



# ACHIEVING A RESILIENT PLANET WITH GEOSPATIAL INFORMATION

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SEE ► BETTER PLACE

**SUSTAINABILITY  
IS NO LONGER  
ABOUT DOING  
LESS HARM. IT'S  
ABOUT DOING  
MORE GOOD.**

**THE GREATEST  
THREAT TO OUR  
PLANET IS THE  
BELIEF THAT  
SOMEONE ELSE  
WILL SAVE IT.**



**UN-GGIM**

United Nations Committee of Experts on Global Geospatial Information Management  
Task Team on Geospatial Information for Climate Resilience

[ggim.un.org](http://ggim.un.org)



# Geospatial information is the data of our world



- Geospatial information is a critical component of the national infrastructure and knowledge economy.
- It is an essential part of a national infrastructure and knowledge-based economy that provides a country with the blueprint for situations and their locations, and the means to integrate a wide range of government services to contribute to economic growth, national security, sustainable social development, environmental protection and national prosperity.
- All governments, both at the national and local levels, hold considerable quantities of geospatial information and location data - for example databases of schools and school performance, flood risk data and mobile phone ownership data



# Geospatial information for climate resilience



- Since its inception in **2011**, UN-GGIM has worked on climate resilience and SIDS issues across its work programme
- In **2022**, the Cambridge Conference community looked at 'How' NGIAs and their sponsor governments can help to adapt to our changing climate and mitigate the impacts on our environment, economies and communities.
- In **2023**: Ordnance Survey and Secretariat developed the "Geospatial Information for Climate Resilience – What Does UN-GGIM Do?" and submitted it as a background document at the 13th Session of UN-GGIM in August 2023 and a Side Event was convened at the 13th session to raise awareness of the paper
- Leading to UN-GGIM Decision 13/107 and the formation of the UN-GGIM Task Team on Climate Resilience



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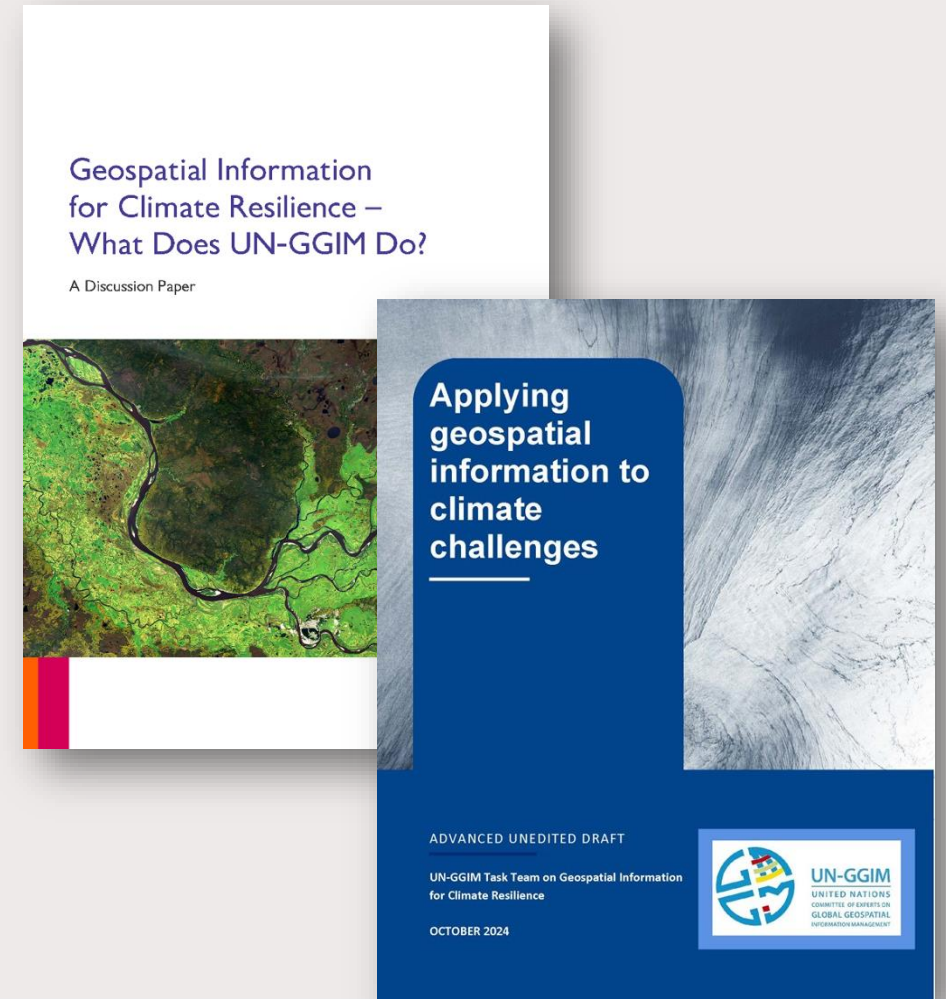
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# Geospatial information for climate resilience

