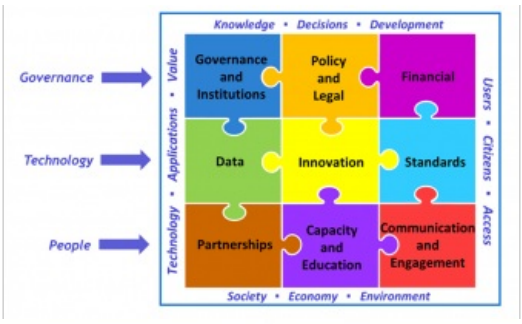
COMMUNICATING TRANSFORMATIONAL CHANGE

The United Nations Integrated Geospatial Information Framework



Despite widespread awareness of the importance of geospatial information in a global digital economy, there is still a considerable lack of understanding of its role in contributing to national development, especially in developing countries. The United Nations Integrated Geospatial Information Framework (UN-IGIF) creates an enabling environment where national governments can coordinate, develop, strengthen and promote the efficient and effective use and sharing of geospatial information for policy formulation, decision-making and innovation. This will give all countries the opportunity to know 'what is happening where' and to develop and contribute to a vibrant national geospatial information ecosystem that enables visible and sustainable transformational change.

"Everything happens somewhere" is a commonly used phrase by the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) and the geospatial community. It refers to the underlying importance of geospatial information in a global digital economy. As an essential national information resource and a major contributor to socio-economic transformation in many countries, geospatial information provides the integrative platform for all digital data that has a location dimension to it and is fundamental to development. Due to its cross-cutting nature, geospatial information is a nation's 'digital currency' for evidence-based decision-making. It is a critical component of a national infrastructure and knowledge economy that provides a nation's blueprint of what happens where, and the means to integrate a wide variety of government services that contribute to economic growth, national security, sustainable social development, environmental sustainability and national prosperity. In today's modern digital society, all countries and all sectors need geospatial information to address national priorities, for national development and for informed decision-making.

However, there is still a considerable lack of awareness and understanding of the vital and integrative role of geospatial information and related enabling architectures, such as National Spatial Data Infrastructures (NSDIs), in contributing to national development. This lack of awareness is particularly common at the policymaking and decision-making levels in developing countries. National policies, and technical capacities and capabilities, need to be better aligned and considerably strengthened so that all countries have the opportunity to know 'what is happening where' and to develop and contribute to a vibrant national geospatial information ecosystem.

After two years of virtual sessions due to the COVID-19 pandemic, the twelfth session of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) took place during the first week of August 2022 at the United Nations Headquarters in New York City. It was an exciting session, with 33 side events, 256 participants from 73 countries and 111 observers. (Photo courtesy: Anne JÃ¸rgensen)

Forward-looking approach

The United Nations Integrated Geospatial Information Framework (UN-IGIF), adopted by the United Nations in 2018, provides a forward-looking approach that creates an enabling environment where national governments can coordinate, develop, strengthen and promote the efficient and effective use and sharing of geospatial information for policy formulation, decision-making and innovation. It establishes a common vision for all government agencies and expresses the goals that will realize the vision, the actions that need to be implemented to achieve the goals, and the outcomes and benefits necessary to support national development.

The UN-IGIF is multi-dimensional global framework that was developed initially as a collaboration between the United Nations and the World Bank to provide a basis and reference guide for lower to middle-income countries when developing and strengthening their national and sub-national arrangements in geospatial information management and related infrastructures. However, as the UN-IGIF has evolved in the past five years, it has become apparent that many high-income and developed countries are also significantly benefiting from its integrative and inclusive strategic nature.

