EuroGeographics General Assembly 2025 – Highlights and Reflections



Our President, Tomaž Petek opened the 2025 General Assembly reminding us that we are united by a common vision to use your expertise and information for the public good.

In the past 25 years, we have worked together to ensure that today your data is recognised as an essential component of European and global infrastructures. Its value to society was confirmed by our speakers in Riga with keynotes and panellists sharing some thought-provoking insights on how it enables users to look to the future with confidence.

Now, as a community, we are putting in place exciting plans to deliver the only high-value large-scale authoritative dataset for Europe based on UN-GGIM core geospatial data recommendations. During a special members-only session, you made the collective decision to take forward this practical solution that meets user needs and maintains your relevance in the wider data ecosystem. This is a collaboration that will continue to unlock the power of geospatial data to benefit people and planet, and in doing so it will provide a more certain future for your authoritative data at pan-European level.

Welcoming us to Latvia, the Minister of Defence said: "National Mapping, Cadastral and Land Registration Authorities have long been trusted sources of geospatial information. Today, a modern mapping agency must be able to operate under conditions of uncertainty."

At one of the biggest gatherings of members in EuroGeographics' history, we demonstrated that we accept this challenge, and I look forward to working with you all to realise the ambition we committed to in Riga.

Best wishes

Sallie Pavne Snell

S. L. Page

Secretary General and Executive Director, EuroGeographics

Overcoming challenges for a more certain future

Giving the opening address, Andris Sprūds, Minister of Defence, Latvia said: "Rapid progress in technology raises questions about achieving the right balance between openness and security. Finding the right balance ... remains a major challenge at all levels of geospatial information management. We're very happy to promote in these difficult times, in these challenging times, the work that you do, because it's certainly indispensable for all."

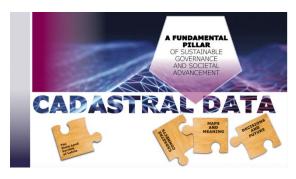
Mrs. Lauma Paegļkalna, Parliamentary Secretary, Ministry of Justice, Latvia added: "In the past quarter century, EuroGeographics has stood as a lighthouse of geospatial excellence, fostering collaboration, innovation and progress. May this milestone serve not only as a reminder of a distinguished past, but also as a renewed commitment to shaping the future in this field."



Martins Liberts, Director General, Latvian Geospatial Information Agency, hosts of the 2025 General Assembly welcomed delegates to Riga.

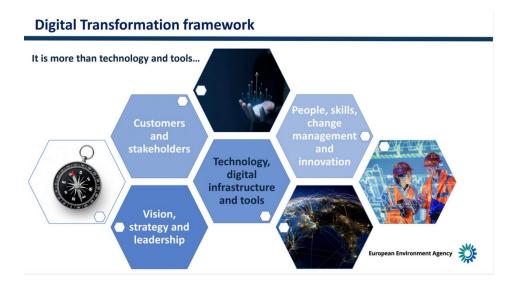
He said: "The geospatial information agency acts as a centre of excellence to promote geospatial knowledge in society ... delivering high-quality accessible

authoritative geospatial data, promoting data-driven decision-making in public service and maintaining international cooperation."



Vita Narnicka, Director General, State Land Service, Latvia concluded: "We must provide trusted data as a source. Data Access must be easy and straightforward and understandable for every user: data holds value only if it contributes decision-making."

Keynote: The big picture: Digital Transformation Karl Hamilton, Head of Digital Department, European Environment Agency



In his keynote, <u>Karl Hamilton</u>, Head of Digital Department, European Environment Agency highlighted that partnerships, such as the long-standing collaboration with EuroGeographics, are crucial to the EEA's work.

Commenting on the cooperation between the two organisations, Karl said: "Reliable, accurate geospatial data is an absolutely critical enabler of the work of EEA. We need to use it in a really integrated way, and think about it in terms of Earth intelligence, and not just data, to develop the insights that can inform reliable decision makers. And of course, being customer focused, we need to always be customer focused partner for momentum and really be drivers for change."

Speaking on The big picture: Digital Transformation, Karl stressed that leaders and experts face common challenges when it comes to digitalization, but crucially, also enormous opportunities.

"We need to think about it, not as change for the sake of change, but delivering more value. And we each need to decide what more value looks like to us and our stakeholders. Is it greater impact? Is it greater efficiency, or is it better services? For the EEA, it's about providing more robust and reliable data to our users and also generating knowledge that's reliable and can be used to inform reliable decision making. And of course, it's about achieving the Green Deal goals and supporting in the challenges that we face. Our citizens in our countries and in Europe as a whole are looking for us to deliver."

