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

Communication and engagement develops 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 raises 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 and priorities.

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 as a key strategy to ensure a successful geospatial program. Adopting a strategic and professional communications approach, telling inspiring and relevant 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.

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 change and 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 through 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 methods tailored to stakeholder interests and 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 principles that promote successful communication and stakeholder and user 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 (IGIF). The overall structure for communication and engagement is illustrated in and anchored by Figure 9.1.

When implemented the actions (and their interrelated actions) 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 in the process of 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, being kept informed, ability to contribute and participate, and included in geospatial policy-making and programs; and
- Positive relationships within government, and between government and stakeholders leading to greater efficiency and effectiveness.

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1 Example of the interrelated actions across Strategic Pathways are described in the introductory chapter; Solving the Puzzle: Understanding the Implementation Guide.
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 involves the development of constructive, collaborative, enduring and trusted stakeholder relationships. 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 whole-of-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 engagement it is possible to identify trends and emerging challenges which are currently impacting on geospatial information management, or will influence the future.

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

Effective communication and engagement is 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. 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.

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 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; 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 and plans, and effective 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 greater potential for conflicting approaches to evolve without awareness and alertness of the 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, 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 in raising awareness and advocacy of the benefits that can be derived from geospatial information. As a consequence, the generation of geospatial information 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 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 and unnecessary technical descriptions. 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 and support.

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 and user engagement strategy and communication 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 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, used and re-used.

In addition to establishing a way forward, stakeholder and user engagement and a communication 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 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 user’s 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. 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 the IGIF
through a Country-level Action Plan is difficult; and the geospatial professional must learn to speak the policy-maker’s language.

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.

When communication and engagement strategies, plans and methods are implemented well, government becomes recognized as open, transparent, responsive and accountable - one that values community input and is attentive to their expectations. 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 a comprehensive dialogue amongst Member States, and between Member States and international organizations and the United Nations system.²

9.3 Approach

In this strategic pathway, the approach for encouraging greater input from stakeholders and for achieving inclusive and transparent decision-making is through the implementation of effective and efficient communication and engagement processes that attain stakeholder buy-in and commitment for, and to uniquely position the IGIF as a new paradigm, a new way of ‘doing business’.

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 and engagement, effective communication strategy, plans and methods and continual monitoring and evaluation. These elements are explained in more detail in Section 9.4 below.

To implement this strategic pathway, as in all strategic pathways, the approach is dictated by national circumstances. Country-specific priorities and needs may be influenced by existing capabilities, resourcing potential, culture and other practicalities.

The approach includes strategic pathway actions that are recommended as a means 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

² United Nations Economic and Social Council (ECOSOC) resolution 2011/24 establishing UN-GGIM in July 2011.
strategic pathway, there are several interrelated and/or prerequisite actions detailed in in other strategic pathways that may also need to be completed prior to or in conjunction with the strategic pathway actions. 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

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 is 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 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, 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.
Outcomes
- Heightened awareness and active engagement in strengthening geospatial information management
- Elevated sense of trust, confidence and increased use of geospatial information
- Greater synergy leading to increased opportunities, innovations and accomplishments
- Increasing engagement, informed, contributing and included in geospatial policy-making and programs
- Positive relationships leading to greater efficiency and effectiveness

Elements
- Stakeholder and User Engagement
- Strategic Messaging and Engagement
- Communication Strategy, Plans and Methods
- Monitoring and Evaluation

Guiding Principles
- Trusted and Transparent
- Personalize and Participatory
- Inclusive and Impartial
- Meaningful and Timely
- Coordinated and Consistent
- Purposeful and Effective
- Adaptable and Responsive

Tools
- 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: Benchmarking

Approach

Actions
Providing Leadership
- Engagement Strategy
- Steering Group
- Internal Communication

Understanding Opportunities
- Stakeholder Identification
- Stakeholder Analysis

Setting Direction
- Policy Platform
- Geospatial Brand
- Strategic Messages

Creating Plan of Action
- Communication Strategy
- Communication Plan
- Communication Methods

Monitoring Progress
- Review and Evaluate
- Stakeholder Surveys

Communicating Value
- Benefits Analysis
- Lessons Learnt

Figure 9.2: The approach to communication and engagement.
9.4.2 Strategic Messaging and Engagement

Strategic messaging and engagement 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 and engagement 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’.

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 nationally integrated geospatial information management and its priorities. Importantly, engagement strategies are the mechanisms to ensure that any geospatial information policy and strategy 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 with the implementation of the IGIF. 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 a 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, embed communications across the implementation process, 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, and that promote acceptance and buy-in.
9.4.3 Communication Strategy, Plans and Methods

A 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 and effective stakeholder and user engagement, perceptions and interests, and grow adoption of the IGIF.

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.

Much of the focus of this strategic pathway is on cross-government engagement and external engagement. However, effective communication strategies, plans and methods must 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 them, the potential change could be perceived as a threat or an opportunity; it needs to be rightly seen as opportunity through effective internal communication.

