



Meeting Sponsors



GeoScience DWG Welcome

106th OGC Technical Committee - GeoScienceDWG session

Orléans, France

Mickaël BEAUFILS

22 March 2018

Agenda



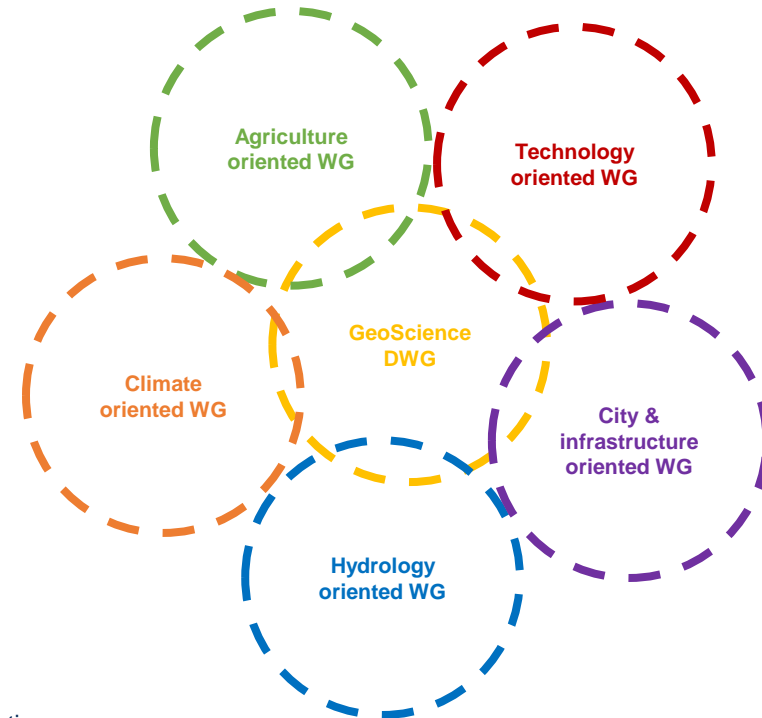
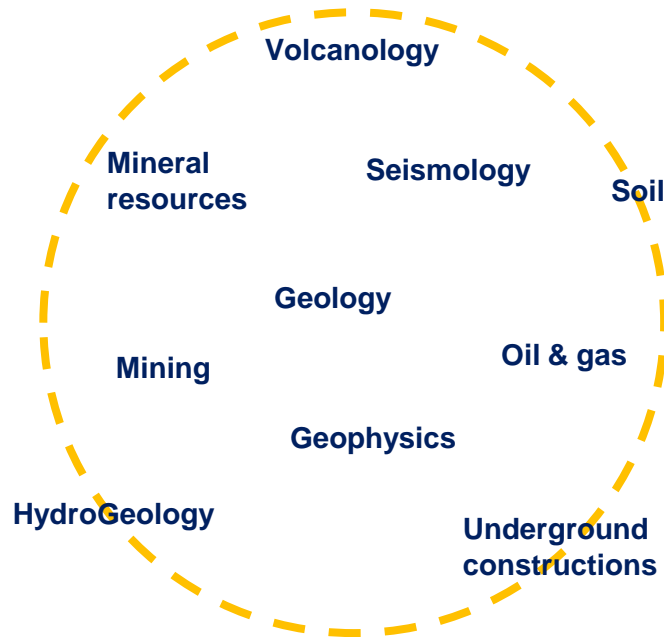
- 8h30 – 10h15:
 - GeoScience DWG Welcome
 - IE news (~ the rest)
 - Borehole IE
 - 3D-4D Model Discovery IE
- 10h45 – 12h30:
 - Presentation session
 - Exploring GeoScience DWG horizons

GeoScience DWG position



- Main targets:

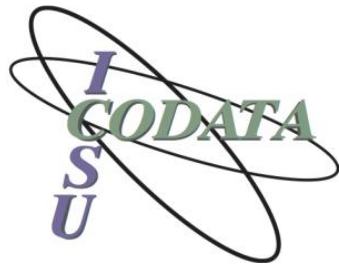
- Harmonize geoscience data expression and facilitate usage
- Stay connected and even propose enhancements to technologies / solutions
- Connect people interested in the geoscience topic
- Ensure proper connections with other groups / communities inside and outside OGC



Breaking news: we are not alone!



