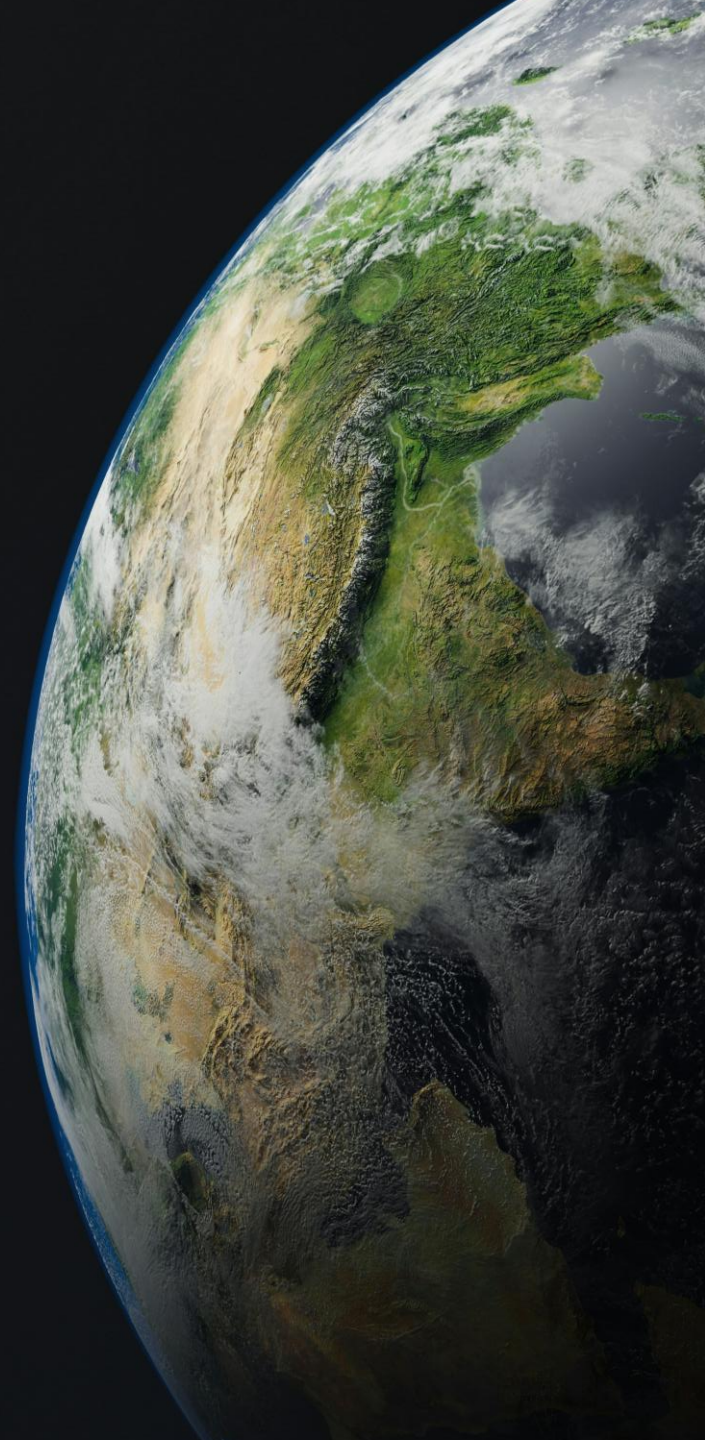




**International Governance for Geodesy –
Options paper discussion**
UN-GGIM Subcommittee on Geodesy

Laila Løvhøiden – Kartverket (Norway)



About the Options paper

The paper is prepared by **UN-GGIM Subcommittee on Geodesy with secretarial support from the UN-GGCE**

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International Governance for Geodesy



An Options Paper

DRAFT: 24 February 2026



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Every satellite service relies on continuous access to accurate and reliable geodetic products.



