

Second expert meeting of the working group on policy and legal frameworks for geospatial information management incorporating the workshop on Authoritative fit-for-purpose geospatial data for crisis

20 – 22 February 2024, Leuven, Belgium

Hosts: National Geographic Institute, Kingdom of Belgium in partnership with UN-GGIM: Europe and EuroGeographics

Outline for the three days:

Day #1 20 Feb

Second expert meeting of the Working Group

Day #2 21 Feb

Meeting of EuroGeographics Policy Knowledge Exchange Network (participants of the second expert meeting are invited to observe this EuroGeographics meeting) (morning)

Joint Working Group/EuroGeographics workshop on policy and legal frameworks for geospatial information management (afternoon)

Day #3 22 Feb

Joint Working Group/EuroGeographics workshop on policy and legal frameworks for geospatial information management (morning)

Second expert meeting of the Working Group (afternoon)



Day 1 – Provisional agenda

20 February 2024 Katholieke Universiteit Leuven

- Agenda #1: Opening of the meeting, welcome and introductions

Ignace Kabayiza

WG on Policy and Legal Frameworks

Johannes Van Geertsom

Attaché Geographer, National Geographic Institute of Belgium

Frank Tierolff

Co-Chair, UN-GGIM Europe



Day 1 - Organization of the meeting at glance

Provisional agenda and proposed organization of the meeting -

01:30	<ul style="list-style-type: none">Opening of the meeting, welcome and introductions; agenda and organization of the meeting
00:30	Break and group photo
01:30	<ul style="list-style-type: none">Policy and legal developments – national and regional;Authoritative geospatial data for crisis
01:00	Lunch
01:30	<ul style="list-style-type: none">Geospatial data for public good; Awareness, communication, and engagement, and developing and sustaining policy-legal capacity.
01:30	Break
	<ul style="list-style-type: none">Evolving geospatial and technological landscape, artificial intelligence and its regulation; collaboration with partnering international organizations and functional groups of the Committee of Experts; Workplan and deliverables for the duration 2023 – 2025



Day 1 – Provisional agenda

20 February 2024 Katholieke Universiteit Leuven

- Agenda #1: Opening of the meeting, welcome and introductions
- Agenda #2: Agenda and organization of the meeting
Setting the scene

Break and Group photo

- Agenda #3: Policy and legal developments – national and regional
- Agenda #4: Authoritative geospatial data for crisis

Lunch

- Agenda #5: Geospatial data for public good
- Agenda #6: Awareness, communication, and engagement, and developing and sustaining policy-legal capacity

Coffee break

- Agenda #8: Evolving geospatial and technological landscape, artificial intelligence and its regulation
- Agenda #7: Collaboration with partnering international organizations and functional groups of the Committee of Experts
- Agenda #9: Workplan and deliverables for the duration 2023 – 2025



Agenda #2: Setting the Scene

a. Thirteenth session of the Committee of Experts on Global Geospatial Information Management

Attended by 282 participants from 80 Member States and representatives of 83 organizations of the United Nations system and observers for intergovernmental, non-governmental and other organizations.

Highlight: Authoritative Data in an Evolving Geospatial Landscape

b. Work plan of the working group (2023 - 2025)

- (a) Paper on geospatial data for public good
- (b) Authoritative “fit-for-purpose” geospatial data for crises
- (c) Legal-policy capacity development and engagements
- (d) Socializing key outcomes and collaborative initiative and activities



c. Fourteenth session of the Committee of Experts

The fourteenth Session of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) will be held in New York United Nations Headquarters the 7 – 9 August 2024, side events will be held the 5 – 6 August.



Agenda #2: Thirteenth session of the Committee of Experts

Decision 13/112

Policy and legal frameworks, including issues related to authoritative data

The Committee of Experts on Global Geospatial Information Management:

- (a) Welcomed the report of the Working Group on Policy and Legal Frameworks for Geospatial Information Management, its updated work plan and deliverables for the period 2023-2025, and the continuing efforts to address the Committee's issues related to authoritative data under the leadership of Canada;
- (b) Appreciated the efforts of the Working Group to engage and collaborate with other functional groups and key partners of the Committee of Experts and encouraged continuing engagement and communication with the Committee and its regional committees to promote and raise awareness on the importance of sound and robust policy and legal frameworks for achieving the societal, environmental, and economic benefits from geospatial information management;
- (c) **Endorsed the paper** entitled 'Authoritative data in an evolving geospatial landscape: an exploration of policy and legal challenges' (Authoritative Data Paper), developed through a collaborative and inclusive global consultation process to address the issues related to authoritative data;



Agenda #2: Thirteenth session of the Committee of Experts

Decision 13/112

Policy and legal frameworks, including issues related to authoritative data

The Committee of Experts on Global Geospatial Information Management:

- (d) Noted that the Authoritative Data Paper is intended as a policy and legal guide to help national geospatial entities, including national mapping, cadastral and land registration authorities, as well as the private sector and civil society, to better produce, sustain and govern the use of geospatial information that is deemed authoritative and trusted, and to be used as a supplement in the implementation of the UN-IGIF strategic pathways relating to authority and authoritativeness;
- (e) Acknowledged that, given the increasing global challenges and the related need for reliable data, the Working Group's planned activity related to addressing the issue of geospatial information for public good, authoritative data and exploring fit-for-purpose authoritative geospatial data and applications in crises and disasters is timely;
- (f) Encouraged the Working Group to continue analyzing the complex policy and legal issues in geospatial information and to further consider the concept of trust in data, the associated data quality and metadata standards, and ensuring responsible and ethical utilization of data;
- (g) Noted the convening of the Working Group's next meeting in Belgium in February 2024 in partnership with UN-GGIM Europe and EuroGeographics, and to be held back-to-back with the EuroGeographics Policy Knowledge Exchange Network to maximize the participation and input from Member States, relevant stakeholders, and policy makers.



Agenda #2: Work plan of the Working Group (2023 - 2025)

Agreed deliverables and activities -

	Activities	Deliverables/Engagement and communication component
G2 and G3	Authoritative “fit for purpose” geospatial data for crisis	<ul style="list-style-type: none">• Draft and table a paper for UN-GGIM endorsement• Develop abstract with key messages• Present paper, share results at meetings, with functional groups, via collaborations including the International Bar Association• Consider linkage with relevant work items within the Committee of Experts programme or work; providing policy/legal perspective and decision support tools/instruments to operationalize and meet identified technical requirements



Agenda #2: Work plan of the Working Group (2023 - 2025)

Agreed deliverables and activities -

	Activities	Deliverables/Engagement and communication component
G1 and G3	Paper on geospatial data for public good	<ul style="list-style-type: none">• Draft and table a paper for UN-GGIM endorsement• Develop abstract with key messages• Present paper, share results at meetings, via collaborations including the International Bar Association



Agenda #2: Work plan of the Working Group (2023 - 2025)

Agreed deliverables and activities -

	Activities	Deliverables/Engagement and communication component
G3 and G4	Sustaining and building legal-policy capacity to respond to needs of Member State; connecting legal and geospatial experts, along with the relevant policy community	<ul style="list-style-type: none">• Continuing to share/champion key outcomes, approaches, resources and deliverables• Considering how to support collaborative, flexible policy and legal instruments that are responsive to changing technologies and norms• Continuing to engage the legal profession when addressing policy and legal issues in geospatial information management• Advocating engagement with relevant policy communities to improve value and uptake in decision-making



Agenda #2: Work plan of the Working Group (2023 - 2025)

Agreed deliverables and activities -

	Activities	Deliverables/Engagement and communication component
G4	Continuing to socialize key outcomes, approaches, resources and deliverables and share guidance from current and previous work plans (leveraging UN-IGIF Strategic Pathway 9)	<ul style="list-style-type: none"> • Developing and sharing key messages corresponding to Working Group objectives, and each work plan item (e.g., policy and legal resource kit, paper on authoritative data) • Collaboration with key partners, attending key events, including the annual conferences of the International Bar Association • Strategically leveraging UN-GGIM meetings, events and activities
G3 and G4	Collaboration with UN-GGIM functional groups including the Subcommittee on Geodesy, the Expert Group on Land Administration and Management and the Working Group on Marine Geospatial Information	<ul style="list-style-type: none"> • Share key outcomes, approaches, resources and guidance at meetings functional groups as appropriate • Collaborate on work items as needed and where appropriate • tbd?



Agenda #2: Fourteenth session of the Committee of Experts

Provisional agenda:

1. Election of officers.
2. Adoption of the agenda and other organizational matters.
3. Enhancing global geospatial information management arrangements.
4. Contribution of regional committees to the global geospatial information agenda.
5. Contribution of thematic networks to the global geospatial information agenda.
6. The future geospatial information ecosystem.
7. United Nations Integrated Geospatial Information Framework.
8. Global geodetic reference frame.
9. Geospatial information for sustainable development.
10. **Geospatial information for climate and resilience.**
11. Integration of geospatial, statistical and other related information.
12. Integrated geospatial information for effective land administration and management.
13. Integrated marine geospatial information.
14. **Policy and legal frameworks, including issues related to authoritative data.**
15. Implementation and adoption of standards for the global geospatial information community.
16. Collaboration with the United Nations Group of Experts on Geographical Names.
17. Programme management report.
18. Provisional agenda and dates of the fifteenth session.
19. Report of the Committee of Experts on its fourteenth session.



Group Photo

First expert meeting of the working group on policy and legal frameworks for geospatial information management



UN-GGIM

United Nations Committee of Experts on
Global Geospatial Information Management

WORKING GROUP ON POLICY AND LEGAL FRAMEWORKS
FOR GEOSPATIAL INFORMATION MANAGEMENT

Positioning geospatial information to address global challenges

ggim.un.org

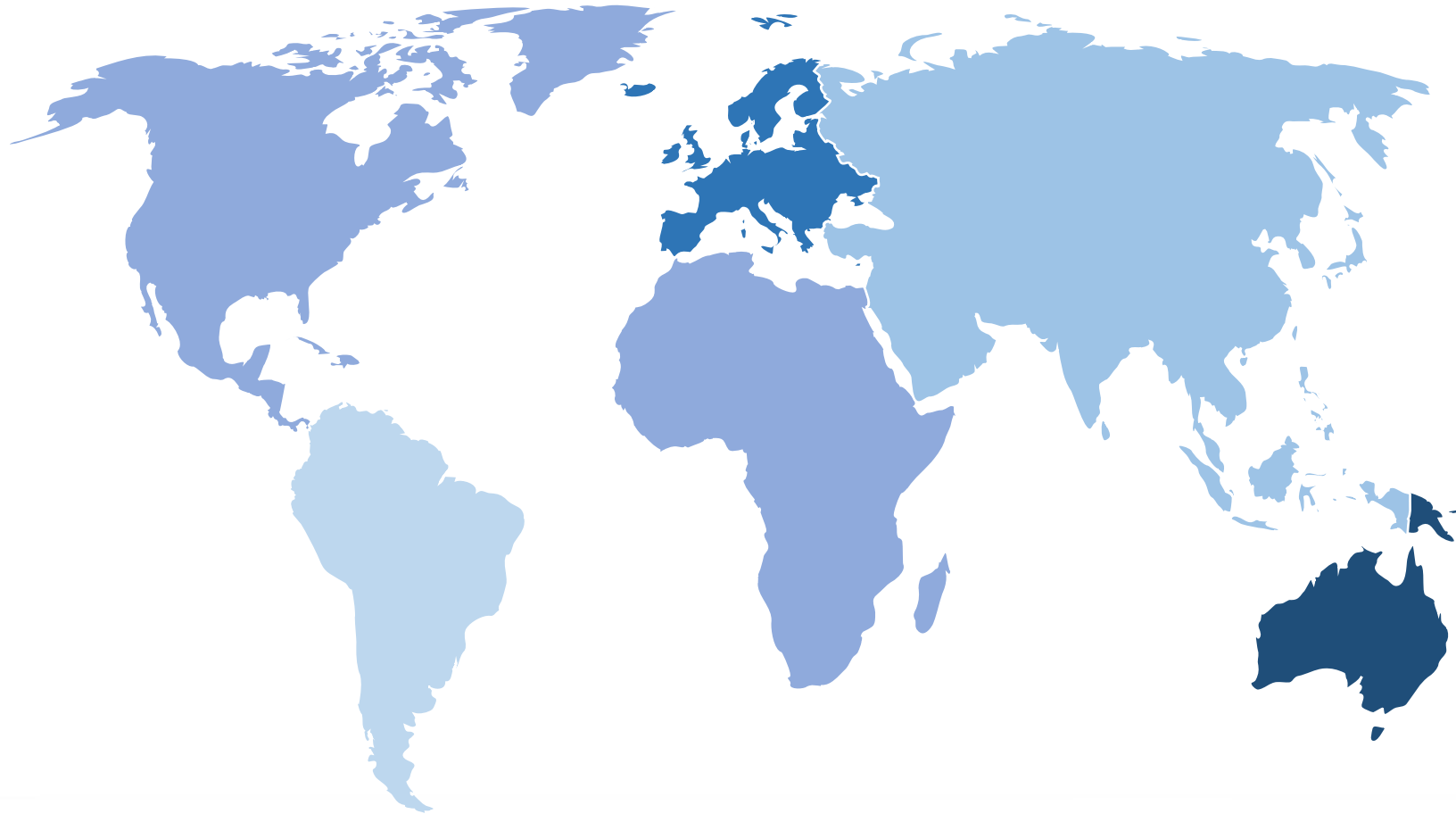
Group Photo

Second expert meeting of the working group on policy and legal frameworks for geospatial information management



Agenda #3: Policy and legal developments – national and regional

Roundtable updates



UN-GGIM

United Nations Committee of Experts on
Global Geospatial Information Management

WORKING GROUP ON POLICY AND LEGAL FRAMEWORKS
FOR GEOSPATIAL INFORMATION MANAGEMENT

Positioning geospatial information to address global challenges

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Agenda #3: Policy and legal developments – national and regional

Mr. Mohamed Amara
Federal Geographic Information Center
United Arab Emirates

Ms. Kun Xu
Ministry of Natural Resources
China

Mr. Ignace Kabayiza
Canada Centre for Mapping and Earth Observation
Canada

Mr. Ali AlAwaji
General Authority for Survey and Geospatial Information
Saudi Arabia





**National Geospatial Governance
KSA**

National Geospatial Data Governance

National Geospatial Data Governance

Creating and managing a comprehensive geospatial data governance that aligns with the requirements of users. This involves collaborating and coordinating with data producers to prepare data for publication, distribution, and exchange in adherence to national policies, standards, and industry best practices. The goal is to ensure that all stakeholders, including decision makers and beneficiaries, can effectively utilize the data.

