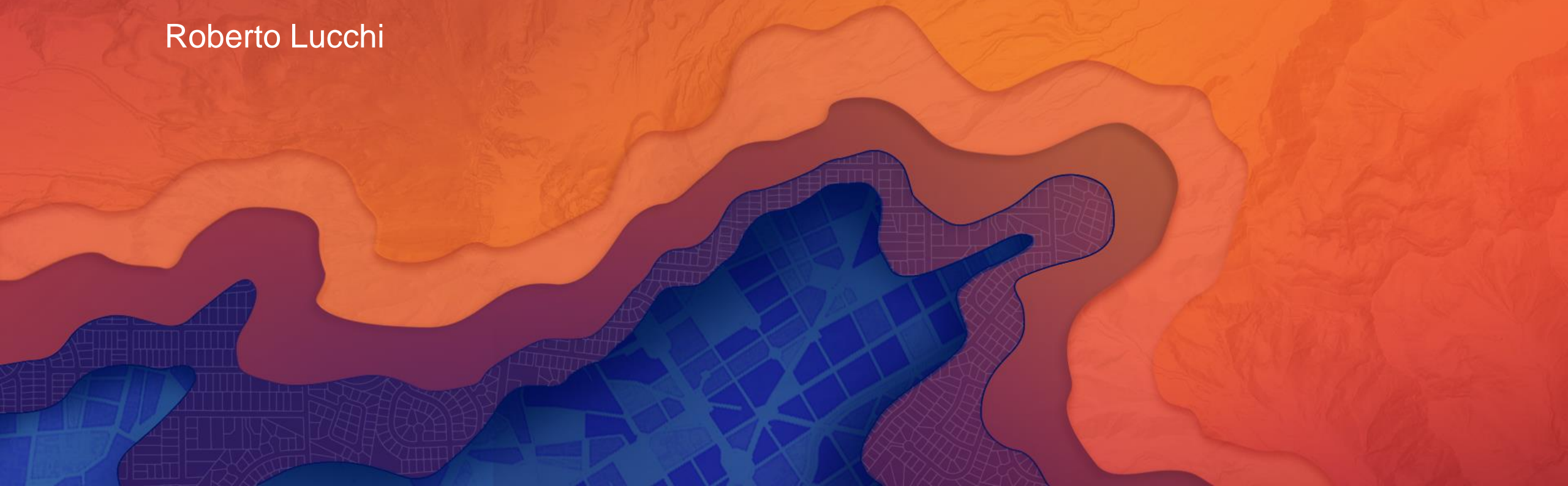


# ArcGIS for INSPIRE Implementing and Using the Pan-European Spatial Data Infrastructure

Roberto Lucchi



# INSPIRE EU directive

- *“The INSPIRE Directive aims to create a European Union spatial data infrastructure for the purposes of EU environmental policies and policies or activities which may have an impact on the environment.”*
- **Implementing rules (transposed to national regulations)**
  - **Metadata**
  - **Network services, SLA**
  - **Spatial data interoperability arrangements (data models)**
  - **Multilingual**
- **Technical guidance: the goal is to prove that implementing rules can be implemented, and provides a “standard-based” baseline for implementing INSPIRE**

# INSPIRE technical guidance documents

Component & Requirements	Implementation option
Metadata	ISO 19115/19119/19139
Discovery service	Based on OGC CSW 2.0.2 ISO AP (+ multilingual metadata, additional indexed metadata attributes, ...)
Data models	Only GML output encoding is provided
View service	Based on OGC WMS (+ multilingual metadata, ...)
	Based on OGC WMTS (+ multilingual metadata, ...)
Download service	Based on OGC WFS 2 and INSPIRE GML schemas
	Based on ATOM/OpenSearch
Service Level Agreement	High availability, response time, minimum capacity



