



# Ping Pong Match: OSGeo & INSPIRE

Organized by:

- [Arnulf Christl](#), [metaspatial](#), [@sevenspatial](#)
- [Margherita Di Leo](#)
- and many other [OSGeo](#) members

# Agenda

## Part 1:

Short presentations from high level representatives:

- Public Administration
- EU Commission
- Industry

## Part 2:

Presentation of a short list of guiding ideas followed by a productive dialog between all participants

OSGeo Wiki follow-up:

[http://wiki.osgeo.org/wiki/INSPIRE\\_conference\\_2013](http://wiki.osgeo.org/wiki/INSPIRE_conference_2013)

# The Speakers

- Clare Hadley
- Stefan Jensen
- Michael Lutz
- Hugo de Groof
- Armin Retterath
- Stefan Sandmann
- Wolfgang Tinkl
- Jani Kylmäaho
- Chris Little
- Jeroen Ticheler
- Markus Schneider
- Arnulf Christl
- Margherita die Leo
- Simone Giannellini
- Just van den Broecke
- Paolo Viskanec

# Timing

- 90 minutes
  - 14 Speakers
- + Dialog
- Each Speaker has 2 to maximum 5 minutes
  - Questions are encouraged at ANY time!
  - Spontaneous presentations at ANY time, given they are shorter than 60 seconds

# Ordnance Survey GB

Clare Hadley



Problems do not 'go away'!



# Where do I come from? What is my role?

- I work for Ordnance Survey, the national mapping agency for Great Britain.
- I am responsible for meeting our INSPIRE obligations and our contributions to the wider UK Location Programme
- I chair the UK Location Business Interoperability Working Group
- I was chair of the INSPIRE Data and Service Sharing Drafting Team

# What I want or have to do

- I have to ensure that OS publishes compliant INSPIRE data and services with compliant access and licensing terms.
- I want our customers to be able to meet their own INSPIRE obligations when it includes some of our data
- I want the GI data providers in the UK deliver their services such that we have an interoperable business infrastructure across UK and wider

# What are the blockers preventing me from getting it done?

- A lack of attention in INSPIRE to access control and rights management
- A lack of clear open standards to achieve this which INSPIRE could endorse to promote interoperability
- The fact the technical and legal people often speak different languages
- A belief that the problem will ‘go away’





# EEA (SEIS)

Stefan Jensen





JRC



Michael Lutz



European  
Commission



# Where do I come from? What is my role?

- Involved in INSPIRE since 2008
- Data modelling and technical contact point for INSPIRE data specifications
- Contact point for INSPIRE maintenance and implementation
- Involved in international standardisation (OGC, ISO/TC 211, W3C)

# What I want or have to do

Coordinate maintenance and implementation process

- Coordinate with MS experts (MIG), NCPs, IC members
- Involve stakeholder experts / community
  - submitting comments
  - providing expertise and experience
  - maintaining content
- Support implementation in MS
  - tools, software
- Maintain central infrastructure components
  - INSPIRE geoportal
  - INSPIRE registry

# What are the blockers preventing me from getting it done?

- Creating motivation for stakeholder to contribute (finding funding, showing benefits, ...)
- Different interests of stakeholders (NCPs, data providers, vendors, OS community, standardisation bodies, ...)
- Innovation vs. stability
- Wide thematic scope
- Standards often too vague
- Not enough communication
- Not knowing what is going on “in the trenches”?



# DG Environment

Hugo De Groof



# Rhineland Palatinate, Germany

Armin Retterath



Rheinland-Pfalz  
**Wir machen's einfach.**

- Geoportals RLP

<http://www.geoportals.rlp.de/>

# Bez.reg. NRW, UBA

Stefan Sandmann

- Geodatenzugangsgesetz



Bundesministerium  
für Umwelt, Naturschutz  
und Reaktorsicherheit

<http://de.slideshare.net/ogd-dachli/19-sandmann-20121004-dach>



# Where do I come from ?



Federal Republic of Germany  
 consists of 16 states („Länder“)  
 14.000 local authorities  
 Capital: Berlin  
 Area 357.023 km<sup>2</sup>  
 Inhabitants 82,5 Mio.