Adopting global best practices in geospatial information



National Geospatial Data Governance – Best Practices



ANNEX 1(9)



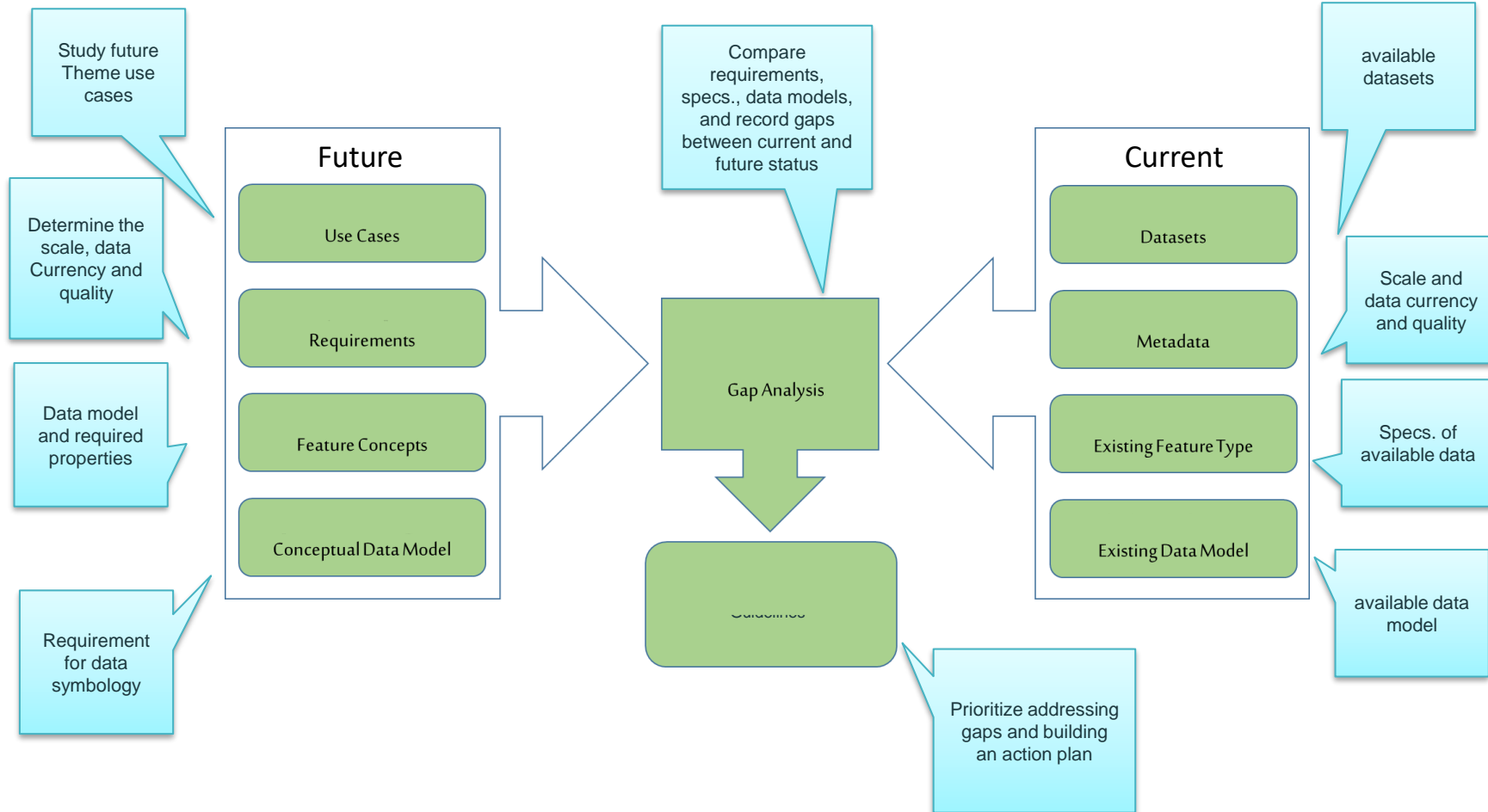
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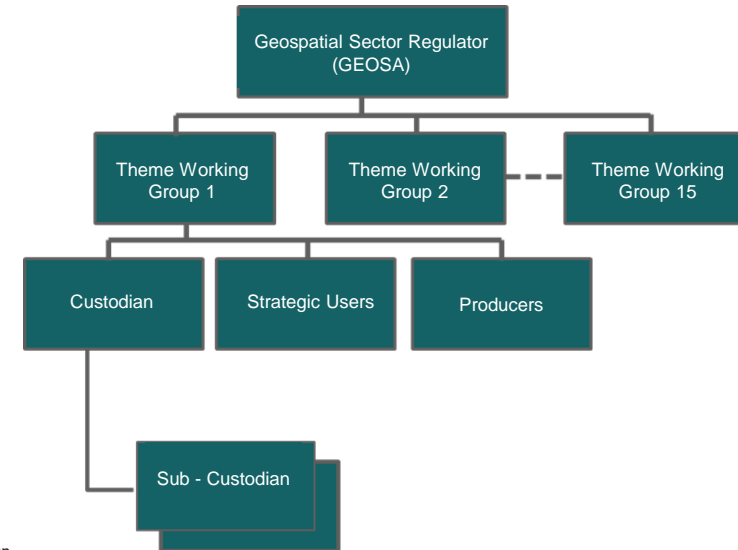
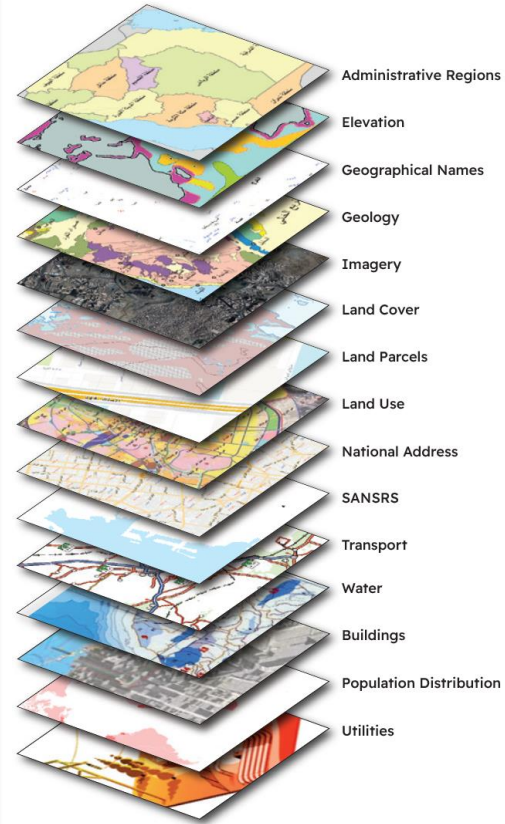
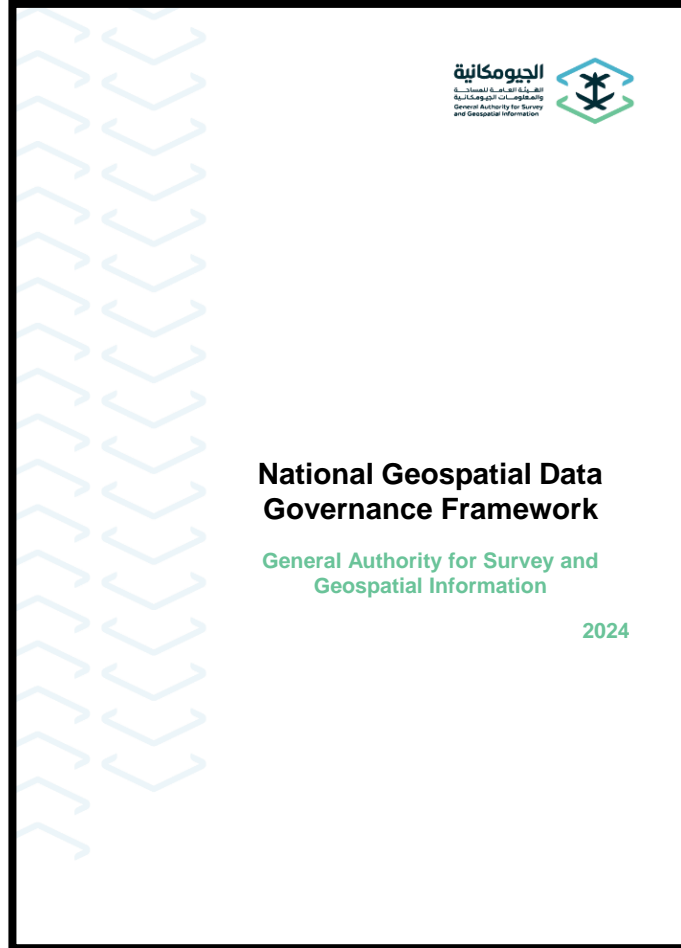
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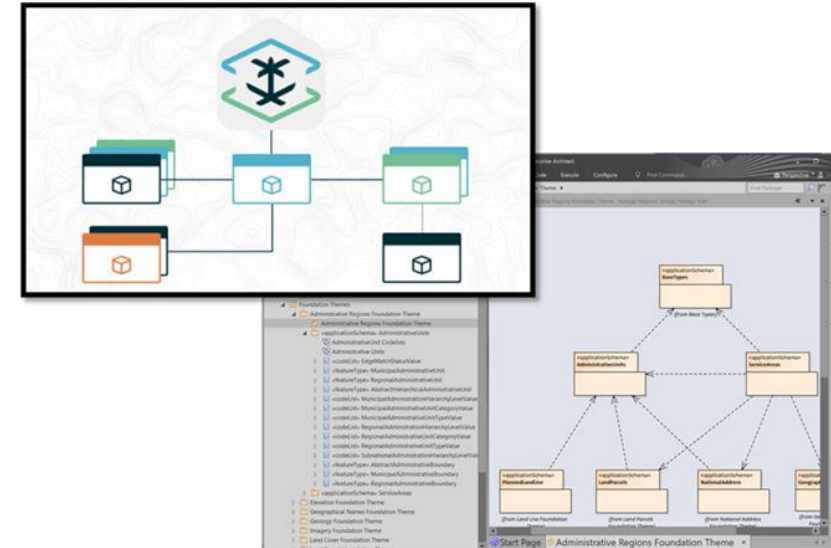
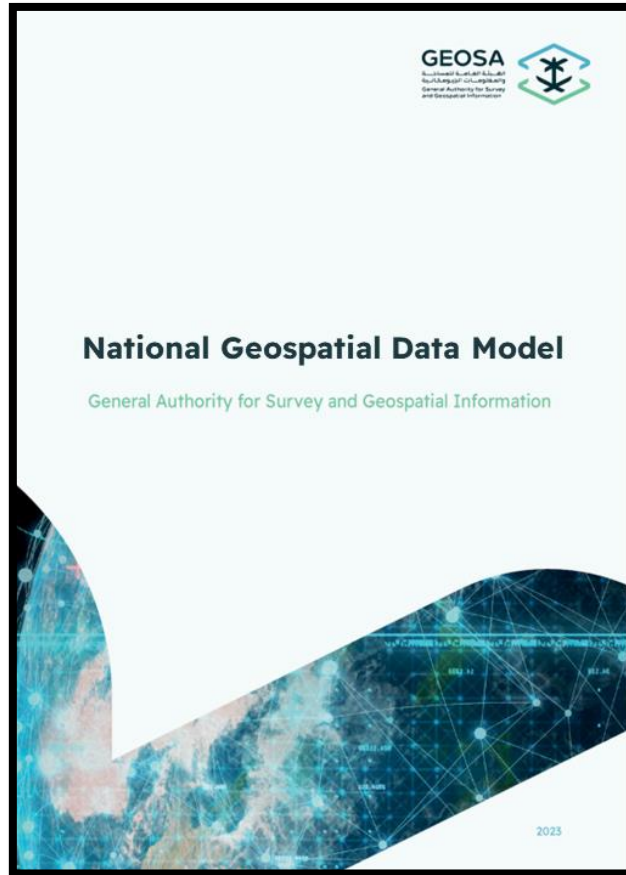
National Geospatial Data Governance - Methodology



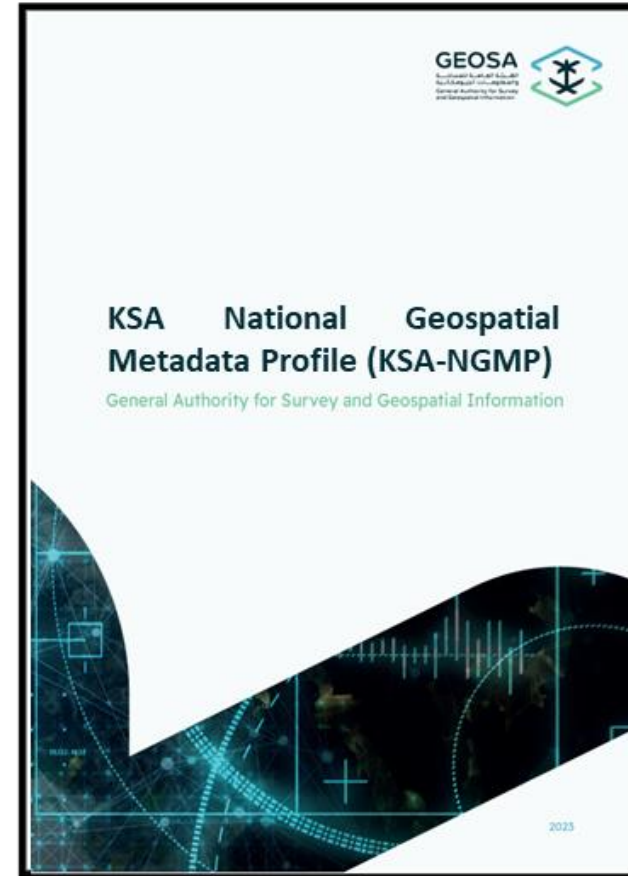
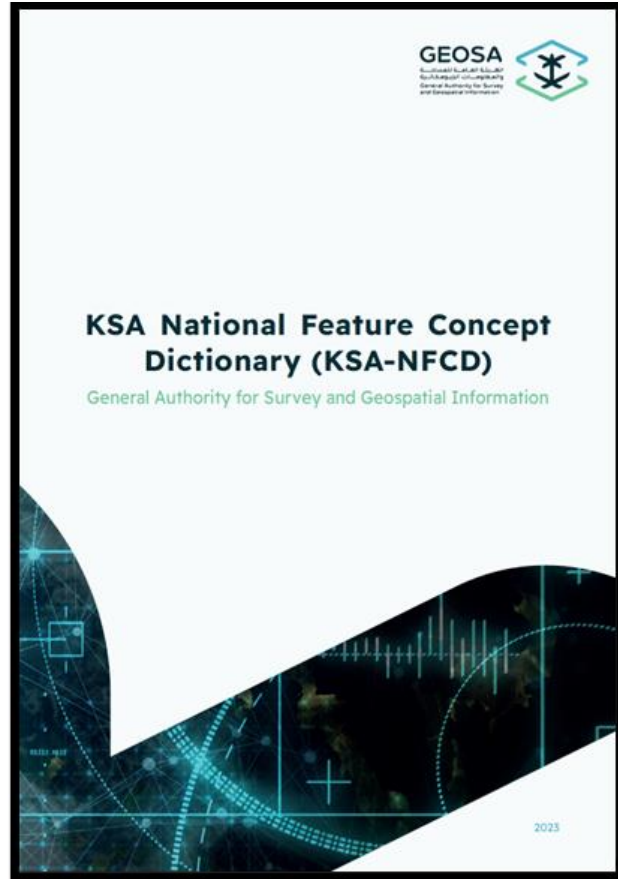
National Geospatial Data Governance – Governance Framework



