

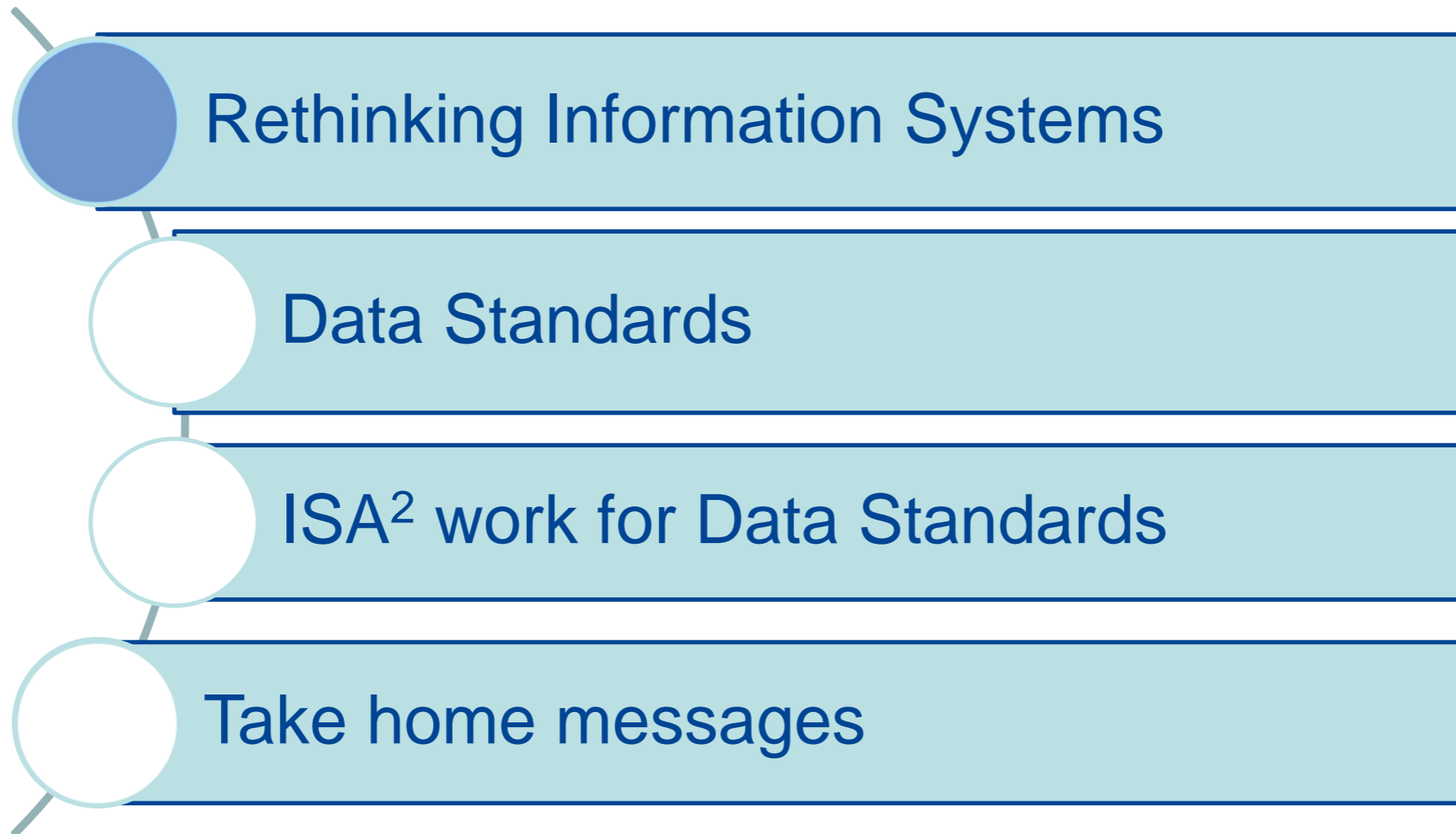


THE ROLE OF DATA STANDARDS IN SEMANTIC INTEROPERABILITY



12 May 2016
Rome – Italy

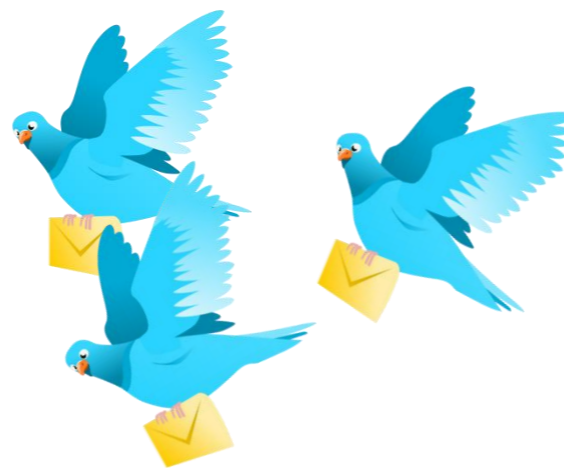
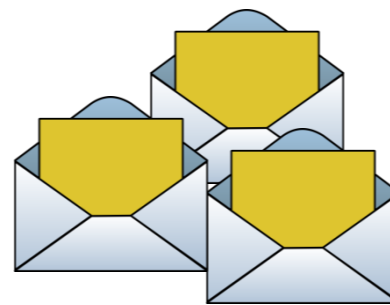
Dr. Vassilios Peristeras
European Commission, DG Informatics, ISA² Programme



Information Systems



Information Systems





- **IT is a means not an end**
- **Information is neither an IT nor an IS by-product**
- **Information Management should become a Core Corporate policy**



