



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 Integrated Geospatial Information Framework within organizations and with stakeholders.*

Summary

Communications and engagement develop and sustains effective, trusted and collaborative relationships with stakeholders. Successfully undertaken, it persuades stakeholders to invest in geospatial information and its applications.

Communication and engagement raise awareness and advocacy to the community, businesses, professionals, decision makers and politicians of the relevance, contributions and benefits of integrated geospatial information management at all levels. It does so in the midst of rapidly changing societal norms and economic outlooks and against a backdrop of many competing agendas.

Gaining political and fiscal recognition of the need for integrated geospatial information is a challenge faced from local to global levels. The value of an effective communication strategy and implementation plan cannot be overstated towards ensuring a successful geospatial program. Adopting a strategic and professional communications approach, telling inspiring and relevant stories, and finding champions is not familiar terrain for the geospatial community. Yet it is absolutely critical. This strategic pathway aims to help address this shortcoming.

Common to all communication and engagement programs are four key elements that are required to build commitment, mutual understanding and cooperation between stakeholders to successfully implement the Integrated Geospatial Information Framework. The four elements are:

- **Stakeholder and User Engagement** - identifies and develops relationships and alliances with advocates, partners, users and third parties. Stakeholder and user engagement should be ongoing as interests, needs and motivations are diverse and will continually evolve over time.
- **Strategic Messaging and Engagement** - seeks to develop the narrative for clear, succinct and compelling messages to all audiences and at all levels to engender initial buy-in and retain support during implementation. Using



common goals, integrated and strategic messaging and engagement ensures a consistent approach for effectively sharing and receiving information.

- **Communication Strategy, Plans and Methods** – are needed to influence perceptions, advocate the significance and grow adoption of integrated geospatial information. An effective communication plan and efficient communication method is tailored to stakeholder interests and needs, and achieved through a forward-looking communication and engagement strategy.
- **Monitoring and Evaluation** - sets the performance measures to assess the effectiveness of communication strategies, plans and methods including processes to identify, engage and sustain stakeholders and users. It is a continual improvement mechanism to ensure that communications and engagement kept pace with changing times, methods and messages remain strategic and impactful.

These elements are underpinned by principles that promote successful communication and stakeholder 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 to achieving an Integrated Geospatial Information Framework. The overall structure for communication and engagement is illustrated in and anchored by Figure 9.1 below.

When implemented the actions (and their interrelated actions¹) 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 actively engaged in the process of strengthening geospatial information management.
- Increased use of geospatial information within government, the private sector and the broader community.
- Strong sense of trust in government information and confidence in its use.
- Greater synergy with the private, scientific, academic and research sectors, leading to innovations and major accomplishments.
- Opportunities to make recommendations that enhance development and increase the benefits of geospatial information to its communities and to the country.
- Increasing awareness, being kept informed, ability to contribute and influence government policy

¹ The interrelated actions across all Strategic Pathways are described in detail in Chapter X, the Index Chapter.