National Geospatial Data Governance – National Geospatial Data Model



↳ National Geospatial Data Governance



National Geospatial Data Policies

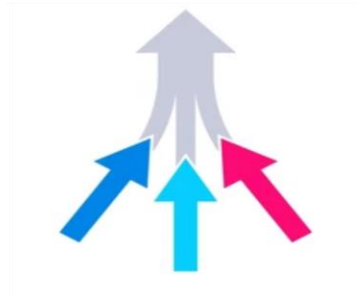
National Geospatial Data Policies – Introduction

The collage features several key elements:

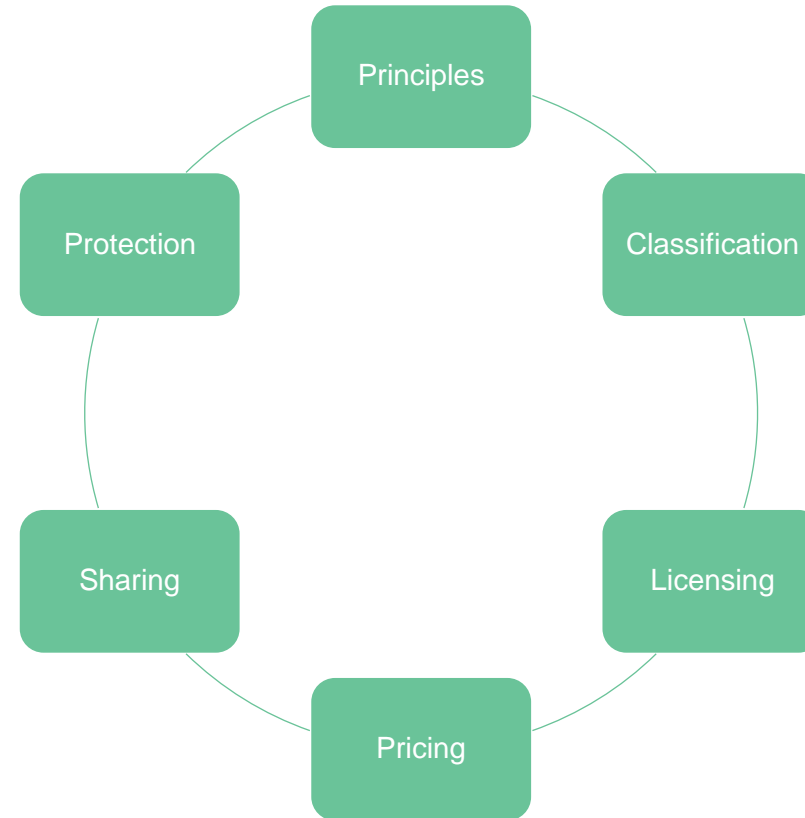
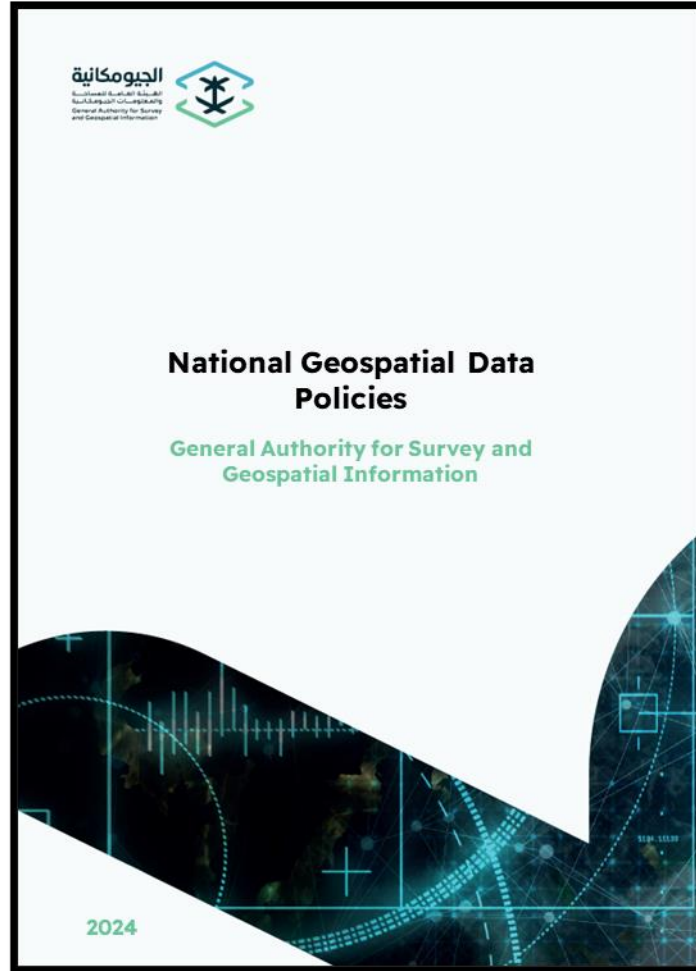
- UN-GGIM:** United Nations Initiative on Global Geospatial Information Management logo.
- INSPIRE:** Infrastructure for Spatial Information in Europe logo.
- Survey of India:** Logo of the Survey of India, Department of Science & Technology.
- ANZLIC:** the Spatial Information Council logo.
- INSPIRE Knowledge Base:** Screenshot showing a video player for "The INSPIRE Directive @ brief description" and a list of events including "11/04/2023 Join the IRC team as Scientific Project officer in Technologies for data ecosystems" and "21/04/2023 APIs for High-Value Datasets to create High Value Ecosystems for Citizens and Businesses".
- ANZLIC Website:** Screenshot showing a globe with network lines and text: "ANZLIC—the Spatial Information Council is the peak intergovernmental organisation providing leadership in the collection, management and use of spatial information in Australia and New Zealand."
- FGDC:** Federal Geographic Data Committee logo.
- Survey of India Website:** Screenshot showing the "National Geospatial Policy-2022" page.



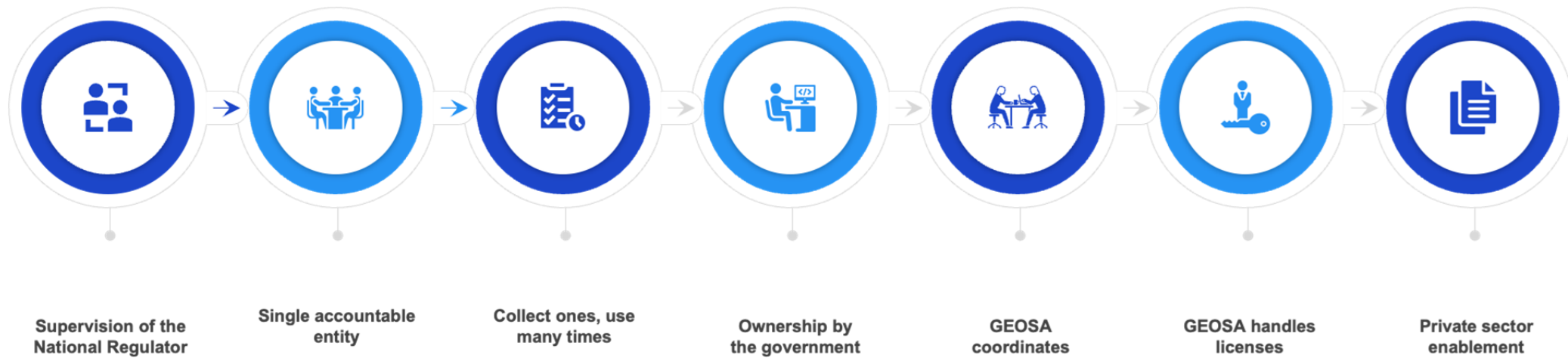
📄 National Geospatial Data Policies – Introduction



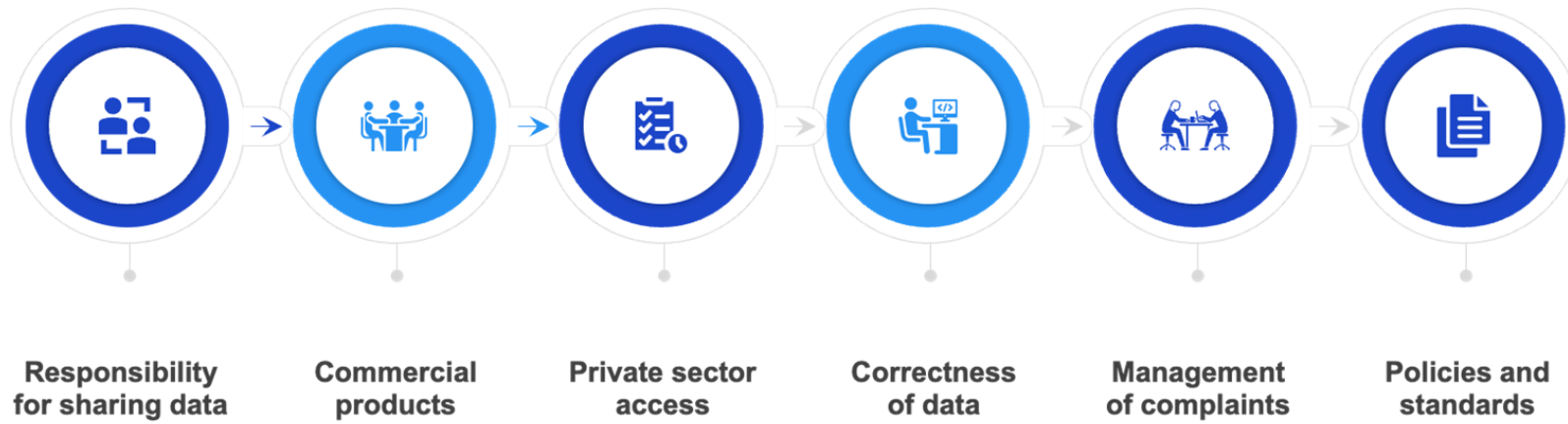
📖 National Geospatial Data Policies – Introduction



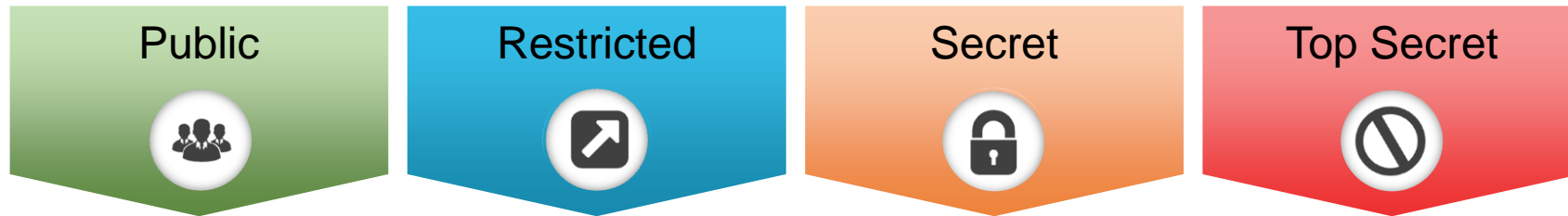
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📄 National Geospatial Data Policies – Principles



National Geospatial Data Policies – Classification

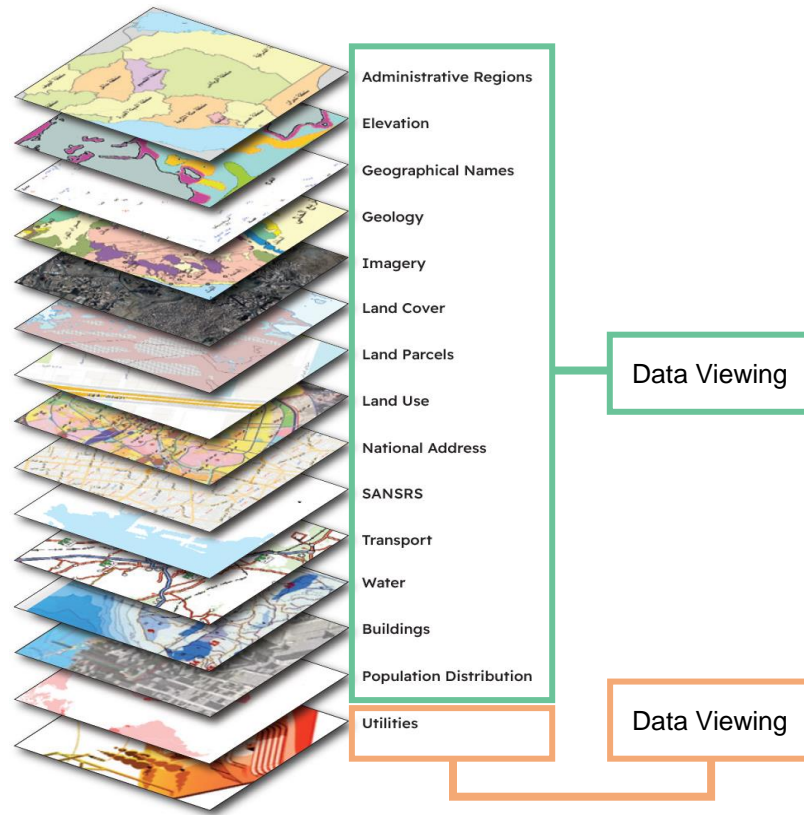


National Geospatial Data Policies – Licensing

Derivative Data/App.
Production

Data Access

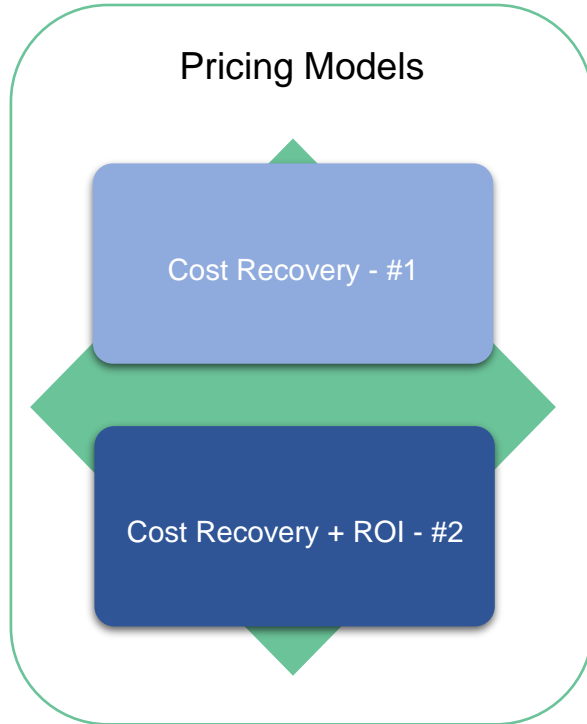
Data Viewing



The minimum Licensing for the Foundation geospatial data is set, however different licensees can be granted based on the required use case.



