

The challenge of building capacity and ensuring equality and diversity

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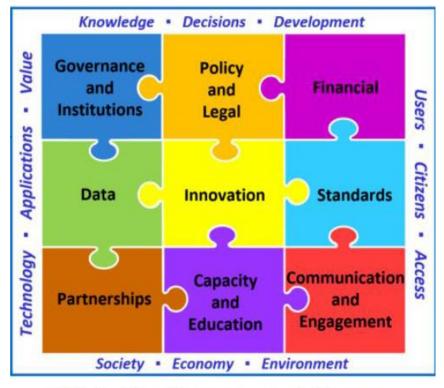
EuroSDR – European Spatial Data Reseach





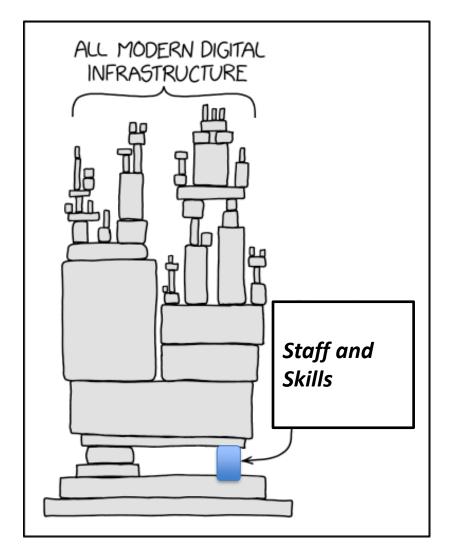
- Non-profit organization since 1953 (OEEPE)
- Provides a pan-European network
- Brings together NMCAs, academia, industry
- Purposes
 - jointly perform applied research
 - secure timely, research-based knowledge
 - educational activities ensuring the dissemination of research-based knowledge
- Keep NMCAs updated on technology developments
- ca. 20 member countries
- Members are NMCAs & Research / Academic institutes + Companies as associate





IGIF - Enabler of Future Geospatial Ecosystem

SP8 - Establishing sustainable capacity building programs and education systems





Recruitment Pipeline

EuroSDR Workshop - <u>Recruitment and Capacity Development Challenges</u> <u>in the Geospatial Domain</u> - 2024. **All countries finding difficult to attract students and staff** (*Industry 85% skills recruitment problems*).

- Specialist education not as popular.
- 'Related "other" courses growing.
- Name of the profession the 'brand'.
- Where/who/how to target?



Many attempts to find solutions – NMCA engagement; National Centres of Competence; Apprenticeships; VGI; Industry involvement.

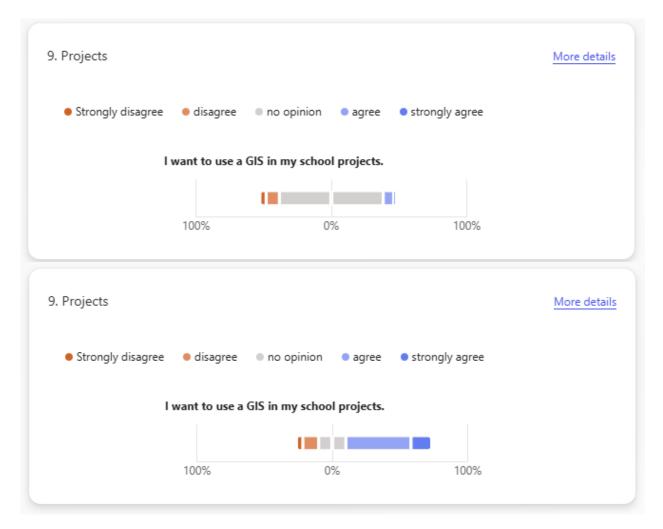
All need funding to succeed but is this the role of the NMCAs?



Sustained Engagement Required

Before any outreach sessions

After 3 visits







"Can you think of a career that uses Geography?"



Before any outreach sessions



After 3 visits

39 respondents (19%) answered Geography Teacher for this question.

weather interprer
Weather Person
Meteorologist Cartographer
Seismologist Weather forecast
News reporter
forecast person
Weather data Weather reporter
Weather Geologist
Weather Geologist
Weather man
Weather data Weather reporter
Weather Geologist
Weather forecaster
Weather reporting

24 respondents (18%) answered Geography teacher for this question.

Weather forecaster

Volcanologists

Seismologist

Weather forecast

Surveyor

Geography Teaacher

Volcanologists

Seismologist

Weather man weather person

Cartographer

Site surveyor

Meteorologist

Weather Geologist

Meteorologist

Forecast presenter

Geography Teaacher

Volcano loge

Landscape Architect



Capacity Development for Future Needs

- EuroSDR and EduSERV, EuroGeographics KENs.
- ISPRS, FIG, CLGE Commissions for Education.
- Copernicus Academies and Relays.
- MOOCs ESA, NASA.
- Industry, Professional Bodies, many others.
- New term to be aware of 'Microcredential' targeted, assessed 5 or 10 ECTS stand-alone module at (with) University – "a European approach for lifelong learning and employability"



Motivation - Career Progression, CPD Personal Development Plans.



Equality and Diversity

- 51%/15%
- Other under-represented groups.
- Back to recruitment pipeline spatial/dropout.
- Inclusive hiring/working practices bias.
- UNGGIM Future Trends/Committee of Experts
- "Flexible, inclusive learning opportunities"





FIG Young Surveyors, CLGE Young Surveyors, YouthMappers, Women in Geo, Sisters of SAR, Ladies of Landsat, Women of Waves, World Geospatial Industry Council – FIG Task Force on Evolutionary Diversity.

Profiling, Advocating, Mentoring



- Gamified Recruitment: Creating interactive challenges or virtual reality experiences that introduce diverse candidates to surveying in an engaging way.
- Community-Based Apprenticeships:
 Partnering with local organizations to offer hands-on surveying training to underrepresented groups.
- Al-Powered Bias Detection: Using Al to analyze hiring and promotion trends to identify and correct unconscious biases in the profession.
- Surveying Pop-Up Events: Hosting temporary surveying workshops in unexpected places—like shopping malls or festivals—to spark interest among diverse audiences.
- Reverse Mentorship Programs:
 Encouraging younger, diverse professionals
 to mentor senior surveyors on inclusivity
 and modern perspectives.







More information?

http://www.eurosdr.net