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, 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 communications and engagement help prepare an organization for the organizational, technical, and cultural change necessary to deliver the vision and goals of the 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

A monitoring and evaluation process sets the performance measures to assess the effectiveness of the strategic messaging and engagement, communication strategies, plans and methods, including activities and procedures to identify, engage and sustain the stakeholder and user community. The process aims to evaluate whether the planning and preparation aspects have been effective for identifying and communicating with stakeholders, and whether the engagement activities and procedures have achieved the intended outcomes.

The monitoring and evaluation process is typically incorporated into normal operations and, at times, as a feedback mechanism. It provides the opportunity to reflect and re-think communication and engagement practices as the Action Plan to implement the IGIF progresses. These efforts address the questions “how well did we do”, “how well have we communicated”, 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 processes, tools and resources. These can be adopted and adapted by countries for planning and executing a communication and engagement strategies for strengthening geospatial information management and managing associated risks.

Effective monitoring and evaluation allows continual improvement including recalibration of communication and engagement strategies and efforts. It ensures strategic stakeholder and user engagement, effective messaging, 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 nationally integrated geospatial information management to thrive and deliver its best and highest use.

9.5 Guiding Principles

There are specific guiding principles and elements common to effective and efficient communication and engagement, to encourage greater input from stakeholders, and promote inclusive and transparent decision-making so that stakeholders can play a pivotal role in the success of strengthening integrated geospatial information management. Replicating a successful communication and engagement arrangement from one country to another will likely not work in its entirety, as there are different priorities and levels of development maturity, and cultural aspects that need to be taken into account. That said, using and leveraging good ideas and successful implementations across countries is encouraged where the arrangement is suitable. The guiding principles for communications 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 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 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.

### 9.6 Actions

The strategic pathway actions are recommended as a means to achieve the four key elements of communication and engagement. 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.

For ease of use, particularly to assist countries in the initial and early stages of developing and strengthening their national 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 and/or prerequisite actions that need to be achieved prior to, or in conjunction with, the strategic pathway actions. 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 should take into account the guiding principles in Section 9.5, as these describe drivers for attaining effective and efficient 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.

9.6.1 Engagement Strategy

Designing and developing a stakeholder and user Engagement Strategy is the first step in laying the critical foundation for the stakeholder and user engagement process. 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, all the activities that follow will be affected, including the identification of stakeholders, determining the communication methods, and managing stakeholder expectations.
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.
The stakeholder and user 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 stakeholders.
- Initiatives, activities 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.
- Long term engagement, including establishment of geospatial customer groups and their strategic governance (relates to Strategic Pathway 1).
- 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 and user engagement mandates e.g. Acts of Parliament that decree consultation such as for Open Data Policy initiatives, or organizations Client Charter that stipulates engaging stakeholders.
- The management of risks associated with the engagement process.

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

9.6.2 Steering Group

It is good practice to initiate an independent communications and engagement Steering 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.

This independent Steering Group, together with the Governing Board and/or the Geospatial Coordination Unit (See SP1), develops strategy, directs the planning and coordination of the communication and engagement program, and regularly reviews progress and effectiveness. The actual communication could be conducted by the Geospatial Coordination Unit, or on behalf of the

For long term complex projects an independent working group or task force may be required to guide stakeholder communication and engagement.
Geospatial Coordination Unit. What would be helpful and crucial is that the Steering Group coordinates the communication and engagement program with the Geospatial Coordination Unit and/or the Governing Board established as part of the implementation of the IGIF. This coordination will include regular and timely reporting. It could be that this communication and engagement Steering Group may need to report to a Governing Board (See SP1).

The Steering 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 Steering 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 a Governing Board (SP1); Geospatial Coordination Unit (SP1); and Specialist Working Groups (SP1).

9.6.3 Internal Communication

Internal communication is for the benefit of staff, whom will all contribute to the successful implementation of the IGIF. 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 staff members may have is not necessarily 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 be able 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; for 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.

9.6.4 Stakeholder Identification

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. As such, 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. 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.

The stakeholder identification process considers all parties likely to be affected by the policy and the program of work.
- 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, also as a means of raising awareness and sharing of 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 being inclusive and include 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. 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.

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 relationships, and any complexities that may exist, between the stakeholders and the geospatial program 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 considers what interests a stakeholder has in strengthening 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. Gaining this understanding of stakeholder needs and use through effective engagement activities, including workshops, invariably promotes and improves understanding of the stakeholder 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 (Figure 9.2) available to assist in categorizing stakeholders 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 with their level of influence and interest.

![Stakeholder Analysis - Levels of influence and interest](image)

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

This understanding of the level of influence and interest 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 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

A policy platform outlines an initiative, a program or a community’s top priorities that are in need of 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, as a 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 developed by a group of diverse stakeholders to brainstorm topics and prioritize the main items. These items may include the need for a national Geospatial Information Management Strategy (See SP1), 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 (See SP9: Action 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. Once this is considered, the final version can be sent to stakeholders for signatures of support.

The lead entity (and this can be the Governing Board. See SP1) 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 to invite the media so that there is public awareness as well as a public record. Media briefing notes and fact sheets should be prepared 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.