National Geospatial Data Policies – Pricing



Government to Government

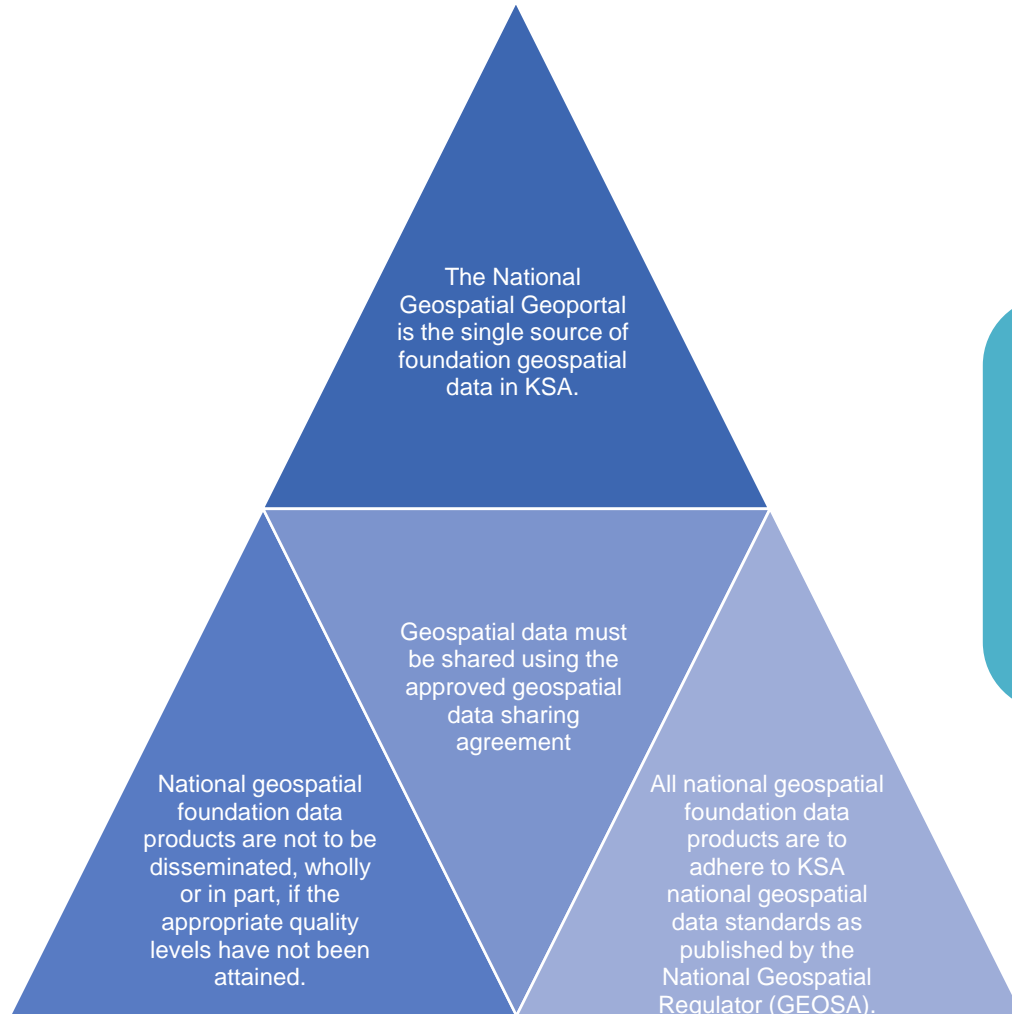
DATA TYPE	GEOSPATIAL DATA	GEOSPATIAL PRODUCTS
Open Geospatial Data	Free	Cost Recovery (Model#1)
Classified Geospatial Data (Confidential and higher)	Free	Cost Recovery (Model#1)

Government to Business/Individuals

DATA TYPE	GEOSPATIAL DATA	GEOSPATIAL PRODUCTS
Open Geospatial Data	Free	Cost Recovery (Model#1)
Classified Geospatial Data (Confidential and higher)	Cost Recovery (Model#1)	Cost Recovery + ROI (Model#2)



National Geospatial Data Policies – Sharing

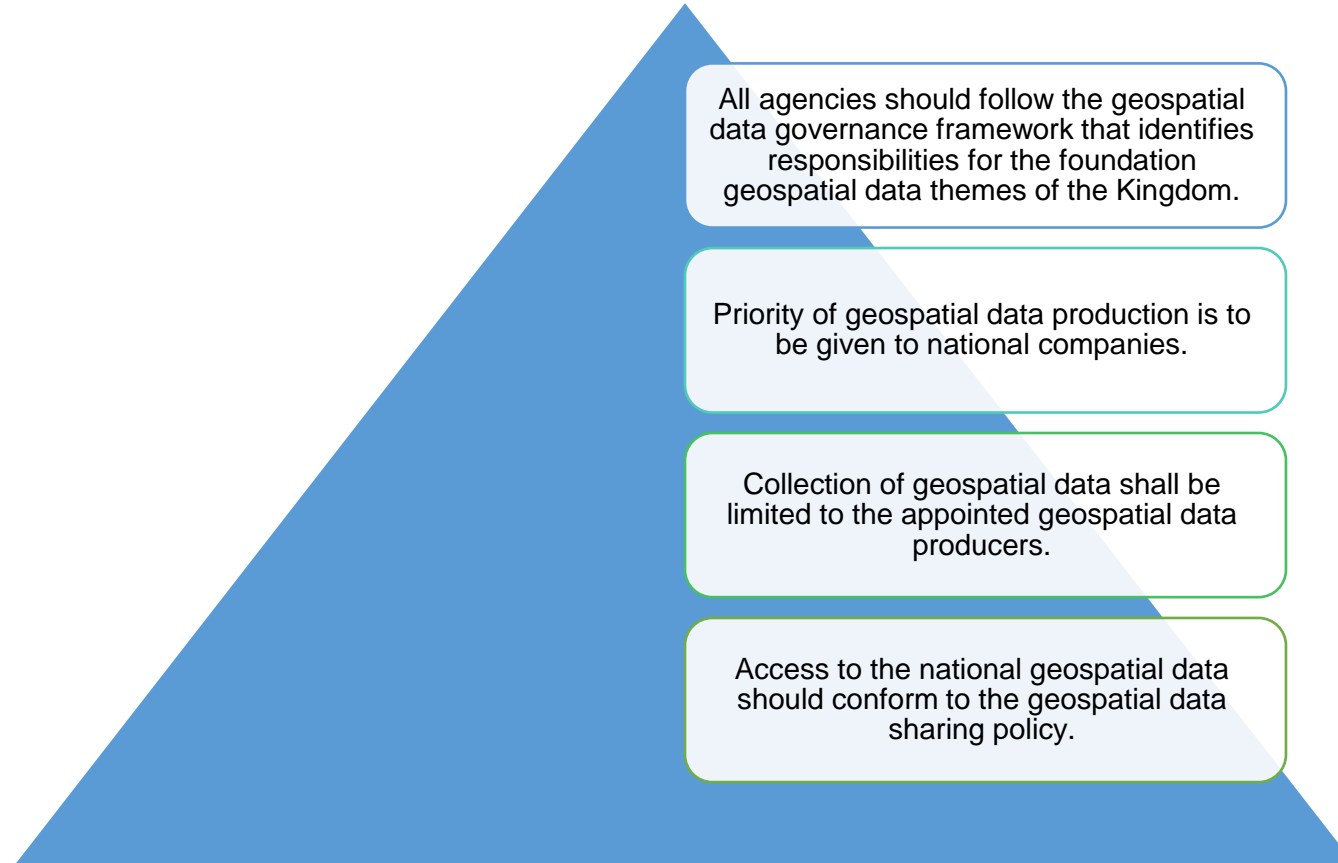


Channels for dissemination of a specific dataset will depend on the data classification as follows:

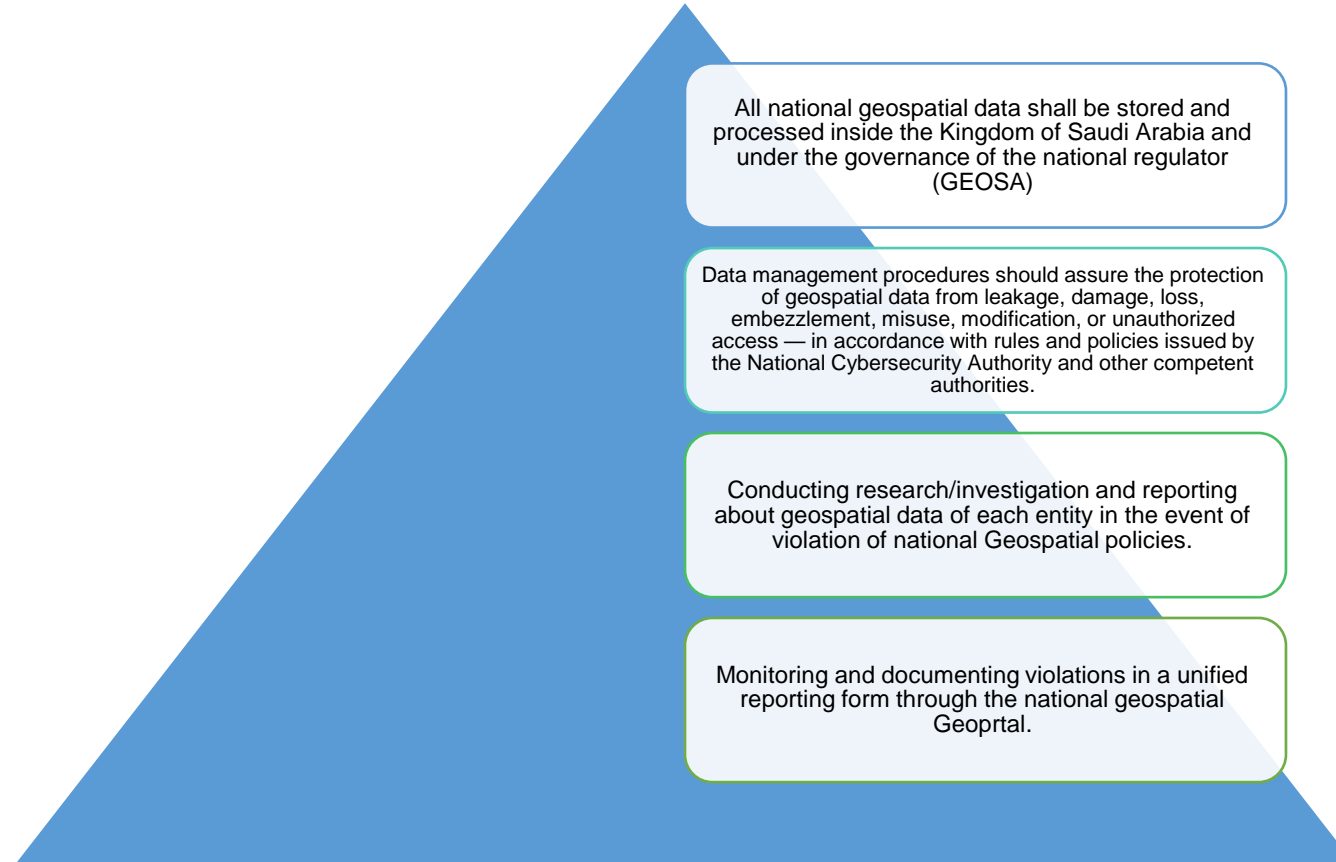
GEOSPATIAL DATA CLASSIFICATION	SHARING CHANNEL
Top Secret and Secret	Government Secure Network (GSN)
Confidential and Public	Geospatial Web Applications / Geospatial Web Services:



National Geospatial Data Policies – Protection



National Geospatial Data Policies – Protection



GEOSA
الهيئة العامة للمساحة
والمعلومات الجيومكانية
General Authority for Survey
and Geospatial Information



Thank
You

Agenda #4: Authoritative geospatial data for crisis

Day 1 – 20 February 2024

Purpose: Address policy and legal considerations of authoritative data by exploring applications of the fit-for-purpose frame in crisis use-case scenarios, authoritative data for crises as a follow-on activity from the paper “Authoritative data in an evolving geospatial landscape: an exploration of policy and legal challenges”

Background:

- Original tasking by the Committee of Experts:
 - Explore and identify policy and legal challenges related to authoritative data, authority and custodianship, including experiences and practices to address crisis and based on one or several real-world problems; explain and develop practical solutions leveraging the IGIF and its implementation guide.
 - Address issues identified in making geospatial data available, accessible and integrated for crisis, e.g. for the Covid-19 pandemic response and recovery.”



