“CURRENT STATUS OF THE INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK IN PANAMA”

Discussion space “Advances and use cases in the Implementation of the UN-IGIF”

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CURRENT STATUS OF THE INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK IN PANAMA

Panama begins its first steps for the GIF in March 2020 with the National Workshop for the implementation of the Integrated Geospatial Information Framework in the Republic of Panama.

Session #1: with authorities, decision makers.

Session #2: group work with the inter-institutional technical committee of the IPDE, specialists and managers of Geospatial Information.

Session #3: coordinators and secretaries of the 5 components of the IPDE, Technical Committee and support staff of the IGNTG.

44 institutions that make up the IPDE participate.
September 2022. Resolution N°002 is signed, authorising the General Administrator, in his capacity as legal representative of the National Land Administration Authority, to sign the accession to the SDG Data Alliance.

Training on the roadmap to follow for the implementation of IGIF and SDG and at the same time the implementation of processes to improve the efficiency of cartographic production.

We have at least 25 institutions committed to the implementation of the Integrated Geospatial Information Framework (IGIF).
Awareness-raising

On 1 September, the first workshop on institutional collaborative competencies was held with the participation of 55 collaborators from 25 institutions that are part of the Panamanian Geospatial Data Infrastructure. The workshop was conducive to address the tasks to be executed for the Integrated Geospatial Information Framework (IGIF).
SDG DATA ALLIANCE

ABOUT MARCO?

WHAT IS THE NEED?

DATA IS FUNDAMENTAL TO THE DEVELOPMENT OF GOVERNMENT STRATEGIES AND PLANS

WHAT DO WE HAVE TO DO?

EXECUTION

Improving the management of national geospatial information, an essential element of national digital infrastructures.

LEGAL BASIS

Resolución N° 002

STRATEGY AND PARTNERSHIP

ALIANZA DE DATOS PARA LOS ODS (SDG)

MARCO INTEGRADO DE INFORMACIÓN GEOESPACIAL (IGIF)

RESULTS

National Center

16 steps to create the National Plan for Geospatial Information

Task 7
Decision-makers and high-level workshop
UN GGIM Country-led approach to development of Country Action Plan

Component One – Planning and preparing
1) Project Initiation and Pre-needs Assessment
2) Stakeholder Identification and Analysis
3) Plan of Action (*to design and develop country-level Action Plan*)

Component Two – Assessing and analyzing
4) Current and Desired (or Future) Situation Assessment
5) Baseline Survey
6) Environmental Scanning and Analysis (*understanding national situation*)
7) Stakeholder Engagement Workshop
8) Strategic Alignment (and Benefits) Exercise
9) Vision, Mission and Goals
10) Gap Analysis Matrix
11) Needs Assessment and Gap Analysis Report

Component Three – Designing and developing
12) Strategic Pathway Actions and Sub Tasks
13) Implementation Schedule
14) Budget Estimations
15) Success Indicators
16) Country-level Action Plan

High-level Project plan
National needs assessment and gap analysis report
Country-level action plan
LIST OF ACTORS (Step 2)

- Executives and producers of alto nivel Public services and communications
- Academics
- Technology, innovation and research
- Risk and Threats
- Social and justice
- Commercial and financial
- Decentralisation bodies
- Security
- Other

In 2023
Methodology

PARTICIPATORY WORKSHOPS
Assessment of the current and desired situation and baseline

OBJECTIVE 1: Effective Management

- Enable geospatial information institutional arrangements management of geospatial information individual institutional requirements and are aligned with national frameworks.

GOAL 2: Capacity building, cap

- Mechanisms are established and use of geospatial information capacity, and build an invent government, industry, private

GOAL 3: Integrated geospatial information syst

- Geospatial information, including community is integrated across the government sector for evidence-based policy and decision ma

Base line

Governance and Institutions

The following questions are designed to understand the governance and institutional arrangements, and political acceptance for integrated geospatial information management.

Do you have a National Geospatial Strategy or equivalent?

☐ Yes Name: ____________________________

Go to question 2

☐ No

If the answer is no, which of the following clauses applies?

☒ It takes too long and there are no resources to develop the strategy

☒ Training in strategy development is required

☒ It is believed that a strategy is not required

☒ Others: It is necessary to raise awareness among authorities and decision makers about the need, importance and benefits of GI.

