

Strategic Pathway 9

Communication and Engagement

*This **strategic pathway** recognizes that stakeholder identification, user engagement and strategic communication are essential to successfully deliver integrated geospatial information management 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 United Nations Integrated Geospatial Information Framework (IGIF) within organizations and with stakeholders.*

Summary

Communication and engagement develop and sustain effective, trusted and collaborative relationships with stakeholders and users¹. 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 their relevance, contributions and benefits.

Gaining political and fiscal recognition of the need for integrated geospatial information is a challenge faced from local to global levels, particularly in the midst of rapidly changing societal norms and economic outlooks, and against a backdrop of many competing agendas and priorities. The role and value of an effective communication and engagement strategy, and its implementation, therefore, cannot be overstated in ensuring a successful geospatial program. Adopting a strategic and professional communication and engagement approach, telling relevant and inspiring stories, and finding appropriate champions is generally not a familiar concept for geospatial practitioners and the geospatial community. Yet it is absolutely critical. This strategic pathway aims to help address this shortcoming.

Four key elements are required to build commitment, mutual understanding and cooperation between stakeholders and users to successfully implement the IGIF:

- **Stakeholder and User Engagement** - identifies and develops relationships and alliances with advocates, partners, users and third parties. Stakeholder and user engagement is ongoing, as interests, needs and motivations are diverse and will continually change and evolve over time.

¹ For this strategic pathway, stakeholder and users are used interchangeably.

- **Strategic Messaging** - develops a clear, succinct and compelling narrative for all audiences. The aim is to gain understanding, engender initial buy-in and retain support during implementation through a consistent approach for effectively sharing and receiving information.
- **Strategy, Plans and Methods** – influence perceptions, advocate the significance of integrated geospatial information to grow its application. An effective plan and efficient methods tailored to stakeholder needs can be achieved through a forward-looking communication and engagement strategy.



- **Monitoring and Evaluation** - sets the performance measures to assess the effectiveness and efficiency of communication and engagement strategies, messages, plans and methods. It is a continual improvement mechanism to ensure that communication and engagement keeps pace with changing times, and remains strategic, targeted and impactful.

These elements are underpinned by guiding principles that promote successful communication and engagement that can be adopted by each country. The principles are put into practice through several strategic actions that deliver and strengthen participation and commitment for implementing the Integrated Geospatial Information Framework (IGIF). Tools, such as matrices, examples and checklists, are provided in the appendices to assist countries to work through concepts and processes to successfully complete each action. The overall structure for communication and engagement is illustrated in and anchored by Figure 9.1.

When implemented the actions (and their interrelated actions²) will enable the achievement of the four elements, which in turn will deliver significant and sustainable national outcomes and benefits for a country. These outcomes include attaining:

- Heightened awareness and active engagement for strengthening geospatial information management;
- Elevated sense of trust in government information, confidence and increased use within government and stakeholders;
- Greater synergy with the private, scientific, academic and research sectors, leading to increased opportunities, innovations and accomplishments;
- Increasing engagement, improved awareness, kept informed, included and able to contribute and participate in geospatial policy-making and programs; and
- Positive relationships within government, and between government and stakeholders, including the general public, leading to greater efficiency and effectiveness.

² Example of the interrelated actions across Strategic Pathways are described in the introductory chapter; Solving the Puzzle: Understanding the Implementation Guide.

Elements of Communication and Engagement	Stakeholder and User Engagement	Strategic Messaging	Strategy, Plans and Methods	Monitoring and Evaluation
Guiding Principles	Trusted and Transparent Meaningful and Timely	Personalize and Participatory Coordinated and Consistent	Inclusive and Impartial Purposeful and Effective	Adaptable and Responsive
Key Actions for Strengthening Geospatial Information Management	Providing Leadership Communication and Engagement Strategy Working Group Internal Communication	Setting Direction Policy Platform Geospatial Brand Strategic Messages	Monitoring Progress Review and Evaluation Stakeholder Surveys	
	Understanding Opportunities Stakeholder Identification Stakeholder Analysis	Creating Plan of Action Communication Plan Communication Methods	Communicating Value Benefits Communications Lessons Learned Resource	
Tools to Assist in Completing the Actions	Categories of Stakeholders Identifying and Classifying Stakeholders Stakeholder Analysis Matrix Stakeholder Analysis and Communication Stakeholder Communication Plan		Communication Methods Communication Methods – Advantages and Disadvantages Review and Evaluation – Methods for Benchmarking	
Interrelated Actions	Geospatial Information Management Strategy (SP1) Specialist Working Groups (SP1)		Benefits Realization Plan (SP3) Socio-Economic Impact Assessment (SP3)	
Outcomes	Heightened Awareness and Active Engagement Elevated Trust, Confidence and Increased Use of Geospatial Information Greater Synergy, Increased Opportunities, Innovations and Accomplishments Increasing Engagement, Awareness and Participation Positive Relationships, Greater Efficiency and Effectiveness			

Figure 9.1: Overall structure for the Communication and Engagement Strategic Pathway - showing the four key elements, guiding principles, actions and interrelated actions, and the tools provided in the Appendices to support and achieve the outcomes.

9.1 Introduction

Communication and engagement involve the development of constructive, collaborative, productive, enduring and trusted relationships to adequately respond to identified trends and emerging challenges impacting or influencing integrated geospatial information management.

Stakeholders are people, groups and organizations that have an interest in geospatial information – from its collection, management and use – to policy needs and investment. Stakeholders include leaders who make decisions, as well as individual users of geospatial information. Stakeholders also include the beneficiaries of the decisions made using integrated geospatial information. Understanding stakeholder needs and concerns helps to improve government outcomes for integrated geospatial information management, and to identify and manage potential external risks. It can also form the basis for future collaboration and partnerships (see SP7: Partnerships). Through effective communication and engagement, it is possible to identify trends and emerging challenges which are currently impacting geospatial information management, or will influence the future.

Communication and engagement are about building and maintaining constructive relationships over time, and need to be embraced early and sustained. Communication and engagement are ongoing processes, and extend throughout the life cycle of developing, improving and strengthening nationally integrated geospatial information management.

Effective communication and engagement are already occurring at many levels. Many countries are witnessing a growth in the awareness and use of geospatial information, resulting in an increase in the number of geospatial specialists and data analysts contributing to and using geospatial data and its integration with other meaningful data to solve societal, environmental and economic challenges. This awareness and advocacy are made possible by educating stakeholders on what geospatial information is, why it is important, and what benefits they can realize from its use and integration. But much more needs to be done.

As an invested owner, the geospatial community 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 the style, frequency and methods used to communicate and engage with them. It also means that communication and engagement strategies, plans and methods need to be far reaching, inclusive, and versatile than ever before; and are crucial to implementing integrated geospatial information management and infrastructures.

Across government, many organizations may not know what geospatial information is or how they may already be benefiting from its use. Communicating, engaging, informing, advocating, and educating through effective communication strategies, plans, methods and channels, add to greater understanding and support for efforts in building and maintaining geospatial information.

The geospatial sector can benefit from an inclusive and participatory environment, particularly in developing countries, where organizations and entities, including local non-governmental organizations, regional and international development agencies or donor and philanthropic entities, may be involved for a certain duration or period. Consequently, there is potential for overlap or even conflicting approaches arising from lack of awareness and alertness of development programs and projects – be they minor or major, strategic or tactical, initiatives.

Communicating plans, project proposals and results are important to successfully implementing the IGIF. Communicating and engaging with stakeholders during this process provides additional information and understanding, and oftentimes adds to the list of needs and expectations. Clearly outlining plans and project proposals informs interested parties of the purpose and intent, and encourages their support and feedback.

