

# Dagstuhl 2021

DDI-CDI / NGSII-LD Interoperability  
Problem statement

# The INTERSTAT Project

The overall objective of INTERSTAT is to develop a framework that will allow the interoperability, by using technical assets and common ontologies, between national statistical portals and the European Data Portal, and the deployment of cross-border services that reuse European statistical open datasets from those portals.

# (One of) INTERSTAT's Objectives

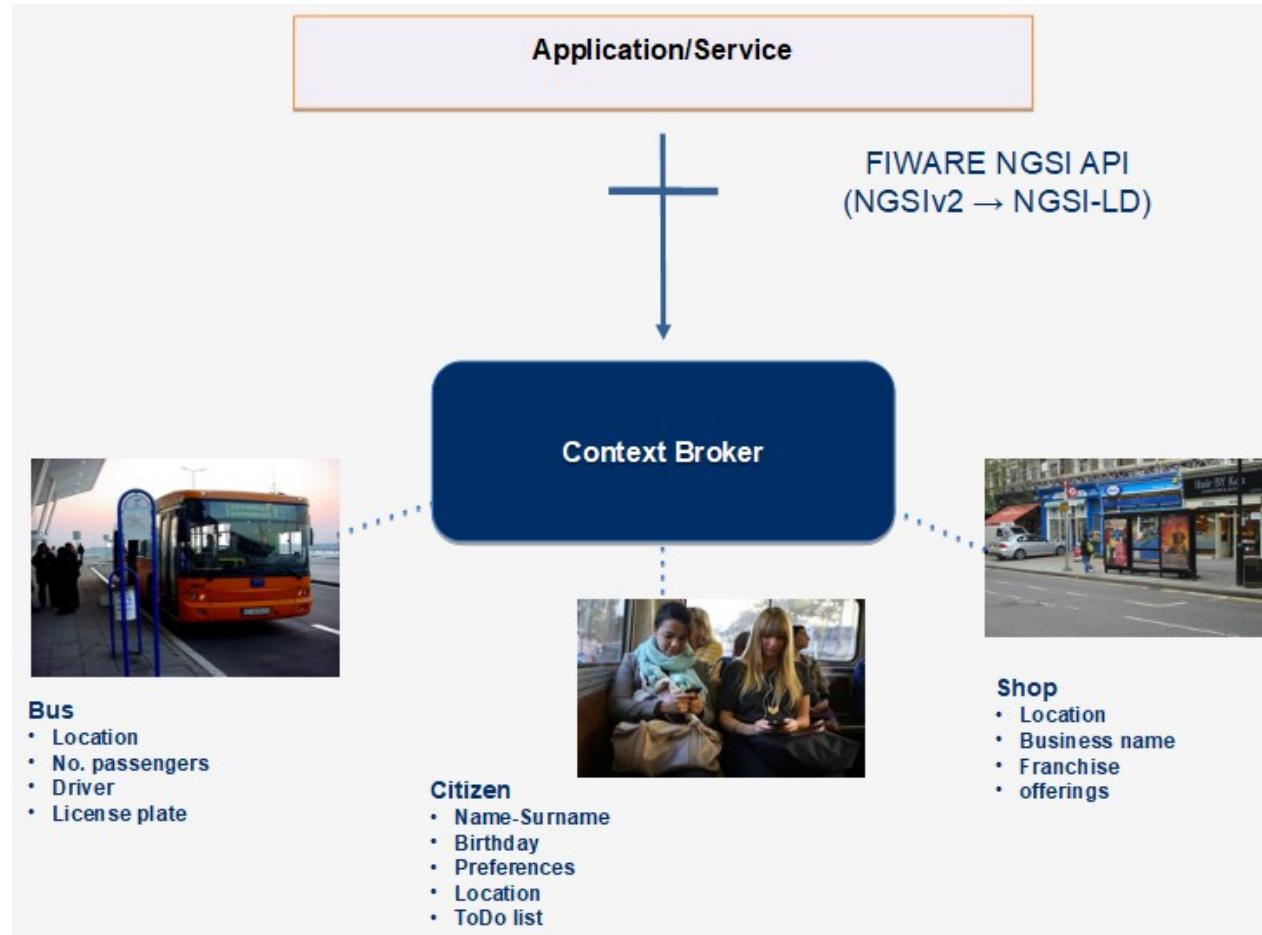
Provide uniform technical interfaces for a standard and simple re-use of statistical information through the adoption of CEF **Context Broker** Building Block and the implementation of ETSI **NGSI-LD** API specification.