### 9.6.7 Geospatial Brand

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. Yet, one of the most significant impediments to the development of national spatial data infrastructure and its roll-out in countries has been the lack of understanding of the value and benefit of geospatial information including by the general public – the geospatial brand is weak. While absolute control over a brand is not possible due to external influences, intelligent use of design, advertising, marketing, service proposition, organizational culture - to name some; it can readily help to generate associations in people’s minds that will benefit the objectives of the IGIF.

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. In essence, these branding qualities are what have made the 17 aspirational SDGs, and what they represent, so effective.

The IGIF is developing 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 and 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 Engagement Strategy should consider how to capitalize on the global endorsement and branding of the IGIF.

9.6.8 Strategic Messages

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 can be possible. It also conveys the conservation of scarce resources through having multiple and repeatable applications from a singular effort.

Another often quoted slogan is ‘everything happens somewhere’ by Nancy Tosta\(^3\) 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 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.

\(^3\) 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](https://www.computerworld.com/article/2582595/gis--more-than-just-a-map.html)
9.6.9 Communication Strategy

A Communication Strategy is a single, coherent narrative that describes the communications solution to meeting the geospatial goals identified, for example, in the Country-level Action Plan (See SP1). Operating at a strategic level, the Communication 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.

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 to be prepared.

The strategy recognizes that organizations and authorities at different levels of government, businesses and interest groups have different requirements, interests and motivations.

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

9.6.10 Communication Plan

The Communication Strategy provides direction on the 'what', 'why' and 'who', whilst the Communications Plan builds on these to inform on the 'when' and 'how'. The Communication Plan delivers the Strategy 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 Management\(^4\) 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.

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 sundries 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.

● Identify tactics to manage risks associated with stakeholder and user engagement e.g. such as using different communication styles to accommodate culture and diversity.

● The stakeholders contact information and their organization affiliation if appropriate – this will enable the stakeholder communication process.

It is also a good practice to officially launch the Communication Plan as a way to let stakeholders know what to expect.

Communication Plans must be adaptable. The ability to proactively respond to opportunities should be built into the plan; and the ability to communicate via demonstrating the integrative capacities of geospatial information at the ‘time of need’ rather than to try and convince after the opportunity has lapsed, ‘that

\(^4\) http://ggim.un.org/future-trends/
could have been contributed’. 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 Stakeholder Communication Plan that provides objectives and methods for connecting with stakeholders is provided in Appendix 9.5.

9.6.11 Communication Methods

Communication and engagement encompasses 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 will have its own benefits, limitations and risks. It is important 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.

Communication methods are typically classified according to an objective - that is whether methods are⁵:

- 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.

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⁵ 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
9.6.12 Review and Evaluate

The review and evaluation process ensures regular monitoring of achievements towards attaining effective communication and engagement goals. A monitoring and evaluation process identifies the success indicators, reporting mechanisms (e.g. traffic light reporting method, evidence of achievement etc.), suggestions, and feedback mechanisms. Review and evaluation requires discipline to periodically check the status of the strategy, plans and methods. Review and evaluation also includes establishing a culture of open dialogue when something deviates from the planned set of activities. Knowing problems that occur as soon as possible helps in controlling the resulting impact and provides more time to propose options for mitigating the problems.

The review and evaluation process should:

- 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.

Review and evaluation determines whether engagement processes are working well, and provides the opportunity to reflect on and re-think engagement practices.
- 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 review and evaluation process also provides avenues for capturing and documenting feedback, good practices and lessons learnt, and includes an evaluation plan. The evaluation plan should include 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.

### 9.6.13 Stakeholder 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. 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.

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

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

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

9.6.14 Benefits Analysis

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 an action rarely successful with national geospatial information organizations. Learning from other country’s successes in this action is beneficial.

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 of integrated geospatial information management (See SP3) 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.

9.6.15 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 positive and negative 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.

Use cases that demonstrate achieved benefits in 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 learnt. Such a ‘Lessons Learnt’ library concept can be virtual. The objective is to provide a source of reference material that can support the strategy, plans and methods.

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

9.7 Deliverables

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

- A Stakeholder and User Engagement Strategy;
- A listing of identified stakeholders and their contact information;
- Steering Group for Communication and Engagement;
- Report of a stakeholder analysis exercise;
- A copy of a Policy Platform;
- The ‘geospatial brand’ and strategic messages designed to communicate and engage stakeholders and users;
- A Communication Strategy that gives a single, coherent narrative that describes the communications solution;
• A Communication Plan specifying methods of engagement, resources allocated and developing the campaigns including an internal communication section; and

• A Review and Evaluation Plan, including stakeholder surveys and defined goals.

9.8 Outcomes

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

• 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; and

• There is a positive change in working relationships between government and industry resulting in greater synergy that leads to significant accomplishments.

9.9 Resources

As part of the work programme of UN-GGIM, there are a number of communication and engagement activities including by the Subcommittee, 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:

- **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 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 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.

- **UN-GGIM Future Trends in Geospatial Information Management**: Plays a leading role in considering how key elements of geospatial information management are likely to change over a five to ten-year timeframe. This is regularly used as evidence in engagement activities.

### 9.10 References

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