Key takeaways:

- Digitalization is an essential enabler, not a nice to have anymore
- Requirement for a clear strategy to deal with the competing priorities.
- Clear priorities to focus investment.
- Success needs commitment and buy-in from the whole organisation.
- Innovation should be made keeping a careful eye on sustainability.

The Future Vision: The next 25 years of EuroGeographics Panel session

Anniversaries are a wonderful chance to celebrate success; they are also an unmissable opportunity to reflect on past achievements and use this experience to put in place solid plans for the future.

Our panel – Dorine Burmanje, Former President, EuroGeographics; Eydis Líndal Finnbogadóttir, Natural Science Institute of Iceland; Bengt Kjellson, Ministry of Justice, Sweden; Colin Bray, Tailte Eireann, Ireland; and Sallie Payne Snell, Secretary General & Executive Director –all played a pivotal part in EuroGeographics becoming the well-respected and forward-looking association it is today.

Key takeaways:

- EuroGeographics is a unique organisation and more than just an association; it is a family where life-long friendships are forged in addition to professional networks
- Technological developments and the on-going demand for open data will mean trust, privacy, ethical and security considerations, as well as maintaining quality are significant challenges for the future.
- Investment is crucial in delivering high quality, reliable data there must be funding to sustain this.
- If National Mapping, Cadastral and Land Registration Authorities don't meet user needs, users will find other sources of data with the risk that official information becomes irrelevant in the wider data ecosystem.
- EuroGeographics much be as important to others as it is to its members.

Director Generals' Knowledge Exchange - Expert Exchange

A broken GNSS?

Serena Coetzee, UN-GGIM Geodesy Centre of Excellence

To demonstrate the importance of GNSS, Serena outlined the worst-case scenarios that could arise from satellite failure. These examples illustrate why it is crucial, not only to have a robust global geodetic supply chain, but also strong political support for geodesy in all countries. To achieve this, and ultimately a next-generation global geodesy supply chain with higher accuracy and stability, it is vital that decision-makers understand the value of geodesy and its role underpinning the satellites upon which modern-society is so reliant.

Ricardo Oliveira, Navigation Systems & Innovation Executive, EuroControl

Ricardo outlined how vulnerabilities in GNSS are being addressed to ensure airspace is kept safe and open. Interference, whether from jamming that makes GNSS signals unusable or spoofing – false GNSS signals mimicking authentic ones – resulting in misleading data, is a new trend. To overcome these issues, EuroControl has three pillars of action: Radio regulatory engagement; improved avionic/air traffic management i for existing standards and product updates; and complementary positioning, navigation and timing for continuity, integrity, and resilience, as well as more robust standards.

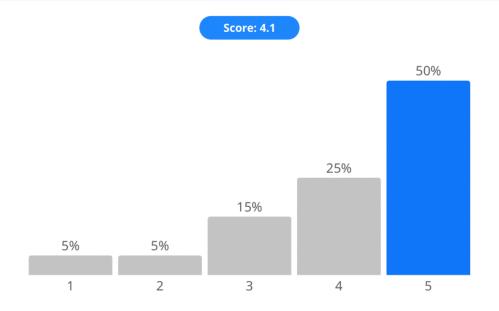
Per Erik Opseth, Head Geodetic Institute, Kartverket

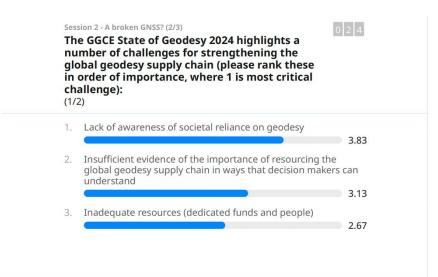
Per took us on a journey through the evolution of the global geodetic reference frame and its role in meeting future demands for geospatial data management. He outlined the relationships between the International Terrestrial Reference Frame (ITRF), World Geodetic System (WGS 84) and European Terrestrial Reference System (EUREF 89). For long-term Multi-Reference Frame Support, future geospatial systems must support multiple reference frames simultaneously to ensure compatibility across datasets. Data systems should automatically update when reference frames are changed or updated, minimising disruptions in map data accuracy, and switching between reference frames should be simplified and automated, avoiding the need for complex, manual processes.

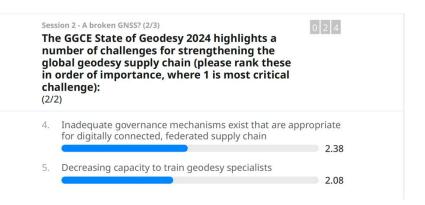
Session 2 - A broken GNSS? (1/3)

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There is a growing awareness of the weaknesses in the global geodesy supply chain and NMCAs should work towards improving national governance arrangements and developing a country level workplan to manage the associated risks.