Agenda #4: Authoritative geospatial data for crisis

Paper Outline and Key Points *(to note – key findings to be shared during Workshop)*

- **Types of data** needed for crisis/disaster management:
 - Primary sources/providers
 - Common, foundational layers required across types of events
- What makes data **'fit for purpose'** for crises/disasters:
 - Across crisis / disaster events and/or specific to types of events e.g., floods, forest fires, pandemic
- **User perspective:**
 - Needs and challenges of users/responders working on the ground
- **Policy and legal considerations** that provide for availability, accessibility, sharing and integration of fit-for-purpose geospatial data, in near real time.
 - Consider means by which data is acquired, and the barriers to obtaining it
- Reflection on **institutional arrangements** - policy and legal instruments, notably **governance** - that allow national spatial data infrastructure to deliver at the time of need (fit-for-purpose data for crisis)



Agenda #4: Authoritative geospatial data for crisis

For discussion/decision by the Working Group – proposed SCOPE of the paper:

- Proposed crisis/disasters focus is an acute situation requiring immediate response:
 - Efforts will be focused on policy/legal instruments and governance arrangements that prepare Member States for events characterized by crisis/immediacy, while relying on existing UN-GGIM and WG products to address broader policy/legal considerations that may apply in this domain.
- Focus is the realm of policy/legal arrangements that fall under the purview of Member States
- The control-trust continuum** will be leveraged to consider the various notions of ‘trust’, ‘social trust’, etc., and to discuss:
 - The role of governments, in relation to roles of non-government actors
 - How policy/legal instruments can establish the “preconditions for trust”

****From first Authoritative Data Paper (Part I)**



Agenda #4: Authoritative geospatial data for crisis

For discussion/decision by the Working Group – proposed SCOPE of the paper:

- Targeted data user is the responder, primarily government emergency management organizations (EMOs), with consideration given to the needs of non-government actors who support disaster response (e.g., NGOs on the ground)
- Linkages to be made to “climate and resilience”, however this will not be a main focus of the paper, so as not to duplicate efforts of the new UN-GGIM Task Team
- Consideration to be given to the need for policy/legal instruments to enable secure/private data channels for first responders, in parallel to ‘open data’ mechanisms



Agenda #4: Authoritative geospatial data for crisis

For discussion by the Working Group – Key Concepts in the paper:

A reminder... Authoritative/Fit-for-purpose data - Part I:

“[I]n order for any data asset, process or organization to be considered as authoritative, it must be fit for the intended purpose(s)”

- If a government/organization designates/brands data as authoritative for a specified purpose:
 - Data governance is in place to provide assurance that the **data is suitable for its intended purpose** so that it has the **desired characteristics** and/or required legal status
 - The **chosen principles for any given data purpose** guide the **processes/governance** to deliver on the intent for the data
 - ... To support **transparency** and establish **trust**
- May be useful to identify some common characteristics of data considered authoritative... the following are valued in some domains:
 - Quality, Accessibility, Accuracy, Timeliness, Traceability, User-centric, Standardized
- Recognizing that there are trade-offs between the cost to produce and maintain data, and the quantity and quality of the data needed to serve particular purposes (e.g., crisis/disaster).



Agenda #4: Authoritative geospatial data for crisis

For discussion by the Working Group – Key Concepts in the paper:

The relationship between fit-for-purpose, authoritativeness and ‘trust’:

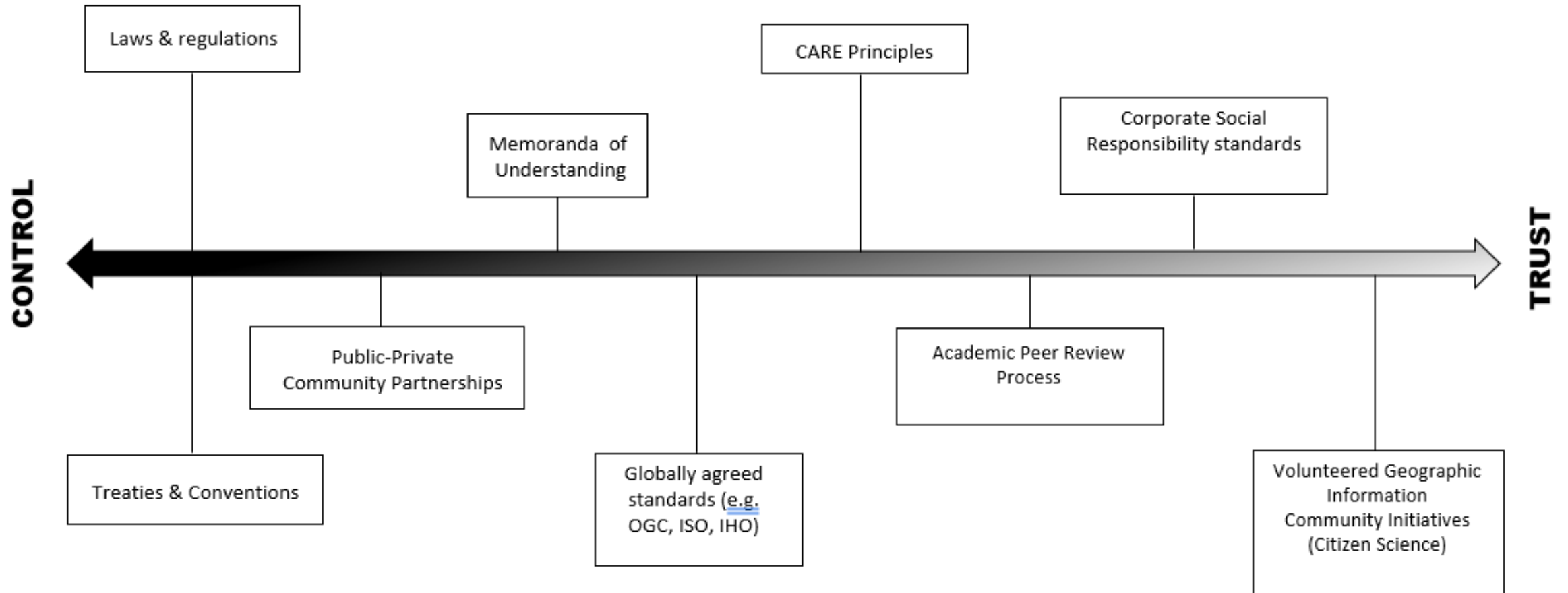
Trust:

- Provision of data with characteristics that apply to a crisis/disaster include:
 - Quality (**accuracy** – including **current conditions**, completeness, validity), **timeliness**, accessibility, and interoperability (as mentioned in Part I).
 - Data with these characteristics contribute to its ‘fitness for purpose’ and can be considered a potential measure of its ‘**authoritativeness**’ and a key **condition to establishing and maintaining trust** with the users of the data. As mentioned in Part I, a data characteristic could be a vital condition for a principle (e.g. data quality may be a pre-condition for trust).
- Sometimes users trust data simply because it is **deemed ‘authoritative,’** which may even suggest that the data is the best of what is available (in terms of various data characteristics), though this is not always the case in practice
- Alternatively, the trustworthiness and **authority of the issuing agency**, whether it is a public authority or otherwise, may be the main evaluating factor to determine the trustworthiness
- Governance instruments that apply processes to deliver geospatial data deemed ‘authoritative’ exists along a continuum, with instruments positioned between endpoints of “control” and “trust”.

➤ **What role does trust play during a crisis/disaster? What are its pre-conditions?**



Supplemental: Continuum of control versus trust seen in authoritative data governance (Part I)



Agenda #4: Authoritative geospatial data for crisis

For discussion by the Working Group – Key Concepts in the paper:

The relationship between fit-for-purpose, authoritativeness, 'quality', and 'trust':

*Desired data characteristics for crisis/disasters situation: data **quality**:*

- Part I:
 - For many geospatial producers/users, authoritativeness assumes that the authority responsible for governing the data has **processes in place to produce high quality data**, even if this is not always the case in reality... there is agreement that **data producers should strive to produce authoritative data that is of a sufficient level of quality to be effectively employed for the intended purpose(s)**.
- Expanding on data quality definition in Part I
 - Quality of geospatial information is measured as the difference between the data and the world they represent; data quality is particularly important to ensure the “fitness for purpose” for crises/disasters, i.e., how well the data suits users’ requirements
- All data have strengths/weaknesses across the multiple data characteristics and specific dimensions of data quality.... These also typically involve trade-offs of comprehensive coverage/**accuracy versus timeliness** and other quality dimensions (accuracy vs. completeness; timeliness vs. quality (completeness, accuracy) and other qualities; validation vs privacy)

➤ **What are other trade-offs with regards to quality and other data characteristics?**



Agenda #4: Authoritative geospatial data for crisis

For discussion by the Working Group – Key Concepts in the paper: Accessibility

Privacy/IP vs. 'openness': Must it be one or the other?

- Open access to data is often met with Intellectual Property and Licensing challenges which can be barriers to data availability and accessibility during crisis
- From an end-user perspective, having open access to data can help make quick decisions in situations that are acute and require immediacy
- Is there an alternate policy/legal mechanism to provide access to data that would normally be private/confidential but that is needed in a crisis situation, e.g., social-demographic data at the individual or individual dwelling level?
 - **Is there a need for a different category or permissions – some certification/license that can be given (even temporarily) for access to private data under emergency situations?**

Accessibility vs Security and Privacy:

- Given the number of people and organizations involved in a disaster preparation scenario and the open integration of data from the different repositories, security measures must be taken to provide users and applications only with data on a **need-to-know basis**.



Agenda #4: Authoritative geospatial data for crisis

For discussion by the Working Group – Key Concepts in the paper:

Data sources/providers and roles:

- Understanding the various data sources and roles/contributions of data providers is key to identifying the policy/legal and/or governance instruments frameworks that govern the various contributors and enable the provision of fit for purpose geospatial data for crises/disasters.
 - Public authorities are recognizing the growing importance of coordinating with and engaging their non-public sector counterparts, counterparts who may have the capacity to collect better quality data, and who may have a greater capacity to deliver products and services that the geospatial community may consider as authoritative
 - Some provider/custodian roles may be particularly relevant to consider in a crisis/disasters situation:
 - **Validation role** for non-traditional data enables expert users in the community to provide feedback and assurances: employing the newest available techniques to check the quality of contributed geospatial information, e.g., checking VGI quality against already-trusted datasets and/or their own, overlaying VGI data on top of aerial/satellite imagery or using a rating/feedback system that support transparency and establish trust
 - Addressing new/growing variety of **data sources not traditionally considered authoritative**:
 - There is value in the depth of information and immediacy gained through contributions from a breadth of sources who disseminate disaster related information, e.g. social media
 - Limitation: Liability is a primary issue that can deter organizations from incorporating VGI into their datasets.
- **What are the policy/legal enablers for combining traditional and non-traditional data sources and managing associated risks? Whose role is it to validate the data and derived products?**



Agenda #4: Authoritative geospatial data for crisis

Key Questions for the Working Group:

- Are we missing any key concepts or considerations?
- How can we focus our efforts to ensure we are providing a “value add” to other initiatives currently underway? E.g., how much “real estate” is needed in the paper to document the range of DRR/disaster response efforts currently under way that are inter-governmental and/or led by non-state actors?
- Are there limitations on the methods that international agencies and their partners can use to effectively respond to disasters and other emergencies? If so, how should international agencies decide when interventions come at too high a cost?



Open discussions



UN-GGIM

United Nations Committee of Experts on
Global Geospatial Information Management

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Positioning geospatial information to address global challenges

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Agenda #5: Geospatial data for public good

Day 1: February 20, 2024, 13:30-15:00

This paper intends to explore **policy and legal considerations** for addressing the issue of geospatial data for public good, taking into consideration that effective policy and legal frameworks will evolve over time, and respond to **societal progress** and **technological developments**.



Agenda #5: Geospatial data for public good

KEY BACKGROUND

- This Paper on geospatial information for public good is one deliverable in the Work plan 2023-2025.
- At the 13th Session, the UN-GGIM Decision 13/112 acknowledged that, given the increasing global challenges and the related need for reliable data, the Working Group's planned activity related to addressing the issue of geospatial information for public good is timely.
- The key audience for consultation on the paper is policy and public administration, and legal experts.



Agenda #5: Geospatial data for public good

- Proposing the following initial conceptual framework, for discussion:
 - The public good can be viewed from a **policy/public administration and legal lens**. Both have **substantive** and **procedural** elements.
 - While the public good has these two pillars (policy and legal), they can be approached through, at least, three different pathways – **rights based, risk-based, and market-based**.
 - We are applying the notion of the public good to the "**control/trust continuum**" that was presented in the Authoritative Data Paper Part I. Notably, this application has teased out a core dynamic between **state-driven vs. negotiated/multilateral** governance instruments in the context of the public good, which we present for initial consideration.



Agenda #5: Geospatial data for public good

PUBLIC GOOD: POLICY AND LEGAL COMPONENTS

- Policy and legal frameworks meant to be considered together with national legal experts, and to be adapted and tailored to national circumstances.

Public good can be broadly described as the structural, political, economic and social conditions that allow communities to live in accordance with the precepts of legal justice and promote peace, order, abundance, and good government.

- Key elements may include validity and efficacy of the national order, solving public problems, preventing risks and abuses, ensuring respect of civil rights and liberties, and promoting economic growth and general welfare.
- Pursuit/promotion of public good may increasingly involve collaborative policymaking.
 - Collaborative policymaking is defined as “a process by which a consensus-driven dialogue is initiated by a public institution to craft solutions to public problems”.