# (One of) INTERSTAT's Pilots

## Support for Environment Policies (SEP)

- Use case for local policy makers
- Integrate datasets deriving from:
  - sensor data concerning air pollution
  - statistical data on local demographics
- More detail on [GitHub](#)

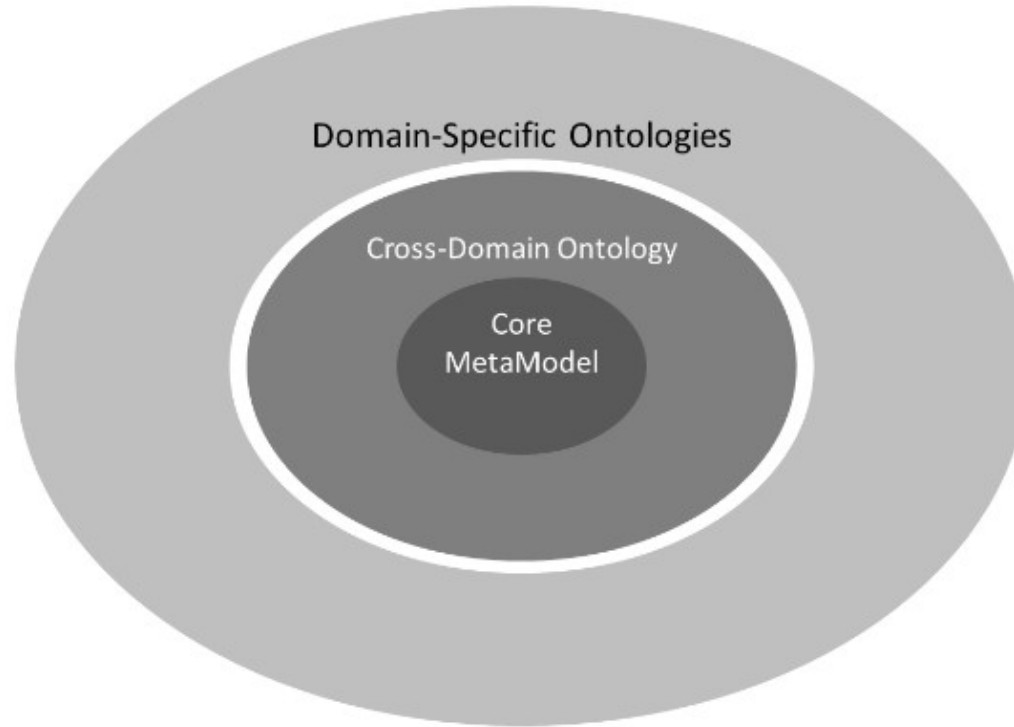
# The Context Broker



# The NGSI-LD Standard

- Information model
- API specification
  - Operations (data consumption and provision, subscriptions, notifications...)
  - JSON-LD serialization
  - HTTP binding
- ...