- **We do a lot for IT management**
- **What about information management ?**





- **We do a lot with IT standards**
- **What about data standards?**



Rethinking Information Systems

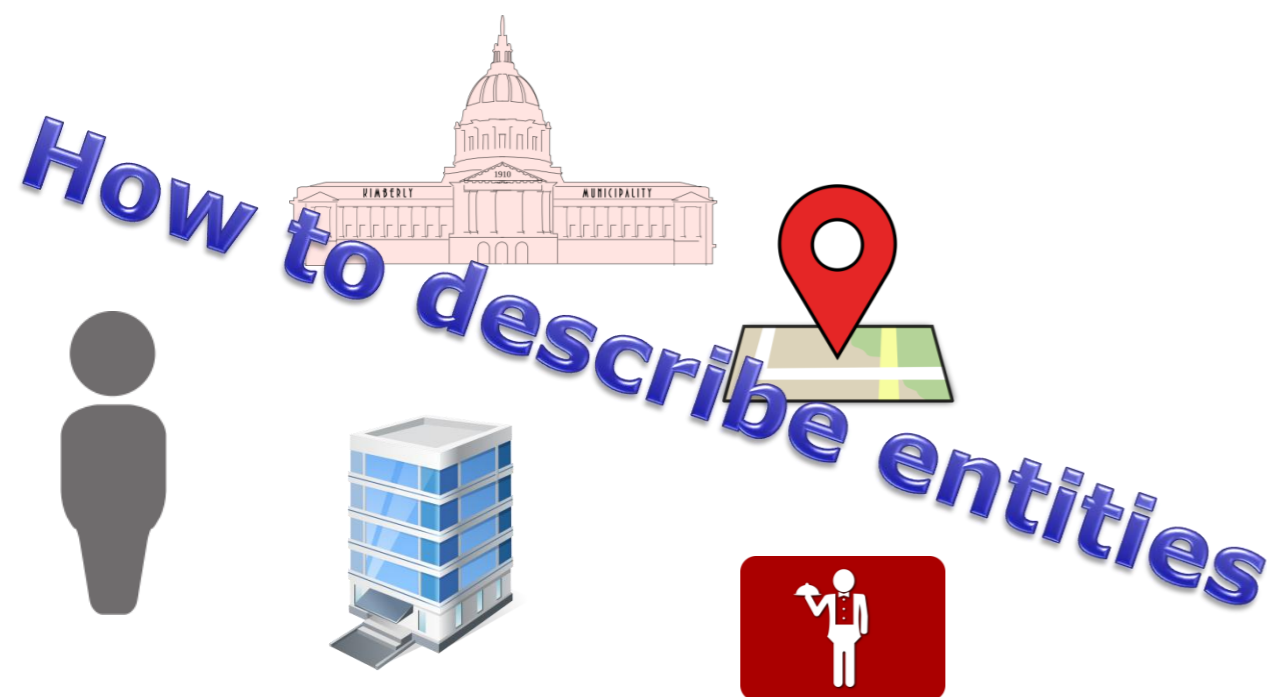
Data Standards

ISA² work for Data Standards

Take home messages

Data standards:

Social agreements on how we describe the world



MIND THE LEXICAL GAP

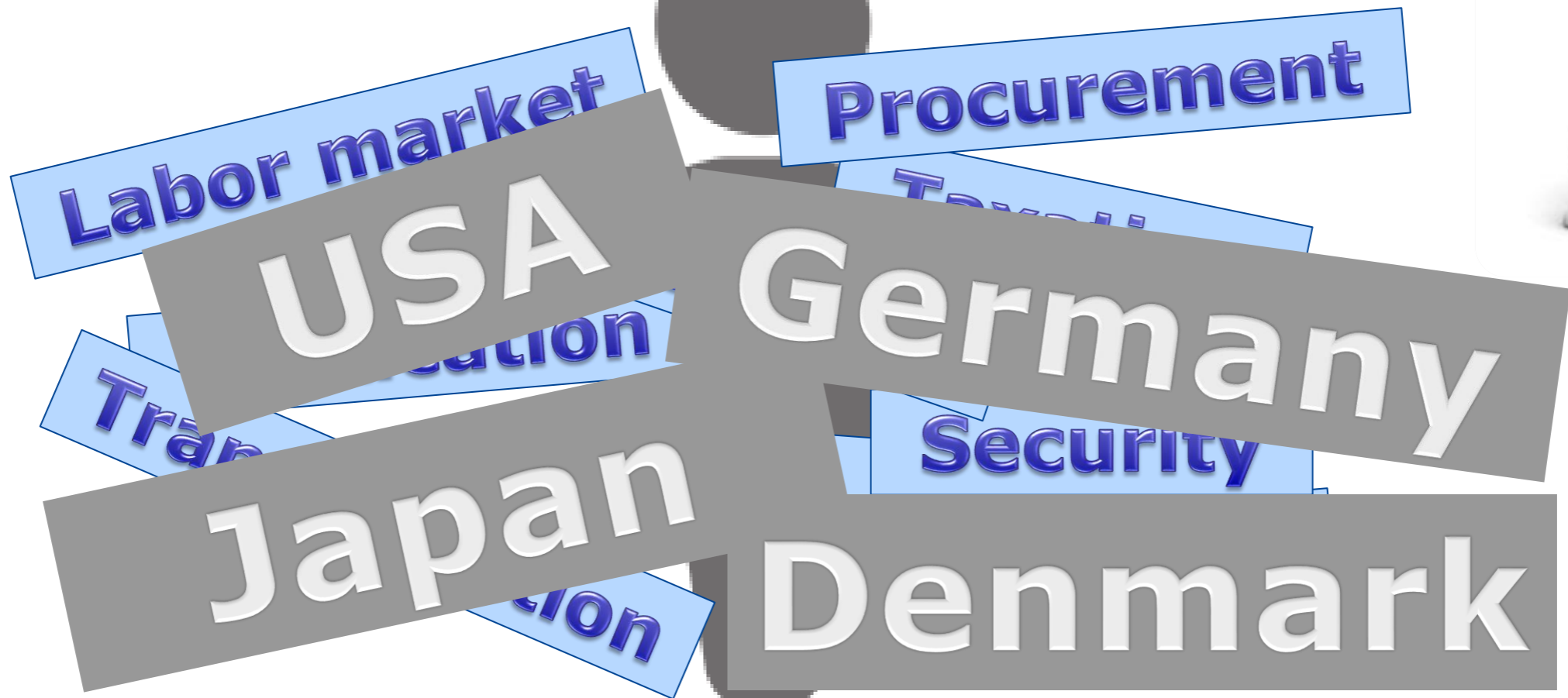
EuroVoc Building block of the semantic

Lists of values

	A	C
Country	Alpha-2 code	Alpha-3 code
Afghanistan	AF	AFG
Aland Islands	AX	ALA
Albania	AL	ALB
Algeria	DZ	DZA
American Samoa	AS	ASM
Andorra	AD	AND
Angola	AO	AGO
Anguilla	AI	AIA
Antarctica	AQ	ATA