The 3 parts of the UN-IGIF

The following three parts make up the UN-IGIF as separate, but connected, documents covering the 'why', the 'what' and the 'how':

- **Part 1: Overarching Strategy** presents the forward-looking strategic elements of the UN-IGIF, built on national needs and circumstances, and provides the overarching strategic messages and more expansive and integrated national framework, particularly focusing on policy, perspectives and elements of geospatial information. It sets the context of why geospatial information management is a critical element of national social and economic development via seven underpinning principles, eight goals and nine strategic pathways that lead to a national approach that takes account of national circumstances, priorities and perspectives.
- **Part 2: Implementation Guide** is the detail document that provides the 'what': the specific guidance and actions to be taken in implementing the UN-IGIF. Expanding on each of the nine strategic pathways, the Implementation Guide comprises reference guides, good practices and specific principles for each of the strategic pathways, including those generated through each of the Subcommittee, Expert and Working Groups of UN-GGIM. The aim is to provide a reference resource and guidance for governments to establish nationally integrated geospatial information frameworks in countries in such a way that transformational change is enabled, visible and sustainable.
- **Part 3: Country-level Action Plan** is specific to and completed by each country. This plan details how the guiding principles, options and actions recommended in the Implementation Guide will be carried out, when and by whom. Importantly, the Country-level Action Plan is a plan, not a programme that is implemented.

The nine strategic pathways that anchor the UN-IGIF and support its implementation.

Areas of influence

Nine strategic pathways anchor the UN-IGIF and support its implementation. These are organized in response to three main areas of influence: governance, technology and people.

- **Governance** is essential to achieving any nationally integrated geospatial information management capability. It includes the institutional arrangements, policy and legal requirements, and financial concerns that need to be factored into any sustainable geospatial information programme or project.
- **Technology** influences geospatial location data, innovations, the required standards and what can be achieved with the emerging geospatial data ecosystem that is able to respond to continually evolving needs, demands and uses.
- The **People** aspect is arguably the most important component as the people are the framework enablers – performing all the tasks needed for a successful UN-IGIF – often through partnerships and in collaboration with others. Having the necessary skills and knowledge is crucial to success, requiring capacity and education programmes as well as ongoing communication and engagement.

Critical strategic pathways

While all strategic pathways are important, two pathways in particular have been identified as the most critical to achieve to ensure that countries are able to establish and sustain nationally integrated geospatial information management capabilities. These are Strategic Pathway 1 (Governance and Institutions) and Strategic Pathway 9 (Communication and Engagement).

Why is this the case? Firstly, because strong leadership and commitment is ultimately required. Leadership drives change and is realized through the implementation of a national geospatial strategy that clearly describes the country's strategic priorities and how geospatial information can be applied to address them. Leadership requires vision, the capacity to take positive steps, and knowing the tactics to achieve the vision. With strong leadership, anything is possible; without leadership, very little is achievable – including the implementation of the UN-IGIF.

In a similar vein, constant and ongoing communication and engagement is required to raise awareness and advocacy to the community, businesses, professionals, decision-makers and politicians of the relevance, value proposition and benefits of integrated geospatial information management at all levels. Amid rapidly evolving technologies, changing societal norms and economic outlooks, and against a backdrop of many competing priorities and agendas, it is critical to be able to communicate the value that geospatial information brings to national development, governments and the broader community.

Strategic Pathway 9 highlights the importance of identifying stakeholders, engaging users and effectively communicating in order to successfully implement geospatial solutions for sustainable development at both the national and sub-national levels.

Communication and engagement

While geospatial information underpins all industries and all sectors in its universality and applicability, it has an inherent ‘communication and awareness’ problem. It is for this reason that Strategic Pathway 9: Communication and Engagement is particularly important. In many respects geospatial information is similar to water and electricity’; it is taken for granted and is just expected to be there – until it is not. This is especially the case for developing countries and the least developed countries. Furthermore, it is a common reality that policy developers, decision-makers and the general public do not understand the detail of the problems being addressed, nor the immense value of such geospatial capabilities in solving everyday societal, economic and environmental problems, from very local to global levels.

There are a number of reasons for this. In many countries, the ‘foundational’ nature of geospatial information often means its direct impacts are hidden from the end users of the relevant applications and solutions. The downside of this ‘hidden’ role of geospatial information is that there is still a lack of awareness of its power and benefits, or the critical value that can be derived from combining and integrating this ‘location-based’ data with many other data types, including for example statistics. As a consequence, the generation of geospatial products and services is not well understood and the resulting products and services not necessarily as effective and fit-for-purpose as they could be. There are often weak links and communication gaps between geospatial professionals and the technical, political and decision-making levels of government. Geospatial science is a complex and often misunderstood discipline. Practitioners are commonly challenged by the need to explain a relatively technical subject in everyday business language or using key strategic messages. Therefore, the disconnect with the political, policymaking and decision-making levels of government persists, resulting in low levels of political buy-in, insufficient support, inadequate funding, limited resourcing and poorly executed geospatial development projects.

