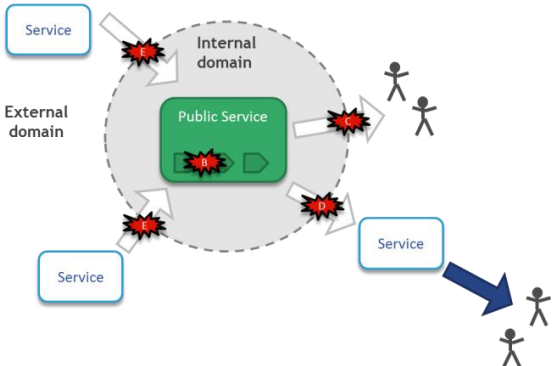


Trans-European Systems assessment (TES)



Interoperability Maturity Model (IMM)





European Commission

EU IOP Cartography

(make the link …)

Member States

Standardisation bodies

joinup

assets

submission

Sharing & reuse policy

assets

federation

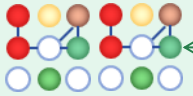
EFIR

IOP assets

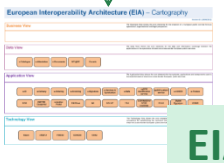
ADMS

ASSET DESCRIPTION METADATA SCHEMA

EU Cartography



Alignment with the EIA Reference Architecture



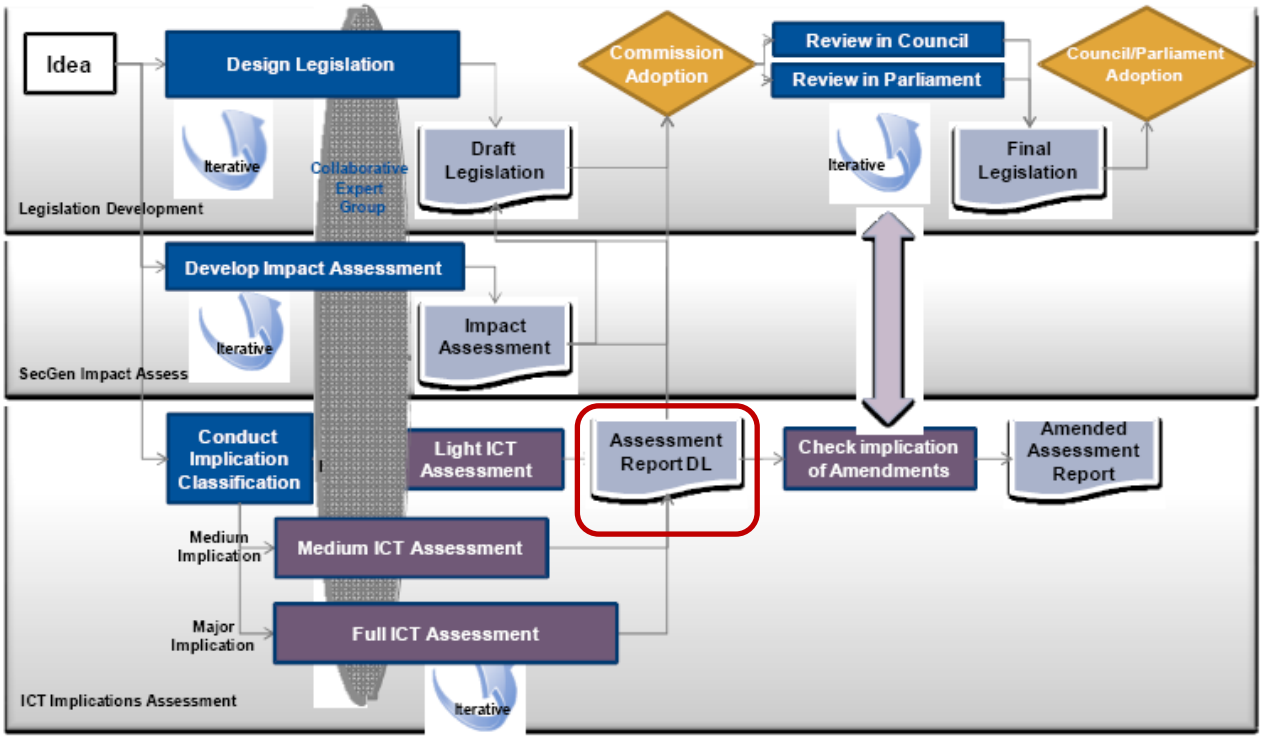
EIA

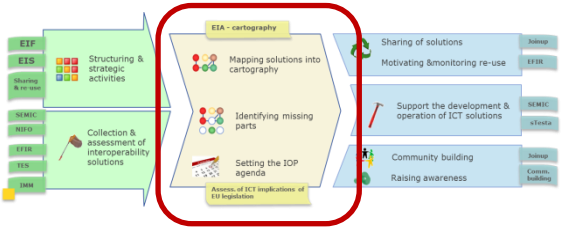
TES

EU Institutions

Industry

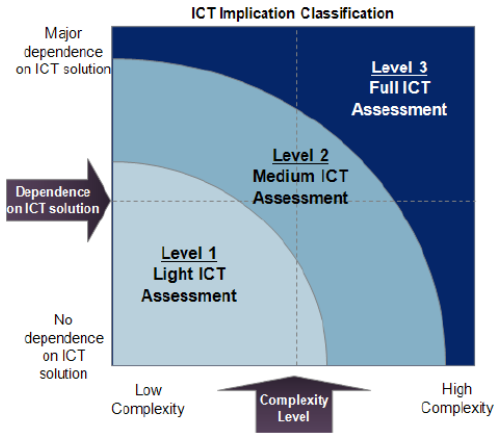
ICT implications assessment





ICT implications assessment (cont.)

Step 1: Classify based on dependence on ICT and complexity of the solution



Step 2: Run the assessment

Microsoft Excel Worksheet

Approaches to consider	
☑	Legislative text review
☑	Content study by Commission ICT experts
☑	Member State Consultation
☐	Content study by Member State ICT experts
☐	Vendor consultation
☐	Pilot study
Tools to consider	
☑	**High-level checklist**
☑	**Detailed checklist**
☐	Template assessment report
☐	Scoring sheet
☐	Architecture overview
☐	Business process modelling
☐	Project plan template
☐	Business Case