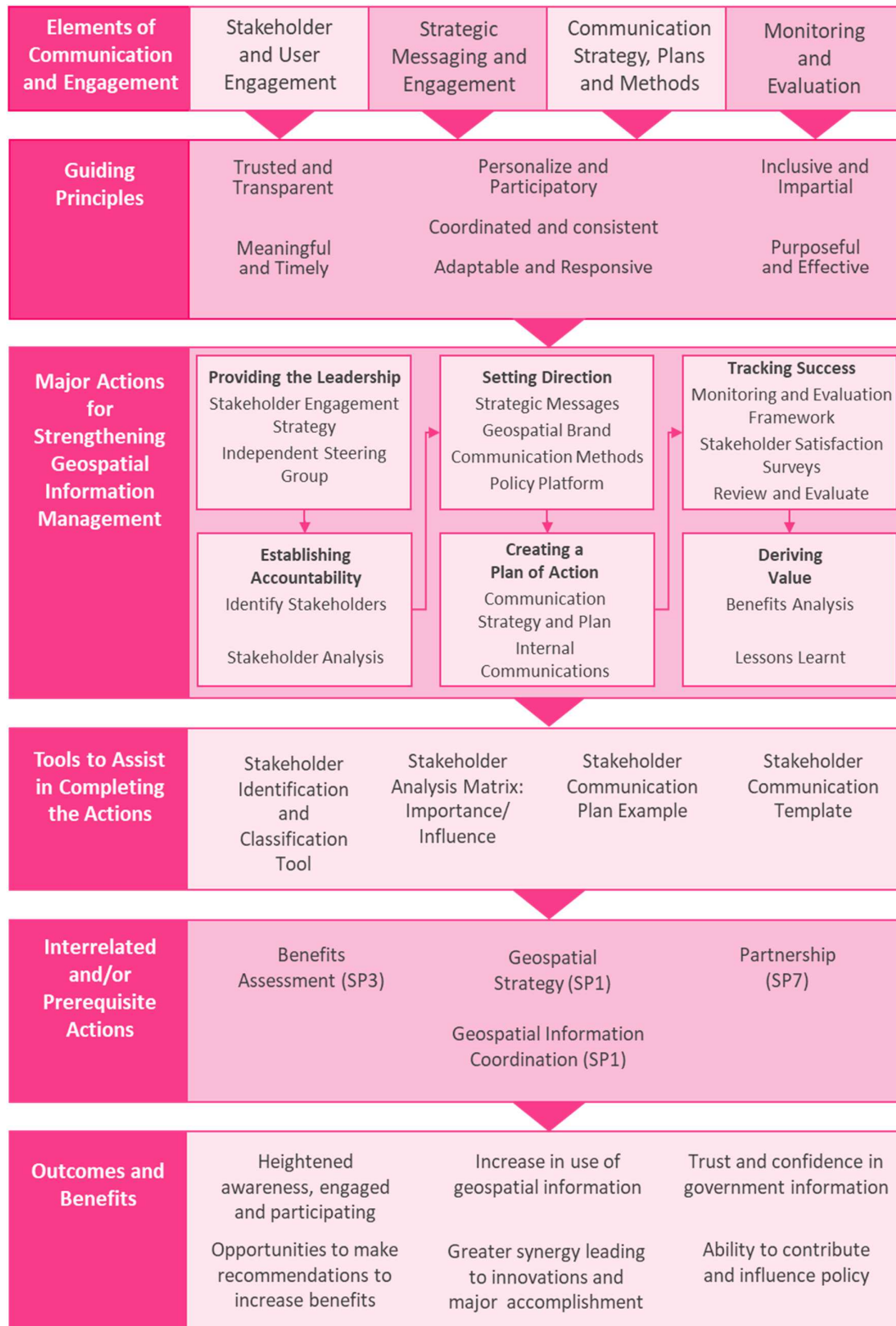


Figure 9.1 The overall structure for communication and engagement - showing the four key elements, guiding principles, actions and interrelated actions, and the tools provided in the appendices to support the achievement of outcomes

Communication and engagement involves the development of collaborative, productive and enduring relationships that lead to the identification of trends and emerging challenges.

9.1 Introduction

Communication and engagement involve the development of constructive, collaborative and enduring stakeholder relationships. Through engagement it is possible to identify the trends and emerging challenges which are currently impacting on geospatial information management or will influence the future.

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 concerns helps to improve whole-of-government outcomes for integrated geospatial information management and the identification of external risks. It can also form the basis for future collaboration and partnerships (See SP7: Partnerships).

Communication and engagement is about building and maintaining constructive relationships over time, and needs to be enacted early and maintained throughout the process of strengthening integrated geospatial information management. Communication and engagement is an ongoing process between all stakeholders and users, and extends throughout the life cycle of strengthening and implementation of integrated geospatial information management.

Effective communication and engagement is already occurring. 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. This awareness and advocacy is made possible by educating stakeholders on what geospatial information is, why it is important, and what benefits they can realize from its use. But much more needs to be done.

The geospatial community has much work to do in raising awareness and advocacy of the issues and benefits of geospatial information to establish new 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 from experts from across a broad range of disciplines and sectors.

The diversity of the user community is also changing, and this has an impact on the style, frequency and methods used to engage and communicate with stakeholders. It also means that communication and engagement strategies, plans and methods need to be far more reaching, inclusive, and versatile than ever before.

Communication and engagement strategies are crucial to implementing integrated geospatial information management processes and systems. Across government,

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

The geospatial sector can benefit from a participatory and inclusive environment, particularly in developing countries, where agencies and entities including local non-governmental organizations, regional and international development agencies or donor/philanthropic entities may be involved for a certain duration or period. Consequently, there is greater potential for conflicting approaches to evolve without awareness and alertness to development programs and projects – be they minor or major, strategic or tactical initiatives.

Communicating plans, project proposals and results are important to the success of an integrated geospatial information management development program. Consulting with stakeholders during this process provides additional information and understanding and oftentimes adds to the list of needs and expectations. Clearly outlining plans and projects proposals informs interested parties of the purpose and intent and encourages their support and concerns.

Sharing the benefits of planned activities and the results often encourages continued improvement and development and this is essential for strengthening integrated geospatial information management, which requires a multifaceted engagement approach.

9.2 Context and Rationale

In many countries, communication and engagement strategies have not been adequate for raising awareness and advocacy of the benefits that can be derived from geospatial information, and as a consequence, geospatial information products and services are not necessarily fit-for-purpose.

There are often weak links and communication gaps between the technical and political, and decision-making levels of government and geospatial professionals. Geospatial science is a complex and often misunderstood discipline. Practitioners are often challenged by the need to explain a relatively technical subject in everyday business language. Key strategic messages are often obscured by lengthy unnecessary technical descriptions. Therefore, the disconnect between the political, policy, and decision-making levels of government persist, resulting in low levels of political will, 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 and support.

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

While many traditional stakeholder groups are often already familiar with what they know about 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 the 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 Engagement Strategy and Communication Plan can foster a strong and active stakeholder and user community; from the initial identification of the individuals, groups and organizations that will raise awareness, advocate and champion the strengthening of geospatial information management, through to the implementation of policies, programs, technologies, processes and standards that will create a valuable volume of geospatial information that can be accessed and used by anyone.

In addition to establishing a way forward, the Stakeholder Engagement Strategy and Communication Plan are the mechanisms used to understand the requirements of each stakeholder group and their priorities, so that decisions can be made about data, applications and system functionality, and the suggested order in which they need to be implemented to gain early benefits.

Importantly, the communication and engagement needs of professional and non-professional users, and between government, business and citizen, 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 users' attitudes and understanding of the potential of geospatial information - requiring regular monitoring and evaluation of ongoing engagement strategies.

It is worth highlighting that stakeholders achieve considerable benefit from being able to engage and contribute directly to policy and program development for integrated geospatial information management. 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 process. Communicating the benefits and value of implementing an integrated geospatial information management action plan developed from this framework is difficult; the geospatial professional must learn to speak the policymaker's language.

Communication and engagement methods often lead to potential partnership opportunities through the identification of synergies between stakeholders and government 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.

When communication and engagement strategies, plans and methods are done well, government becomes recognized as open, transparent and accountable - one that values community input and is responsive to their expectations. 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 a comprehensive dialogue with all relevant actors and bodies (UN-GGIM, ECOSOC Resolution 2011/24].

9.3 Approach

In this strategic pathway, the approach for encouraging greater input from stakeholders and for achieving transparent decision-making is through the implementation of effective and efficient communication and engagement processes that attain stakeholder buy-in and commitment, including for the Integrated Geospatial Information Framework itself.