# NGSI-LD Information Model



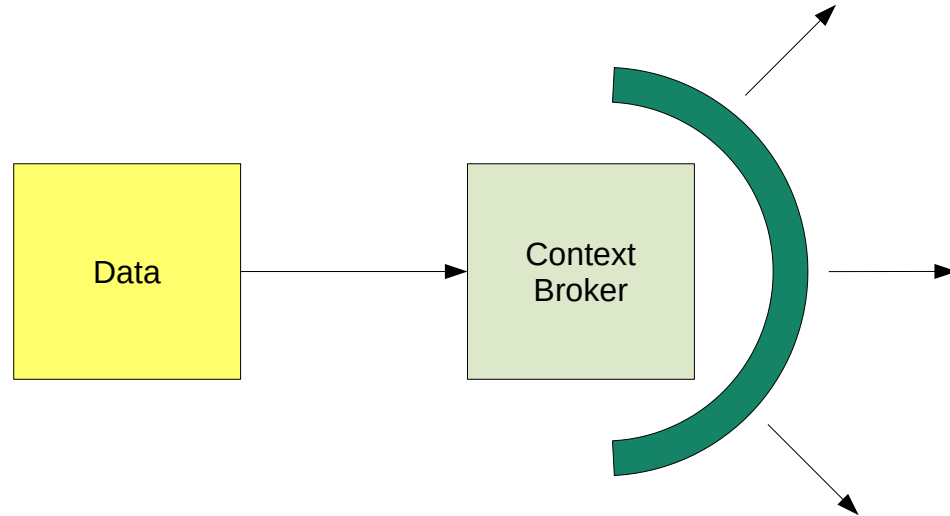
More in the [specification](#)

# Problem statement

- Overall objective: publish statistical data with the Context Broker
- Boils down to interoperability between NGSI-LD and statistical information models
- Explore the problem on the basis of INTERSTAT pilots, starting with SEP