SUBSTANTIVE VS. PROCEDURAL ELEMENTS OF POLICY AND LEGAL PERSPECTIVES

Public good	Substantive/Material	Formal/Procedural
Policy	<ul style="list-style-type: none">- Validity and efficacy of the national order (legal social, etc.)- Solutions to public problems- Utility and (economic) value- Perspectives and interests of stakeholders & partners	<ul style="list-style-type: none">- Processes and structures for decision making- Public consultation- Consensus driven dialogue
Legal	<ul style="list-style-type: none">- Data privacy and security- Market regulation- Human rights and liberties- Intellectual property- Licensing, etc.- Minority rights (including Indigenous rights)- Environmental rights- Liability law- Criminal law- International law (ius gentium)?	<ul style="list-style-type: none">- Fairness and due process applied to<ul style="list-style-type: none">➤ Constitutions, laws (statutes or customary), regulations and➤ Customs and traditions/practices ?- Interpretation rules and principles (ex. Fit and justification)

Agenda #5: Geospatial data for public good

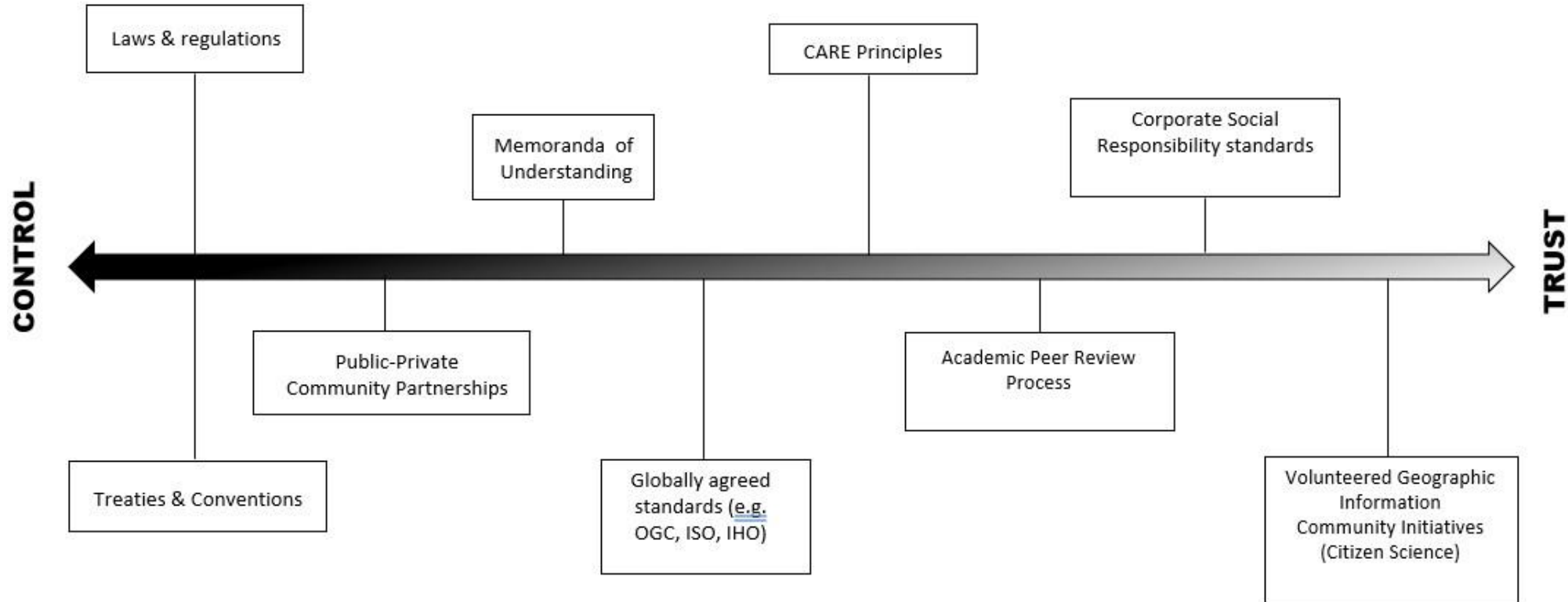
DIFFERENT APPROACHES

- **Rights-based approach** considers governments must recognize, develop and promote common good- supported rights, including through regulation and litigation processes. Coverage goes beyond the classical role of public authorities promoting peace, justice, and abundance. Public good now includes health, and a right relationship to the natural environment.
- **Risk-based approach** focuses on apprehension of harm to human beings. Consists of assessing levels of risks and recommending mitigating measures. Unacceptable risks may be banned, high risks would be assessed before the marketing stage and monitored throughout the life cycle of associated data/services, limited risks could be subjected to compliance measures in terms of minimal transparency requirements that would allow users to make informed decisions.
- **Market-based approach** emphasizes the definition and the value of the growing geospatial marketplace and on how governments capitalize on geospatial opportunities arising from the technological revolution to address current global challenges including climate change, energy security, economic growth, and security.



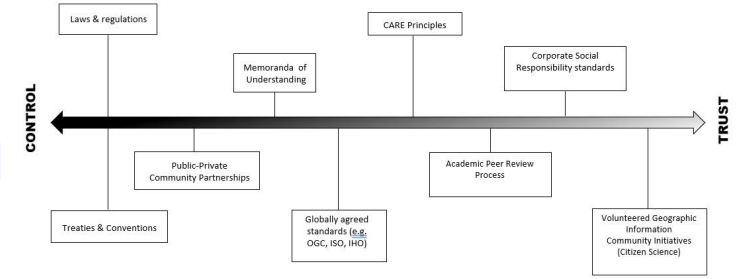
Agenda #5: Geospatial data for public good

CONTROL VERSUS TRUST CONTINUUM



Agenda #5: Geospatial data for public good

ELABORATION ON THE CONTROL VERSUS TRUST CONTINUUM



- Considering the different approaches to the public good reveals a different angle on the Control/Trust continuum – a distinction between government driven versus negotiated/multilateral governance instruments or arrangements
 - **Risk based** approaches stream along the continuum line: high risk correlates with use of instruments on the control side of the continuum, and lower risks with the trust side.
 - **Market based** approaches tend to rely on approaches on the trust side of the continuum.
 - **Rights** also stream along the continuum, with constitutional on the control side followed by legislation and case law, while contractual rights are on the trust side.



Agenda #5: Geospatial data for public good

APPLICATION OF CASE LAW

- Approaches to ‘use for public good’ are applied on a case-by-case basis, the paper will interpret ‘legitimate interest’ to identify criteria that can guide countries in their assessment of whether the use of geospatial data can be considered ‘public good’.
- Examples of caselaw:
 - To what extent does/could the two-step approach in R. v. Katigbak - 2011 SCC 48 - [2011] 3 SCR 326: legitimate purpose and degree of harm apply to geospatial data in the context of new technologies?
 - How could the characterization and level of threat as well as related power distribution among different levels of jurisdictions, in Reference re Genetic Non-Discrimination Act - 2020 SCC 17 - [2020] 2 SCR 283, apply to geospatial data for public good?



Agenda #5: Geospatial data for public good

KEY DISCUSSION QUESTIONS

- Does this conceptual framework resonate with you and your experience/jurisdictions?
- Are we missing any key elements in terms of the definition of the ‘public good’ from a legal/constitutional and policy/public administration perspective? – (Particular need for input on the policy side)
- Are there additional approaches for governments to take in delivering on the ‘public good’, beyond rights, risk and market-based approaches?
- Do you have any feedback on what was proposed regarding applying the trust/control continuum to the concept of public good? Do you see governments and non-governmental actors considering the continuum when choosing instruments to deliver on the public good?
- What are examples of policy/legal institutional and governance arrangements applied to geospatial information and emerging technologies that correspond with rights, risk and market-based approaches?
- How do these different approaches/lenses impact geospatial information management?
- How does this conceptual framework intersect with UN-GGIM and WG activities??



Open discussions



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Agenda #6: Awareness, communication, and engagement, and developing and sustaining policy-legal capacity

	Activities	Deliverables/Engagement and communication component
G3 and G4	Sustaining and building legal-policy capacity to respond to needs of Member State; connecting legal and geospatial experts, along with the relevant policy community	<ul style="list-style-type: none">• Continuing to share/champion key outcomes, approaches, resources and deliverables• Considering how to support collaborative, flexible policy and legal instruments that are responsive to changing technologies and norms• Continuing to engage the legal profession when addressing policy and legal issues in geospatial information management• Advocating engagement with relevant policy communities to improve value and uptake in decision-making



Open discussions



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Agenda #8: Evolving geospatial and technological landscape, artificial intelligence and its regulation



Biographie

Kai Zenner is Head of Office and Digital Policy Adviser for MEP Axel Voss (European People's Party Group) in the European Parliament. Describing himself as a digital enthusiast, he focuses on AI, data and the EU's digital transition. Currently, he is involved in the political negotiations on the AI Act, AI liability directive, e-privacy, Regulation and GDPR revision. In his individual capacity, he is pushing for reforms within the European Parliament and for bringing back the Better Regulation agenda to EU policymaking.

Mr Zenner graduated in political science (M.Sc. at University of Edinburgh, B.A. at University of Bremen) and in law (State Exam at University of Münster). Before moving to the European Parliament, he worked as research associate at the European office of the Konrad Adenauer Foundation in Brussels.

He is member of the OECD.AI Network of Experts since 2021, was awarded [best MEP Assistant in 2023](#) ("APA who has gone above and beyond in his duties") and ranked Place #13 in [Politico's Power 40 - class 2023](#) ("top influencers who are most effectively setting the agenda in politics, public policy and advocacy in Brussels").



Agenda #7: Collaboration with partnering international organizations and functional groups of the Committee of Experts

	Activities	Deliverables/Engagement and communication component
G4	Continuing to socialize key outcomes, approaches, resources and deliverables and share guidance from current and previous work plans (leveraging UN-IGIF Strategic Pathway 9)	<ul style="list-style-type: none"> • Developing and sharing key messages corresponding to Working Group objectives, and each work plan item (e.g., policy and legal resource kit, paper on authoritative data) • Collaboration with key partners, attending key events, including the annual conferences of the International Bar Association • Strategically leveraging UN-GGIM meetings, events and activities
G3 and G4	Collaboration with UN-GGIM functional groups including the Subcommittee on Geodesy, the Expert Group on Land Administration and Management and the Working Group on Marine Geospatial Information	<ul style="list-style-type: none"> • Share key outcomes, approaches, resources and guidance at meetings functional groups as appropriate • Collaborate on work items as needed and where appropriate • tbd?



Agenda #7: Collaboration with partnering international organizations and functional groups of the Committee of Experts

Fourteenth Session:

1. Election of officers.
2. Adoption of the agenda and other organizational matters.
3. Enhancing global geospatial information management arrangements.
4. Contribution of regional committees to the global geospatial information agenda.
5. Contribution of thematic networks to the global geospatial information agenda.
6. The future geospatial information ecosystem.
7. United Nations Integrated Geospatial Information Framework.
8. **Global geodetic reference frame.**
9. **Geospatial information for sustainable development.**
10. **Geospatial information for climate and resilience.**
11. **Integration of geospatial, statistical and other related information.**
12. **Integrated geospatial information for effective land administration and management.**
13. **Integrated marine geospatial information.**
14. **Policy and legal frameworks, including issues related to authoritative data.**
15. Implementation and adoption of standards for the global geospatial information community.
16. Collaboration with the United Nations Group of Experts on Geographical Names.
17. Programme management report.
18. Provisional agenda and dates of the fifteenth session.
19. Report of the Committee of Experts on its fourteenth session.



Agenda #7: Collaboration with partnering international organizations and functional groups of the Committee of Experts

Agenda items of the Fourteenth session:

8. *Global geodetic reference frame.*
9. *Geospatial information for sustainable development.*
10. *Geospatial information for climate and resilience*
11. *Integration of geospatial, statistical and other related information.*
12. *Integrated geospatial information for effective land administration and management.*
13. *Integrated marine geospatial information.*
14. *Policy and legal frameworks, including issues related to authoritative data.*

Second expert meeting of the Working Group on Policy and Legal Framework for Geospatial Information Management

- 20 – 22 February 2024
- Brussels, Belgium

Sixth expert meeting of the Working Group on Marine Geospatial Information

- 4 – 8 March 2024
- Indonesia
- International Seminar

Fourth Plenary Meeting of the Subcommittee on Geodesy (*back to back with the 2nd meeting of the UN-GGCE: IAC*)

- Week of 18 March 2024
- Bonn, Germany

Fourth meeting of the Expert Group on Land Administration and Management

- April/May 2024
- Mexico
- International Seminar

Expert Group Meeting on the Integration of Statistical and Geospatial Information together with the Expert meeting of the IAEG-SDGs Working Group on Geospatial Information

- September 2024
- Nairobi (UNON), Kenya

Expert meeting of the Working Group on Geospatial Information and Services for Disasters

- Date and host/venue to be decided



Agenda #7: Collaboration with partnering international organizations and functional groups of the Committee of Experts

The Committee of Experts, at its thirteenth session, in decision 13/107

(e) Supported elements of all three options as presented in the discussion paper, namely: (i) **establish a task team** under the purview of the Committee of Experts to strengthen interlinkages between geospatial, statistical, climate and other relevant communities and organizations of the United Nations system; (ii) **convene an appropriate and relevant international forum** or event on geospatial information for climate resilience that brings relevant stakeholders together to establish an effective programme of work; and (iii) **develop a more detailed concept paper** that expands on the relevant initiatives, activities and frameworks under the purview of the Committee of Experts;

(f) Welcomed the multiple offers by Member States to support and contribute to the three options, and invited the Bureau and the Secretariat to **work with Member States to determine the modalities for implementing the three options and to report back on progress at the fourteenth session** of the Committee of Experts, in 2024, potentially under a **dedicated agenda item so as to not burden the programme of work** of the working group on geospatial information of the Inter-Agency and Expert Group.



UN-GGIM Task Team on Geospatial Information for Climate Resilience

James Norris

International Policy Lead, Ordnance Survey

Tuesday 20th February 2024



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The Policy and Legal Working Group is being asked to:



1. Note the work of the Task Team since UN-GGIM13.
2. Consider the alignment of the Task Teams activities with the wider objectives from the Policy and Legal Working Group.
3. Contribute to the collection of case studies to promote role of geospatial information in climate resilience.
4. Consider mechanisms to increase engagement and collaboration across the UN-GGIM Programme of Work.