The approach includes four key elements that are a guide for countries to ensure stakeholders (as well as the general community) are integral to the implementation of integrated geospatial information management systems. These elements include the stakeholder and user engagement, strategic messaging and engagement, the communication strategy, plans and methods and monitoring and evaluation. These elements are explained in more detail below in Section 9.4.

The approach also includes strategic pathway activities that are recommended as a way to achieve the four key elements. The actions are underpinned by guiding principles, and there are several interrelated actions that need to be achieved prior to or in conjunction with the strategic pathway activities. These interrelated actions are referenced in the text and detailed under other related strategic pathways. Tools are available in the appendices. The Approach for Strategic Pathway 9: Communication and Engagement is illustrated in Figure 9.2 and explained in the following sections.

The actual implementation approach of each strategic pathway activity will depend on country-specific needs, which may be influenced by country priorities, existing capabilities, resourcing potential, culture and other practicalities. Whatever the implementation approach, each activity should reference the guiding principles below as these describe what is important for effective and efficient communication and engagement.

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



Figure 9.2 The Approach to communication and engagement.

9.4 Elements

Stakeholders are critical to strengthening integrated geospatial information management.

9.4.1 Stakeholder and User Engagement

Stakeholder and user engagement identify and develop relationships and alliances with advocates, users, partners and third parties. Given the underpinning nature of integrated geospatial information management, stakeholders will be diverse, priorities will need to be set, and expectations managed. Their interests, needs and motivations will evolve with time.

Stakeholders are crucial to strengthening integrated geospatial information management and their buy-in and commitment is vital to success. Stakeholders and users emanate from differing professional domains and bring a range of perspectives, requirements and expertise. Stakeholders include politicians and policymakers, government agencies and their employees, development organizations, philanthropic entities, geospatial information users (both professional and general), scientific institutions, universities and research centers, private sector suppliers (data, technology and services), private sector business users, NGO's and volunteer groups (as supplier, user and partner), consumers, and citizens (often the beneficiaries). Stakeholders also include cross-government policymakers and consumers of geospatial information.

It is important to identify these stakeholders and users early, including emerging users, and analyze 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, and legal and policy perspectives; to financial, business, education 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 a participatory and inclusive environment.

9.4.2 Strategic Messaging and Engagement

Strategic Communications use compelling messaging to attract stakeholders buy-in.

Strategic messaging and engagement seek to develop the narrative of clear, succinct, compelling and strategic messages to all constituents and audiences to engender initial understanding and buy-in and 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.

Coupled with strategic engagement, approaches will enable stakeholders, users and the general community to participate meaningfully in the processes, decisions and actions that will strengthen geospatial information management and its utility.

Engagement strategies are 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 integrated geospatial information management priorities. Importantly, engagement strategies are the mechanisms to ensure that geospatial policy is developed in a consultative manner.

Integrated engagement strategies involve proactive and ongoing communication over extended periods of time. They foster partnerships and promote collaboration and inclusive decision-making in how geospatial information management is to be strengthened. Strategies 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, organisations and other groups in policy and program development, as well as creating awareness to educate and generate momentum, embed communications across the implementation, and focus on key concepts that compel the reasons to change. Messages must be strategic, appropriate to the occasion and circumstances, honest and unembellished, that engender trust, promote acceptance and buy-in.

9.4.3 Communication Strategy, Plans and Methods

Communication strategy, plans and methods develop and use strategic messages and content from a forward-looking communication and engagement strategy to effectively 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 stakeholder engagement, user perceptions and interest, and grow adoption of integrated geospatial information.

Planning and Execution is critical to effective communication strategies and plans. Stakeholder communication and engagement must be 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 geospatial information management activities.

Planning and execution 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.

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

Much of the focus of this strategic pathway is on cross-government engagement and external engagement. However, effective communication strategies, plans and methods do not overlook the need to engage and communicate with those working in the agencies already delivering surveying, mapping, geospatial information, and geospatially referenced data.

Sharing information within an organization helps to assure success of the communication strategies and plan. 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, input 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 geospatial organization.

Internal communications and engagement help prepare an organization for the technical, organizational and cultural change necessary to deliver the vision and goals of the national integrated geospatial information strategy. 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 identifies if planning processes have been effective and whether engagement processes have achieved the intended outcomes.

A Monitoring and Evaluation Framework sets the performance measures to assess the effectiveness of the communication strategies, plans and methods including processes and methods to identify, engage and sustain the stakeholder and user community. The framework aims to evaluate whether the planning processes have been effective for identifying and communicating with stakeholders; and whether the engagement processes have achieved the intended outcomes. The monitoring and evaluation process is typically incorporated into normal operations and at times as feedback mechanism. It provides the opportunity to reflect and re-think communication and engagement practices as the plan to strengthen integrated geospatial information management is progressively delivered. These efforts address the question “how well did we do”, “how well have we communicate”, and “have we been effective or impactful”, in assessing the effectiveness of the communication strategies and plans.

There are a number of good practice examples for stakeholder monitoring and evaluation frameworks, tools and resources. These can be adopted by countries for planning and executing a communication and engagement strategies for strengthening geospatial information management and managing associated risks. Examples are described in the Actions Section below.

Effective monitoring and evaluation allows continual improvement including recalibration of communication and engagement efforts. It ensures strategic stakeholder and user engagement, and where the communication strategy, plans and methods are keeping pace with the changing times, delivering strategic

messages that continually contribute to an enabling environment for integrated geospatial information management to thrive and deliver its best and highest use.

9.5 Guiding Principles

The guiding principles, for effective and efficient communication and engagement, are to encourage greater input from stakeholders (including the general community) and promote transparent decision-making so that stakeholders can play a pivotal role in contributing to the success of strengthening integrated geospatial information management. The guiding principles are:

- **Trusted and transparent:** Open and honest communications builds trust and promote 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 and 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 honest, 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 various types of 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.