Go to question 7

Comment

Although the IPDE is made up of 40 institutions is committed to sharing their data. Urgent institutions can manage and have their inf

Comment

There are government institutions dedicated to lack of budget they cannot execute the gap in terms of development and research information. In fact, we know that it is not academic centers in order to achieve progress to achieve the participation of companies in innovation in new processes and make it

Comment

To the extent that institutions disseminate the work of the IPDE, both external and internal users could be reached, as part of a dissemination strategy. There is still a need to integrate the community so that it can use the geospatial information to its advantage.
High Level Session
<table>
<thead>
<tr>
<th>Description</th>
<th>Benefit</th>
<th>Obstacles</th>
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<tbody>
<tr>
<td>Policies</td>
<td>- Safe environments for citizens, through government security policies.</td>
<td>- Lack of application of climate change policies</td>
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<td>- Open data strategies in the portal, according to the National Authority</td>
<td>- Bureaucracy that prevents effective and timely</td>
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<td>for Access to Information.</td>
<td>development.</td>
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<td>- Disaster preparedness, recovery and risk management</td>
<td>- From the executive there is delay in determining policies.</td>
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<td>- There is a National Census in development that will provide</td>
<td>- Education of the data consumer regarding copyright and use of sources.</td>
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<td>Information that must be available and easy to access.</td>
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<td></td>
<td>- Regulation of powers and reduction of duality of functions.</td>
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<td>- Educational strategies for certain attention to the needs of the</td>
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<tr>
<td></td>
<td>sector.</td>
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<tr>
<td></td>
<td>- Promote copyright and credits to information</td>
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<td></td>
<td>- Improvement in application of agr-food policies</td>
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<tr>
<td>Economic</td>
<td>- Savings through the implementation of the IQIF</td>
<td>- Lack of government budget for hiring GIS personnel.</td>
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<td>- Revenue growth opportunity</td>
<td>- Skills shortage</td>
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<td>- Labor cost savings.</td>
<td>- Lack of Innovation in the government and the private sector.</td>
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<td>- Improving data quality</td>
<td>- Lack of funding in the geospatial area</td>
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<td>- Savings on research and development</td>
<td>- Rotation of personnel in charge of managing geospatial</td>
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<td>- Decrease in the allocation of economic resources for geospatial</td>
<td>information</td>
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<td>products.</td>
<td>- Inflation in the interest rate (they play against the budget)</td>
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<td>- Public – Private Partnership.</td>
<td>- Disposable income level of consumers</td>
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<td>Social</td>
<td>- Access to new technologies</td>
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<td>- Effective transmission of Information to the average citizen</td>
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<td>- Provision of statistical information on the population</td>
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<td>- Development of new capabilities</td>
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<td>- Characterization of economic consumption</td>
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<td>- Timely alerts in risky situations</td>
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<tr>
<td>Technological</td>
<td>- Potential benefits of using geographic information through GIS.</td>
<td>- Allocating resources in areas where they are not needed.</td>
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<td></td>
<td>- Search for mechanisms to promote the use of geospatial Information</td>
<td>- There must be clear rules regarding information.</td>
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<td>- Create and implement competencies</td>
<td>- Diagnosis and monitoring of the state of technology</td>
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<td>- Inventory of technological and personal capacity</td>
<td>- There is no communication between data users and technology managers.</td>
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<td>- Updated equipment and licenses</td>
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<td>- Adequate communication infrastructure</td>
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<td>- Create a legal regulation that requires all data to have metadata.</td>
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</tbody>
</table>
SWOT analysis

**STRENGTHS**
- Leadership
- Skills
- Technology
- R&D
- Community demand

1. Suitable, trained, committed personnel.
2. Existence of legal framework
3. There is the existence of quality standards and norms and metadata
4. Technical awareness, about the lack of data and which data is a priority to generate.
5. Size of our country, allows us to cover the generation of data.
6. Collaboration of international organizations

**WEAKNESSES**
- Data topics missing, obsolete or below standard.
- Policies.
- Collaboration between agencies.
- ROI and

1. Data exchange occurs
2. Cooperation with international organizations
3. Data organization based on examples of good practices (other countries)
4. Advance as a successful country in data management and support for the Panama 2030 agenda and national priorities
5. Be taken into account for decision making

**OPPORTUNITIES**
- Expanding data usage.
- New Applications.
- Community Crowdsourcing.
- Brand governmental.
- Community trust.