Mandate: UN-GGIM Decision 13/107

- (c) Commended the United Kingdom of Great Britain and Northern Ireland for authoring the discussion paper entitled “Geospatial Information for Climate Resilience – What Does UN-GGIM Do?”, which articulates the intersectional nature of geospatial information with the valuable role of the frameworks and policies of the Committee of Experts in combating the climate challenge, and draws attention to the potential role that national geospatial and mapping agencies could play in delivering data and technologies that assist countries in mitigating and adapting to climate change;
- (d) Appreciated the engaging side event on geospatial information for climate resilience convened on the margins of the thirteenth session, which emphasised that acting on climate resilience was now imperative for the Committee of Experts, that the item should not be delayed further, and that it was critically important to advocate for and raise awareness of the potential of geospatial information for climate resilience;
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Current Membership & Leadership



Member States

- Argentina
- Australia
- Austria
- Bahamas
- **Barbados** (co-Convenor)
- Brazil
- Canada
- Chile
- Ethiopia
- Germany
- Mexico
- Mozambique
- Nepal
- Singapore
- South Africa
- **Tonga** (co-Convenor)
- Turkey
- **United Kingdom** (co-Convenor)
- United States of America



Mr David McCollin, Chief Surveyor
Lands and Surveys Department
Barbados



Mr Viliami Folau, Geodetic Surveyor
Ministry of Lands & Natural Resources
Tonga



Mr David Henderson, Chief Geospatial Officer
Ordnance Survey
United Kingdom



TT-GICR Work Activities



A Concept Paper on Geospatial Information for Climate Resilience

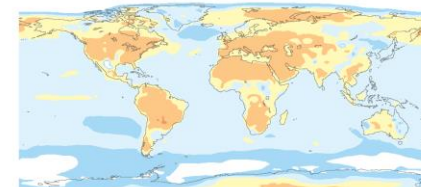


Capturing Country Experiences

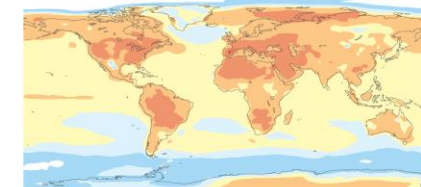
FAQ3.1: Impact of 1.5°C and 2.0°C global warming

Temperature rise is not uniform across the world. Some regions will experience greater increases in hot days and decreases in cold nights than others

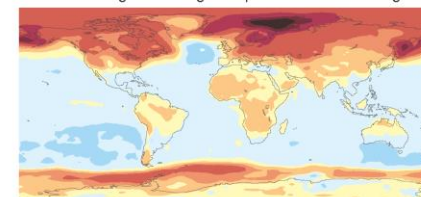
+ 1.5°C: Change in average temperature of hottest days



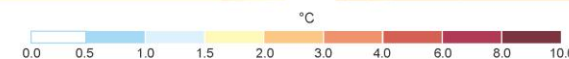
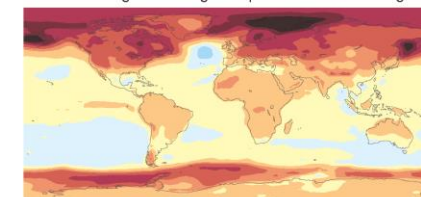
+ 2.0°C: Change in average temperature of hottest days



+ 1.5°C: Change in average temperature of coldest nights



+ 2.0°C: Change in average temperature of coldest nights



<https://www.ipcc.ch/sr15/chapter/>

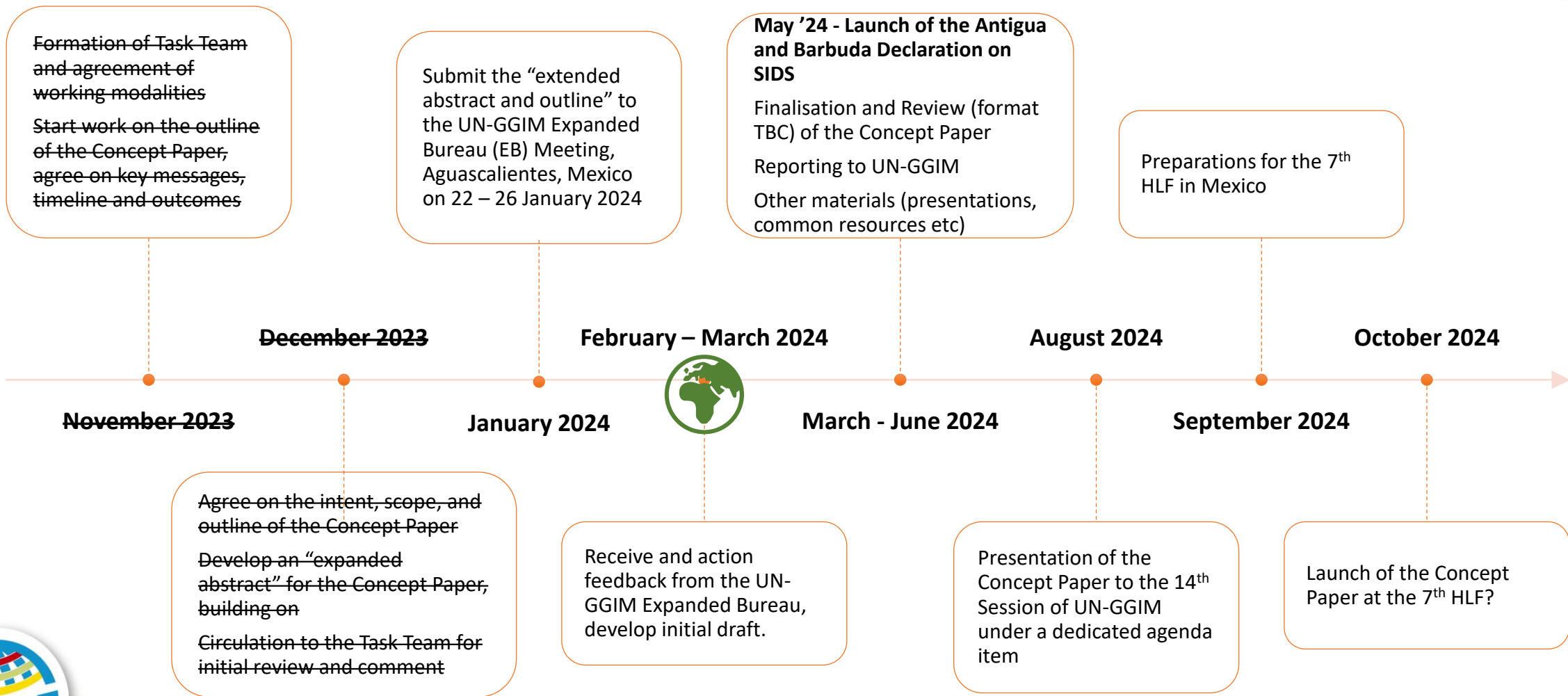


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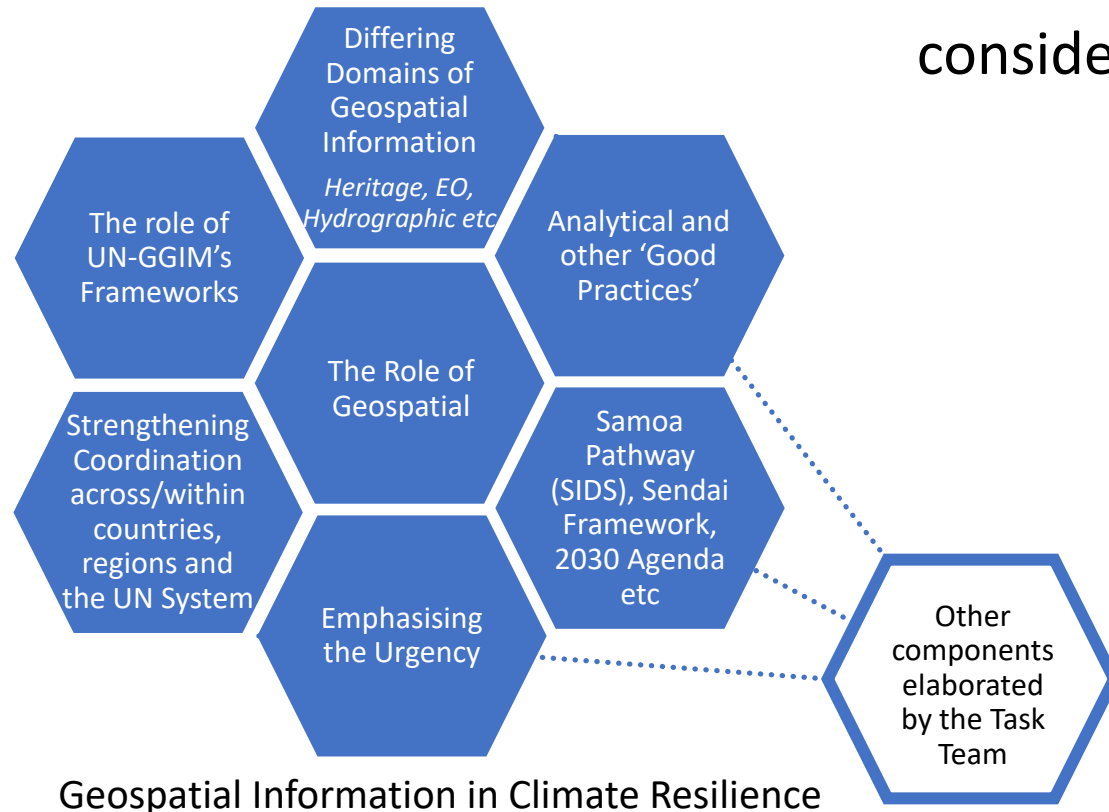
Timeline



Scope



We defined our scope – what the Task Team considers... ..and what it doesn't.

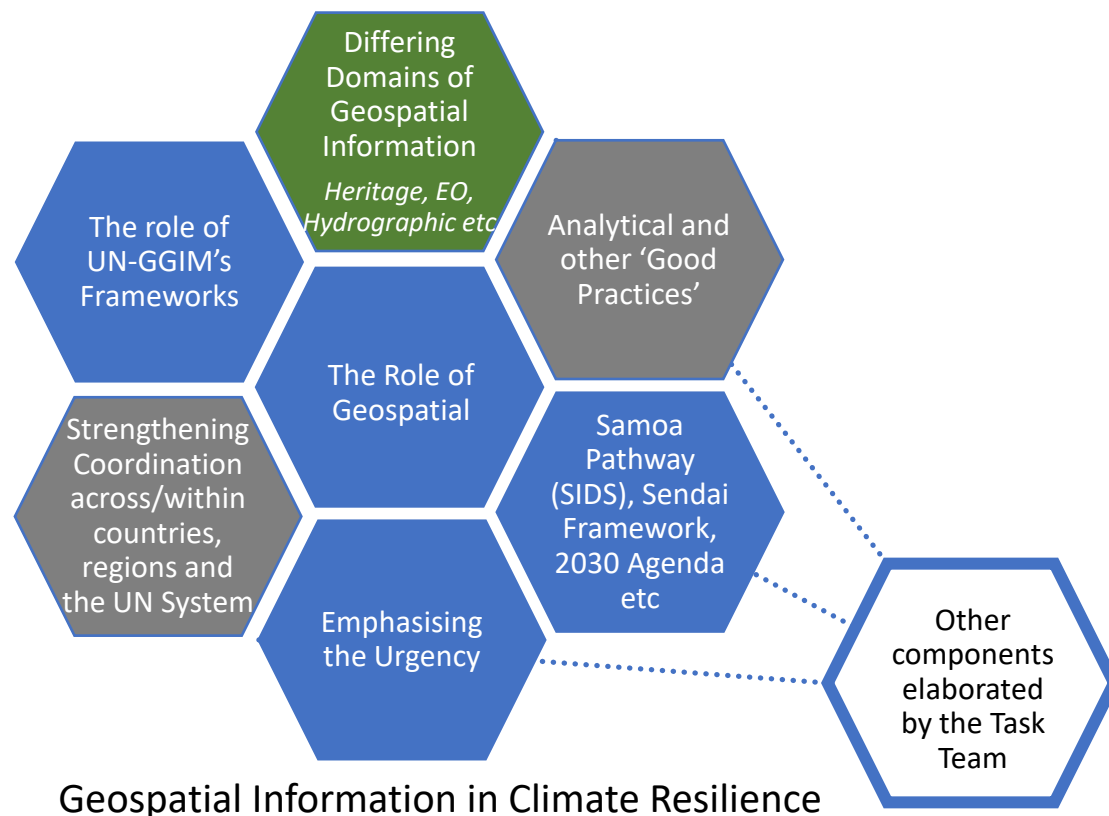


Assumptions

- We are not defining climate resilience but know where we can shape and influence UN-GGIM, using the Committee of Experts and Secretariat appropriately.



Concept Paper: Substance

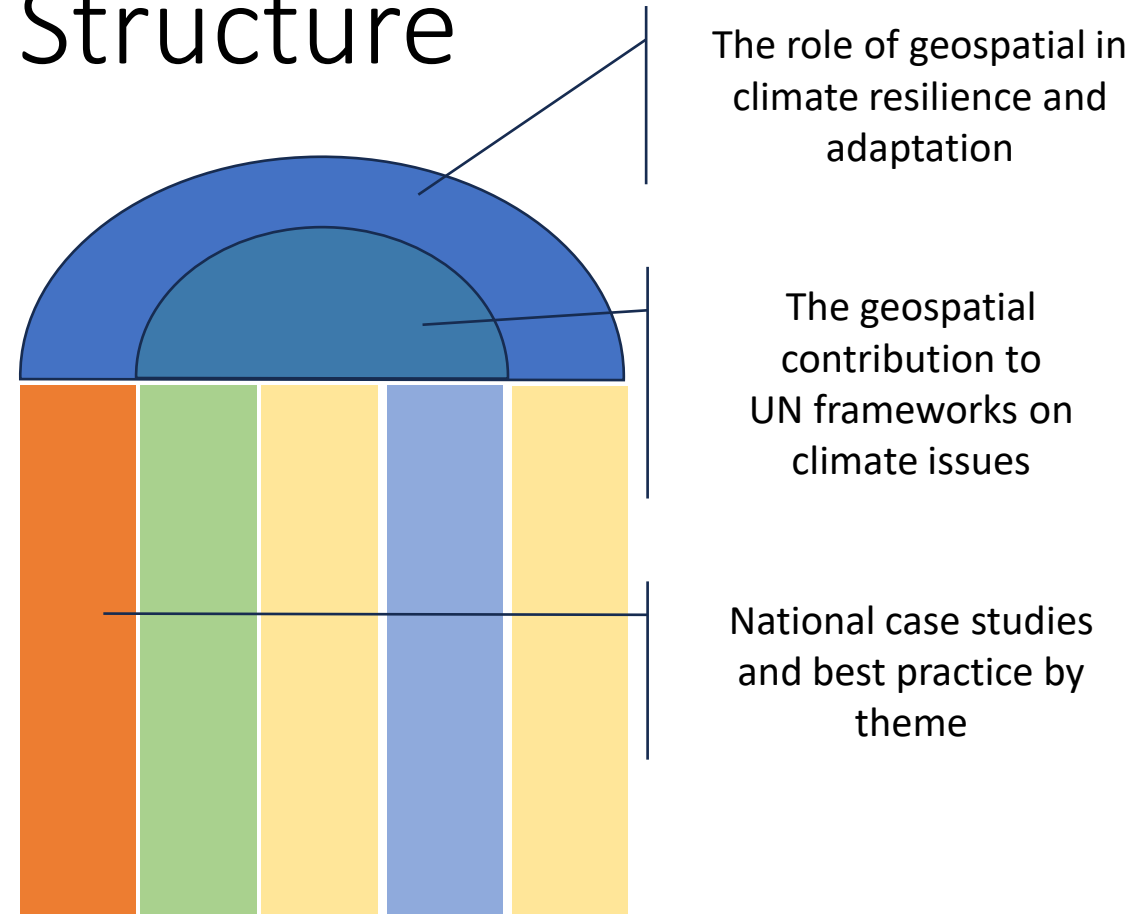


- Emphasize that acting on climate resilience is imperative and critically important to raise awareness of the potential of geospatial information for climate resilience
- Expand on the relevant initiatives, activities, and frameworks under the purview of the Committee of Experts



Concept Paper: Proposed Structure

- A high-level restatement of the value of geospatial to climate resilience and the role of NGIAs in producing authoritative, trusted data
- A specific section highlighting the role of geospatial information for climate resilience across and within Member States, UN-GGIM regions and the UN system
- A selection of practical case studies that help support the good cases of how the UN-IGIF is used