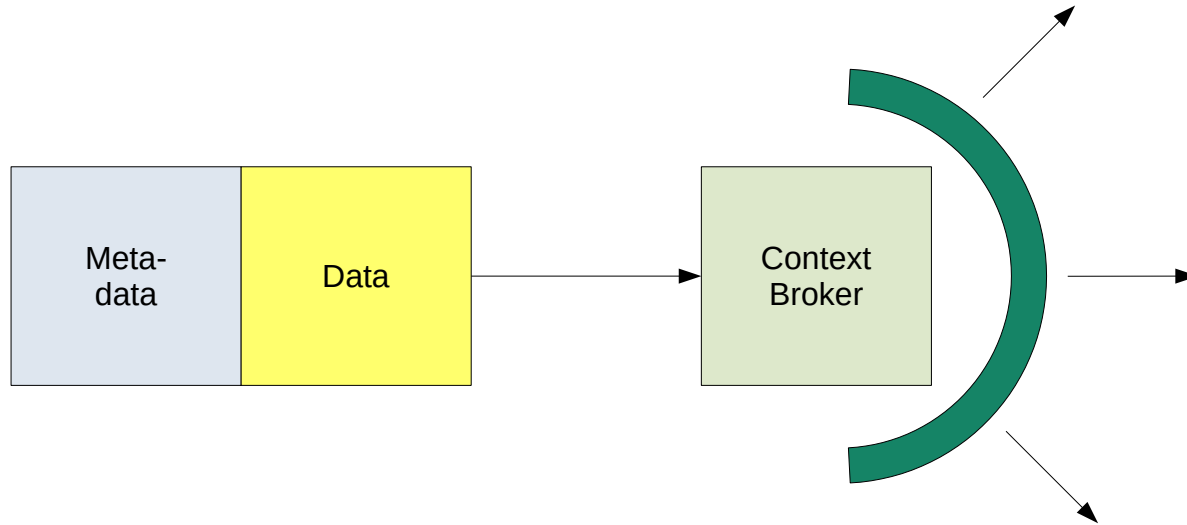


# Problem statement



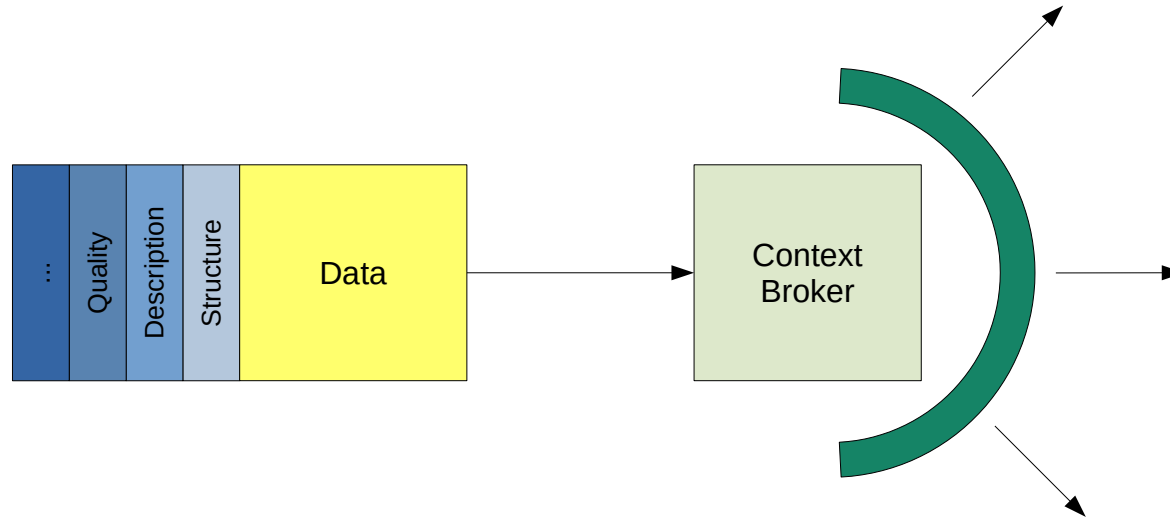
Publish statistical data with the Context Broker