List of "must-do" for the medium ICT assessment

Step 3: Pass it on to the European Parliament and to the Council

Step 4: Amend if necessary

European Commission

Business Models for sharing and reuse

- Objective: Identity sustainable business models for sharing and re-use of IT solutions
- Means: desk research, survey and interviews with public administrations in Member States and Commission services

1 Development and re-use of shared tools 5 cases

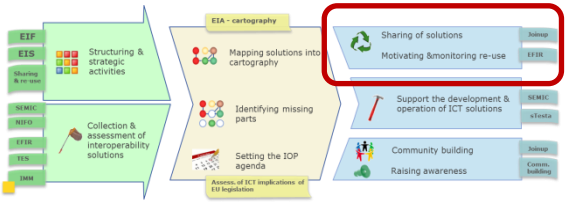
- EU: e-Prior and Open e-Prior
- BE: IMIO: re-use and pooling of IT
- SE: procurement framework for re-using free solutions
- CH: Financing eGovernment priority projects

2 Development and use of shared services 3 cases

- EU: EC ICT Shared Services for EU services and other EU bodies
- EU: sTesta data communication network service
- UK: G-Cloud and Cloud store – shared services and procurement

3 Shared development of IT solutions 5 cases

- EU: Customs domain - Sunset project
- EU: Customs domain - collaborative implementation of the Customs code
- FR: OpenFoncier and OpenMairie frameworks for sharing development
- NO: Friprogforeningen and Frikomport – shared development among municipalities
- FR: eBourgogne: Regional shared platform for electronic public services



Business Models for sharing and reuse (cont.)