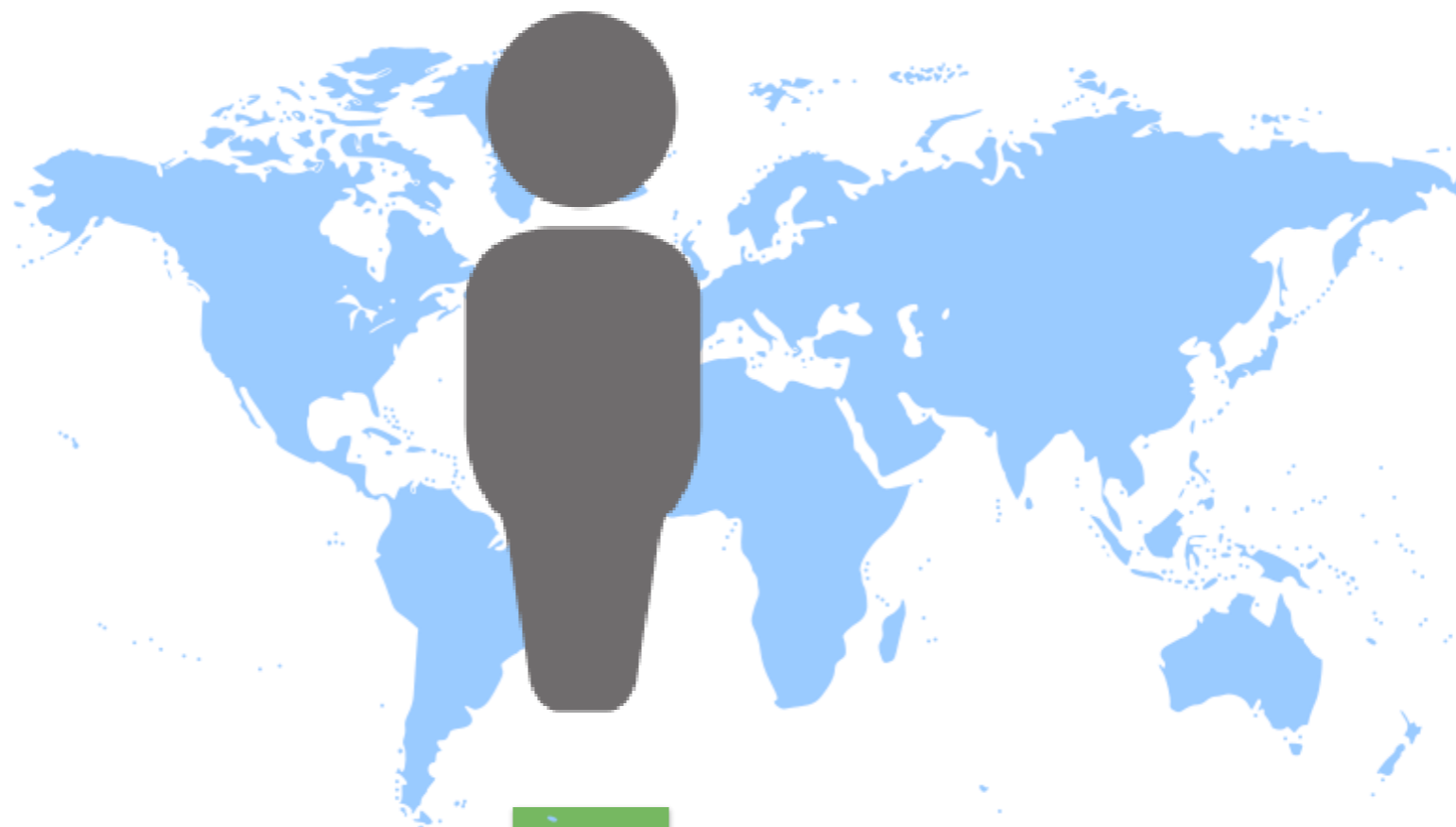


Data standards suffer from domain and country-based fragmentation





We need universal data standards