Sharing the benefits of planned activities, and the subsequent results, often encourages continued improvement and development while breaking down traditional silos that is essential for strengthening integrated geospatial information management, which requires a multifaceted communication and engagement approach.

9.2 Context and Rationale

An integrated communication and engagement strategy and plan are the key to fostering a strong and active stakeholder community.

In many countries, communication and engagement approaches have not been adequate in raising awareness and improving advocacy of the benefits that can be derived from geospatial information. As a consequence, the generation of geospatial products and services is not well understood, and are not necessarily as effective and fit-for-purpose as they could be.

There are often weak links and communication gaps between the technical, political and decision-making levels of government and geospatial professionals. 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, policy, and decision-making levels of government persist, resulting in low levels of political buy-in, insufficient support, inadequate funding, limited resourcing, and poorly executed geospatial development projects. The adage “it is better to have someone else make your case for you” is only possible if stakeholders understand and can communicate the key points and messages that lead to successful understanding.

While many traditional stakeholder groups are already familiar with geospatial information, there is a specific need to engage with stakeholders in other disciplines, such as the disaster risk and resilience, statistics, environment, and transportation sectors, where policy and planning are influenced by, and have a need for, knowledge about the location of people, events and activities. Other sectors, such as business, economic, and agricultural sectors, have significant need but might not yet understand why or how their needs can be supported. This is where communication and engagement can have a significant impact.

A stakeholder and user communication and engagement strategy and plan can foster a strong and active stakeholder community. This starts with the initial identification of the individuals, groups and organizations that will raise awareness, advocate and champion the strengthening of integrated geospatial information management. It reaches fruition with the implementation of policies, programs, technologies, processes, standards and projects that will create a valuable volume of geospatial information that can be accessed, integrated, used and re-used.

The strategy and plan are the mechanisms used to understand the requirements of each stakeholder group and their priorities. This ensures the right decisions can be made about data, applications and systems functionality, and the suggested order in which they need to be addressed to gain early benefits.

The communication and engagement need of professional and non-professional users, and between government, business and citizens, may be quite different, requiring a structured stakeholder needs assessment. This assessment will be an ongoing task. As the user community grows and technologies evolve, so too will attitudes and understanding of the potential of geospatial information - requiring regular monitoring and evaluation of ongoing engagement strategies.

Stakeholders achieve considerable benefit from being able to engage and contribute directly to policy and program development. Communication and engagement methods provide an opportunity for greater participation in government operations, greater awareness and advocacy of government activities, and the opportunity to influence government policy and programs. To communicate the benefits and value of implementing the IGIF, the geospatial community needs to speak the same language as the policy- and decision-makers.

Communication and engagement methods often lead to potential partnership opportunities through the identification of synergies between stakeholders and governmental functions. This may lead to more integrated and comprehensive solutions, as well as increased potential for innovative products and services resulting from shared knowledge, skills and strategic thinking.

Well implemented communication and engagement activities demonstrate the key role nationally integrated geospatial information management can play in developing a government's reputation as inclusive, transparent, responsive and accountable. By way of example, the United Nations supports transparency and openness, inclusiveness, knowledge sharing and partnerships by encouraging Member States to hold regular high-level, multi-stakeholder forums and dialogues on global geospatial information management, including through the convening of global forums. The aim is to promote comprehensive dialogue amongst Member States, and between Member States and international organizations and the United Nations system.³

³ United Nations Economic and Social Council (ECOSOC) resolution 2011/24 establishing the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) as a functional body of ECOSOC in July 2011.

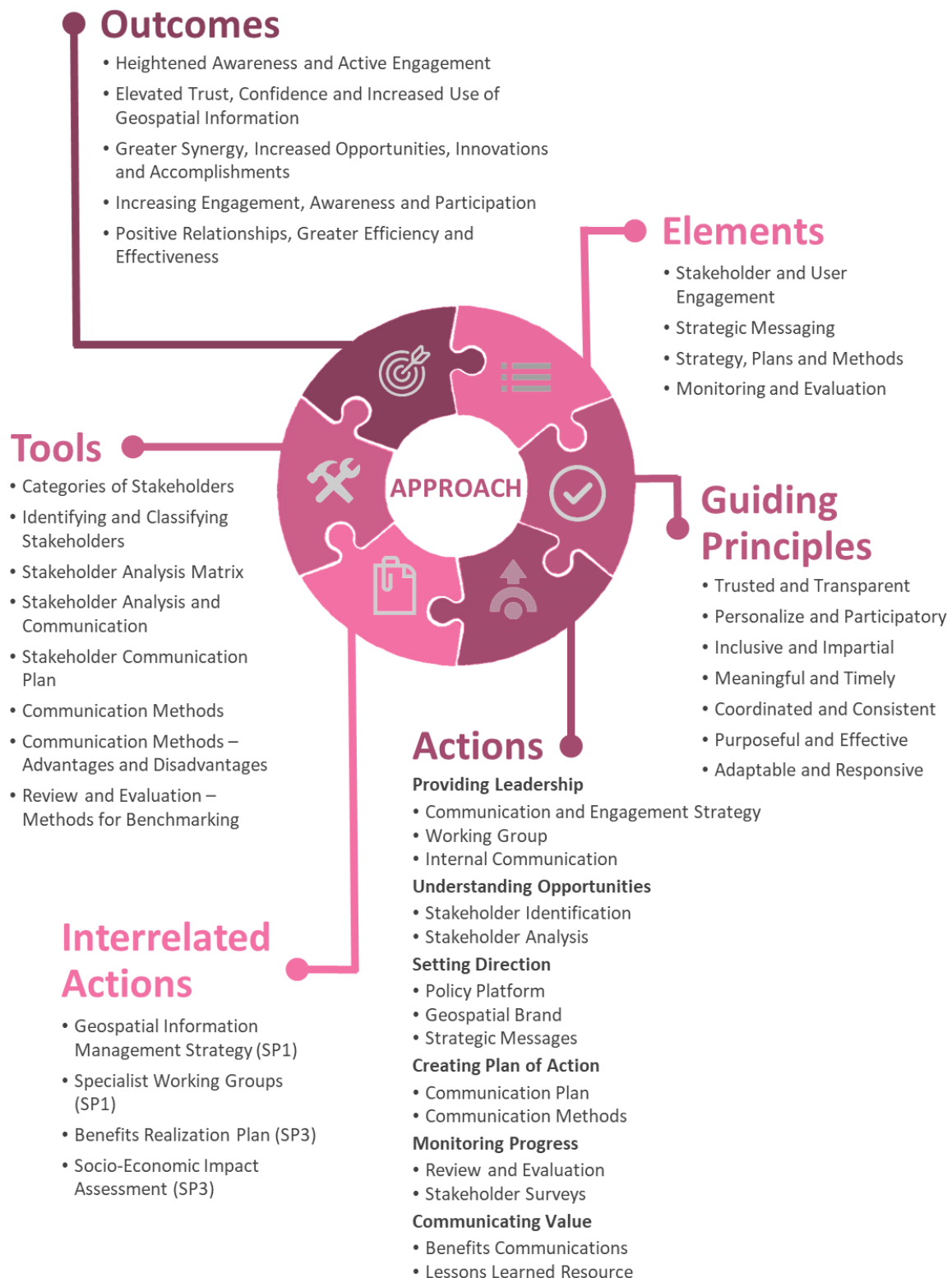


Figure 9.2: The approach to communication and engagement.