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Introduction

The purpose of the option paper:

Start high level discussions on international governance for geodesy

- To outline and discuss governance options
- To create a shared vision

.. And explain the cost if nothing is done.



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Photo: Bjørn-Owe Holmberg

The governance gap

The State of geodesy maturity assessment concludes:

- The global geodesy supply chain currently functions due to the expertise and commitment of the scientific community, but **lacks the governance structures, strategic coordination and sustained investment** typically associated with critical infrastructure systems.
- While the **International Association of Geodesy (IAG)** provides **strong scientific coordination**, it does not have the governmental authority to secure long-term funding, define responsibilities or enforce operational requirements.



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Photo: Laila Løvhøiden, Einstein tower, Potsdam

The gap cause problems

The governance gap creates four fundamental problems:

1. **No shared vision** among governments, satellite operators, space agencies, the scientific community, and the private sector about what constitutes a robust global geodesy supply chain.
2. **No agreement on roles and responsibilities** for maintaining infrastructure, sharing data, or supporting developing countries.
3. **No mechanisms to implement, coordinate, and oversee commitments**, resulting in fragmented decision-making and inconsistent investment.
4. **No sustainable funding model**, leaving critical infrastructure dependent on research budgets that fluctuate with political cycles and compete with other priorities.



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Constraints and sensitivities

The governance framework must address several key challenges:

- **Ensure shared responsibility**
- **Data sovereignty concerns**
- **Capacity differences**
- **Private sector engagement**
- **Preserving geodesy as a global public good**



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Three governance options

1. Legally binding agreement
2. Expand an existing legally binding agreement
3. Non-binding framework with targets

The options are **not mutually exclusive**



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Photo: Kyoung-Soo Eom, UN General Assembly February 26, 2015

Evaluation criteria

Important criteria to consider

- **Speed of implementation**
How quickly could this model realistically be put in place?
- **Political feasibility**
How likely is it that governments would support this approach?
- **Level of commitment**
Would it create voluntary cooperation or formal obligations?



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Implementation considerations

- **Institutional arrangements**
What governance structure would be required?
- **Resources resolved**
What level of financial and organizational commitment would be needed?
- **Operational implications**
How would responsibilities be coordinated and sustained?



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The cost of inaction

- Without the introduction of governance for geodesy, **the global geodesy supply chain will continue to degrade.**
- **The system is unlikely to fail gracefully**—vulnerabilities will accumulate until critical disruptions occur.
- When failures happen, **the impacts will cascade across satellite services**, affecting telecommunications, transportation, financial systems, emergency response, climate monitoring, and **economic activity worth hundreds of billions of dollars annually.**



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Possible way forward

Spring 2026

- Anchoring and discussions with the geodesy community and co-authors

May 2026

- Options paper formally sent to UN-GGIM Heads of Delegation with copy to UN-GGCE contacts

June 2026 (optional)

- Open webinar to introduce governance options and answer questions

August 2026 (possible next step)

- Meeting with Director-Generals alongside the 16th UN-GGIM session to discuss options and explore a possible pathway forward