From 2011 to 2013:

- Federal Ministry for Environment, ....
- Responsible for open data policy

# What I want or have to do?

- With the amendment to **the act on access to digital spatial data in Germany** (Geodatenzugangsgesetz) on the federal level spatial data and metadata are available via spatial data services **free of charge** for commercial and non-commercial use
- **The conditions for use** are well ordered in an **ordinance**

# What are the blockers preventing me from getting it done? No Blockers ^^

## New Legislation

### Gesetz zur Änderung des Geodatenzugangsgesetzes

Vom 7. November 2012

Der Bundestag hat das folgende Gesetz beschlossen:

#### Artikel 1

#### Änderung des Geodatenzugangsgesetzes

Das Geodatenzugangsgesetz vom 10. Februar 2009 (BGBl. I S. 278) wird wie folgt geändert:

1. § 4 Absatz 1 Nummer 4 wird wie folgt geändert:

a) Buchstabe h wird wie folgt geändert:

„h) Gewässernetz (Elemente des einschließlich Meeresgebietigen Wasserkörper und ihre Teilsysteme, darunter Teileinzugsgebiete; gegebenfalls die Definitionen der Richtlinie des Europäischen Parlaments vom 23. Oktober 2000 zur Ordnung des Gewässernetzes für die Mitgliedstaaten im Bereich der Fließgewässer (L 327 vom 22.12.2000, S. 1), die Richtlinie 2009/31/EG vom 5.6.2009, S. 114) geändert in Form von Netzen)“.

b) Buchstabe u wird wie folgt geändert:

„u) Produktions- und Industrieparks für industrielle Produktion durch die Richtlinie 2010/75/EU des Europäischen Parlaments und des Rates vom 24. November 2010 über Industriemissionen (integrierte Vermeidung und Verminderung der Umweltverschmutzung) (Neufassung) (ABl. L 334 vom 17.12.2010, S. 17) erfasste Anlagen und Einrichtungen zur Wasserentnahme sowie Bergbau- und Lagerstandorte)“.

2. § 11 wird wie folgt gefasst:

„§ 11

#### Allgemeine Nutzung

(1) Geodaten und Geodatendienste, einschließlich zugehöriger Metadaten, sind vorbehaltlich der Vorschrift des § 12 Absatz 1 und 2 öffentlich zur Verfügung zu stellen.

### § 11 General use

Spatial data and metadata shall be made available via spatial data services **free of charge** for commercial and non-commercial use unless a special legal provision provides otherwise .....

Die Bundesregierung wird ermächtigt, durch Rechtsverordnung, die nicht der Zustimmung des Bundesrates bedarf,

## Conditions of use

### Section 2: Uses

Spatial data and services, including the appropriate metadata, shall be provided free of charge for all currently known purposes and **for all purposes becoming known in the future of commercial and non-commercial use**

# LFRZ Austria

Wolfgang Tinkl



- Joint Member State contracting
- Get out of Upgrading Hell

<http://prezi.com/7p2t2qxhoxgz/innovation-im-lfrz/>

# Where do I come from, what is my role

- From external IT Center of Ministry for Environment
- Responsible for technical implementation NS
- Member of IOCTF Network Services

Land-, forst- und wasserwirtschaftliches Rechenzentrum GmbH  
LFRZ – System- & Software-Entwicklung, <http://www.lfrz.at>

# What I want or have to do

- Use Open Source products
- Implement generic solutions for network services
- Think of solutions for data harmonization
- Minimize / optimize the costs of implementation and maintenance
- Set up useful services that are really used

# What are the blockers preventing me from getting it done

- Insufficient coordination between INSPIRE and Open Source provider / OGC
- Difficult commitments between member states when contracting together assigning a company for changes in the core of an OS Product
- The EC / JRC should take a lead role here
- We are facing problems when upgrading to a new Version of an OS Product (merging our changes not implemented in the core)
- Functions ahead of standards have to be implemented (e.g. Multilinguality). Useful?

# Finnish Land Survey

Jani Kylmäaho



MAANMITTAUSLAITOS  
NATIONAL LAND SURVEY OF FINLAND

Paikkatietoikkuna  
Oskari



<http://www.paikkatietoikkuna.fi/>



# What does the Industry say?

Nota bene: Liek everywhere the edges between producer and consumer are blurring.

# UK MetOffice

Chris Little

- IT Fellow - Operational Infrastructures
- UK Met Office
- Co-Chair **Met Ocean DWG OGC**



# Where do I come from?

Chris Little

Meteorology has been global for decades, if not more than a century. Globally interoperable, real time, 4D, data exchange, but specific to meteorology and oceanography, but not hydrology or ecosystems science. Latter becoming more important for integration with mainstream meteorology and global exchange in near real-time.

# Where do I come from?

## Chris Little

All Met Ocean data now increasingly important for effective, efficient integration with mainstream Geospatial data.