A key objective of Strategic Pathway 9 is to ensure that suitable material is available to assist countries in their efforts to raise awareness, improve advocacy and improve the visibility of nationally integrated geospatial information management and the societal benefits that can be derived. Successful communication and engagement efforts require the development of constructive, collaborative, productive, enduring and trusted relationships to adequately respond to identified opportunities, trends and emerging challenges impacting on or influencing nationally integrated geospatial information management.

UN-GGIM brings together experts from Member States to promote global cooperation in geospatial information management. (Photo courtesy: Anne JÃ¸rgensen)

4 key elements

Through four key elements, Strategic Pathway 9 recognizes that stakeholder identification, user engagement and strategic communication are essential to successfully deliver geospatial arrangements nationally and sub-nationally for sustainable social, economic and environmental development. The objective is to ensure effective communication and engagement to enhance and deepen participation and contributions from all stakeholders and at all levels. Commitment, mutual understanding, collaboration, cooperation and communication are essential to successfully implement the UN-IGIF with organizations and stakeholders. The four key elements are listed below:

- **Stakeholder and User Engagement** identifies and develops relationships and alliances with advocates, users, partners and third parties. Given the underpinning nature of nationally integrated geospatial information management, stakeholders will be diverse, priorities will need to be set and expectations managed. Their interests, needs and motivations will continually change and evolve over time. Stakeholders are critical to strengthening integrated geospatial information management, and their buy-in and commitment are vital to success.
- **Strategic Messaging** seeks to develop the narrative of clear, succinct, compelling and strategic messages to all constituents and audiences to engender initial understanding and buy-in and to retain support during implementation. These will feed into support for, and development of, national policies and strategies. In so doing, a national geospatial branding is developed. A brand will strategically support messaging, increasing the likelihood that people will ‘look you up’, just to see what nationally integrated geospatial information management is about and to be associated with a ‘winner’.
- **Strategy, Plans and Methods** develop and use strategic messages and content from a forward-looking communication and engagement strategy to identify, engage and communicate with stakeholders and users, including to sustain communication channels and information flows. They reflect the understanding of prevailing circumstances, stakeholder needs derived from strategic and effective stakeholder and user engagement, perceptions and interests, and grow the acceptance and implementation of the UN-IGIF. Planning and execution are critical to effective strategies and plans.
- **Monitoring and Evaluation** sets the performance measures to assess the effectiveness of communications and engagement in meeting the intended outcomes. The process is typically incorporated into normal operations and as a feedback mechanism. This ensures strategic stakeholder and user communication and keeps pace with the changing times, delivering strategic messages that continually contribute to an enabling environment in which nationally integrated geospatial information management can thrive. Effective monitoring and evaluation ensures the dynamism and agility of communication processes and efforts, and that they are fit for purpose. It provides for continual review, assessment and improvement, ensuring that the communication and engagement efforts deliver the desire impacts.

Conclusion

The global geospatial community, an invested owner, still has much work to do and much to gain in raising awareness and advocacy of the value and benefits of geospatial information. This means establishing new and strategic alliances across a much broader stakeholder community, especially at the political and decision-maker level. There are also many technical, policy and legal matters that need to be addressed, requiring input and support from experts from across a broad range of disciplines and sectors. The diversity of the user community is also changing. This has an impact on how to communicate and engage with users. It also means that communication and engagement strategies, plans and methods need to be far reaching, inclusive and more versatile than ever before, and are crucial to implementing integrated geospatial information management and infrastructures. Successful communication and engagement efforts develop and sustain effective, trusted and collaborative relationships with stakeholders and users. They raise awareness, advocacy and investment in geospatial information management and applications by engaging and persuading the community, businesses, professionals, decision-makers and politicians of the relevance, contributions and benefits of geospatial information.