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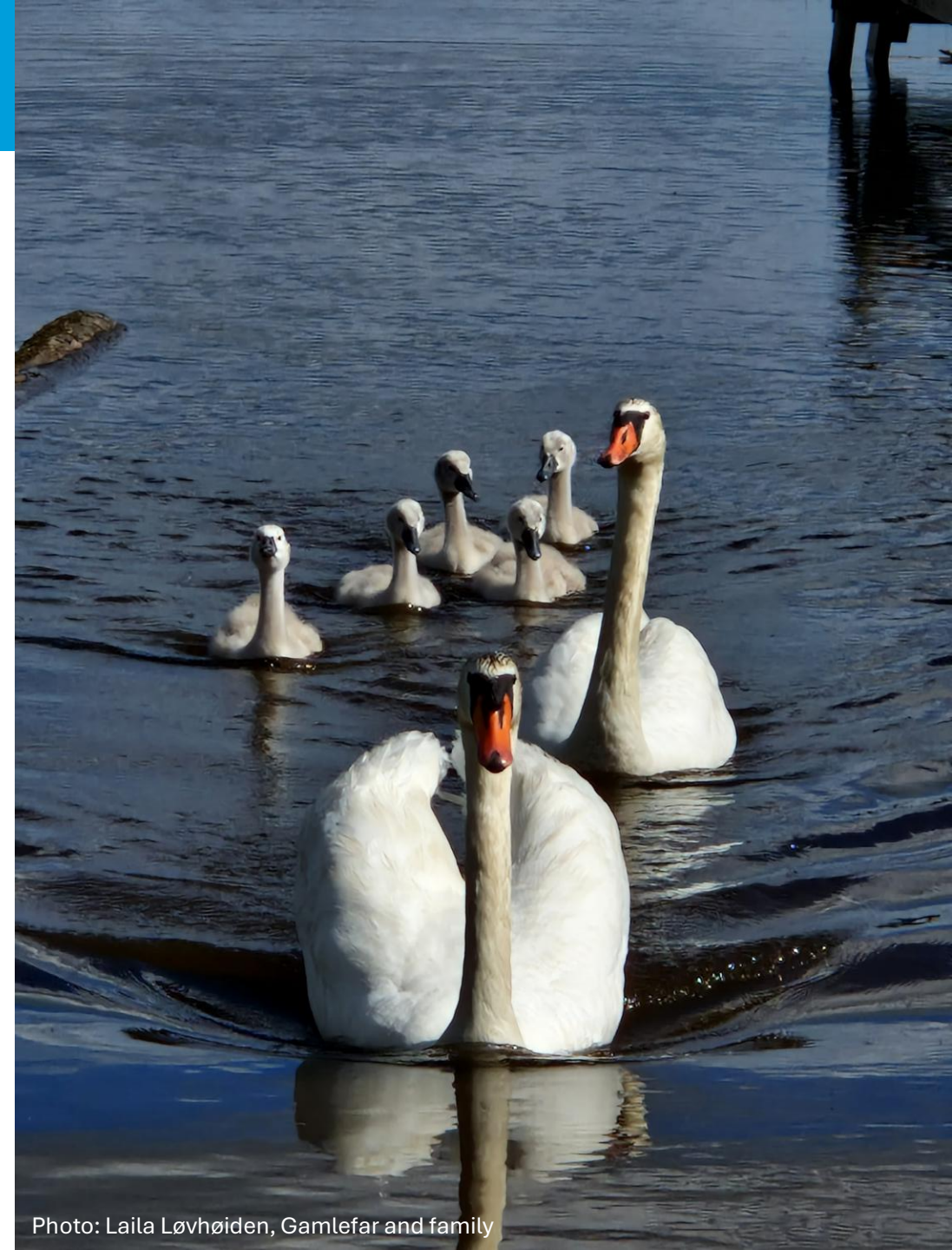


Photo: Laila Løvhøiden, Gamlefar and family

Discussion day 1

Q1: “Is this a useful way forward?”

Q2: “Do you miss anything?”

Q3: “What would be needed to make it successful?”

Q4: “What would help ensure strong national engagement and responses to the options paper?”

Q5: “What can you do to help ensure strong national engagement and responses to the options paper?”

Discuss over dinner

- **Shall we arrange a meeting for Director Generals or UN-GGIM Heads of Delegation at the 16th session to discuss possible options and a potential way forward?**
 - 1. How can we tempt them to attend?**
 - 2. How can we prepare them for the meeting?**



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Discussion day 2

Q6: "What should we advise the UN-GGCE contacts to do when the Position paper is sent out?"

Q7: "What support do we need from the GGCE or others?"

Q8: "What would Heads of Delegation need to understand about geodesy?"

Q9: "How can we engage the private sector?"