• 21/3 : Joint session with RDA ESES <https://www.rd-alliance.org/ig-earth-space-and-environmental-sciences-rda-11th-plenary-meeting>



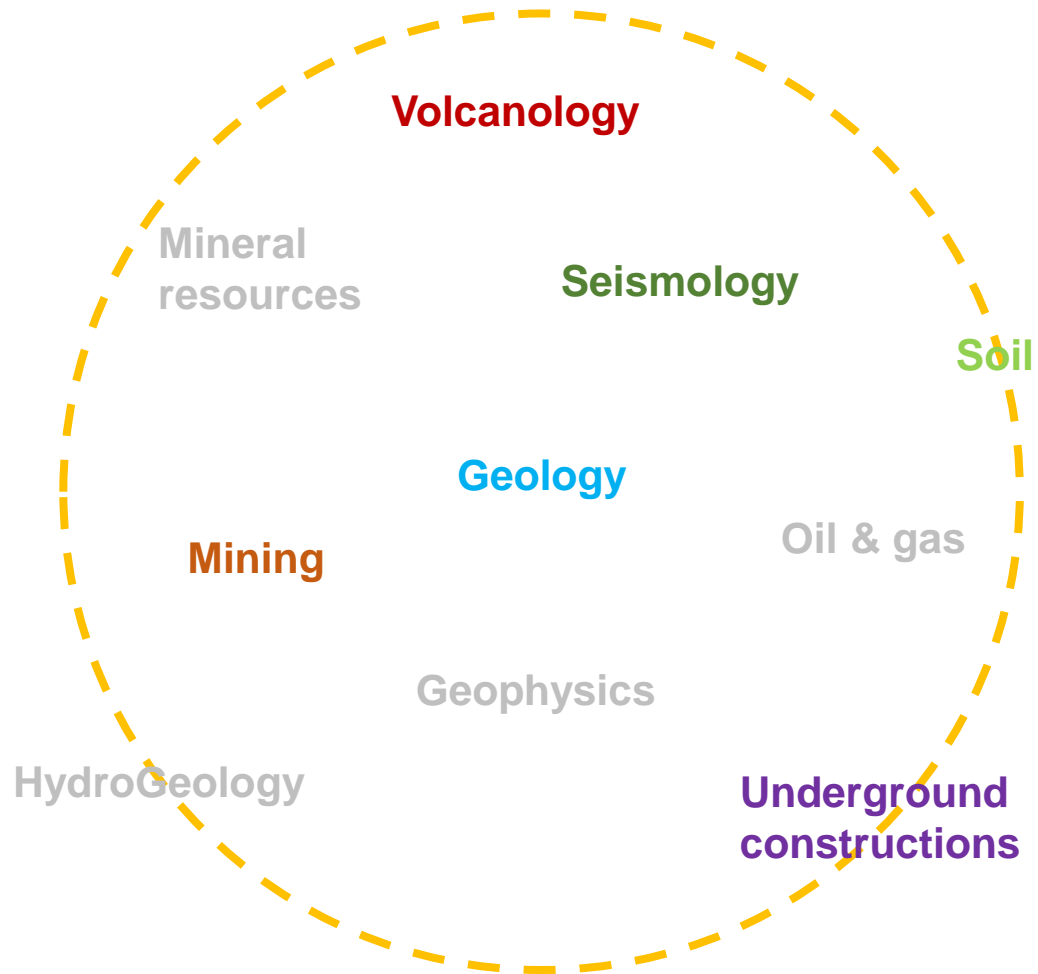
AuScope
AN ORGANISATION FOR A NATIONAL
EARTH SCIENCE INFRASTRUCTURE PROGRAM