# ArcGIS for INSPIRE

Enabling users to achieve both immediate and long term INSPIRE goals



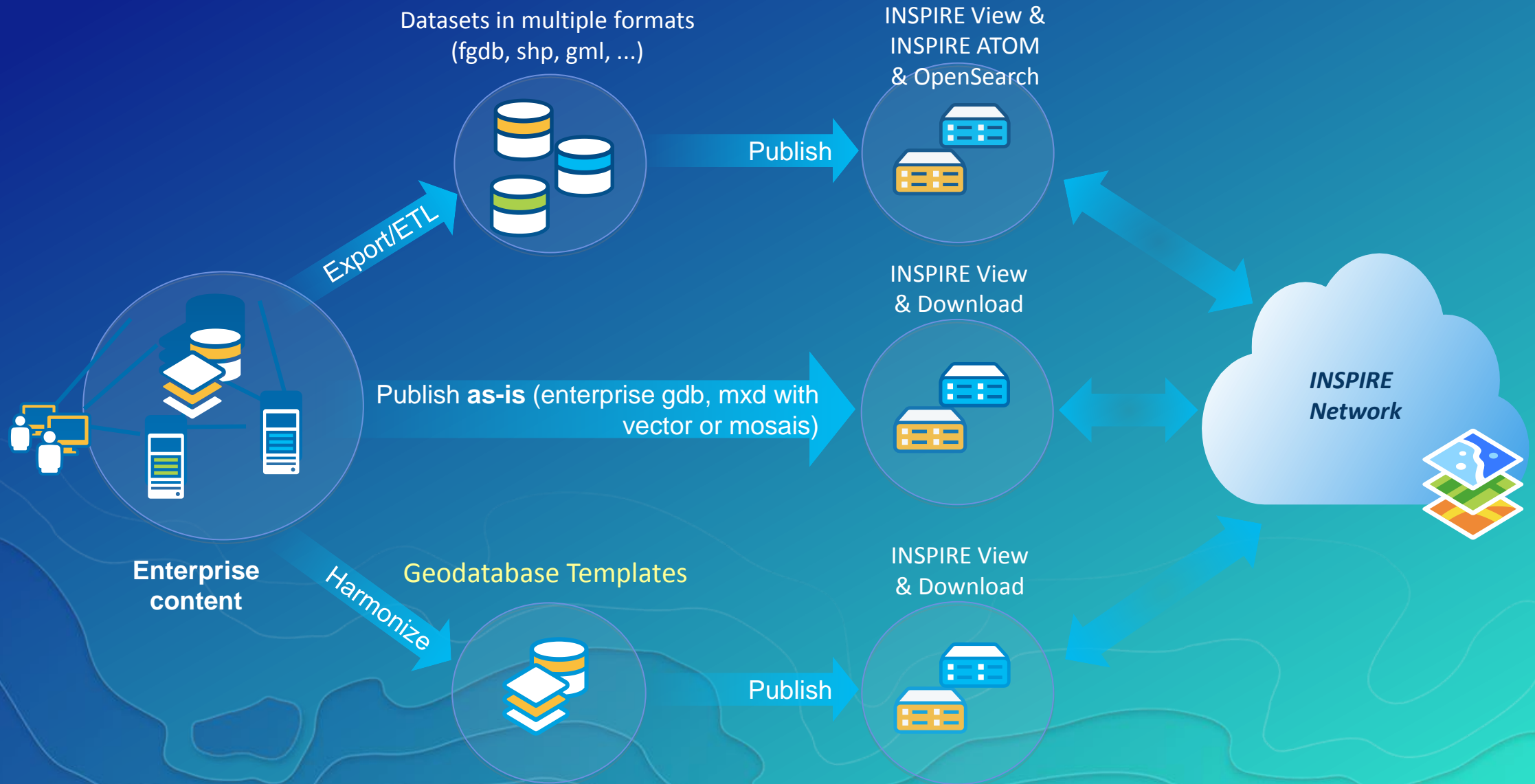
INSPIRE-compliant View, Discovery and Download services

*Data models for 18 key themes*

# ArcGIS for INSPIRE implements technical guidance documents

Component & Requirements	Implementation option	ArcGIS for INSPIRE
Metadata	ISO 19115/19119/19139	X
Discovery service	Based on OGC CSW 2.0.2 ISO AP (+ multilingual metadata, additional indexed metadata attributes, ...)	X
Data models	Only GML output encoding is provided	X
View service	Based on OGC WMS (+ multilingual metadata, ...)	X
	Based on OGC WMTS (+ multilingual metadata, ...)	X
Download service	Based on OGC WFS 2 and INSPIRE GML schemas	X
	Based on ATOM/OpenSearch	X
Service Level Agreement	High availability, response time, minimum capacity	X