1. The free data policy does not have sustainability or financing.
2. Change in leadership and government policy.
3. Public reaction due to lack of information
4. Duplication of information
5. Data quality does not live up to consumer expectations
6. Technology becomes obsolete

**THREATS**
- The data policy - free, impact in the ROI.
- Change in policy -
- Behavior in he consumer.
- Technology obsolete.

1. Commitment of committee members (availability to participate)
2. Stagnation in the development of standards
3. Reinforcement of training
4. Interinstitutional Disclosure
5. Marketing Promotion
6. Lack of budget
7. Lack of commitment and vision at a hierarchical level
8. Lack of a national plan, which is based on solid planning. Whose relevance is found in the data as support for national priorities.
## Integrated Geospatial Information Framework in the Republic of Panama

**Component Two: evaluation and analysis**

**Task: 8 – Strategic Alignment**

<table>
<thead>
<tr>
<th>Strategic drivers</th>
<th>Evidence of government strategic priority</th>
<th>Geospatial theme</th>
<th>Geospatial Information Benefit</th>
<th>Current situation</th>
<th>Investment priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve waste management</td>
<td>Municipal Zero Waste Program Plan (Municipality of Panama). 2015-2035</td>
<td>Geospatial models to locate the most suitable sites for the deposit and management of waste. (Ex. Land use layer, water network, hydrogeology, etc.)</td>
<td>It allows real-time monitoring, improves waste collection processes, and reduces transportation and collection costs.</td>
<td>Lack of control in management planning, lack of payments, poor urban waste management, lack of maintenance of collection equipment.</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>National waste management plan of the Urban and Home Cleaning Authority (AUD). 2017-2027</td>
<td>Georeferenced information for monitoring and controlling waste management. (For example, location of collection sites, collection routes, populated places with demographic and service data, location of informal settlements)</td>
<td>Improvement of public and environmental health.</td>
<td>Lack of geospatial information available to achieve good waste disposal by users.</td>
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<td></td>
<td>Pollution of bodies of water.</td>
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</tbody>
</table>
Mission:
To promote the use of up-to-date and reliable geospatial information in the comprehensive and sustainable management of the territory, for timely decision-making, in order to improve the quality of life of its citizens.

Vision:
To be a country that promotes Geospatial Information management in a coordinated, participatory and efficient manner for sustainable development.
### Integrated Geospatial Information Framework in the Republic of Panama

#### Component Two: assessment and analysis

**Item N° 10 - Gap Analysis Matrix**

<table>
<thead>
<tr>
<th>Current situation</th>
<th>Desired future</th>
<th>Gap identified</th>
<th>Strategy to follow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum percentage of institutions that are committed to share their data</td>
<td>Institutions that are able to manage and make their information available within the PEI.</td>
<td>Technicians state that the state of their data limits their ability to share it with other users. Institutions are not aware of the topics to be published. Temporary political management should not influence the continuous sharing of data. Provide greater empowerment to the PEI. Lack of financial and human resources that are prepared to review and monitor geospatial information. Failure of technical management of the tool. Lack of knowledge of the operation of the PEI at senior level (In 80% of the institutions there is no commitment at senior level for the insertion of geospatial data information).</td>
<td>Implementation of norms and standards applied to data. Elaborate a legal instrument so that entities are obliged to generate data based on their competence, both for public and private institutions. To make known the fundamental data and responsibilities of institutions. Establish a guided process from inception to publication of data. Have dedicated staff within the PEI to execute adequate follow-up on the status of the data. Establish internal technical guidelines for data filtering. Raise awareness at management level within institutions. IFDE dissemination plan. Communication plan for decision-makers to ensure continuity with incoming governments during the transitions of the different institutions.</td>
</tr>
</tbody>
</table>
Other considerations

- Needs Assessment and Gap Analysis Report
- Increased outreach of IGIF with the country's provincial units.
- Increased outreach to academia
- Increased private sector outreach
- Design of a plan for the new authorities
- Work with the information producing units for the publication of priority data.
- Putting together the National Plan for National Information
Thanks