More groups here →



Presentation session trailer



Exploring GeoScienceDWG horizons

- BIM and Geomodelling (Mickaël Beaufils - BRGM)
- LIDAR and Geomodelling (Thomas Dewez - BRGM)
- Seismology (Aurelien Dupont - EMSC) 
- Volcanology (Jean-Marie Saurel – IPGP) 
- Mining (Andrew Scott - GMSG) 
- Soil (Josh Liebermann - Tumbling Walls LLC)
- AstroGeoScience (Mark Hunter - USGS)

Interoperability Experiments reminder



- **Borehole Interoperability Experiment** targeting a common Borehole conceptual model
 - Borehole is a core concept in geoscience
 - Several existing standards
 - Cross-countries initiatives on the run to push standard usage (EPOS, ...)
- **3D-4D model discovery Interoperability Experiment** targeting definition of metadata for 3D-4D models
 - 3D-4D model standardization is not so advanced
 - “No consensus of 3D-4D model definition”
 - Have to make 3D-4D models at least findable
 - Cross-countries initiatives on the run to push standard usage (EPOS, OneGeology, ...)

Another IE driven by the GeoScience community



- Environmental Linked Features IE (ELFIE)
- ‘Demonstrate the use of existing and pending OGC standards for the encoding of environmental observation data in an integrated dataset of features linked according to ReSTful and Linked Data principles.’

- Initiators:

- U.S. Geological Survey (US)
- Land Information New Zealand (NZ)
- BRGM (FR)

- Participants

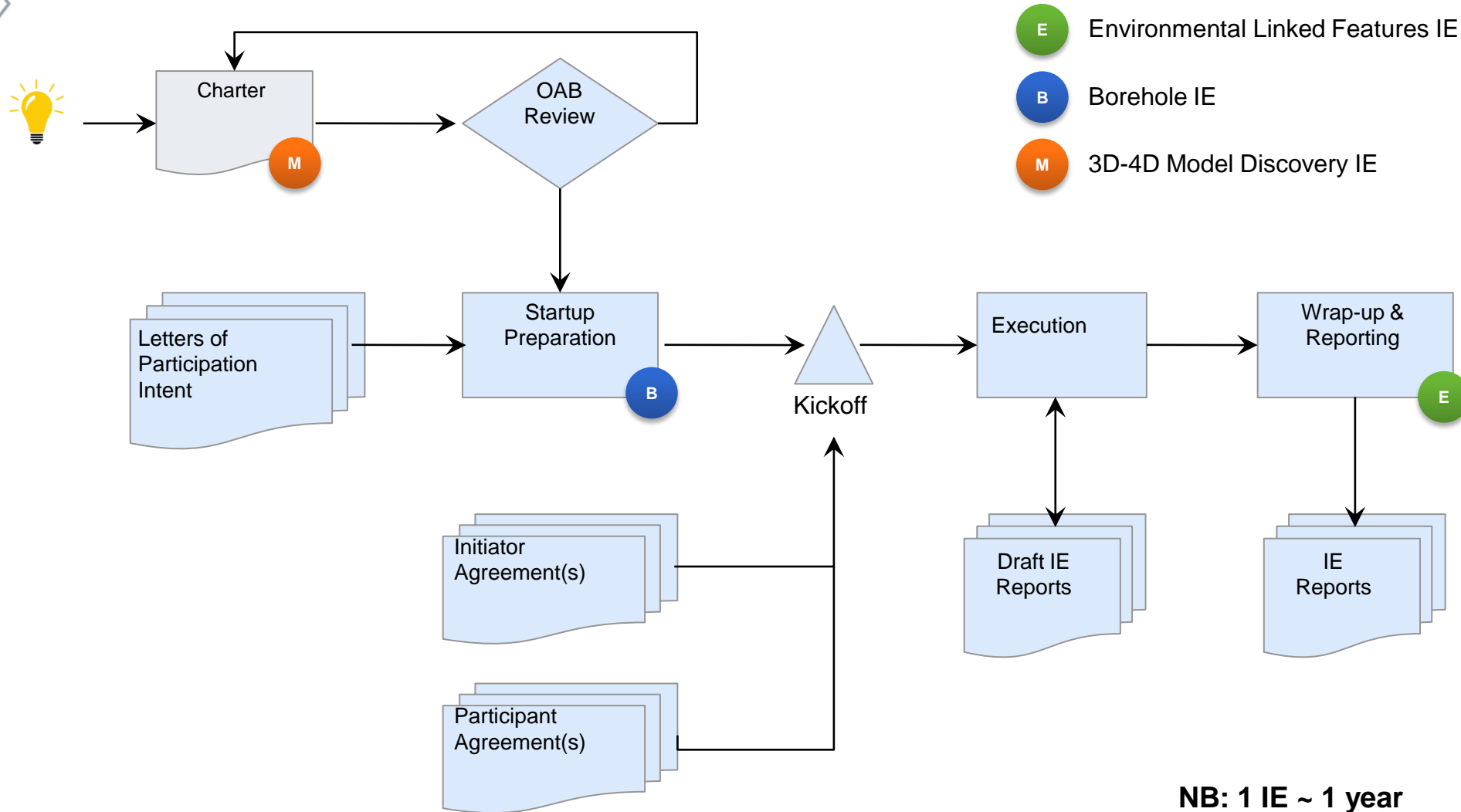
- Tumbling Walls and Dewberry (US)
- Meta-linkage (AU)
- INSPIRE (EU)
- Natural Resources Canada (CA)
- Manaaki Whenua and Horizons Regional Council (NZ)