Data formats were for >50 years based on telegraphic technologies, including compact, language independent codes tabulated and maintained in several languages. These are being transitioned to binary codes (save factor of 2!) and controlled vocabularies. The gridded data formats are GRIB and NetCDF and for point and line data BUFR and CREX.

WMO and other authoritative organisation have the bureaucracy to maintain these tables/controlled vocabularies.

Real-time disciplines have been useful to force standardization.

# What I want or have to do

Chris Little

- Seamless, effective, timely exchange of geospatial data across the above domains.
- Use Conceptual Model driven schemas to construct desired data exchanges using on-the-fly serializations, but maintaining automatic conversions to and from Met Ocean community 'old-fashioned' formats and allowing content validation.

# What I want or have to do

## Chris Little

- Do not want the verbosity of XML. JSON may be good enough. If not, would like the compact Met Ocean formats to be easier to use.
- National Met Services, and WMO, will continue to be the 'authoritative voice' for weather forecasts and climate predictions. E.g. would you evacuate 1 million people on the strength of a CNN forecast? Or invest an extra \$1B in wind farms or nuclear power on the strength of one person's climate prediction ("it's not happening!")

# What are the blockers

Chris Little

- OGC not being apparently as open source friendly as I would like.
- People coercing 4D data into 2D solutions for quick fixes e.g. putting data such as wind speed and direction, into a RGBA image pretending they are colours.

# What are the blockers

## Chris Little

- The architectural solution for many met ocean applications such as visualisation still entail downloading a big 4D data cube and then slicing and dicing and transforming locally. Too much assumption that maps and images are not very volatile.
- Perception that O&M standards are too heavyweight or complex for real-time crowd sourcing of environmental data.
- Assuming English and EDT time will solve everything.



# What are the blockers

Chris Little

- History of all South American activity mediated via USA.
- Acceptance of existing library based protocols for catalogue content and searching (OAI-PMH, ISOS23950 + SRU1.3) outside of the library communities.



# GeoCat



Jeroen Ticheler



<http://geocat.net/>

# Where do I come from?

- The Netherlands
- FAO
- OSGeo
- Java
- Metadata

# What are my Roles?

- Director GeoCat
- OSGeo Emeritus Director
- Software Architect
- Project Lead

# What I have

- GeoNetwork Software
- SDI Implementations
- Open Source
- Open Standards
- GeoCAT Bridge

GeoNetwork  
Opensource





# Occam Labs

Markus Schneider



<http://www.occamlabs.de/>

# Where do I come from?

Markus Schneider

- Germany
- Software development
- Open Source
- Open Standards
- Java

# What I have

- deegree INSPIRE ready software
  - Metadata
  - View Service
  - Download
  - Transformation
- Training and Support
- Standards expertize
- SDI Implementations







# metaspatial

Arnulf Christl

Open Everything!



<http://metaspatial.net>

# Where do I come from?

Arnulf Christl

- Open Standards
- Open Source Software
- Open Data



<http://metaspatial.net>

# What I have

Arnulf Christl

- Know-How
- Network
- People Skills



<http://metaspatial.net>

# What I want

Arnulf Christl

- Support the evolution of INSPIRE !
- Test, Innovate and Iterate ...
- Interesting Projects !
- Business €

<http://metaspatial.net>

# What are the blockers preventing me from getting it done

Call for the Pool for Experts for the INSPIRE Maintenance and Implementation Framework (MIF)

...

## 2.6 Expenses

1. Participants in the activities of the pool of experts shall not be remunerated for the services they render.

<http://inspire.ec.europa.eu/index.cfm/pageid/5160>



# Joint Research Center

Margherita die Leo



Open Everything!

<http://ec.europa.eu/dgs/jrc/>

# What I want or have to do

Margherita die Leo

- Taking care of the European Forest Data Centre (EFDAC) of the JRC
- I have to edit / create metadata INSPIRE compliant

<http://ec.europa.eu/dgs/jrc/>

# What are the blockers preventing me from getting it done

Margherita die Leo

- Actually not a blocker, but I'd like to be sure that the metadata we produce are actually INSPIRE compliant. How do I test them?