# Problem statement



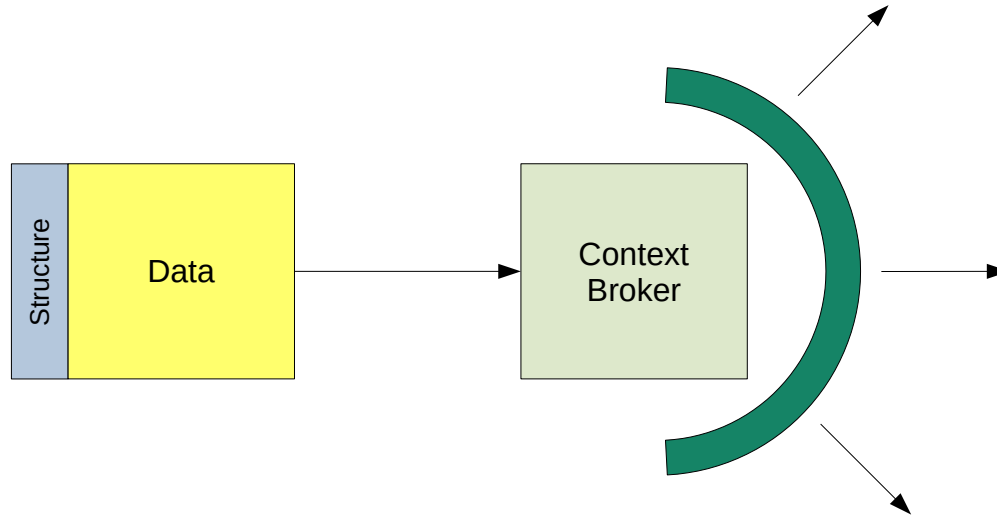
Without metadata, data means nothing

# Problem statement



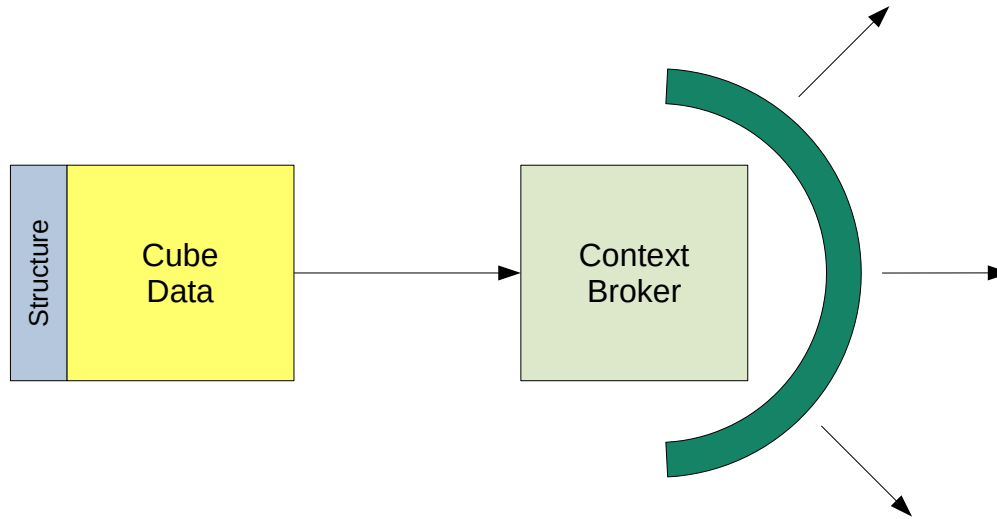
All kinds of metadata

# Problem statement



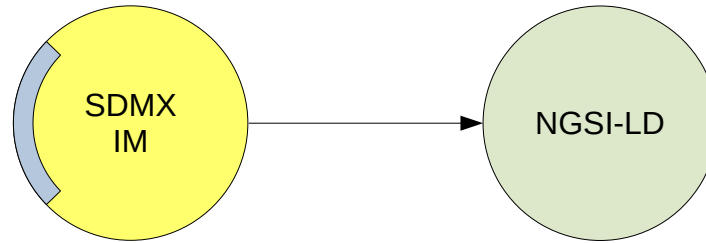
Let us start with structural metadata

# Problem statement



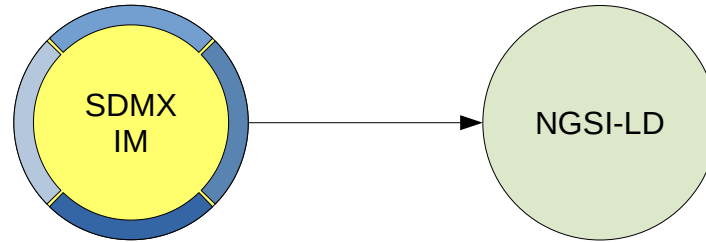
Most statistical data are cube data

# Problem statement



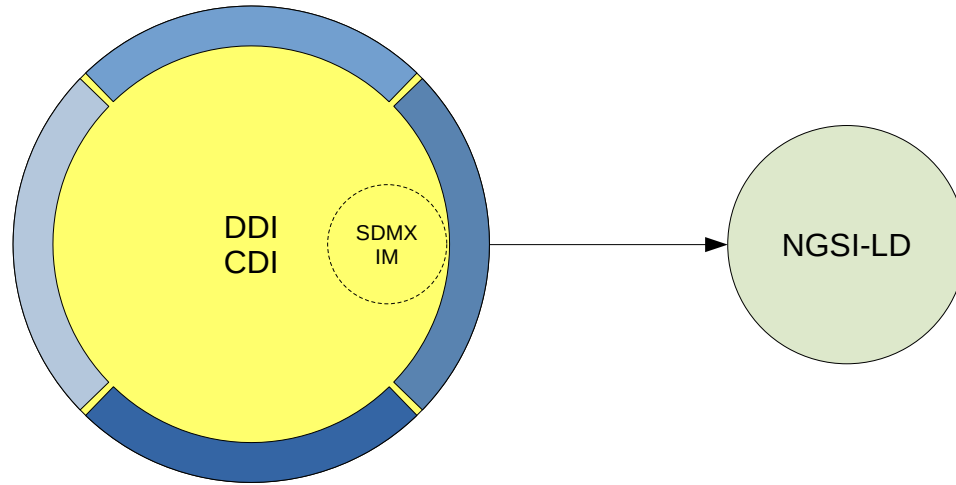
In terms of models

# Problem statement



Zoom out: other kinds of metadata

# Problem statement



Zoom out: other kinds of data