These principles will encourage stakeholders to engage and contribute to strengthening geospatial information management.

9.6 Actions

The following strategic pathway actions are recommended as a way to achieve the four key elements. Some actions have interrelated actions that need to be achieved prior to, or in conjunction with, the strategic pathway actions. These

interrelated actions are referenced in the text and detailed under other strategic pathways.

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

Whatever the implementation approach, each action should take into account the guiding principles above as these describe drivers for effective and efficient integrated geospatial information management.

The strategic pathway actions are divided into six categories that reflect the order in which the actions are typically completed. A road map illustrating this order and where the Actions typically occur is presented in Figure 9.3 and detailed more with interrelated actions in Figure 9.4. The categories of Actions are:

1. Providing the Leadership
2. Establishing Accountability
3. Setting Direction
4. Creating a Plan of Action
5. Tracking Success
6. Deriving Value

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



Figure 9.3: The Communication and Engagement Strategic Pathway includes several actions and tools designed to assist countries to achieve is essential to successfully deliver integrated geospatial information management arrangements, nationally and sub-nationally. The actions are divided into six categories and reflect the order with which these actions are typically completed

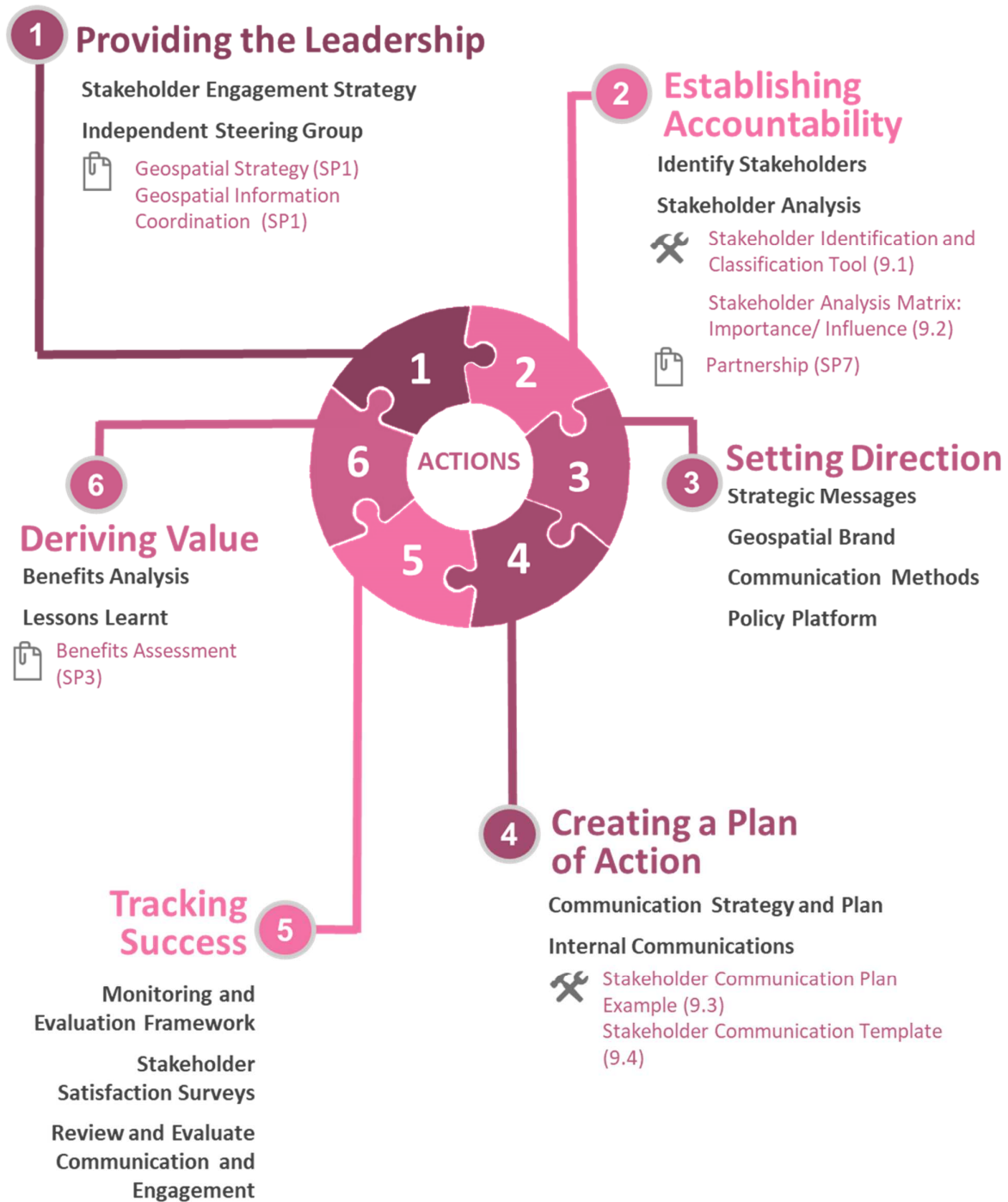


Figure 9.4: The Communication and Engagement Strategic Pathway includes several actions and tools designed to assist countries to achieve is essential to successfully deliver integrated geospatial information management arrangements, nationally and sub-nationally. The actions are divided into six categories and reflect the order with which these actions are typically completed.

1 Providing the Leadership

9.6.1 Develop a Stakeholder Engagement Strategy

The Stakeholder Engagement Strategy is the first step in laying the critical foundation for the stakeholder engagement process. It identifies and prioritizes key stakeholder groups and explains the method and timetable for 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, all the activities that follow will be affected, including the identification of stakeholders, determining the communication methods, and managing stakeholder expectations.