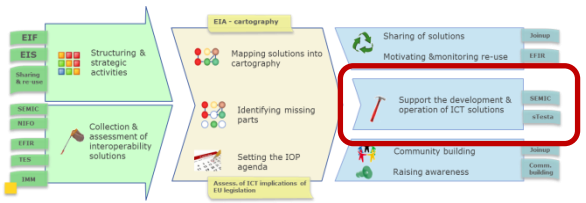
Findings

1. Active incentives are needed to achieve sharing and reuse
2. Political engagement is important but not enough – financial benefit need to be created
3. Identify and mitigate possible show-stoppers for collaboration early on
4. Know your target group – Diversify your offers
5. Success = ICT infrastructure services + procurement services + software as a service
6. Savings may come in many forms …
7. Reaping of benefits needs initial investment

European Commission

IT systems and Infrastructures

Development & operation of ICT solutions



Development & operation of ICT solutions (cont.)

Semantic interoperability
Core Vocabularies

A Core Vocabulary is a simplified, reusable, and extensible data model that captures the fundamental characteristics of an entity in a context-neutral fashion

Multi-disciplinary working group

67 participants

21 Member States and the US, South Africa and Croatia
EU institutions
Standardisation bodies
External experts/academia

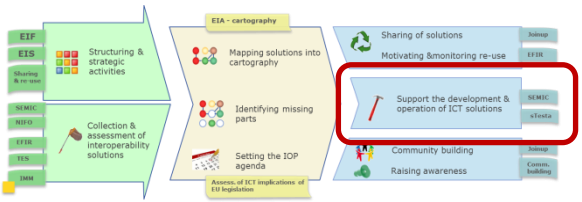
Core Vocabularies Working Group
W3C methodology

CORE LOCATION VOCABULARY
Core Location TF: chaired by EC Joint Research Centre/H6 (INSPIRE Directive)

CORE BUSINESS VOCABULARY
Core Business TF: chaired by DG MARKT (European Business Registry project)

RegOrg
W3C note

CORE PERSON VOCABULARY
Core Person TF: chaired by EUROJUST
Eurojust promotes the interoperability in the judicial domain amongst MSs



Development & operation of ICT solutions (cont.)

Access to Base Registers

Identify good practises

Within a single MS
OR
Same type of base register across MS

Development & operation of ICT solutions (cont.)

Access to Base Registers

Legal	Good practice #1: Equivalence of paper and electronic base registries records is formalised in legislation
	Good practice #2: Principles of data sharing across sectors are formalised to bridge differences in legislation
	Good practice #3: European initiatives have legal support to answer questions about national legislation
	Good practice #4: Legislation regulating base registries uses technology neutral terms or standards and specifications which are not proprietary

Organisational	Good practice #6: Cross–organisational committees, with decision power, coordinate the interconnection between base registries
	Good practice #7:Collaborative processes are put in place to design interoperable interfaces used for interconnecting base registries
	Good practice #8: The conditions to exchange data between base registries are gradually formalised in service level agreements which are respected
	Good practice #9: Stakeholders' engagement is an integral part of the lifecycle of interconnecting of base registries
	Good practice #10: All base registries have defined a master-slave governance for data in a cross-sector setting
	Good practice #11: The owners of base registries provide data at charges and not higher than marginal cost

Development & operation of ICT solutions (cont.)

Access to Base Registers

Semantic	Good practice #12: Base registries are moving towards the use of ISA's Core Vocabularies
	Good practice #13: EU-wide projects make use of coded values to reduce semantic conflicts
	Good practice #14: Entities can be unequivocally identified within the Member State and across borders

Technical	Good practice #15: Service Oriented Architecture (SOA) is the architectural style for interconnecting base registries
	Good practice #16: User and application access management is based on a federated structure of authorised users and applications
	Good practice #17: The digital identity of a public administration is guaranteed by means of a digital certificate

European Commission

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

ADMS
ASSET DESCRIPTION METADATA SCHEMA

CESAR
COMMUNITY OF EUROPEAN SEMANTIC ASSETS REPOSITORIES

eGOVERNMENT CORE VOCABULARIES

CORE PERSON VOCABULARY

CORE BUSINESS VOCABULARY

CORE LOCATION VOCABULARY

ADMS F/OSS

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

European Commission