in a similar way
we need universal technology standards



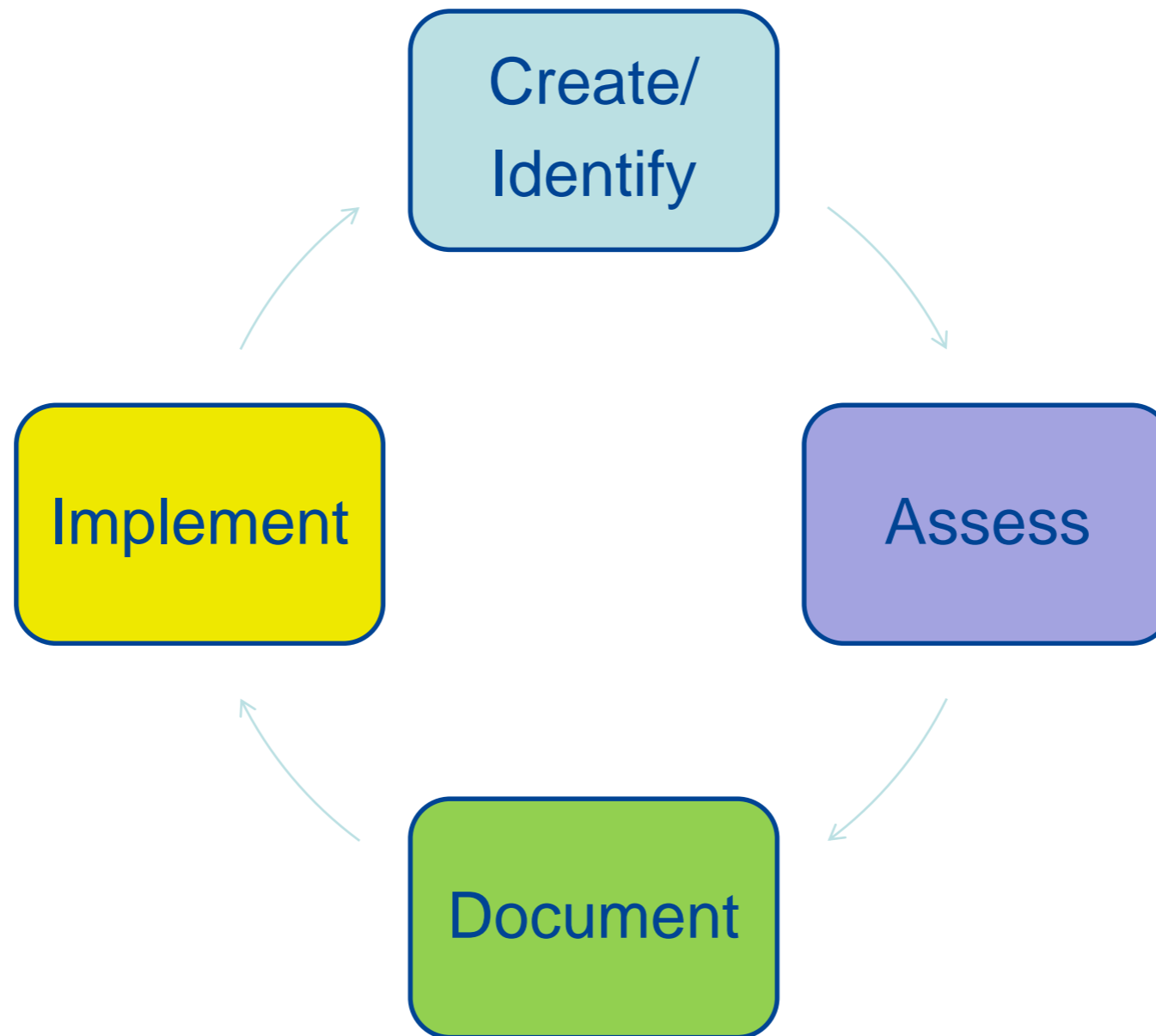
Rethinking "Information Systems"