The Stakeholder Engagement Strategy includes the following:

- Strategic reasons for consulting with stakeholders.
- Outcomes required from the engagement process.
- Types of stakeholders to be consulted.
- Anticipated priority issues for both government and its stakeholders.
- Initiatives or events that are to be a key focus in the first year.
- Methods for communicating with stakeholders - these are likely to be different for each stakeholder type.
- Timing and sequencing issues e.g. which stakeholders to engage first and why.
- Accountability and responsibility for the consultation and how the results will be captured, tracked, reported and disseminated.
- Most important messages to be communicated.
- Preparation of any materials that communicate invitations, purpose, expectations, and any possible tasks.
- Opportunities to collaborate with other groups regarding communication to ensure messages are consistent and avoid consultation fatigue.
- Opportunities for stakeholders to participate in the process of strengthening integrated geospatial information management.
- Stakeholder engagement mandates e.g. Acts of Parliament that decree consultation, such as for Open Data Policy initiatives.

The Stakeholder Engagement Strategy is the first step in laying the critical foundation for the stakeholder engagement process.

- The management of risks associated with the engagement process.



Interrelated Activity
Geospatial Information Strategy

9.6.2 Form an Independent Steering Group

For long term complex projects an independent Steering Group may be required to guide stakeholder communication and engagement

It is good practice to initiate an independent Stakeholder Communications and Engagement Steering Group to guide the stakeholder communication and engagement processes. This is because strengthening integrated geospatial information is a large complex program of work with long term horizons and requires a concentrated effort and enduring results.

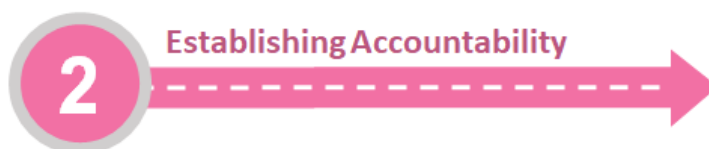
The Steering Group directs the planning and coordination of the stakeholder engagement program, and regularly reviews progress and effectiveness. The actual communication is generally conducted by the Geospatial Information Coordination Unit (SP1: Act 1.6.2), which reports regularly to the Steering Group (and vice versa).

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

One of the key responsibilities of the Steering Group is to ensure that the key messages for strengthening geospatial information management is communicated consistently across all stakeholder groups. This may include common branding across all communications to increase the profile of the program, create an environment of trust, and motivate stakeholders to be part of the initiative.



Interrelated Activity
Geospatial Information Coordination Unit



9.6.3 Identify Stakeholders

The stakeholder identification process considers all parties likely to be affected, both positively and negatively, directly or indirectly.

A fundamental requirement for strengthening integrated geospatial information management is that the goals and priorities reflect the needs of society and interest groups, and not merely the internal needs of government institutions. As such, the stakeholder identification process considers all parties likely to be affected by the program of work, both positively and negatively, directly or indirectly. The list of stakeholders can be extensive and include, among others:

- Politicians and policymakers and their staff.

- Government agencies, 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, donor entities including philanthropic foundations.
- UN agencies, other national governments, and non-government organizations.
- Geospatial information users in government, 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 public libraries.
- Private sector users, both professional and occasional.
- Professional bodies, volunteering groups, community-level associations, both as supplier, user and partners.
- Consumers and Citizens, often the same person, but with a different role.

Identifying stakeholders 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, also as means of raising awareness and sharing of information.

It is best to begin by being inclusive and include groups who traditionally are underrepresented in planning efforts. While there may be some challenges in this effort, 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. Of those who are known, it may be wise to avoid representatives who do not typically contribute or who may be unproductively

argumentative. That said, the selection process is sometimes unavoidable. The following list of categories are provided as an example:

- **Data Suppliers/Producers:** Organizations responsible for generating geospatial data, such as the Survey Department and Environmental Agencies, as well as private companies that collect and distribute geospatial information.
- **Value-adding Organizations** - Government departments and commercial enterprises who add value to the data by extracting information from the data collection, such as Department for Disaster Management. Other organizations may take the basic geospatial information made available and add more data categories and attributes that form new products.
- **Business Users:** Information users including administrators, managers, agriculture co-operatives, trade organizations, retailers and general public who acquire economic benefits from the availability of information.
- **Political and Decision Makers:** Decision makers, such as Ministers and Committees/Councils who influence financing, policy and strategic priorities of government.
- **Interest Groups:** Community groups with a special interest in spatial information and its use, such as professional bodies and institutes, as well as Surveying, Geospatial Information and IT-related Societies, volunteered geographic information providers and hobbyists.
- **Government Organizations:** National/federal agencies, National legislators; regional and local government
- **Education Institutions:** Ranging from universities to local primary schools;
- **Media Organizations:** Newspaper, television, journals, radio etc. Note: this group has one of the greatest time dependencies but often the least understanding of geospatial information and what to do with it.
- **Libraries:** Ranging from national to neighborhood libraries that have an interest in provisioning geospatial information as opposed to being a traditional information users.



An example template for classifying stakeholders is provided in Appendix 9.1

9.6.4 Conduct a Stakeholder Analysis

Stakeholder analysis is used to understand the relationships and any complexities that may exist between the stakeholders and the activities being undertaken by government towards strengthening integrated geospatial information management.

Stakeholders have different levels of influence over, and interest in, geospatial information management. The stakeholder analysis process considers what interest a stakeholder has in strengthening geospatial information management; how they will be impacted by change, and what influence they wield (Figure 9.5).

Geospatial Information is cross-cutting but the emphasis and use placed by different stakeholders will differ. Gaining this understanding of stakeholder needs from the development of national integrated geospatial information management invariably benefits from effective workshops to understand stakeholder challenges.

