



# INSPIRE in practice: Experiences with INSPIRE data and services

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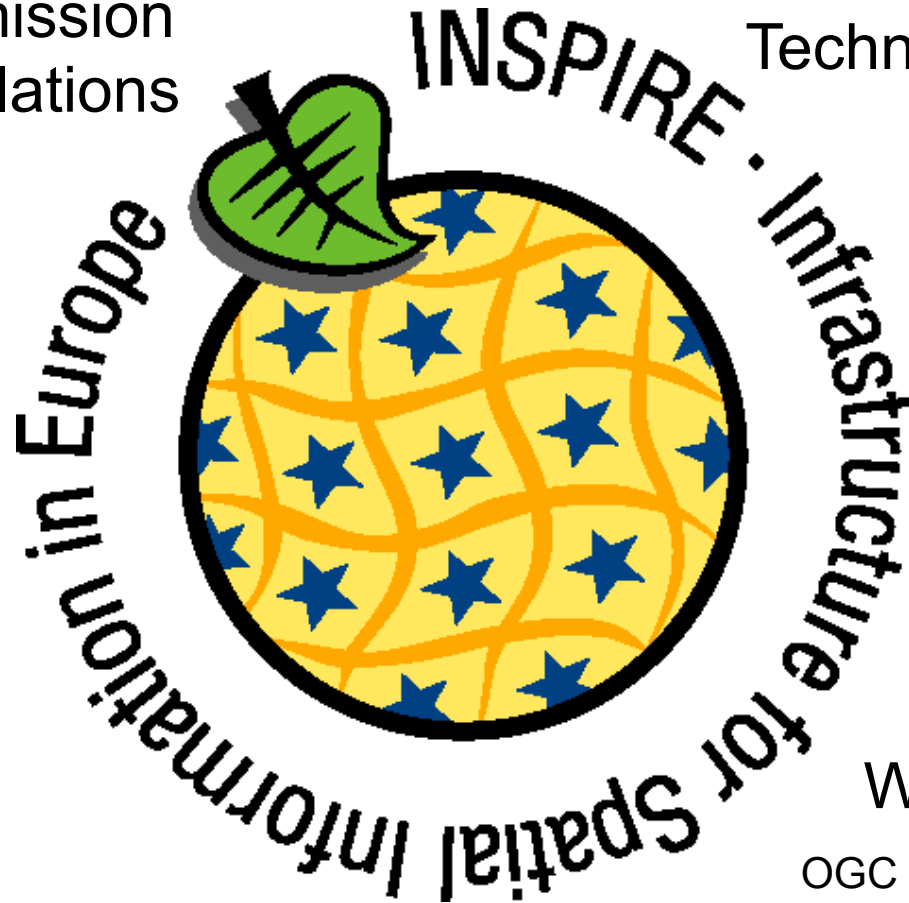
June 2014: ISO TC211 Standards in Practice workshop

# What's INSPIRE?

European Commission  
Directive & regulations

Technical Guidance

19135



19110  
19131  
19109  
OGC Simple Geometry  
19111  
19113  
19118

19136  
GeoTIFF  
Data

JPEG

19142  
19143  
Web Services  
OGC WPS  
W3C Atom  
OGC CSW

# What's this presentation?



**OGC / OS Plugfest (UKIAP)**  
Dec 2013/March 2014



Hackday, February 2014

23 companies; 14 'desktop' software; 6 server software  
4 ISO 19128 servers; 3+ ISO 19136 datasets; 4 ISO 19142 servers

# Summary

- ISO 19128 Web Mapping Service
  - Well supported by server software
  - *In spite of this being a 2005 ISO standard, some client software still only supports OGC's 2001 WMS 1.1*
  - Also, service operators often prefer OGC's tiled spec: WMTS
- ISO 19136 Geography Markup Language
  - A simple subset is well supported, roughly as defined by OGC Simple Features Profile
  - *In spite of this being a 2007 ISO standard, some software still only supports (a subset of) OGC's 2002 GML 2.1*
- ISO 19142 Web Feature Service
  - Reasonable support server side, but rarely implemented
  - BECAUSE only one client even claimed to support it

# ISO 19128 WMS

- Client software from  
Autodesk, CADCorp, Intergraph, Envitia, Esri, OSGeo, Pyxis, QGIS  
Worked well with server software from  
Caris, Esri, Intergraph, MapServer, OSGeo
- *BUT*
  - Some clients prefer OGC WMS 1.1
  - Many server operators prefer OGC WMTS  
(due to a more predictable server load?)

# ISO 19136 GML

- Desktop & server software from  
Astun, Autodesk, CADCorp, Intergraph, Envia, Esri, MapBox,  
MapMaker, OSGeo, Pyxis, QGIS, Safe Software, Snowflake  
Worked well with **simple** data created by software from  
Safe Software & Snowflake
- Most software can't handle multiplicity > 1
- *Therefore preference for OGC Simple Features level 0*
- Some software can't handle coordinates in 3D
- Most software hardly uses the XSD
- No software used the GML 'wrapper' of grid data

# ISO 19142 WFS

- Client software from  
Esri and QGIS

Worked with *simple data* returned by server software from  
Caris, OSGeo, Snowflake



# OGC UK Interoperability Assessment Plugfest

- 9<sup>th</sup> December 2013 and 3<sup>rd</sup> March 2014
- Five scenarios: GML, WMS, WMTS, Cascading WMS, WFS
- Two sprints, with time to fix issues in between
- Eleven companies participated, using nine GIS clients: *Arc, Astun, CadCorp, Helyx, Magellium, Intergraph, QGIS, Snowflake, Safe,*
- We looked briefly at OGC Catalogue Services for the Web, and Web Coverage Services too
- OGC Engineering report & OS 'Best Practices paper' to come  
(This presentation is from a draft & my own notes on the day)



# OS Insight Hackday

- Six recent / 'under development' products, including three that are in ISO 19136 GML
- Twelve organisations, seven pieces of software
  - *Five of which could open the ISO GML*
- OS Terrain® vector: easy
- OS Terrain® grid: no one used the GML; loaded ASCII grid
- OS MasterMap® Networks - Water layer: easy
  - Simplified INSPIRE Hydrography network specification
  - *except some software can't handle 3D coordinates*
- OS VectorMap® Local 2.0: easy
- (we also looked at a couple of CSV products & a GeoTIFF)
- OS Terrain 50 and OS VectorMap District are open data

# Links for further information

OGL: [Open Government Licence](#)

OGC UK Interoperability Assessment Plugfest:

<http://www.opengeospatial.org/OSplugfest>

<http://www.ordnancesurvey.co.uk/blog/2013/12/sprint-1-of-the-uk-interoperability-assessment-plugfest/>

<http://www.snowflakesoftware.com/2013/12/plugfest/>

Ordnance Survey's OS Insight programme:

<http://www.ordnancesurvey.co.uk/business-and-government/help-and-support/os-insight/index.html>

OS Open Data:

<http://www.ordnancesurvey.co.uk/business-and-government/products/opendata-products.html>

# Contact for further information

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Linked data / map:

<http://data.ordnancesurvey.co.uk/id/postcodeunit/SO160AS>