9.3 Approach

Encouraging greater input from stakeholders and achieving inclusive and transparent decision-making is through the implementation of effective and efficient communication and engagement processes.

The IGIF is an overarching paradigm, is a new way of 'doing business' and provides an effective 'hook' for engaging stakeholders. The actual implementation approach for each strategic pathway action will depend on country-specific needs and circumstances, which may be influenced by country priorities, existing capabilities, resourcing potential, culture and other practicalities. Whatever the implementation approach is, each action should reference the guiding principles (see Section 9.5) as these describe what is important for integrated geospatial information management.

The approach includes four key elements that are a guide for countries to ensure stakeholders and the general community are integral to the implementation of the IGIF. These elements include identifying and developing **stakeholder and user engagement**, developing **strategic messaging**, effective **strategy, plans and methods** and continual **monitoring and evaluation**.

The approach includes strategic pathway actions that are recommended to achieve the four key elements. The actions, which are underpinned by guiding principles, provide the step-by-step guidance to implement and achieve the desired outcomes. Whilst most of these actions may be unique to this strategic pathway, there are several interrelated actions detailed in other strategic pathways that may also need to be completed. Tools to assist in completing the actions are available in the appendices to the strategic pathway. The approach for Strategic Pathway 9: Communication and Engagement is illustrated in Figure 9.2 and explained in the following sections.

9.4 Elements

9.4.1 Stakeholder and User Engagement

Stakeholders and users are critical to strengthening integrated geospatial information management.

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.

Stakeholders and users emanate from differing professional and user domains, bringing a range of perspectives, requirements and expertise. Stakeholders include politicians and policy-makers, government organizations and their employees, local government, municipal or provincial agencies, development organizations, philanthropic entities, geospatial information users (both professional and general), scientific institutions, universities and research institutions, private sector suppliers (data, technology and services), private sector users, non-government organizations and volunteer groups (as supplier, user and partner), consumers, and citizens (often the beneficiaries). Stakeholders also include cross-government policy-makers and consumers of geospatial information.

It is important to identify these stakeholders and users early, including emerging users, and understand their level of interest, expectations, importance and influence. Stakeholders may have a role in collecting, managing, disseminating and sharing geospatial information, and/or using it for a range of services and applications. Their views will differ - ranging from technical, governance, policy and legal perspectives; to financial, business, educational and employment insights, and much more.

Not all stakeholders and users will be identified or known early in the process, while other potential stakeholders will emerge as engagement progresses. This should be welcomed within efforts to promote an inclusive and participatory environment.

9.4.2 Strategic Messaging

Strategic communications use compelling messaging to attract stakeholder buy-in.

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 to 'look you up' just to see what nationally integrated geospatial information management is about, and to be associated with a 'winner'.

Communication and Engagement Strategy is about being responsive to the current and future needs of stakeholders and users, and about providing opportunities for stakeholders to have a share in shaping nationally integrated geospatial information management and its priorities. Importantly, strategies and plans are the mechanisms to ensure that any geospatial information policy and program is developed in a consultative manner.

Effective communication and engagement involve proactive and ongoing efforts over extended periods of time. They foster partnerships and promote collaboration and inclusive decision-making in how geospatial information management is to be strengthened with the implementation of the IGIF. These include those that: (a) inform or educate stakeholders in a one-way communication style; (b) consult to gain information and feedback from stakeholders in a two-way communication process; (c) involve stakeholders directly and throughout using a two-way or multi-way communication approach where learning takes place on both sides; (d) collaborate by working together on opportunities to develop solutions going forward; and (e) empower stakeholders' influence and decision-making, responsibilities and/or actions on a particular issue (IAP2, 2007).

In using integrated engagement strategies, countries can meaningfully involve individuals, organizations and other groups in policy and program development, as well as creating awareness and generating momentum, embedding communications across the implementation process, and focusing on key concepts that compel the reasons for change.

Messages will need to be strategic, appropriate to the occasion and circumstances, honest and unembellished, that engender trust, and that promote acceptance and buy-in.

9.4.3 Strategy, Plans and Methods

Communication campaigns use persuasive, compelling and strategic messaging to change thinking and behaviors.

Effective 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 IGIF.

Planning and execution are critical to effective strategies and plans. Stakeholder communication and engagement is best embedded within the culture and core functions across government - through the guiding principles and into policies, strategies and day-to-day operations. A committed approach will lead to better outcomes for the individuals, groups and organizations that are affected by, or can affect, the government's integrated geospatial information management activities. It also takes into consideration that potential stakeholders will only become active participants if they do not feel threatened by the governance arrangements associated with giving and receiving information (including feedback), and that they want to see benefits for their organization or groups and customers.

Much of the focus of this strategic pathway is on cross-government engagement and external engagement. However, effective communication and engagement strategies, plans and methods also incorporate the need to engage and communicate with those working in the organizations already delivering surveying, mapping, valuation, building cost, and geospatially referenced data. For these internal stakeholders, the potential change could be perceived as a threat or an opportunity; effective internal communication is key to a positive outcome.

Sharing information within an organization helps to assure success of the strategies and plans. Without staff understanding, buy-in and support, the likelihood of a successful communication blitz or campaign is diminished. Frequently sharing new information, seeking staff ideas, inputs and feedback, and responding to staff questions are examples of successful internal communications. Internal communication team(s) work in partnership with leaders to identify and engage staff within their organization.

Internal communication and engagement help prepare an organization for the organizational, technical, and cultural change necessary to deliver the vision and goals of nationally integrated geospatial information management. The organization should speak with one voice. Effective internal communication helps to assure that voice is consistent and coherent.

9.4.4 Monitoring and Evaluation

Monitoring and evaluation identify whether communication engagement processes have been effective and achieved the intended outcomes.

A monitoring and evaluation process set 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 for nationally integrated geospatial information management to thrive.

Effective monitoring and evaluation ensure the dynamism and agility of communication processes and efforts, and their fitness-for-purpose. It provides for continual review, assessment and improvement, ensuring that the communication and engagement deliver the desired impacts.

9.5 Guiding Principles

The guiding principles encourage stakeholders to engage and contribute to strengthening integrated geospatial information management.

That said, using and leveraging good ideas and successful implementations across countries is encouraged where the approach is appropriate. The guiding principles for communication and engagement are:

- **Trusted and transparent:** Open and honest communication builds trust and promotes transparency throughout the engagement process, and to faithfully deliver what is expressed.
- **Personalize and participatory:** Emphasize in-person engagement early on to establish foundational strategic relationships, provide opportunities for involvement, participation and for soliciting input and feedback to inform.
- **Inclusive and impartial:** Communication and engagement is conducted in an inclusive, open, and unbiased way; respect views, perspectives and expertise; that makes it easy for all interested stakeholders and users to engage and to feedback.
- **Meaningful and timely:** Communicating and engaging early where messages are truthful, relevant and meaningful, and provided in a timely and consistent manner.
- **Coordinated and consistent:** Coordinate communication and engagement activities, including with related organizations to facilitate consistency and to avoid stakeholder fatigue. Develop clear and consistent messaging.
- **Purposeful and effective:** The most effective communication and engagement activities are pursued with a clear understanding of what is to be achieved, what are desired outcomes with an awareness of stakeholders' objectives, expertise and level of influence.
- **Adaptable and responsive:** Adapt timings to react to the changing environment and adapt communication and engagement methods to suit different audiences and use appropriate mechanisms to build upon initial momentum, manage different and opposing stakeholder viewpoints to achieve the most suitable outcome for all.