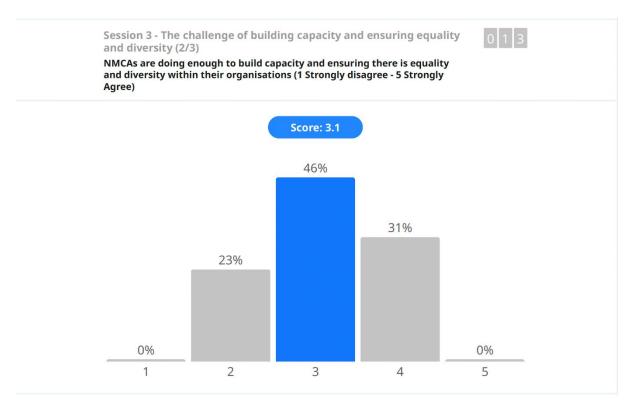
The challenge of building capacity and ensuring equality and diversity

Conor Cahalane, Secretary General, EuroSDR

A 2024 EuroSDR workshop found that all countries are experiencing difficulties in attracting students and staff to the geospatial domain. Reasons for this included the fall in popularity of specialist education and the perceived 'brand' of the geospatial profession. Overcoming these issues is not just a question of effectively targeting recruitment, it also requires sustained engagement. Conor highlighted some of the initiatives currently working to encourage people to think differently about careers in geography – from 'gamified' (interactive) recruitment campaigns using the latest technology and pop-up events to community apprenticeship and mentoring.

Ingrid Vanden Berghe, Director General, NGI Belgium

Ingrid unveiled NGI Belgium's new circular organisational chart; an unconventional yet deliberate choice that reflects the organisation's commitment to inclusivity, and innovation. Instead of a hierarchical power structure, the approach breaks down silos and highlights the equal importance of every team member, as well as the interdependence and relationships that drive the entire organisation. The benefits to NGI Belgium include increased flexibility in adapting to new challenges, an enhanced culture of collaboration where ideas easily flow and evolve, and streamlined decision-making.



Competing policy drivers Open vs Security

Jiři Pilar, Legal & Policy Officer, DG Connect, European Commission

Jiři focused on the Commission's current and future data policies, in particular the Data Union Strategy and what it means for National Mapping, Cadastral and Land Registration Authorities. He gave an overview of the Open Data Directive and High-Value Datasets, and stressed that the rules on the reuse of data only apply to publicly accessible data with Member States deciding what data is accessible.

Catharina Bamps, Policy Officer, DG DEFIS, European Commission

Copernicus data and information dissemination is based on a free, full and open data policy. As civilian program under civilian control however, the security aspect relates only to civil security. Catharina outlined how Copernicus supports EU policies in response to Europe's security challenges through its three Security Services. These are Border Surveillance, Maritime Surveillance, and support to EU External and Security Actions (SESA). All improve crisis prevention, preparedness and response.

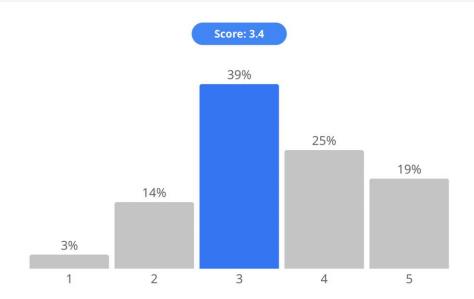
Hannah Cook, Director, Property Division, Kartverket

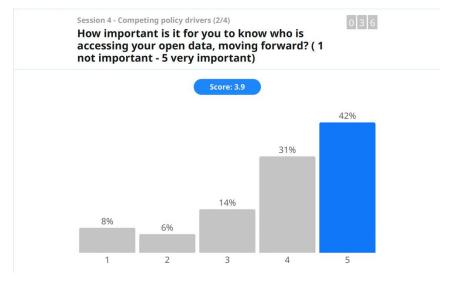
Hannah's take on open vs security was that global political, economic and environmental challenges require us to share what we can and protect what we must. She pointed out the world has changed significantly since the implementation of the Open Data Directive and rules for High Value Datasets with data sharing now a balancing act. Considerations not only include what data can be shared but how and to whom?