From: <https://github.com/opengeospatial/ELFIE>

The screenshot displays the GitHub interface for the repository 'opengeospatial / ELFIE'. It includes navigation tabs for Code, Issues (20), Pull requests (0), Projects (1), Wiki, and Insights. Below the repository name, it shows 'Environmental Linked Features IE Repository' with a link to the repository page. Statistics include 198 commits, 2 branches, 0 releases, and 10 contributors. A table of recent commits is visible, with the most recent being a merge pull request #73 from dbloggett-usgs/master. The README.md file content is partially visible at the bottom, starting with the title 'Environmental Linked Features Interoperability Experiment (ELFIE)'.

| Commit | Message | Time |
|--|--|--------------|
| dbloggett-usgs Merge pull request #73 from dbloggett-usgs/master | Latest commit 2e10d21 16 hours ago | |
| R | got a solid first draft of elf-net for hy_features | a day ago |
| data | adding canadian data to "cr" use case | 16 hours ago |
| diagrams | - first set of coherent elements for 'grounwater level forecast UC' | 18 days ago |
| docs | got a solid first draft of elf-net for hy_features | a day ago |
| er | a bit of word smithing... I think this is better, bit it may need som... | 5 months ago |
| models/shapechange | Moved json-ld from models to docs | 3 months ago |
| .gitignore | missing newline for table rendering | 3 months ago |
| README.md | formatting | 5 months ago |

Interoperability Experiments Status



Interoperability Experiment todo list



- Write charter
- Submit charter to OAB
- Have OAB validation



- **Startup preparation phase (> 30 days)**

- 2 OGC Press Releases (\$)
 - Announcing IE content, kickoff date
 - 30-day Participant Notification period starts
- Interested organizations submit Letter of Participation Intent to OGC
- By Kickoff date, all participating org's must submit a signed Participant Agreement

- Kickoff requirements:

- 30-day Participant Notification period finished
- Initiator and participant agreements signed



- **Do the job!**
- Write report(s)



Environmental Linked Features IE



Borehole IE



3D-4D Model Discovery IE

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Environmental Linked Features IE