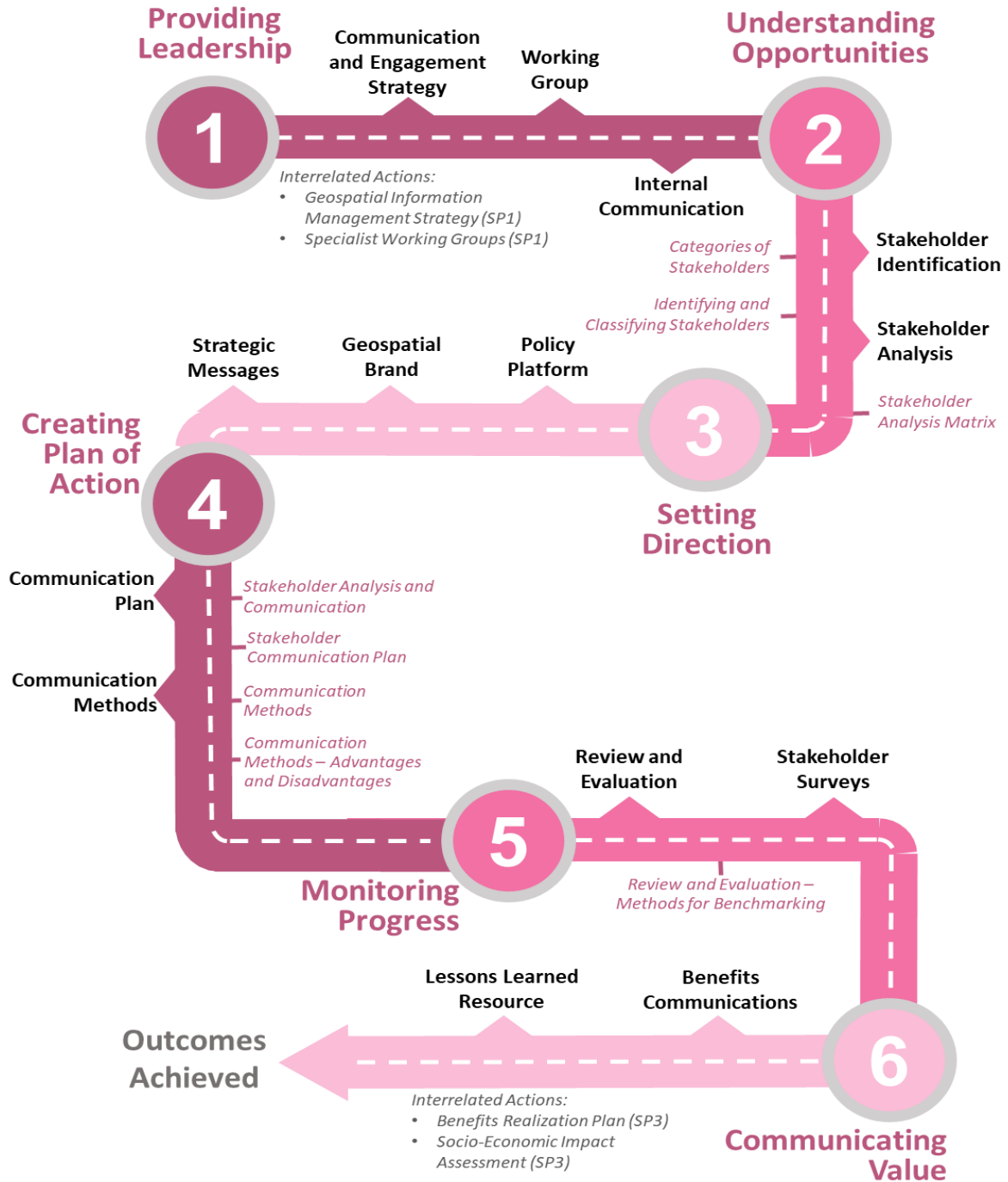


Figure 9.3: Communication and engagement includes several actions and tools designed to assist countries to effectively communicate and engage stakeholders and users in the implementation of the Integrated Geospatial Information Framework. The actions are divided into six categories and reflect the order with which these actions are typically completed.



Figure 9.4: Communication and engagement includes several actions and tools designed to assist countries to effectively and efficiently raise awareness, advocate for and secure political, fiscal and user recognition essential to successfully strengthen integrated geospatial information management. The interrelated actions provide key linkages to other strategic pathway actions.

9.6 Actions

The strategic pathway actions are recommended as a means to achieve the four key elements of the Communication and Engagement Strategic Pathway.

Country-specific actions may be influenced by factors such as country priorities, existing capabilities, national circumstances, resources, culture and other practicalities. These will influence approaches for implementing each strategic pathway and their related actions.

To assist countries in the initial and early stages of developing and strengthening their national integrated geospatial information management arrangements, the actions are presented in a sequential step-by-step structure. A road map illustrating this order and where the actions typically occur and are completed, is presented in Figure 9.3. However, it is acknowledged that countries, depending on existing national arrangements, may also wish to start their actions at different steps along the pathway, and in a different sequence. Therefore, a less structured road map is additionally presented in Figure 9.4.

Some actions may have interrelated actions that need to be achieved prior to, or in conjunction with, the strategic pathway actions. Actions may also be iterative and need to be reviewed and revisited at different times. These interrelated actions are also illustrated in Figures 9.3 and 9.4, are referenced in the text, and detailed under other strategic pathways.

Whatever the implementation approach, each action takes into account the guiding principles in Section 9.5, as these describe drivers for attaining effective and efficient integrated geospatial information management. The actions for communication and engagement are divided into six categories, which are:

1. Providing Leadership
2. Understanding Opportunities
3. Setting Direction
4. Creating Plan of Action
5. Monitoring Progress
6. Communicating Value

The following actions are typically used to address gaps in capability. They serve as a guide to developing the necessary capacity and capabilities to strengthen integrated geospatial information management processes and systems.

1 Providing Leadership

9.6.1 Communication and Engagement Strategy

A Communication and Engagement Strategy is a single, coherent narrative that describes the approach and solutions to meeting the goals identified, laying the critical foundation for the stakeholder and user engagement process.

Designing and developing a stakeholder and user Communication and Engagement Strategy is the first step in laying the critical foundation for engaging and involving stakeholders and users. It identifies and prioritizes key stakeholder groups and explains the method and timetable for engaging and sharing information. The strategy also describes the resources and responsibilities for implementing the engagement activities, and explains how stakeholder feedback will be managed.

This first step is often overlooked and leads to problems later in the engagement process. If the purpose of the engagement is poorly defined and communicated, all the activities that follow will be affected, including the identification of stakeholders, determining the communication methods, and managing stakeholder expectations.

An effective strategy is a single, coherent narrative that describes the communication and engagement solutions to meeting the goals identified, for example, in the Country-level Action Plan (see SP1: Action 1.6.9). Operating at a strategic level, the Communication and Engagement Strategy states the:

- Nature of the geospatial information management challenge;
- Key considerations in addressing this challenge;
- Choices that have been made;
- Key drivers of those decisions (particularly considering key stakeholders);
- Communications objectives;
- Resources; and
- Evaluation criteria.



See Interrelated Action on a Geospatial Information Management Strategy (SP1).

9.6.2 Working Group

For long term complex projects, a working group or task force may be required to guide stakeholder communication and engagement.

It is good practice to initiate a communication and engagement Working Group or a Task Force to guide the stakeholder communication and engagement processes. This is because strengthening integrated geospatial information management is a complex and often large program of work with long term horizons, and requires coordinated and concentrated efforts for enduring results.