# ArcGIS for INSPIRE Implementation Patterns

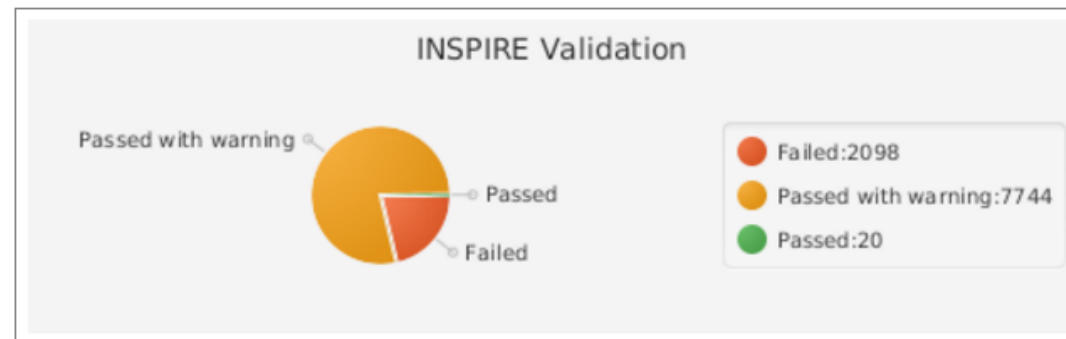
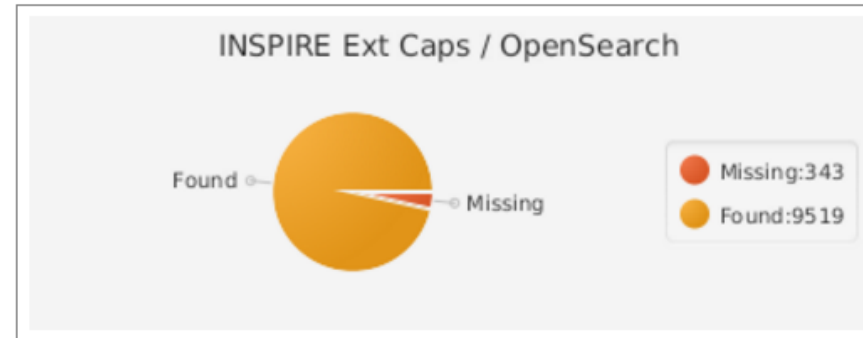
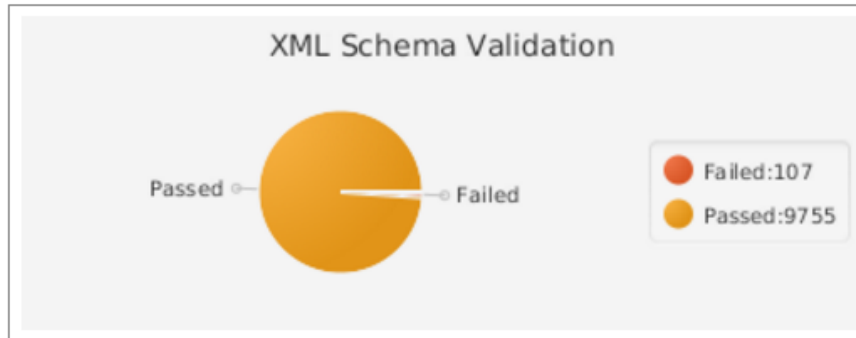
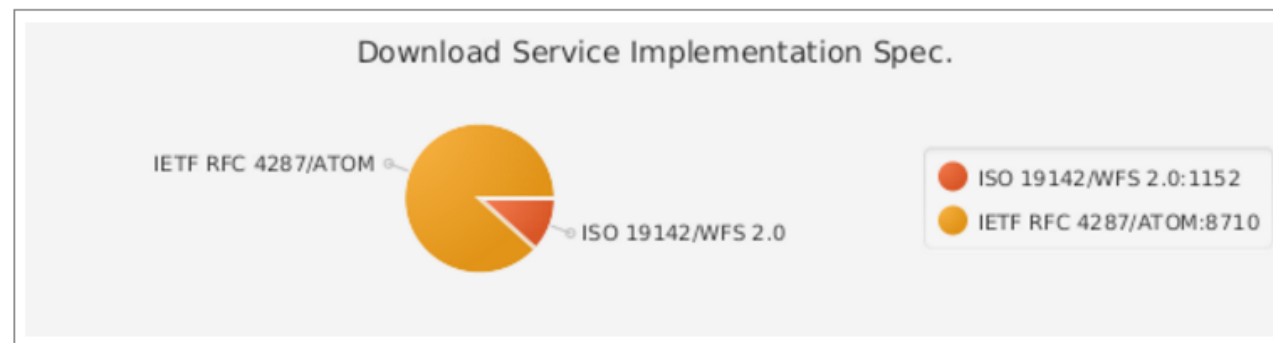




Annex I	Annex II	Annex III
Coordinate Reference System Geographical Grid System Geographical Names Administrative Units Addresses Cadastral Parcels Transport Networks Hydrography Protected Sites	Land Cover Geology Elevation Orthoimagery	Statistical Units Land Use Mineral Resources Buildings Soil Habitats and Biotopes Species Distribution Population Distribution - Demography Environmental Monitoring Facilities Natural Risk Zones Human Health and Safety Utility and Governmental Services Production and Industrial Facilities Agricultural and Aquacultural Facilities Area Managements/Restriction/Regulation Zones and Reporting Units Atmospheric Conditions, Meteorological Geographical Features Oceanographic Geographical Features Sea Regions Bio-geographical Regions Energy Resources

**Additional geodatabase templates at each release**

# Expectations: is compliance enough? What are the right metrics?





# Can you make this real?

## 14 INSPIRE Themes for Global Sustainable Development Goals

- GIM International on “14 INSPIRE Themes for Global Sustainable Development Goals”
  - <http://bit.ly/2aNrhnv>

It is time to shift emphasis to “adoption” and “use”

Source: GIM International, Issue 9, Volume 30, September 2016

### 14 INSPIRE Themes for Global Sustainable Development Goals

The scope of geospatial data extends far beyond environmental, social and economic analysis, a study by UN-GIMM: Europe has found. Research by the regional committee of experts shows that information about location also plays a key role in implementing policy to help address a wide range of concerns at regional, national and global level. The report, which is the first deliverable of the Working Group on core data, has identified 14 INSPIRE themes that can support the UN's sustainable development goals (SDGs) and meet user needs for authoritative, harmonised and homogeneous framework core data.

► <http://bit.ly/2aNrhnv>



The 17 Sustainable Development Goals.



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SCIENCE  
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WHERE