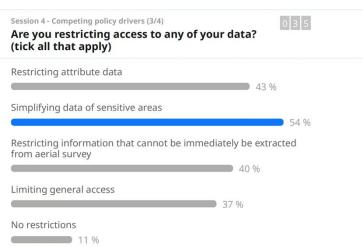
Session 4 - Competing policy drivers (1/4)

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Increasing security concerns are impacting NMCAs in making their data open and accessible, even if there is European and/or National legislation about making data open (1 Strongly disagree - 5 Strongly agree)





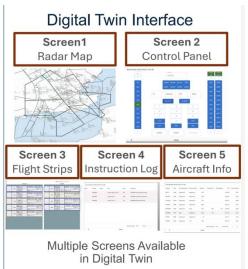


Technology working with us or against us - Al and Future trends Keynote: <u>Marc Thomas</u>, Project Bluebird, NATS

Real-world Operations



Multiple Screens for each Air Traffic Controller



NATS covers 11% of Europe's airspace (London & Scottish) and 80% of North Atlantic traffic (Shanwick). Challenges include increased air traffic; carbon reduction targets; integration of new generation air vehicles, such as drones, uncrewed aircraft systems (UAS), and electric vertical take-off and landing vehicles; and implementation of the eVTOLS airspace modernisation strategy which will transform the route network to enable a simpler and safer future for air travel.

The aim of Project Bluebird, which started in 2021, is to build an AI agent to control a sector of UK airspace. The 5-year £15m partnership between NATS, The Alan Turing National Institute for AI, and The University of Exeter is funded by the partners – the Engineering and Physical Research Council and Microsoft Research. Its main components are data, a probabilistic Digital Twin of UK airspace, AI Air Traffic Control Agents, and AI Explainability (trustworthiness, transparency and validation).

Air Traffic Control is highly regulated and the regulator's views on automation is still evolving. What is clear is that in the foreseeable future, machines will have to coexist with humans.

Jordi Escriu Paradell, Scientific Project Officer, JRC, European Commission

New technologies ae not only enabling innovation in data collection but also production, processing and sharing. Jordi outlined how this can contribute to the European Commission's 2024 to 2029 priorities which include positioning Europe as a global frontrunner in artificial intelligence and ensuring access to high-quality data through the European Data Union Strategy. He also pointed to some of the funding sources available to build capacity and competence to achieve these goals.

lan Schuler, CEO, Development Seed

Billions of decisions would benefit from better geodata. New technologies and tools are not only improving information but also the insights users can gain from it. For example, digital twins are answering the question what now, what next and what if. Ian identified 5 steps to ensure the benefits of data are realised: Understand user requests, source data, parse and prepare data, select and run analysis and models, and finally summarise and visualise.

Nick Land, European Business Development Manager, esri Europe

Nick posed the question: Is AI-enabled GIS working with us or against us? AI certainly brings benefits such as efficiency, innovation and insights yet also requires us to address the need for greater transparency, control and legal compliance. He provided a number of case studies to show how National Mapping, Cadastral and Land Registration Authorities are enhancing their activities with AI and concluded his presentation with these words from esriChatGPT: By addressing concerns ... we can harness the benefits of AI while mitigating potential risks.

NMCAs response to global challenges

Marta Nagy-Rothengass, Head of Unit, Eurostat, European Commission

Marta focused on the global challenge of climate change, which does not stop at borders! All public services therefore have a role in tackling it and need harmonised cross-border data to do this, including the integration of statistics and spatial data. Eurostat can support this as a bridge between NSIs and NMCAs for closer cooperation, by promoting the development of European geographical information and existing initiatives, and by disseminating aggregated data. Funding is also available, for example NMCAs and NSIs can make a joint application for Eurostat GEOS grants. Marta ended her presentation with a call for us all to work on addressing the climate challenge together.

<u>Inge Jonckheere</u>, Head of the Green Solutions Division, European Space Agency (ESA)

Copernicus is the largest producer of EO data in the world, supporting international and EU policy. The UN Sustainable Development Goals, the Paris Agreement on Climate Change and the Sendai Framework For Disaster Risk Reduction 2030 are just some of the global policies benefitting from Copernicus data. In Europe, it supports strategies such as EU Biodiversity and zero pollution aims. For example, ESAs Earth Explorer Biomass Mission uses longwave radar to observe forest height and biomass. It is the first Mission to host a radar sensor capable of measuring forest biomass and tree height across multiple types of forest. In addition, the radar also provides day and night imagery enabling images to be acquired regardless of weather conditions or cloud cover.

<u>Andris Viksna</u>, Head of the Forecasting & Climate Department, Latvian Hydrometeorological Service (Member of World Meteorological Organisation)

Andris outlines how climate change is being monitored and measured using remote sensing in Latvia to predict future patterns. The data collected for analysis includes air temperature, precipitation, snow and sea level ice. Current and historical information is compared to assess the impact of changes, for example the effect on the coastline. This provides a tool for analysis that supports planners and policy makers.