The working group should report directly to the Geospatial Coordination Unit (see SP1: Action 1.6.2) and would typically develop strategy, direct the planning and coordinate the communication and engagement program, and regularly review progress and effectiveness. The actual communication could be conducted by the Geospatial Coordination Unit or the Governing Body (see SP1: Action 1.6.1), or on behalf of the Geospatial Coordination Unit or the Governing Body. It is crucial that the Working Group coordinates the communication and engagement program with the Geospatial Coordination Unit and/or the Governing Body established as part of the implementation of the IGIF. This coordination will include regular and timely reporting. It could be that this working group is also requested to report to the Governing Body (see SP1: Action 1.6.1).

The Working Group establishes clear modalities for the different types of methods and information being communicated by the various cross-agency teams involved in geospatial information projects.

One of the key responsibilities of the Working Group is to ensure that the key messages for implementing the IGIF are communicated consistently across all stakeholder groups. This may include common branding across all communication methods to increase the profile of the program, create an environment of trust, and to motivate stakeholders to be part of the solution.



See Interrelated Actions on Specialist Working Groups (SP1).

9.6.3 Internal Communication

Internal communication is for the benefit of staff, who will all contribute to the success of the integrated geospatial information management program.

This includes not only those who are directly responsible and involved in that success, but all staff who are tangentially supporting the effort, as well as those affected by the program and who have a general interest. The roles and responsibilities of staff members may not necessarily be predictable or even known. Therefore, effective, inclusive, and stimulating communication helps in assuring that everyone has a base level understanding of the vision, mission and objectives of the program, the current and future state of geospatial information within the organization, the plan for engagement with stakeholders and users, and the approach to achieve the future, and desired state.

Internal communication can be taken in several contexts. For a national organization it refers to staff, but it could equally be a geospatial community in a country, a group of organizations in government (and may include municipal or local government agencies) and others who, by taking a common approach, can create a powerful collaborative voice. Often overlooked, there are compelling reasons to consider the 'internal community' as a stakeholder group.

Consistent messaging within an organization strengthens external messaging. Staff, and in particular those engaging with stakeholders, should all be reinforcing the same message. Therefore, they need to be well equipped to understand and champion the message(s).

To contribute to the broader geospatial information needs of a nation, organizations may need to change. This change may simply be conceptual, with a change in a strategic message, or it could be significant, with new technologies, processes, skills and outputs. Staff need to be informed and understand why change is happening, and their part in the future; uncertainty can render change

being negative or ineffective. For example, for many national mapping organizations, developing and 'skilling' the workforce is the most significant challenge faced in implementing innovative geospatial capabilities. Internal communication becomes essential in delivering change and ensuring staff see opportunities, rather than threats. It is also important for the leadership of the organization to bring along the staff and harness the collective capabilities and energies through transparency and clear communication.

2 Understanding Opportunities

9.6.4 Stakeholder Identification

The stakeholder identification process considers all parties likely to be affected by the policy and the program of work, both positively and negatively, directly or indirectly.

A fundamental requirement for strengthening integrated geospatial information management is that goals and priorities reflect the needs of society and interest groups, and not merely the internal needs of government organizations. The list of stakeholders can be extensive and include, among others:

- Politicians and policy-makers and their staff - key government organizations might include defense, lands, digitalization, infrastructure, health, municipalities, agriculture, natural resources, water and environment, etc.
- Government organizations, including those who are knowing or unknowing users of geospatial information but not necessarily providers of geospatial information.
- Bilateral or multi-lateral development assistance organizations and donor entities, including philanthropic foundations.
- United Nations agencies, other national governments, and non-government organizations.
- Geospatial information users in government, academia and the private sector, both professional and occasional.
- Scientific institutions, universities and research centers.
- Private sector suppliers of data, technology and services, including representative trade associations.
- Government sector suppliers of data, technology, and services such as survey, geospatial, mapping and cadastral agencies, valuation, building costs, utilities including underground utilities, and other major data providers.
- Professional bodies, volunteering groups, community-level associations, both as suppliers, users and partners.
- Consumers and citizens, often the same person, but with a different role.

Stakeholder identification is best driven by common sense, experience, and some networking and investigation. There may be an existing geospatial information community profile that will make a good starting point. Other means of identifying stakeholders and users may include organizing open seminars, forums or dialogues, which also provide opportunities to raise awareness and share information.

Stakeholder groups may exist from established or previous national spatial data infrastructure initiatives. However, for communication and engagement, it is best to begin by including groups who traditionally are under-represented in planning efforts. While there may be some challenges in this, other benefits will be realized including educating more people about the importance and offerings of geospatial information. This may seem like a straightforward process, but this is often not the case. Today, end-users access data online and therefore, geospatial organizations may find it difficult to determine categories of users and the full range of applications that utilize geospatial information.

The first step is to identify categories of stakeholders so that these groups can be engaged separately, since stakeholder needs are not always aligned. The second step is to list the names of stakeholders and identify which category they fall under. Some stakeholders will fall under more than one category. Selecting representatives will involve adding people who are unknown to the geospatial community. That is expected. This also is an opportunity to include under-represented groups including women, minority groups, and indigenous people. Engaging stakeholder who are known to be productive, participatory, provide honest views and are open to debate and discussions is a good basis for selection.



An example of a listing of Categories of Stakeholders is provided in Appendix 9.1.
A template for Identifying and Classifying Stakeholders according to categories is provided in Appendix 9.2.

9.6.5 Stakeholder Analysis

A stakeholder analysis is used to understand the complexities of the relationships between the stakeholders and the activities being undertaken towards strengthening integrated geospatial information management.

Stakeholders have different levels of influence over, and interest in, geospatial information management. The stakeholder analysis considers what interests a stakeholder has in strengthening integrated geospatial information management, how they will be impacted by change, what influence they have, and how they can be best engaged and involved.

Geospatial information provides the integrative platform for all digital data that has a location dimension to it, but the associated emphasis and use placed by different stakeholders may differ. Effective engagement opportunities, including workshops, is key to understanding stakeholder needs and use, and invariably promotes and improves understanding of their challenges. It is important to consider whether a stakeholder group, with sufficient engagement, can be that trusted partner needed to fast track the implementation of the IGIF.

Stakeholder analysis is relatively straightforward, and there are tools available to assist in categorization according to their level of influence and interest. An example is provided in Figure 9.5 - stakeholders are mapped to the quadrant which best identifies their level of influence and interest.

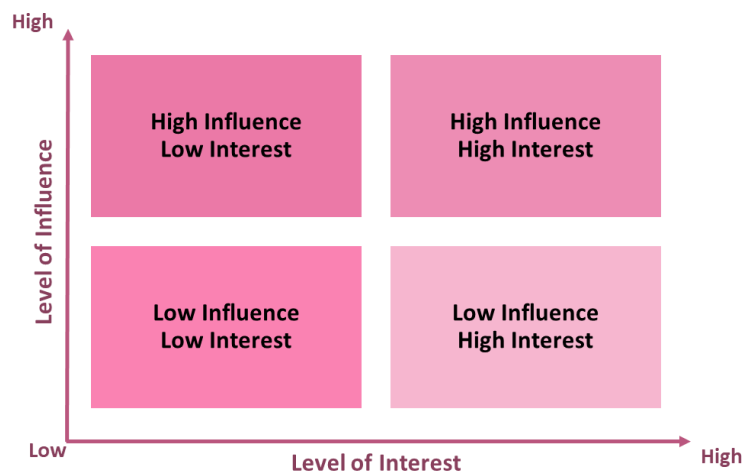


Figure 9.5: Stakeholder Analysis – Levels of influence and interest.

