



And if data could talk and understand data?

4 June 2019
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EIF – European Interoperability Framework



Recommendation 42:

Publish open data in machine-readable, non-proprietary formats. Ensure that open data is accompanied by high quality, machine-readable metadata in non-proprietary formats, including a description of their content, the way data is collected and its level of quality and the licence terms under which it is made available. The use of common vocabularies for expressing metadata is recommended.

Proposed solution

For example those included in the DCAT-AP specification developed in the context of the ISA programme.



The ISA² programme supports the development of **digital solutions** that enable public administrations, businesses and citizens in Europe to benefit from **interoperable** digital public services.



Goals of the programme

- Promote a holistic approach to interoperability
- Cross border, cross sector and user centric public administrations
- Identify, create and operate interoperability solutions
- Facilitate the reuse of interoperability solutions by European public administrations.



Semantic interoperability





ISA² Action 2016.07 SEMIC: Promoting Semantic Interoperability amongst the EU Member States

Raising awareness on the importance of metadata management.



Identifying opportunities for alignment on semantic definitions, metadata and reference data sources with special focus on identification and definitions of Core Concepts/ Vocabularies.



Promoting, share and reuse of semantic assets, experiences and tools and facilitating agreements in key areas.





SEMIC specifications





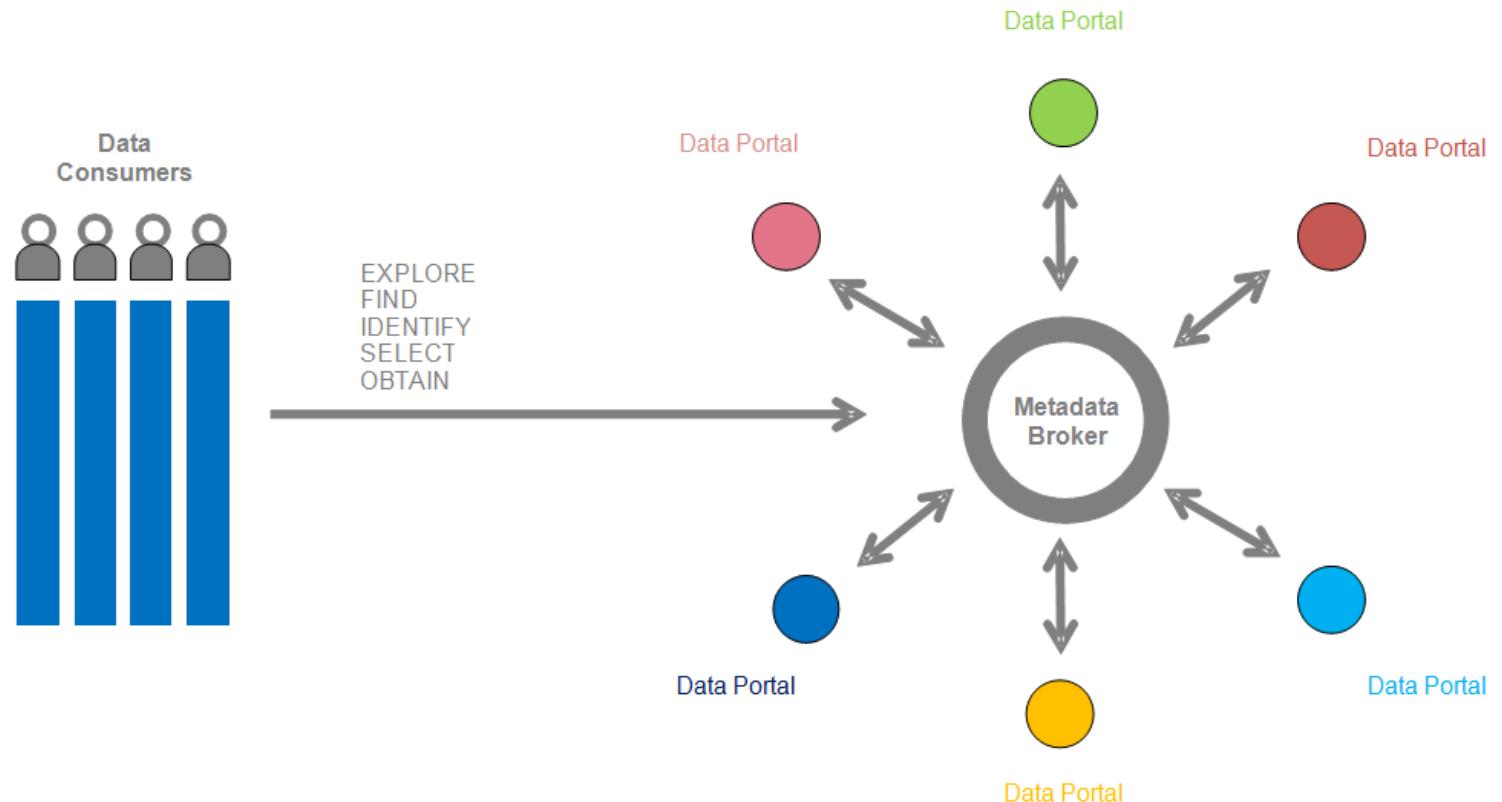
DCAT-AP

4 June 2019



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- The diagram features two large, light-green curved arrows pointing from left to right. Each arrow contains a green circle with a white outline and a piece of text describing a benefit of a common metadata schema.
- A common metadata schema to describe datasets.
 - Increase discoverability and thus (re)use of the data.
 - Uniform search across platforms and languages.

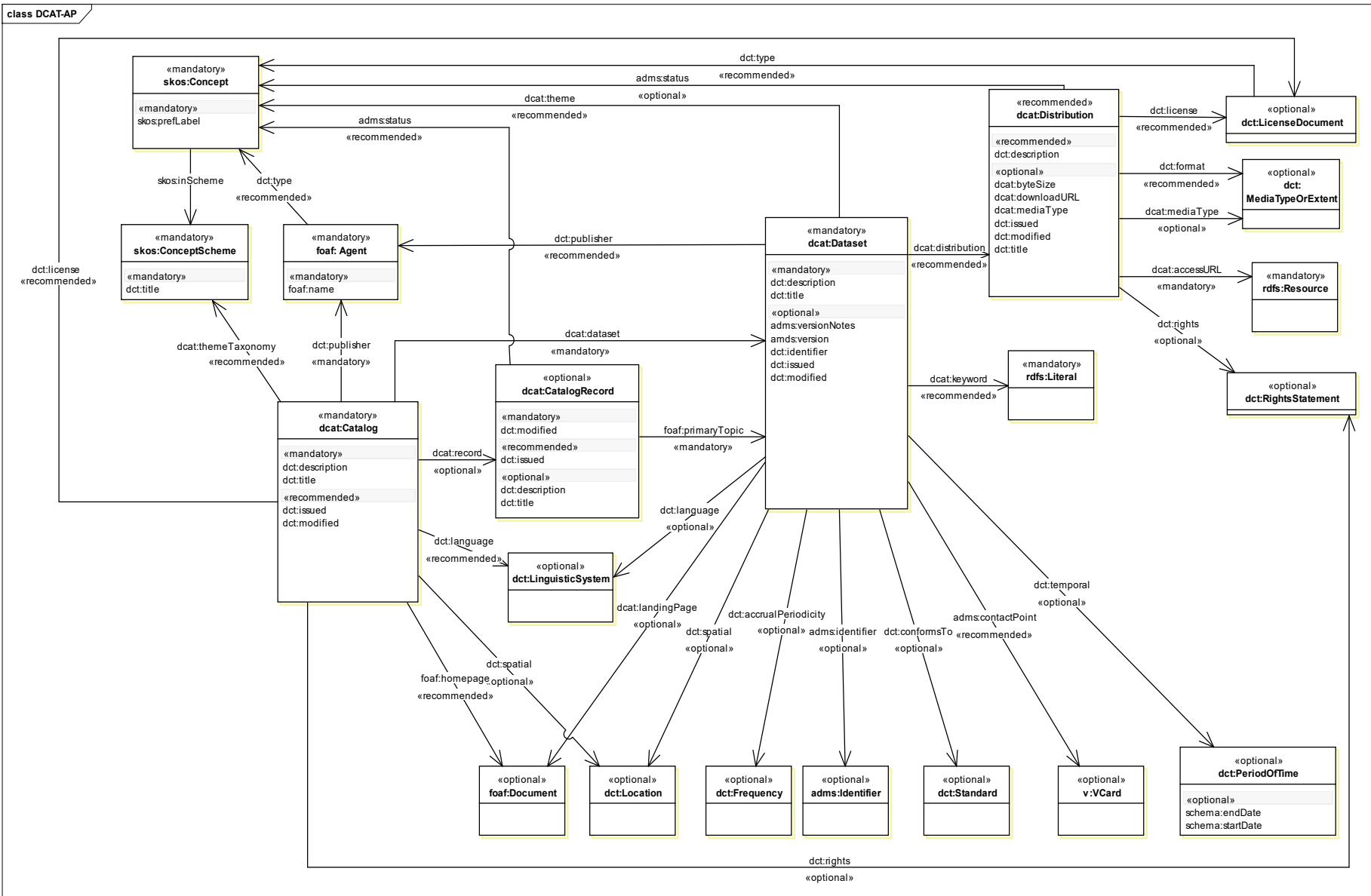
DCAT-AP enables the exchange of dataset metadata between portals





What's in the specification?