<http://ec.europa.eu/dgs/jrc/>





# GeoSolutions IT

Simone Giannellini



<http://www.geo-solutions.it/>

# Where do I come from? What do I do?

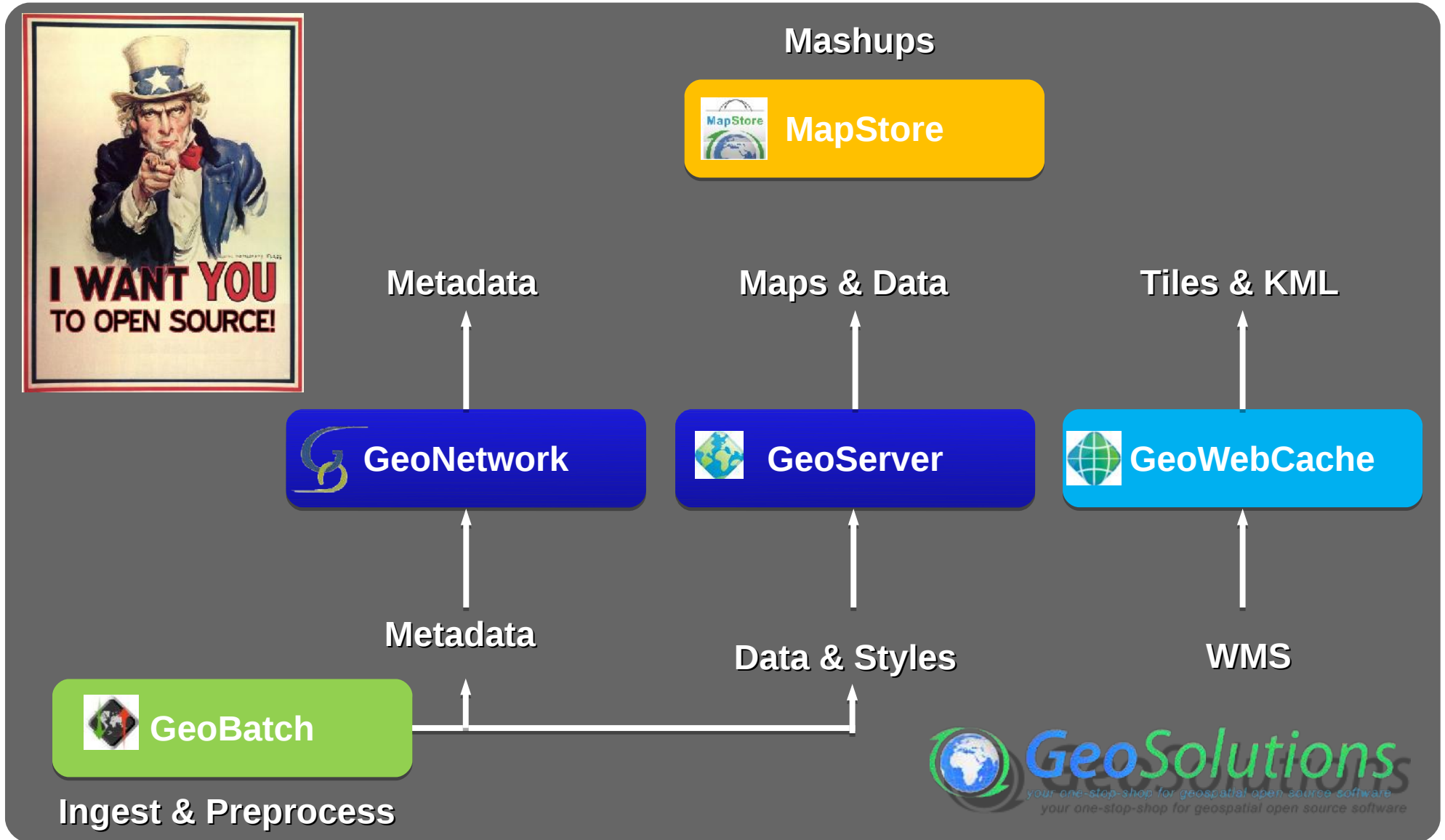
- My Mother
- Computer Engineering in Pisa (a nightmare, believe me...)
- Freelance Consultant
- Director at GeoSolutions
- PSC of GeoServer
- PMC of GeoTools
- PMC of GeoBatch
- Charter Member of OSGEO
- I used to be good at coding, now I talk about other's people code
  - Maybe this is a hint I was not THAT good...