This understanding of the level of influence and interest is used to determine the level and type of communication methods required for each stakeholder, and to decide whose interests and views are given priority. For instance, significant awareness-raising may be required to turn highly influential stakeholders that have a low interest into partners and collaborators. Influential stakeholders are prime candidates to serve as advocates and champions in promoting the importance of nationally integrated geospatial information management.

In certain national circumstances, given the importance of a geospatial information ‘champion’ to drive change from the ministerial or cabinet level, stakeholders and users should be on the look-out for potential ‘champions’. Such a champion may not necessarily be the minister responsible for geospatial information and could be a key user or beneficiary of nationally integrated geospatial information management who can advocate for, including, resourcing, a Country-level Action Plan.



An example of a Stakeholder Analysis Matrix is provided in Appendix 9.3.



9.6.6 Policy Platform

Policy platforms are initiated by advocacy groups and identify priorities that require government support.

A policy platform outlines an initiative, a program or a community’s top priorities that need high-level government and policy support. Policy platforms are usually initiated by advocacy groups. In the context of implementing the IGIF, these may include professional and practitioners’ associations, open data groups, and industry councils. This is an effective way to approach government or elected

representatives and request their support on key issues, such as access to adequate resources to implement and sustain the IGIF in the country. Such a platform may not necessarily apply to all countries and is dependent on national situations.

A policy platform creates a united voice. It helps politicians, professional entities, and government officials understand what is required. Developing a policy platform can be instrumental in effectively supporting and pushing forward suggestions for a new policy or law that benefits geospatial interests and needs. However, it takes a significant amount of time and effort to establish and maintain such platforms.

Policy platforms are usually influenced by a group of diverse stakeholders to prioritize the main items. These items may include the need for a national Geospatial Information Management Strategy (see SP1: Action 1.6.7), an open data policy, a new geospatial data theme or effort at collecting geospatial data for an existing theme, education and training courses to increase the number of geospatial professionals and need for improved fundamental data for integrated spatial planning and analysis.

The policy platform is typically drafted with three to five strategic messages (see 9.6.7) that are supported by appropriate assessment and analysis, and relevant case studies/examples (including press articles that outline a deficiency) to illustrate tangible benefits that will be favorable to the broader community. The draft policy platform is then shared with the broader geospatial stakeholder community for feedback.

The lead entity (and this can be the Governing Body - see SP1: Action 1.6.1) for the policy platform organizes a meeting with elected representatives and/or policy-makers to raise awareness, and to inform and educate with the aim to garner support. Once an agreement is reached, a public meeting can be arranged to generate positive publicity for both the supporters and the policy platform. It is recommended that the media is invited so that there is public awareness, as well as a public record. Media briefing notes and fact sheets are prepared beforehand to make it easier for journalists to learn and to report on the event and, more importantly, report on the policy platform being promoted. This is particularly important, as nationally integrated geospatial information management is often not well understood, let alone communicated via the mainstream media.

9.6.7 Geospatial Brand

A brand is a set of associations that people make with an organization, product or service.

A geospatial brand can be an important part of communication and engagement. A brand can be a tool by which awareness, value and benefits are communicated and improves the level of understanding and appreciation for nationally integrated geospatial information management. Organizations use brand communication to inform, improve awareness, remind and reinforce their stakeholders of the need for and reason why the IGIF has to be implemented.

A brand is a set of associations that a person (or group of people) makes with a company, product, service, individual or organization. Amazon, Apple and Google are amongst the more successful brands globally. One of the most significant impediments to the development of national spatial data infrastructure, and its roll-out in countries, is a weak geospatial brand due to a lack of understanding of its value and benefit. While absolute control over a brand is not possible due to external influences, but intelligent use of design, advertising, marketing, service proposition, and organizational culture

for example, can readily help to generate associations in people’s minds that will benefit the objectives of the IGIF.

Brands are based on: communicating the central idea; values; vision; unique qualities of the solution being proposed; and simplicity. Standardized concepts, graphics and terminologies all help deliver the ‘geospatial brand’. A clear and unambiguous brand supports the strategic messages. For example, these branding qualities have made promotion and understanding of the 17 aspirational SDGs, and what they represent, so effective.

The IGIF is evolving as its own brand and recognition. It focuses on the role of geospatial information in the digital age and how that information is integral to effective and efficient government functions at all levels, as well as for transformative change that is enabled, visible and sustainable. Part 1: The Overarching Strategic Framework communicates this via vision and mission statements, seven (7) underpinning principles, eight (8) goals and nine (9) strategic pathways, all of which are aligned to strategic national to global drivers. This in itself is a global geospatial brand. It supports conversations and engagement with policy-makers as geospatial policies and strategies are developed, strengthening the case for geospatial data and location-based decision-making. The stakeholder and user Communication and Engagement Strategy considers how to capitalize on the global endorsement and branding of the IGIF.

9.6.8 Strategic Messages

Similar to slogans and taglines commonly used in advertising, strategic messages have similar impact when well thought out and formulated.

Effective communication and engagement will be better served by strategic messaging. As we are familiar with slogans or taglines commonly used in advertising, strategic messages on the implementation for the IGIF can have similar impact when well thought out and crafted. A commonly used strategic message for geospatial information is ‘collect once; use many times’, which means that the most value from collecting geospatial information (which can be expensive and/or time consuming) is maximized through as many uses as possible. It also conveys the conservation of scarce resources through having multiple and repeatable applications from a singular effort.

*“Geospatial information is a critical component of the national infrastructure and knowledge economy; a blueprint of what happens where, and the means to integrate a wide variety of government services”
(IGIF Overarching Strategic Framework, 2018)*

*“Everything happens somewhere”
(Nancy Tosta, 2001)*

Another often quoted slogan is ‘everything happens somewhere’ by Nancy Tosta⁴ which serves as a guiding principle for the geospatial community, highlighting the importance of location and location-based information, the value of location as an integrator, and a building block from which all other information can be integrated. The IGIF focuses on location information that is integrated with any other meaningful data to solve societal and environmental problems, acts as a catalyst for economic

⁴ Computerworld, June 2001, in the article ‘GIS: More Than Just a Map’. <https://www.computerworld.com/article/2582595/gis--more-than-just-a-map.html>

growth and opportunity, and to understand and take benefit from a nation's development priorities and the SDGs.

Strategic messages are often easily recognizable and memorable, and can be readily associated with, in this instance, the strengthening of geospatial information management. Carefully considered strategic messaging elevates communication and engagement efforts, providing a connection and ownership.



9.6.9 Communication Plan

The Communications Plan is the means by which the aims of the Communications Strategy are realized.

A strategy differs from a plan in that it considers the wider context, takes a longer-term view and avoids the details of individual activities or individual stakeholders. It builds upon many of the preceding actions to provide direction on the 'what', 'why' and 'who', enabling the detailed plan of action to be prepared.

The Communication Plan builds on these to inform on the 'when' and 'how', and delivers the Communication and Engagement Strategy (see 9.6.1) and uses the information gathered during the identification and analysis of stakeholders. The Plan includes:

- The level of impact that changes to nationally integrated geospatial information management will have on the stakeholder (low, medium and high). It is also helpful to capture the reason for a particular preference when viewed from a national perspective.
- How much influence and contribution the stakeholder has on driving change (low, medium and high) and why.
- What particular geospatial information resources are important to the stakeholder, and for what purposes, to better understand if there are common, essential and aspirational needs. The United Nations Future Trends in Geospatial Information Management⁵ also helps engagement with stakeholders seeking to look to the future.
- How the stakeholder can contribute to the process of strengthening geospatial information management. This aspect considers opportunities to collaborate.
- Whether or not the stakeholder could impede the process of change or the process of transition. This is important as it may have ramifications, including political, that will need to be considered.
- The strategy for communicating with the stakeholder and at which point in the process stakeholders are to be engaged e.g. at the policy development stage or for a response to a new/revised policy.