Data Standards

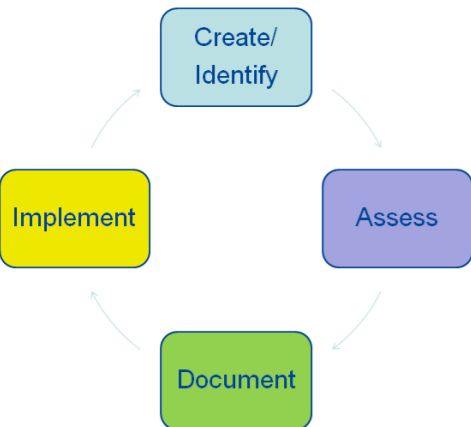
ISA² work for Data Standards

Take home messages

What organisations should do with Data Standards...



How ISA² can help you with Data Standards...



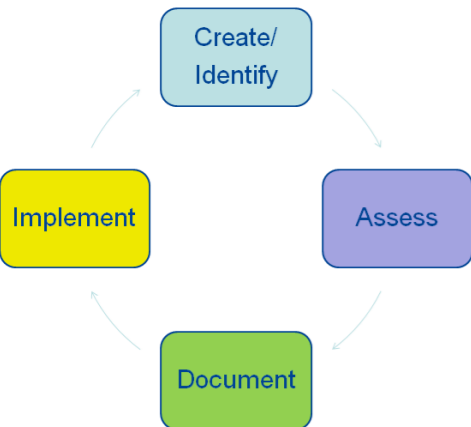
Create/
Identify

- Core Vocabularies and ISA specs
- European Interoperability Framework
- EU Cartography
- EU Catalogue of Standards

Assess

- CAMSS
- Interoperability Maturity Model (IMM)

How ISA² can help you with Data Standards...



Implement

- European Interoperability Strategy (EIS)
- European Interoperability Framework (EIF)
- Methodologies & Tools

Document

- ADMS
- DCAT-AP, GEO/DCAT-AP, STAT/DCAT-AP
- EIRA

Rethinking "Information Systems"

Information and Data Standards

ISA/ISA² work for Data Standards

Take home messages



Agency level

- Refocus on the "I" part of your "Information System"
- Use existing data standards, do not start your data model from scratch (no excuse!)
- Find standards in catalogues/Joinup
- Assess candidate standards using CAMSS
- Check ISA² methodologies and tools for data standards

National level

- Implement the EIF recommendations on information management/standards
- Use DCAT-AP for publishing open data
- Create Core Data Standards by reusing the ISA Core Vocabularies
- Create national catalogues of data standards
- Document and publish your standards using ADMS to describe them
- Contribute and support international data standards initiatives



THE ROLE OF DATA STANDARDS IN SEMANTIC INTEROPERABILITY

Vassilios.Peristeras@ec.europa.eu

Visit our initiatives

Get involved

Follow [@SEMICeu](#) on Twitter

Join the [SEMIC](#) group on LinkedIn

Join the SEMIC community on Joinup



ADMS ASSET DESCRIPTION METADATA SCHEMA	DCAT APPLICATION PROFILE FOR EUROPEAN DATA PORTALS	ADMS. SW	REGISTERED ORGANIZATION VOCABULARY	CORE PUBLIC ORGANISATION VOCABULARY
eGOVERNMENT CORE VOCABULARIES	CORE PUBLIC SERVICE VOCABULARY	CORE LOCATION VOCABULARY	CORE PERSON VOCABULARY	CORE CRITERION & EVIDENCE VOCABULARY