It is important to consider whether a stakeholder group is likely to block change if their views are not considered seriously or conversely, consider if they have collaboration potential as a partner that can fast track geospatial data and Information and Communication Technologies (ICT) development, and/or policy implementation.

Stakeholder analysis is relatively straight forward and there are tools (Figure 9.2) available to assist in categorizing stakeholders according their level of influence and interest. An example is provided below - stakeholders are mapped to the quadrant which best identifies with their level of influence and importance.

This classification process is then used to determine the level and type of communication methods required for each stakeholder and decide whose interests and views are to be given priority. For instance, significant awareness-raising may be required to turn highly influential stakeholders that have a low interest into potential interested collaborators. At some point, influential stakeholders are prime candidates to serve as advocates on the importance of geospatial information as well as the benefits of varying levels of support.

Stakeholder analysis is used to understand the complexities of the relationships between the stakeholders and the activities being undertaken by government.

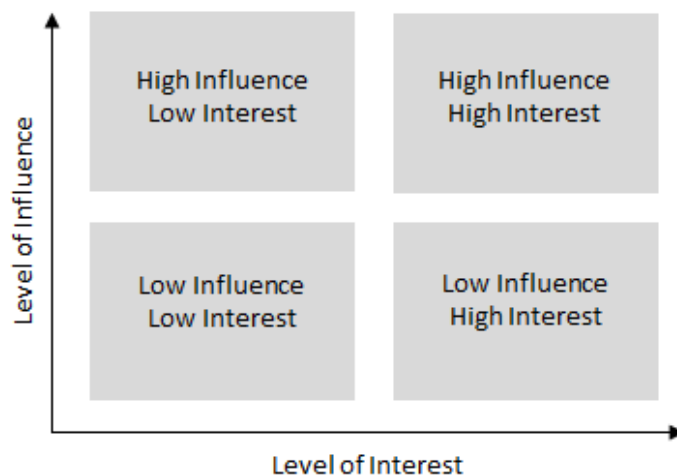
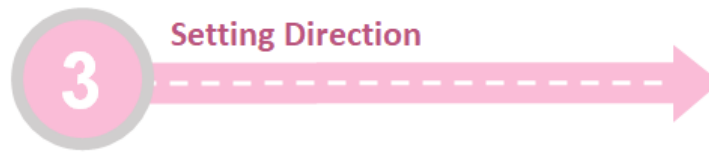


Figure 9.5 Stakeholder Analysis



An example of a Stakeholder Analysis Matrix: Importance/Influence is provided in Appendix 9.2.



Everything happens somewhere.

9.6.5 Strategic Messages

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 can be applied. Another quoted message used by the UN-GGIM is “Everything happens somewhere” by Nancy Tosta in 2001 which serves as a guiding principle for the geospatial community by highlighting the importance of location. Geospatial information includes basic location information in one of a variety of forms as one of its core characteristics. The value of location is a basic building block from which all other information can be added or derived.

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

9.6.6 Geospatial Brand

A brand is a set of associations that a person (or group of people) makes with a company, product, service, individual or organisation. Google and Apple are amongst the most successful brands globally. Yet, one of the most significant impediments to NSDI development and roll-out in most countries has been the lack of a coherent understanding of geospatial information – the geospatial brand is weak. While absolute control over a brand is not possible due to outside influences, intelligent use of design, advertising, marketing, service proposition, corporate culture and so on, can all really help to generate associations in people’s minds that will benefit the objectives of the Integrated Geospatial Information Framework.

Brand is created 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 should be developed to support the strategic messages.

9.6.7 Communication Methods

Communication and engagement encompass a range of activities and approaches, from information sharing and consultation, to participation, negotiation and partnerships.

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 stakeholder engagement and selecting the relevant tools and techniques will vary depending on the situation, time available, skills within the team, and budget constraints.

There is no one right stakeholder engagement method. Each engagement method will have its own benefits and limitations and it is important to select the right one for the particular context. The disadvantage and advantages of commonly used methods are provided below for guidance (SPARC, 2019):

- **Seminars, Conferences, Workshops and Meetings:** These are the most effective methods for building and maintaining relationships, influencing views, creating goodwill and for seeking feedback. They are however, expensive to deliver – catering costs, venue etc. If vendors are included as part of a technical exhibition, their registration and sponsorship can offset costs significantly.
- **Websites:** Websites are a great way to disseminate materials and information is accessible all hours. Information can be separated into public sections and more secure sections for specific groups and committees. However, websites can be expensive to set-up and need to be constantly updated and promoted to attract continuous user traffic. Users won't normally go to a website unless drawn to it. Links to a website can be included in other communication media as a way to direct users there.
- **Online Newsletters:** Suited to short focused messages. Online Newsletters are fast and easy to dispatch, and cheaper to produce and distribute. They can be announced via an email subscription list. They are also easy to re-share and suitable for social media. The downside is that they can be viewed as spam and end up in junk email folders and may be returned if email addresses are not kept up-to-date.
- **Printed Newsletters:** These are excellent for more in-depth articles and have a longer shelf life because people tend to keep them on desks and tables. However, they do have longer production times and are more expensive to produce than online newsletters. Also, mailing lists need to be maintained and this can be time consuming.
- **Strategies, Brochures and Reports:** Are a great opportunity to build visibility of the government's integrated geospatial information management initiatives. They can be distributed at conferences and seminars where larger print runs can reduce per unit cost, and like printed newsletters, they have a long shelf life. The cost of production may be prohibitive. Another alternative can be to include these documents as PDF

Communication and engagement encompass a range of activities and approaches.

files on a give-away USB drive. The downside is that users have to be interested and take action to look at them.

Methods of engagement are typically classified according to an objective - that is whether methods are²:

- 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.