⁵ <http://ggim.un.org/future-trends/>

In addition to understanding stakeholders, the Communication Plan also includes information that ensures the communication process can be executed. The following information needs to be considered:

- Allocation of responsibilities for communication tasks.
- Identifying budget requirements e.g. seminars and conferences, as well as marketing and communication consultants, staffing, ICT resources, and other items such as stationeries, postage etc.
- Develop a calendar for communications. This helps with identifying overlaps in communications and where additional resources may be temporality required.
- Develop the content for the Communication Plan including the strategic messages appropriate for targeted audience.
- Identify tactics to manage risks associated with stakeholder and user engagement e.g. such as using different communication styles to accommodate culture and diversity, and creating onboarding documentation for new stakeholders.
- The stakeholders contact information and their organization affiliation if appropriate – this will enable the stakeholder communication process. In maintaining contact information, compliance to privacy procedures and guidelines is important for public-facing communications.

Communication Plans are living documents that need regular review and updates. By identifying opportunities, it enables timely communications to be delivered proactively rather than after an event. Sometimes key and pivotal events, some with negative impacts, provide opportunities to demonstrate the power of location-based geospatial information for a city, region or a country. For example, during extreme weather events, disasters, for a major gathering or sporting event, or because of a new government policy or government seeking international finance projects. The power of the ‘map’ as a means of portraying and visualizing situations, impacts and assessment in near-real time is a powerful communication tool.



An example of a template for Stakeholder Analysis and Communication is provided in Appendix 9.4.

An example of a Stakeholder Communication Plan that provides objectives and methods for connecting with stakeholders is provided in Appendix 9.5.

9.6.10 Communication Methods

Communication and engagement encompass a range of activities and approaches. Choosing the appropriate method of communication and engagement will vary depending on the situation and stakeholder.

Communication and engagement encompass a range of activities and approaches, from awareness raising and promoting understanding, information sharing and consultation, to participation, negotiation and collaborative projects. The nature and frequency of this engagement should reflect the level of risks and impacts being brought about by change to the way geospatial information is

managed. Choosing the appropriate method of communication and engagement will vary depending on the situation, opportunities, time available, skills within the team, and budget constraints.

There is no correct communication and engagement method. Each method has its own benefits, limitations and risks. It is important therefore to select the more feasible and appropriate method for the particular circumstances. An illustration of different communication methods mapped to a particular objective linked to the level of influence and interest (Figure 9.6) is provided in Appendix 9.6 for guidance. Figure 9.6 illustrates how these objectives are linked to the level of influence and interest of stakeholders.

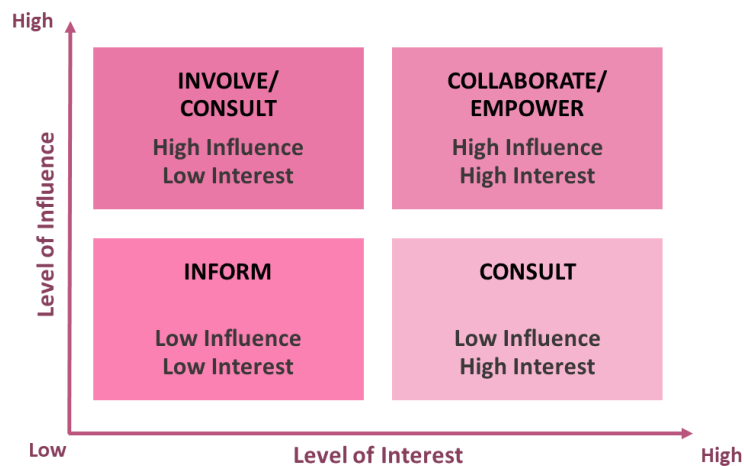


Figure 9.6: Stakeholder Analysis – Stakeholders mapped according to interest and influence.

Communication methods are typically classified according to an objective - that is whether methods are⁶:

- For information purposes only;
- Used to trigger consultation;
- Aimed at involving stakeholders as an integral part of the development process;
- Needed to generate collaborative partnerships; and
- Required to empower stakeholders to make active decisions.

One highly effective method of communication is through the use of maps that tell a story by making the principal points of a communication message. In the digital age, maps have become even more powerful communications tools. They provide multi-scale detail, enabling visualizations of various themes and issues that use assorted types of geospatial information combined with non-geospatial data. The web enables the combination of dynamic maps with text and other forms of multimedia—photos, videos, audio—to tell rich and engaging stories. When combined these communication methods offer information and emotion to motivate people to action. The technique of joining maps and storytelling communicates the value of integrated geospatial information to decision-makers, stakeholders, and the public. It also enables a deep emotional impression which is critical to marketing

⁶ These categories are based on those recommended by the International Association for Public Participation (IAP2) spectrum and are available at: <https://www.slideshare.net/IAP2USA/iap2-public-participation-spectrum>

communication and an individual's recollection of that information. Many organizations have discovered that this multimedia approach can make geospatial data more accessible, relevant and useful to large audiences.



An example of Communication Methods is provided in Appendix 9.6.

An example of Communication Methods - Advantages and Disadvantages of Commonly Used Methods is provided in Appendix 9.7.



9.6.11 Review and Evaluation

Review and evaluation determine whether engagement processes are working well, and provide the opportunity to reflect on and re-think engagement practices.

The review and evaluation process ensures regular monitoring of achievements towards communication and engagement goals. It identifies the success indicators, reporting mechanisms (e.g. traffic light reporting method, evidence of achievement etc.), suggestions, and feedback mechanisms. This requires discipline to periodically check the status of the strategy, plans and methods. Review and evaluation processes also include establishing a culture of open dialogue when something deviates from the planned set of activities. Identifying any problems as soon as possible helps in controlling the resulting impact and provides more time to propose options for mitigation. For this reason, the review and evaluation process will:

- Identify the people, groups and organizations involved in delivering and maintaining an integrated communication and engagement strategy.
- Provide the methodology and procedures for assessing, evaluating and reporting.
- Allow for incentives (and disincentives) for enabling successful communication and engagement practices.
- Use success indicators to monitor and evaluate progress and impacts. Success can be gauged by measuring progress towards achieving the objectives of the communication and engagement strategy or the impacts of the strategic messages developed.
- Confirm achievement of objectives to indicate on the right path towards strategic communication and engagement goals. If an objective is not met, corrective action may be required. It is worthwhile documenting contributing factors and extenuating circumstances that may justify either leaving the objective as-is, or changing it.

An effective review and evaluation process also provide avenues for capturing and documenting feedback, good practices and lessons learnt, and includes an evaluation plan. It includes review points and the flexibility to adjust the strategic messages, communication strategy, communication plan and methods if needed.

The first step in the evaluation process is to decide what to measure. For instance, stakeholder and user engagement may be assumed to be effective if there is an increase in the awareness, advocacy and use of geospatial information. It is good practice to establish baseline data. This process is referred to as 'benchmarking' and can take on various forms.