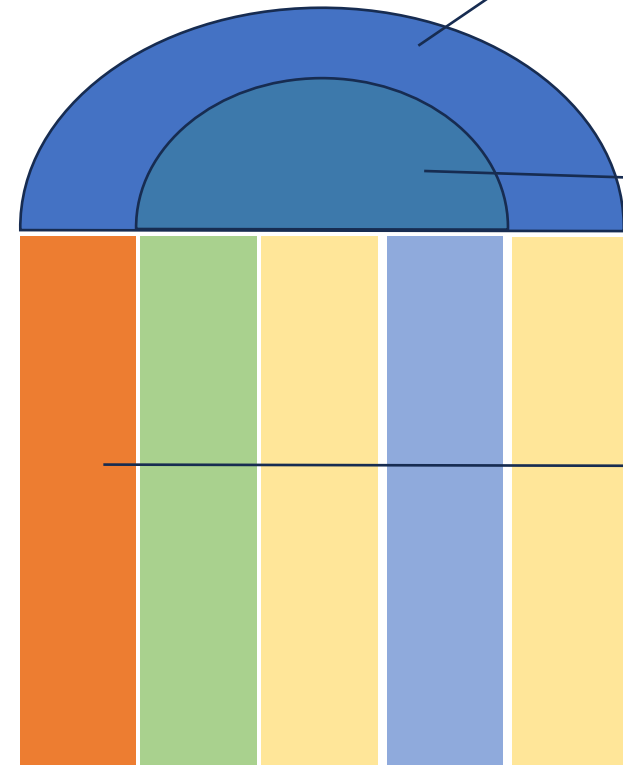


Concept Paper: Proposed Structure

1. Introduction

2. The Need of Geospatial Information for Climate Resilience

- ***Geospatial information and management for adaptation and resilience***
- ***Measuring and Monitoring***
(Greenhouse gas (GHG) emissions; ascertaining the impacts of climate change; measuring and modelling land use and land cover, inc. Data capture and Data Analysis & Science)
- ***The UN-IGIF as the anchor***
The Role of UN-GGIM's frameworks and policies in achieving the Samoa Pathway (SIDS), Sendai Framework, Paris Agreement, 2030 Agenda
 - *UN-Integrated Geospatial Information Framework, the Integration of geospatial, statistical and other related information (inc. Human and Physical Geographies; Role of Geodesy; and Role of Standards & Metadata)*
- ***Defining the potential successes and risks (inc. Resourcing change)***



The role of geospatial in climate resilience and adaptation

The geospatial contribution to UN frameworks on climate issues

National case studies and best practice by theme



Concept Paper: Proposed Structure

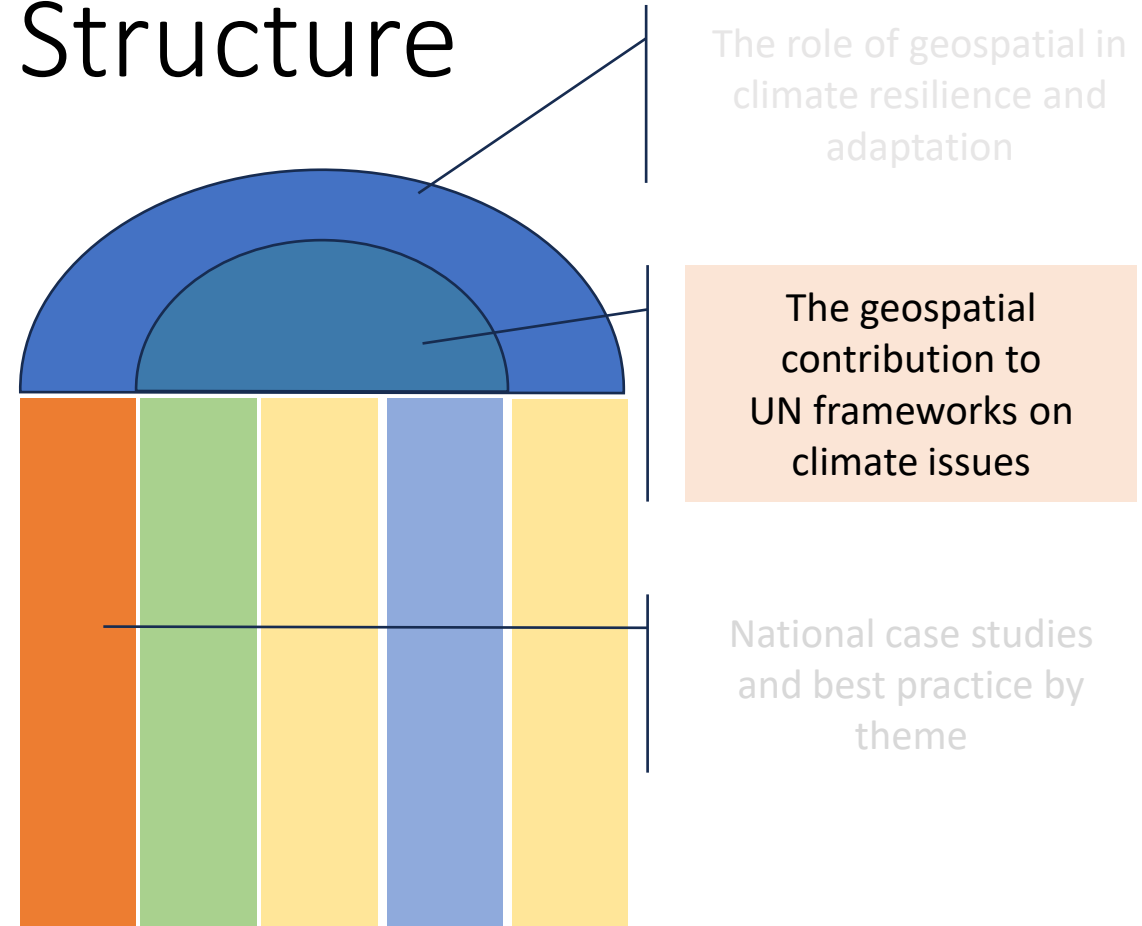
3. Enabling Global to Local Decision-Making – Local to Global Impact

I. UN-GGIM as a Coordinating Mechanism

- *Within the UN System*
- *Inter-regional collaboration*
- *Across Functional and Thematic Groups*
- *Across other domains and communities*

II. Multilateral Collaboration

- *Working with global organisations*
- *Working with regional bodies*



Concept Paper: Proposed Structure

4. Geospatial Information as a Foundation for Climate Resilience Partnerships

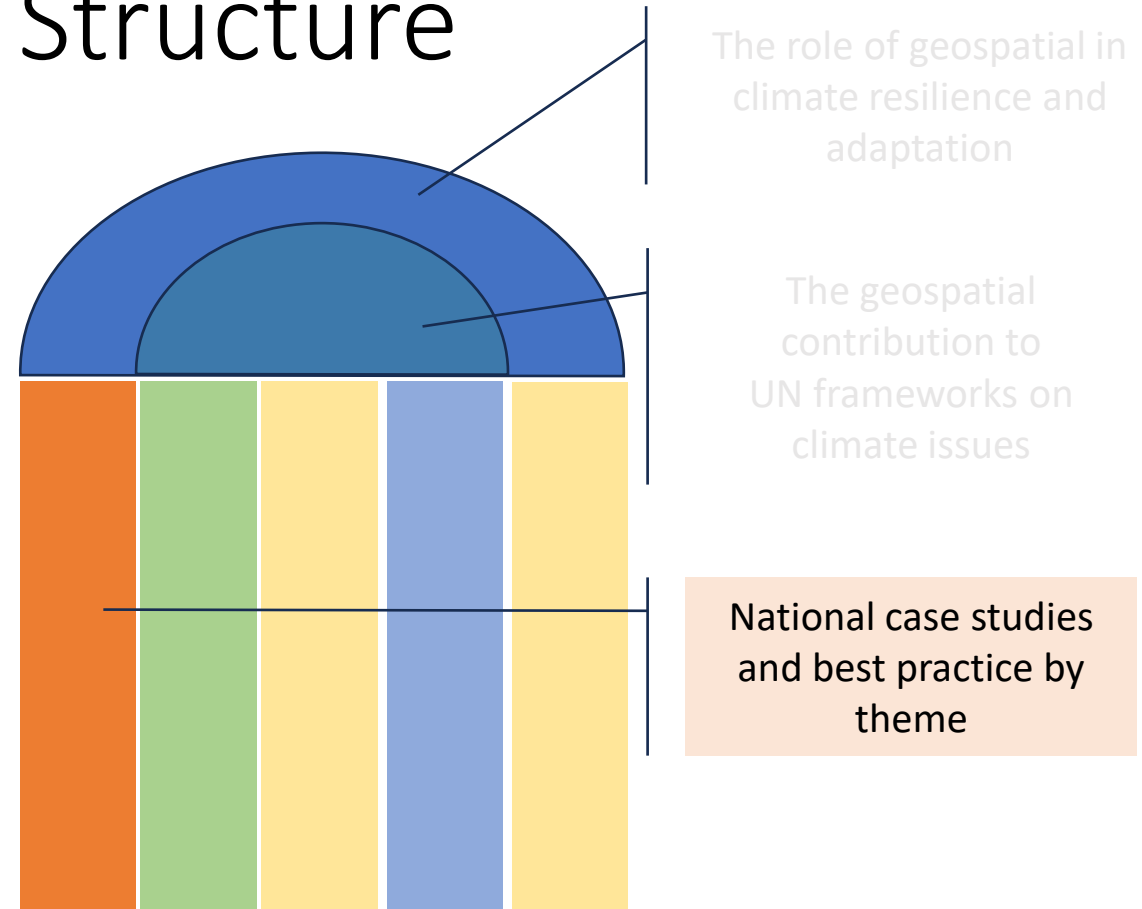
I. *Geospatial information and management for adaptation and resilience*

Case Studies: Sea-Level Changes; Land Administration

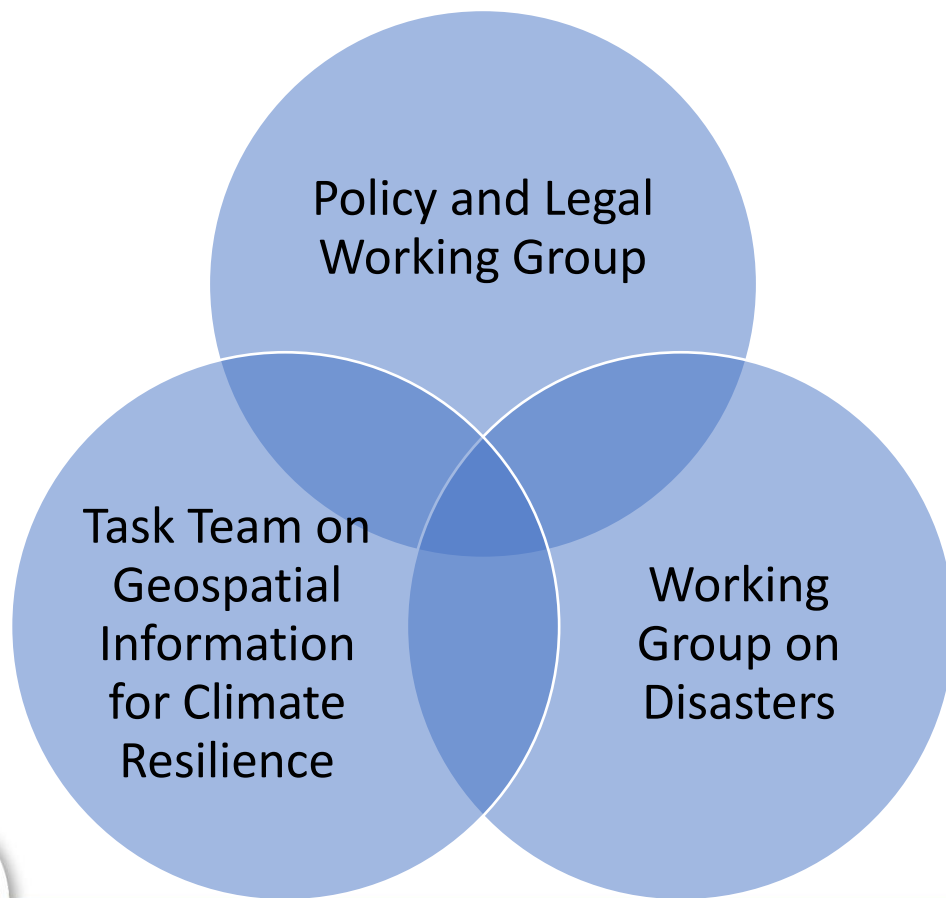
II. *Geospatial information and management for climate impact*

Case Studies: Understanding impacts, the Marine Domain etc.

5. *Summary: 'Enabling action: Accelerating implementation, achieving resilience'*



Alignment across UN-GGIM



Policy and Legal Working Group

Text

Working Group on Disasters

Text

Geospatial information for Climate Resilience

Text



Next steps:



1. Publish the call for case studies.
2. Complete the drafting of the report ahead of UN-GGIM14.
3. Continue to identify interlinkages between existing UN-GGIM Work Programme activities to avoid duplication.
4. Increase awareness and engagement outside the Committee of Experts.



Agenda #9: Workplan and deliverables for the duration 2023 – 2025

2024	Activity	Indicative timing and Deadline
Reporting to the Committee of experts	Summary for the report to the 14th Session of UN-GGIM	First week of May 2024
	Report to the 14th Session	Last week of June 2024
	Background documents for the 14th Session of UN-GGIM <ul style="list-style-type: none"> Paper on geospatial data for public good 	First week of July 2024
	Side event/open meeting on the margins of the 14 th Session of UN-GGIM	First week of August 2024
	Side event on the margins of the 14 th Session of UN-GGIM: <ul style="list-style-type: none"> Paper on geospatial data for public good 	August 2024



Agenda #9: Workplan and deliverables for the duration 2023 – 2025

<i>2024</i>	<i>Activity</i>	<i>Indicative timing and Deadline</i>
	<ul style="list-style-type: none"> Preliminary results of the paper on “Authoritative, fit for purpose data for crises” (Part II) 	
	Global consultation and refinement of paper on “Authoritative, fit for purpose data for crises” (Part II)	October 2024 – April 2025
Meetings of the Working Group	21st virtual meeting	February/March 2024
	22nd virtual meeting	May/June 2024
	23rd virtual meeting	October 2024
	2nd expert meeting of the Working Group (in-person)	TBD
Forums	TBD	TBD



Open discussions



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