Figure 9.6 illustrates how these objectives are linked to the level of influence and interest of stakeholders, and Table 9.1 shows how the different communication methods are mapped to a particular objective.

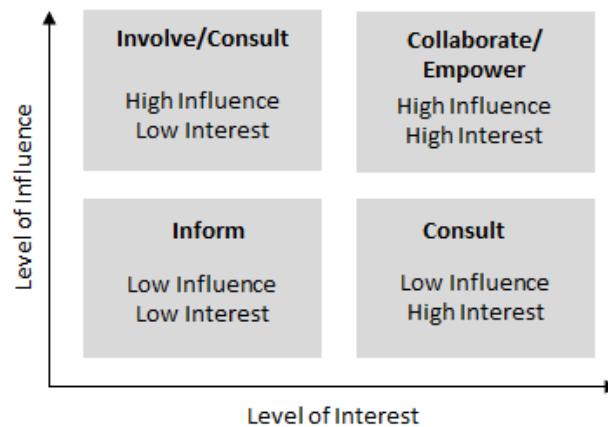


Figure 9.6 Stakeholder Analysis – Stakeholders are mapped according to a Communication objective



An example of a communication plan that provides communication objectives and methods for connecting with stakeholders to is provided in Appendix 9.3

Objective	Communication Method
Inform	Fact sheets, annual reports, bulletins and letters, speeches, conferences, media releases, websites, open days, newsletters, bulletins, circulars, reports, briefings, blogs, social media, webinars
Consult	Face-to-face Meetings, Surveys, Seminars, Public Meetings, Focus groups, Surveys/Questionnaires, Online feedback and discussion
Involve	Workshops, Web 2.0 tools (such as wikis, blogs, and podcasts) Forums

² 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>

Collaborate	Reference Groups, joint projects, participatory forums for decision-making; pilot projects, workshops, consultative committees, advisory panels, multi-stakeholder initiatives, partnerships
Empower	Facilitated direct dialogue between stakeholders and government, committee members, shareholders, joint planning

Table 9.1 *Types of Engagement Methods (adapted from IPA2, 2007).*

9.6.8 Establish a Policy Platform

A policy platform is a powerful document that outlines a community's top priorities that are in need of high-level government support. Policy platforms are initiated by advocacy groups, including professional bodies and surveying and geospatial associations, as a way to approach government representatives and request their support on key issues, such as to request access to geospatial information resources.

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

A policy platform creates a united voice. It helps politicians, professional entities, and government officials understand what is needed. 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 significant time to establish such platforms.

Policy platforms are usually developed in a workshop setting with a group of diverse stakeholders to brainstorm topics and prioritize the main items. These items may include the need for an Open Data Policy, a new geospatial data theme or effort at collecting geospatial information 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 that are supported by 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. Once the feedback is considered, the final version can be sent to stakeholders for signatures of support.

The lead organization for the policy platform organizes a meeting with political candidates to garner support. Once an agreement is reached, a public meeting can be arranged to generate positive publicity for both the candidate and the policy platform. It is good practice to invite the media so that there is a public record. A one-page fact sheet can be used to make it easier for journalists to report on the event, particularly as geospatial information is often not well understood.

An alternative to the direct political approach for initiating and implementing a new policy or a policy reform is to take the steps of engagement discussed above and formulate a budget initiative that focuses on the geospatial policy. Political

support is garnered through educating key government agencies and their support network to further educate those who approve budgets and budget initiatives.

4 Creating a Plan of Action

The communication plan is used to maintain open lines of communication with stakeholders.

9.6.9 Develop the Communication Plan

The communication strategy and plan are used to maintain open lines of communication with stakeholders. The plan recognizes that organizations and authorities at different levels of government, businesses and interest groups have different motives and interests. The Communication Plan brings together the information gathered during the identification and analysis of stakeholders. The plan includes:

- The stakeholders contact information and their organization affiliation if appropriate – this will enable the stakeholder communication process
- The level of impact that changes to integrated geospatial information management will impact 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 the stakeholder has on driving change (Low, Medium and High) and why.
- What geospatial information is important to the stakeholder to better understand if there are common, essential and aspirational needs
- 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 block the process of change. This is important as it may have political ramifications.
- 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).



An example of a Stakeholder Communication Template is provided in Appendix 9.4

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, ITC resources, and sundries such a stationary, postage etc.
- Develop a quarterly calendar for communications. This helps with identifying overlaps in communications and where additional resources may be temporality required.
- Develop the content for key messages and branding for communications.
- Identify tactics to manage risks associated with stakeholder engagement e.g. such as using different communication styles to accommodate culture and diversity.

Finally, it is good practice to officially launch the Communication Plan as a way to let Stakeholders know what to expect.

9.6.10 Internal Communications Plan

Internal communications can be taken in several contexts. For a national agency it refers to staff, but it could equally be a geospatial community in a nation, a group of 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 from an organization strengthens a message. Staff, and in particular those engaging with stakeholders, should all be reinforcing the same message. They therefore need to understand and champion the message.

Internal communications are for the benefit of staff who will 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 those who have a general interest. Knowing which part any one staff member plays is not necessarily predictable or even knowable. 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 on geospatial information within the organization, and the plan for engagement with stakeholders and users.

Invariably, to contribute to the geospatial needs of a nation, organizations need to change. It may be conceptually, or it could be significantly with new technologies, processes, skills and outputs. Staff need to understand why change is happening, and their part in the future. For many national mapping agencies, developing the workforce is the most significant challenge faced in implementing innovative geospatial capabilities. Internal communications becomes essential in delivering change.

Tracking Success

Monitoring and evaluation provides the opportunity to reflect and re-think engagement practices.