Through review and evaluation, it is possible to identify tactics to manage risks associated with stakeholder's engagement. For instance, it may be observed that a group of stakeholders is not engaging in the geospatial information management policy and development process. The answer may be that they have difficulty engaging with government and this has affected their ability to fully participate in the initiative.

It may be necessary to work with stakeholders to augment their contribution or offer modified or different models of engagement. Without a robust review and evaluation process, it is difficult to know which approaches are working and whether changes are needed.



An example of a Review and Evaluation – Methods for Benchmarking is provided in Appendix 9.8.

9.6.12 Stakeholder Surveys

Stakeholder Surveys are a useful method for receiving stakeholders' perspectives and pinpointing particular issues relating to integrated geospatial information management.

Surveys can be targeted at specific sectors to better understand stakeholders' opinions, knowledge, understanding and attitudes. They can also be used for the organization to understand what stakeholders think of the resultant products or services, or about the effectiveness of the 'geospatial brand' or strategic messages delivered. Survey topics may include information access, data content, data quality, use and usability and legal issues such as licensing and data reuse.

Survey results, with accompanying analysis, will provide an understanding of what stakeholders' needs and priorities are and how best to engage with the different groups. For example, data access issues for government agencies may stem from inadequate data sharing technologies, while for private companies and individual's access issues, it may relate to not knowing what data is potentially available and/or where to find it.

In initiating and preparing for a Stakeholder Survey, including a stakeholder satisfaction survey, a set of well-defined goals need to be established. The next steps are to select a survey tool, develop a plan to execute the survey, and execute to plan.

While the execution of a survey is straightforward, the questions can be difficult to formulate in a way that makes it possible to get accurate and useful data. It is worthwhile conducting a test on the questions with a small sample of stakeholders before sending it out to a wider audience. Questions target the "what", "why", "how" and "when" related questions on a specific topic.

9.6.13 Benefits Communication

Building the knowledge and benefiting from lessons learned are necessary to support engagement with policy-makers.

Building the knowledge necessary to support effective communication and engagement, and drawing on a consistent set of facts, is essential for engagement with policy-makers. This knowledge will reside both within and external to an organization or a country. There will be many materials derived from analysis of the benefits of the implementation of the IGIF. The benefits identified in Strategic Pathway 3: Financial, and the supporting evidence, along with other use cases identified in the country or internationally, will build this knowledge. It is important to communicate the benefits of geospatial information as they come to fruition. This is a challenge for national geospatial information management organizations, it is therefore beneficial to learn from other countries successes.

Similarly, letters supporting, commending or thanking national geospatial information organizations for enabling successful national policy outcomes also illustrate the benefits of implementing the IGIF at the country level. Benefits are not all obvious, particularly political benefits. Close relationships with other governmental organizations will help understand these better. However, benefits analysis, socio-economic-environmental-political, are needed, especially when there are significant investments in a country's geospatial information program.

The outcomes of any socio-economic impact assessment (see SP3: Action 3.6.9) of integrated geospatial information management contributes to the strategic messages and supports stakeholder and user engagement, especially when these socio-economic benefits can be communicated effectively including via media channels.



See Interrelated Actions on Benefits Realization Plan (SP3); and Socio-Economic Impact Assessment (SP3).

9.6.14 Lessons Learned Resource

Documenting lessons learnt can be an invaluable resource as effective communication and engagement strategies are iterative and responsive to situations and changing times.

Capturing implementing experiences and lessons learned, particularly when documented and available online, promotes the availability and sharing of knowledge and experience that supports the iterative and continual improvement nature of effective communication and engagement. This resource is good for the organization, its existing and future strategy, plans and methods apart from communicating commitment to excellence and to learn from the actual experiences of one another.

Responses from national stakeholder surveys, both positive and negative, form part of this resource of lessons learned, along with the many reports, documents and publications of the United Nations

Committee of Experts on Global Geospatial Information Management⁷ such as the Future Trends in Geospatial Information Management: the five to ten year vision⁸.

Use cases that demonstrate the benefits achieved by a nation are particularly helpful; many organizations globally will already promote these online. An effective monitoring and evaluation framework also provides avenues for capturing and documenting feedback, good practices and lessons learned. A 'Lessons Learned' resource can be virtual - the objective is to provide a source of reference material that can support the communications and engagement strategy, plans and methods and actions recommended under this strategic pathway.

9.7 Deliverables

The outputs typically created as a result of completing the actions in this strategic pathway are listed in the deliverables below. They are the key success indicators in realizing an Integrated Geospatial Information Framework. Examples include:

- Communication and Engagement Strategy providing a single, coherent narrative that describes the communications solution.
- Working Group for Communication and Engagement.
- Listing of identified stakeholders and their contact information.
- Report of a stakeholder analysis exercise.
- Copy of a Policy Platform.
- 'Geospatial brand' and strategic messages designed to communicate and engage stakeholders and users.
- Communication Plan specifying methods of engagement, resources allocated and developing the campaigns including an internal communication section.
- Review and Evaluation Plan, including stakeholder surveys and defined goals.

9.8 Outcomes

The following outcomes result from encouraging greater and active stakeholder and user engagement, strategic messaging, well-developed communication strategy, plans and methods and continual monitoring and evaluation for integrated geospatial information management:

- Heightened awareness and active engagement for strengthening geospatial information management.
- Elevated sense of trust in government information, confidence and increased use within government and stakeholders.

⁷ <http://ggim.un.org/UN-GGIM-publications/>

⁸ http://ggim.un.org/meetings/GGIM-committee/10th-Session/documents/Future_Trends_Report_THIRD_EDITION_digital_accessible.pdf

- Greater synergy with the private, scientific, academic and research sectors, leading to increased opportunities, innovations and accomplishments.
- Increasing engagement, improved awareness, kept informed, included and able to contribute and participate in geospatial policy-making and programs.
- Positive relationships within government, and between government and stakeholders, including the general public, leading to greater efficiency and effectiveness.

9.9 Resources

As part of the work programme of UN-GGIM, there are a number of communication and engagement activities such as those by the Subcommittees, Expert and Working Groups of the Committee of Experts. These initiatives and activities are multi-stakeholder when arriving at outcomes and outputs. This inclusive and participatory nature of work has resulted in the development and preparation of a number of outputs and publications that are helpful and useful when addressing the challenge in communicating and engaging stakeholders and users that impacts geospatial information management. These include:

- **UN-GGIM Future Trends in Geospatial Information Management** - the five to ten year vision: The publication plays a leading role in considering how key elements of geospatial information management and trends are likely to change over a five to ten-year timeframe. This is regularly used as evidence in engagement activities.
- **Expert Group on Land Administration and Management:** Plays a leading role in raising awareness and advocacy, and highlighting the importance to decision-makers of the need for efficient and effective land administration and management.
- **Expert Group on the Integration of Statistical and Geospatial Information:** Plays a leading role in raising awareness and highlighting the importance of reliable, timely, fit-for-purpose, and integrated statistical and geospatial information to support social, economic, environmental, and resilience policy decision making, including at the sub-national and regional levels.
- **Working Group on Policy and Legal Frameworks for Geospatial Information Management:** Plays a leading role in raising awareness and advocacy, and highlighting the importance of sound legal and policy frameworks for geospatial information management at the highest levels in order to promote development, innovation, production consumption, and distribution of geospatial information in the midst of rapidly changing societal norms towards access to data and other types of information.
- **Working Group on Marine Geospatial Information:** Plays a leading role at the policy level by raising political awareness and advocacy, and highlighting the importance of reliable, timely and fit-for-purpose marine geospatial information to support the administration, management and governance of the marine environment.

9.10 References

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