A common vocabulary for describing datasets hosted in data portals in Europe, based on the Data Catalogue vocabulary (DCAT).





Scottish Road Accident Statistics

dct:title (Dataset)

Data about injury road accidents, accident costs, vehicles involved, drivers and riders, drink-drive accidents, drivers breath tested, casualties and international comparisons.

Source agency: Scottish Government

Designation: National Statistics

Language: English **dct:language**

Alternative title: Scottish Road Accident Statistics



dct:description

dct:license
Licence

UK Open Government Licence (OGL) [OPEN DATA](#)

Dcat:accessURL

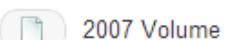
Data Resources **2**



Key statistics for 2007

Details

Download ▾



2007 Volume

Details

Download ▾

dct:title (Distribution)

dcat:downloadURL, dct:issued,
dct:format, dct: description

Additional Information

Openness score	★★★★★
Geographic coverage	Scotland dct:spatial
National statistic	yes
ONS Category	Travel and Transport dct:theme
Temporal coverage	No value dct:temporal
Date added computed	No value
Date updated computed	No value

dct:publisher

Publisher

Scottish Government

Enquiries:

No details supplied

FOI Contact:

- Web:
<http://www.whatdotheyknow.com...>

adms:contactPoint

Tags

accident	health-well-being-and-care
road	road-accidents
roads	road-safety
safety	transport
travel-and-transport	transport-accidents-and-casualties

dcat:keyword

About this dataset

- Added to data.gov.uk: 10/12/2011
- Modified on data.gov.uk: 10/06/2013
- History of changes
- JSON, API and URI for developers

dct:issued

dct:modified

Do more with this data

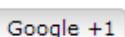
- Share your app
- Share an idea
- Request new data



Tweet



f Share

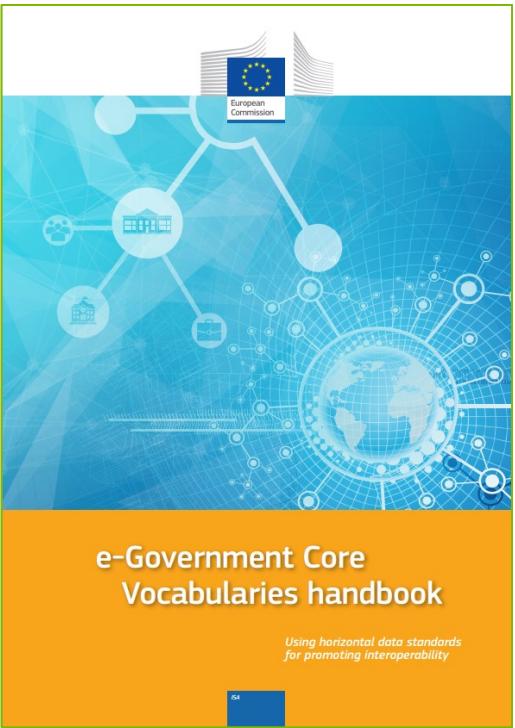


g+ Google +1



CORE VOCABULARIES

Core Vocabularies



Simplified, re-usable, and extensible data models that capture the fundamental characteristics of a data entity in a context-neutral and syntax-neutral fashion