Borehole IE



3D-4D Model Discovery IE

NB: 1 IE ~ 1 year

Interoperability Experiments

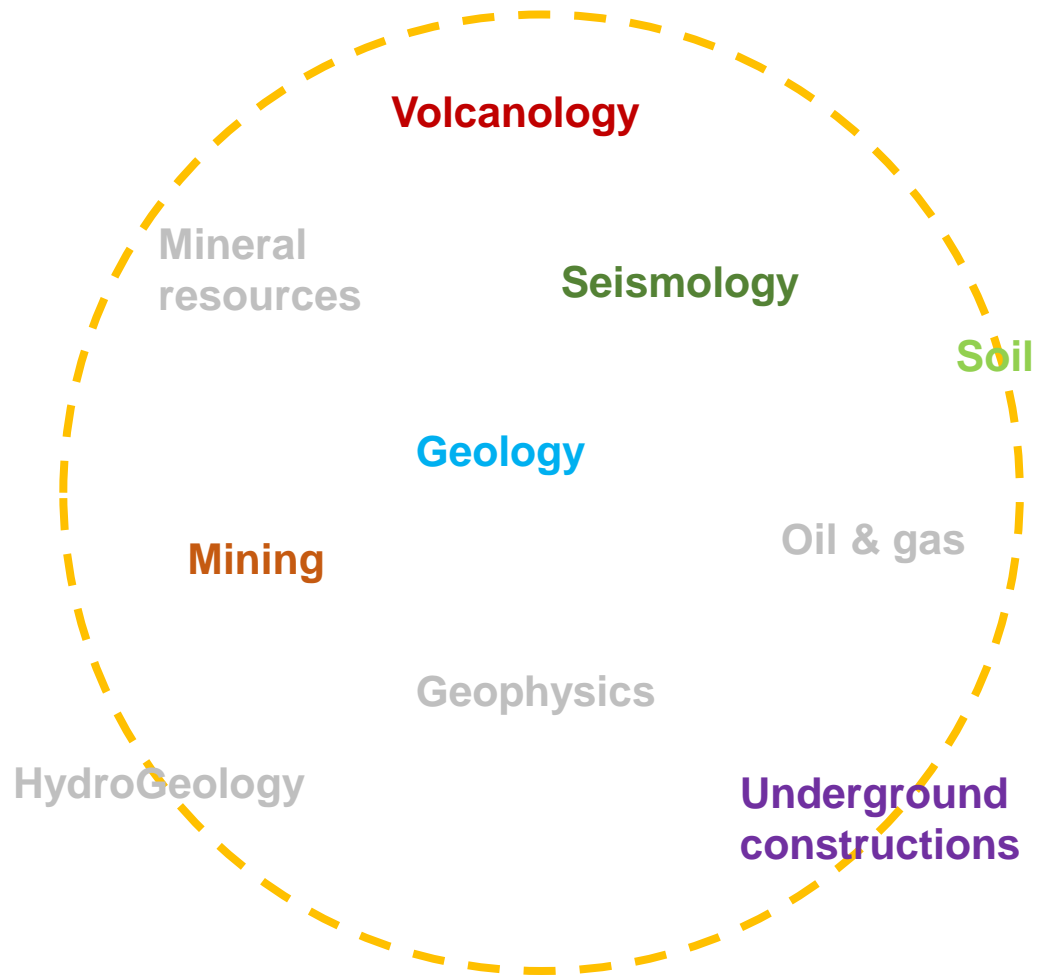


- **Borehole Interoperability Experiment**



- Charter link: <https://docs.google.com/document/d/1H4A5tGM4rKyHunLqeJXPZrqHX4Ya-H-5zhtFrKLQ1mQ/edit>

- **3D-4D model discovery Interoperability Experiment**

- Charter link: <https://docs.google.com/document/d/1jX5opnv2twVPR8KSO9Ox2u8TIBskv1UCp2OxuQhNWJ0/edit>



Exploring GeoScienceDWG horizons

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- LIDAR and Geomodelling (Thomas Dewez - BRGM)
- Seismology (Aurelien Dupont - EMSC)  WP8
- Volcanology (Jean-Marie Saurel – IPGP)  WP11
- Mining (Andrew Scott - GMSG) 
- Soil (Josh Liebermann - Tumbling Walls LLC)
- AstroGeoScience (Mark Hunter - USGS)