9.6.11 Monitoring and Evaluation Framework

The Monitoring and Evaluation Framework ensures regular monitoring of achievements towards attaining the strategic communication and engagement goals. A monitoring and evaluation framework identify the success indicators, reporting mechanism (e.g. traffic light reporting method), evidence of achievement etc.), suggestion and feedback mechanism. Monitoring and evaluation require discipline to periodically check the status of the strategy, plans and methods. Monitoring also includes establishing a culture of open dialogue when something goes amiss from the planned set of activities. Knowing problems occur as soon as possible helps in controlling the impact and provides more time to propose options for mitigating the problem.

The Monitoring and Evaluation Framework should:

- Identify the people, groups and organizations involved in delivering and maintaining 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.
- Success indicators are used 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.
- Achievement of objectives indicates you are on the right path towards achieving your 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 monitoring and evaluation framework also provides avenues for capturing and documenting feedback, good practices and lessons learnt.

9.6.12 Stakeholder Satisfaction Surveys

Stakeholder surveys are a useful method for stakeholder perspectives and for pinpointing particular issues relating to integrated geospatial information management. They can be targeted at specific sectors to better understand stakeholder's opinions, knowledge, understanding and attitudes. Satisfaction survey topics may include information access, data content, data quality, use and usability and legal issues such as licensing and data reuse.

The results of surveys 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 relate to not knowing what data is potentially available and/or where to find it.

While the execution of surveys 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 should target the what, why, how and when related questions on a specific topic.

Stakeholder surveys are a useful method for pinpointing particular issues relating to integrated geospatial information management.

9.6.13 Review and Evaluate Communication and Engagement Strategies

A Stakeholder Review and Evaluation Plan is used to determine whether engagement processes are working well, and if the intended outputs and outcomes will be delivered in the long term. The Evaluation Plan should include review points and the flexibility to adjust an approach if needed.

The first step in the evaluation process is to decide what to measure. For instance, stakeholder 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 including:

- Interviews with stakeholders to see if they have noticed a difference in communications. These can be informal such as contacting a stakeholder to learn how well the communication and program are going. A more organized approach could include a session during a stakeholder meeting to engage them with their reactions.
- Feedback questionnaires at conferences and seminars. A count of the number attending is usually an indicator of growing or waning interest and thus the effectiveness of engagement.
- Number of news articles referencing geospatial information, and new location-based products and services, and Apps.
- Number of organizations complying with new policy initiatives, for example an increase in the number of datasets available, indicates compliance with data sharing policy.
- Stakeholder satisfaction surveys that ask for a rating on communication and engagement performance. These can be repeated annually to gauge if improvements are occurring.

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.



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

9.6.14 Benefits Analysis

Building the knowledge necessary to support policy 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 a nation or organization.

There will be much material. The benefits identified in Strategic Pathway 3, and the supporting evidence, along with other uses cases identified in the nation or internationally will sit in this library. So too will letters supporting or thanking geospatial organisations for enabling successful national policy outcomes.

9.6.15 Lessons Learnt

Use cases that demonstrate achieved benefits in a nation are particularly helpful; many organisations globally will already promote these online. An effective monitoring and evaluation framework also provides avenues for capturing and documenting feedback, good practices and lessons learnt. Documenting lessons learnt can be an invaluable resource as effective communication and engagement strategies are iterative and responsive to situations and changing times. Responses from national stakeholder surveys, both the good and the not so good responses, should also form part of this library of lessons learnt along with documents such as the United Nations Future Trends in Geospatial Information management.

The library concept can be virtual. The objective is to provide a source of reference material that can support the strategy, plans and methods.



Interrelated Activity
Benefits Assessment (SP3)

9.7 Deliverables

The following are products derived through the integrated geospatial information management development process under Strategic Pathway 9.

- A Stakeholder Engagement Strategy.
- Steering Group for Stakeholder Communication and Engagement.
- A list of Stakeholders and their contact information.
- A Communication Plan specifying method of engagement and resources allocated and developing the campaigns.
- A Stakeholder Review and Evaluation Plan.
- Stakeholder Surveys on particular issues/topics.
- Stakeholder Satisfaction Surveys.
- Internal Communications Plan.

9.8 Outcomes

The following outcomes stem from encouraging greater input from stakeholders and creating an environment of transparency in governance and decision-making:

- Stakeholders and users are actively engaged in the process of strengthening integrated geospatial information management.
- There is a heightened awareness and understanding about geospatial information within all levels of government and across all industry sectors.
- There is an increase in the use of geospatial information within government, the private sector and the broader community.
- The community has a strong sense of trust in government provided geospatial information and the confidence to use it.
- There is an increase in transparency and more clear, open, and simplified means in dealing with government.
- There are opportunities to engage with government, contribute to and influence government policy and process.
- There are increases in business opportunities for both government and the private sector through an increased awareness of government activities and user needs.
- There is a positive change in working relationships between government and industry resulting in greater synergy that leads to significant accomplishments.

9.9 Additional Resources

As part of the UN-GGIM program of work, there are a number of outreach activities that are aimed at providing the instruments and knowledge to better engage with stakeholders. In addition, these groups are actively engaging at senior levels to raise awareness of the importance of geospatial information for sustainable development. They are as follows

- **Expert Group on Land Administration and Management:** Plays a leading role at the policy level by raising political awareness and advocacy and highlighting the importance to decision makers of the need for timely and fit for purpose land administration and management”.
- **Working Group on Legal and Policy Frameworks:** 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 Big 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.

Also, many of the UN-GGIM members and associated societies have active engagement programs, which could act as a reference for national engagement programs.

9.10 References

International Association for Public Participation (IAP2). 2007. IAP2 public participation spectrum [Online]

Sport and Recreation New Zealand (2019) Creating a Stakeholder Communications, [Online] Available at

https://www.sportbop.co.nz/downloads/3.4._Creating_a_Stakeholder_Communications_Plan.pdf, accessed January 2019.