- In establishing the task team, we have focused on bringing together Member States to share their national experience of using geospatial information across all different elements of climate resilience
- May 2024 convened a side event at SIDS4.
- October 2024 7th High-Level Forum with delivering a day on climate and resilience.

[https://ggim.un.org/documents/Geospatial\\_Information\\_for\\_Climate\\_Resilience.pdf](https://ggim.un.org/documents/Geospatial_Information_for_Climate_Resilience.pdf)



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# Applying geospatial information to climate challenges

ADVANCED UNEDITED DRAFT

UN-GGIM Task Team on Geospatial Information for Climate Resilience

OCTOBER 2024



**António Guterres**  
Secretary-General of the United Nations

Opening remarks during the Summit of the Future

22 September 2024

*"The climate crisis is destroying lives, devastating communities and ravaging economies"*



**François Ayodele Jackman**  
Permanent Representative of Barbados to the United Nations

*"Geospatial information is crucial towards identifying how our communities are, and could be, impacted by climate change. Armed with this knowledge we can take action."*



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## National Examples of Good Practice

Member State	Key Message	Topic(s)
Austria	The impacts of climate change on human health and the healthcare system exhibit complex interrelationships, varying across time and space. AI frameworks for the prediction of bark beetle infestation risk in a continuous monitoring scenario Landslides are one of the most widespread geohazards in Europe, which are further responsible for significant social and economic impacts.	Health  Forest Health, Biodiversity, and AI Landslides
Barbados	Improved resilience to natural hazards, including those affected by climate change	Natural Hazards
Brazil	Environmental monitoring and applied research to monitor hydrometeorological disasters Knowledge of the territory and its population	Hydrometeorological Disasters Statistics and NSDI
Canada	Improving knowledge of where floods can occur helps plan mitigation and adaptation efforts	Flooding
Chile	Geospatial data coordination, sharing and visualisation to provide information for decision-making in the context of wildfires in the Valparaíso Region, Central Zone of Chile	Wildfires
Germany	Digital Twin for Germany: A tool to predict how humanitarian crisis and natural disasters will affect the infrastructure and resources Mapping the Effects of Heavy Rainfall: Germany-wide standardised simulation of flood situations due to heavy rainfall	Digital Twins Rainfall and Flooding
Mozambique	Increasing climate resilience using geographic information system technologies	Climate Resilience
South Africa	Integrating Geospatial Insights for Community Empowerment and Ecosystem Services: Isimangaliso Wetland Park, Umkhanyakude District, Kwa Zulu Natal, SA	Community Empowerment and Ecosystem Services
United Kingdom (Scotland)	Adapting to our future coastal change: GIS analysis of coastal erosion and rising sea levels inform coastal erosion risk assessment and adaptation planning to kick-start national adaptation actions	Coastal Erosion and Sea-level Rise
United States (United States Virgin Islands)	US Virgin Island's Street Addressing Initiative - Building Geospatial Infrastructure for Climate Resilience. USVI's Street Addressing Initiative (SAI) is building the basic geospatial data infrastructure needed for climate resilience, disaster planning, and disaster recovery efforts.	Addressing
Uruguay	The Military Geographic Institute of Uruguay and its efforts to promote Climate Resilience (EN/ES)	Geodesy
Other Arctic SDI	Circumpolar Arctic – Canada (*Case study submitted by Canada), Finland, Iceland, the Kingdom of Denmark, Norway, the Russian Federation, Sweden, United States Spatial data infrastructure enabling seamless sharing of geospatial data across borders and time for the Arctic region. Enables discovery, accessibility, and use of pan-Arctic geospatial information for diverse applications, including decision-making for climate resilience	Spatial Data Infrastructure



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