# GeoSolutions

- Founded in Italy in late 2006
- Expertise
  - Image Processing, GeoSpatial Data Fusion
  - Java, Java Enterprise, C++, Python
  - JPEG2000, JPIP, Advanced 2D visualization
- Supporting/Developing FOSS4G projects
  - GeoTools, GeoServer, MapStore
  - GeoBatch, GeoNetwork, ImageIO-Ext
- Clients
  - Large NGOs, Public Administrations
  - Private Companies
  - Good balance between Italian and International Clients



# What I have

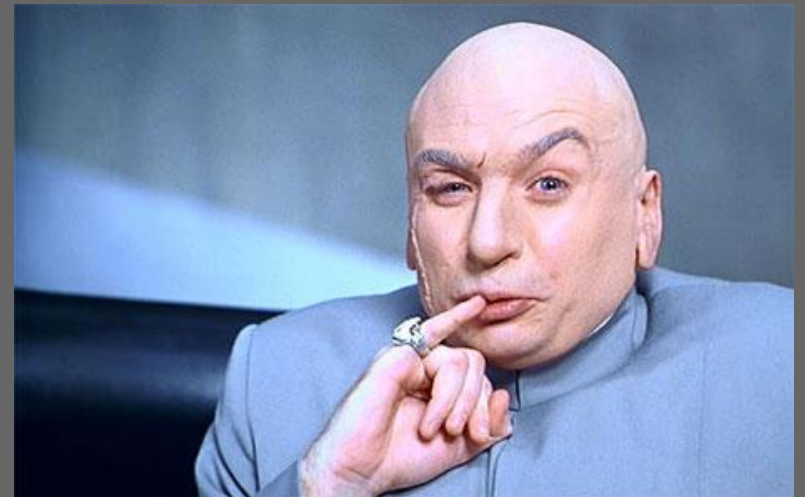


# Our Offer

- Enterprise Support Services
  - Bug Fixing
  - Support
  - Customizations & New Features
- Professional Training
- End-To-End Projects (Integration)
  - Tell me what you need, I'll put it together for you
- Take our core products and
- Bend them, twist them, embed them
  - hammer them to make clients happy
- FOSS4G Software is core for us



# What I want







# JustObjects.nl

Just van den Broecke

**Just** Objects

<http://www.justobjects.nl/>

# Where do I come from?

- Geospatial
- Scripting and ETL
- Open Source and Standards



## About Me

Independent Open Source Geospatial Professional

Secretary OSGeo Dutch Local Chapter  
Member of the Dutch OpenGeoGroep



Just van den Broecke  
[just@justobjects.nl](mailto:just@justobjects.nl)  
[www.justobjects.nl](http://www.justobjects.nl)





# What are my Roles?

- **OSGeo Netherlands** Lead
- Software Developer
- Entrepreneur
- Doer

<http://de.slideshare.net/justb4/introducing-osgeonl-the-dutch>

# What I have

- Stetl, Streaming ETL, is a toolkit for the transformation (ETL) of geospatial data.



<http://stetl.org>

- Loads of experience with GML
- INSPIRE-FOSS project/repo:
- Heron MC GeoExt

<http://inspire-foss.org>



<http://www.heron-mc.org/>



# R3 GIS

Paolo Viskanic



<http://www.r3-gis.com/>

# What I have

- FreeGIS
- GISClient
- MapServer
- PostGIS
- gvSIG



# Our experience with INSPIRE

- The FreeGIS.net project allowed us to study and implement new technologies to meet INSPIRE requirements
- Through the participation to conferences and OGC we met new partners and created a network to meet changing requirements of market
- However all this was possible because of the use of open technologies. Through Free and Open Source software we are actors in the application of INSPIRE and not spectators

# Our experience with INSPIRE

- We re-engineered our products to use the same stack of applications as the FreeGIS.net reference implementation
- We implemented INSPIRE policies in our application (e.g. management of urban green areas)
- We proposed and implemented SDI based on this technology in many municipalities, provinces and regions in Italy and Austria
- We are constantly extending the stack of applications of the FreeGIS.net project: e.g. mobile offline client

# Our experience with INSPIRE

- INSPIRE enables "**interoperability**"
- Interoperability opens new opportunities
- INSPIRE opens new market opportunities
- Through FreeGIS.net we have tried to lower the entry barrier for small administrations to implement INSPIRE compliant services
- However we miss consciousness about INSPIRE in the local Administrations in Italy and in Austria (our two main markets)

## Part 2 – Dialog

Now it is time for a dialog.

- Ask questions
- Exchange ideas
- Follow-up



# Guiding Ideas for the Dialog

- Maturity of the standards
- Maturity of the software
- Maturity and correctness of the data
- Implementability of the INSPIRE directive
- Degrees of freedom in the implementation
- Complexity of INSPIRE technical guidance and OGC standards
- INSPIRE implementing rules, international and national standards
- Communication channels between OSGeo and INSPIRE
- How to contribute to INSPIRE Maintenance  
(Presentation by Vanda Nunes de Lima)



# Thank You

Organized by:

- **Arnulf Christl, metaspatial, @sevenspatial**
- **Margherita Di Leo**
- and many other **OSGeo** members