CORE
BUSINESS
VOCABULARY

CORE
LOCATION
VOCABULARY

CORE
PERSON
VOCABULARY

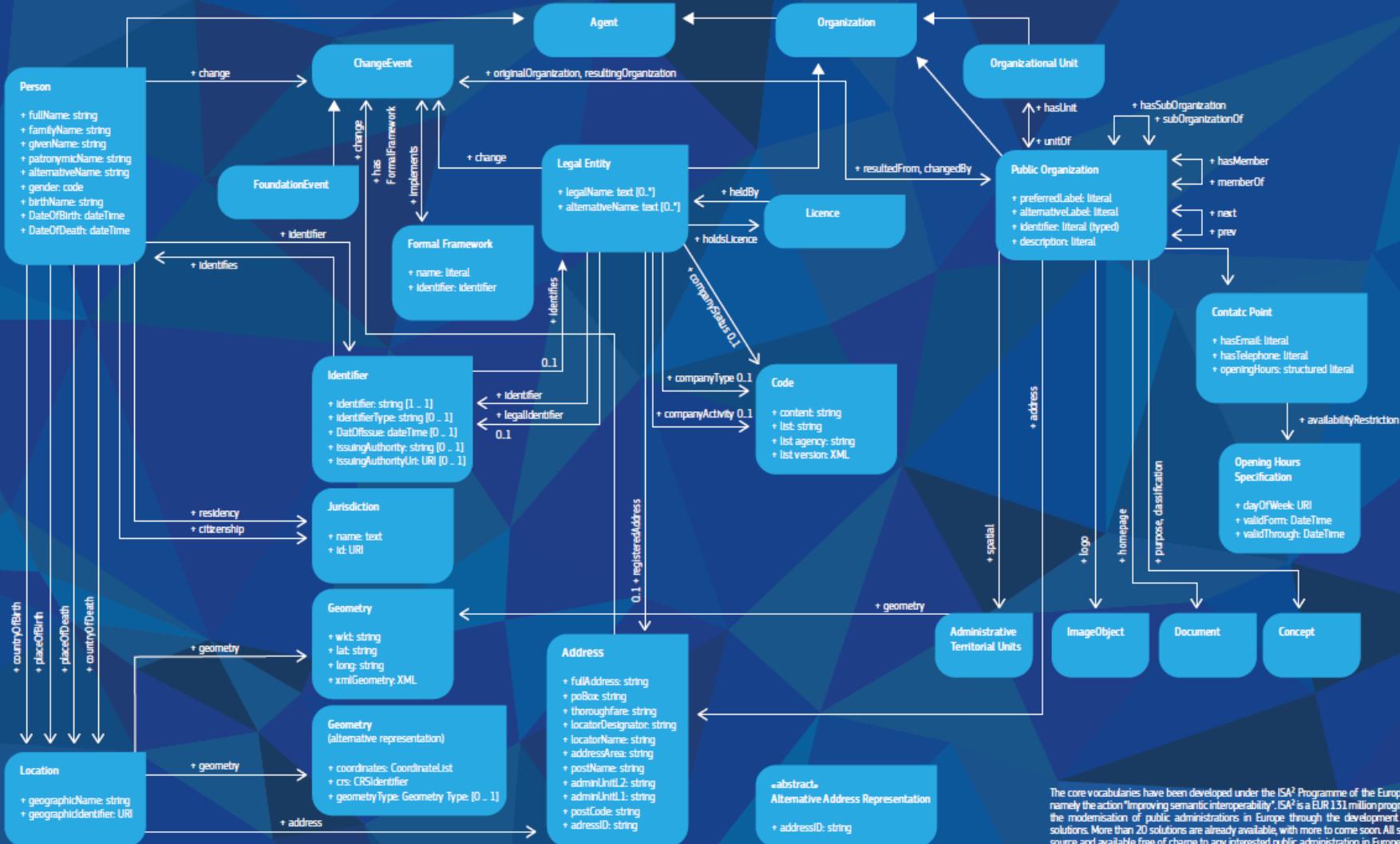
CORE
PUBLIC
SERVICE
VOCABULARY

CORE
CRITERION &
EVIDENCE
VOCABULARY

CORE
PUBLIC
ORGANISATION
VOCABULARY



ISA² Core Vocabularies



The core vocabularies have been developed under the ISA² Programme of the European Commission, namely the action "Improving semantic interoperability". ISA² is a EUR 131 million programme supporting the modernisation of public administrations in Europe through the development of eGovernment solutions. More than 20 solutions are already available, with more to come soon. All solutions are open source and available free of charge to any interested public administration in Europe.

Sharing & Reuse

CONFERENCE



11 JUNE 2019
BUCHAREST, ROMANIA

Open.Share.Link



RECAP

- The European Interoperability Framework is the overarching framework for digital public services interoperability in the EU.
- The ISA² programme, as predecessors and successors, supports and develops the EIF.
- An ISA² action, SEMIC, has developed specifications (DCAT-AP, ADMS, CoreVocs) allowing *data* to talk and understand data.



ISA² programme

You click, we link.

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ec.europa.eu/isa2



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Run by the Interoperability Unit at DIGIT (European Commission) with 131€M budget, the ISA² programme provides public administrations, businesses and citizens with specifications and standards, software and services to reduce administrative burdens.