



**FGU**  
Federalna uprava za geodetske i imovinsko-pravne poslove

# ***New Spatial Data Infrastructure Strategy for the Federation of Bosnia and Herzegovina based on the IGIF***

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*Geospatial World Forum 2023  
Land & Property*

# Outline

- Intro
- SDI development
- SDI Strategy 2023-2027
  - Baseline assesment
  - Strategic Document
  - Action plan
- Summary

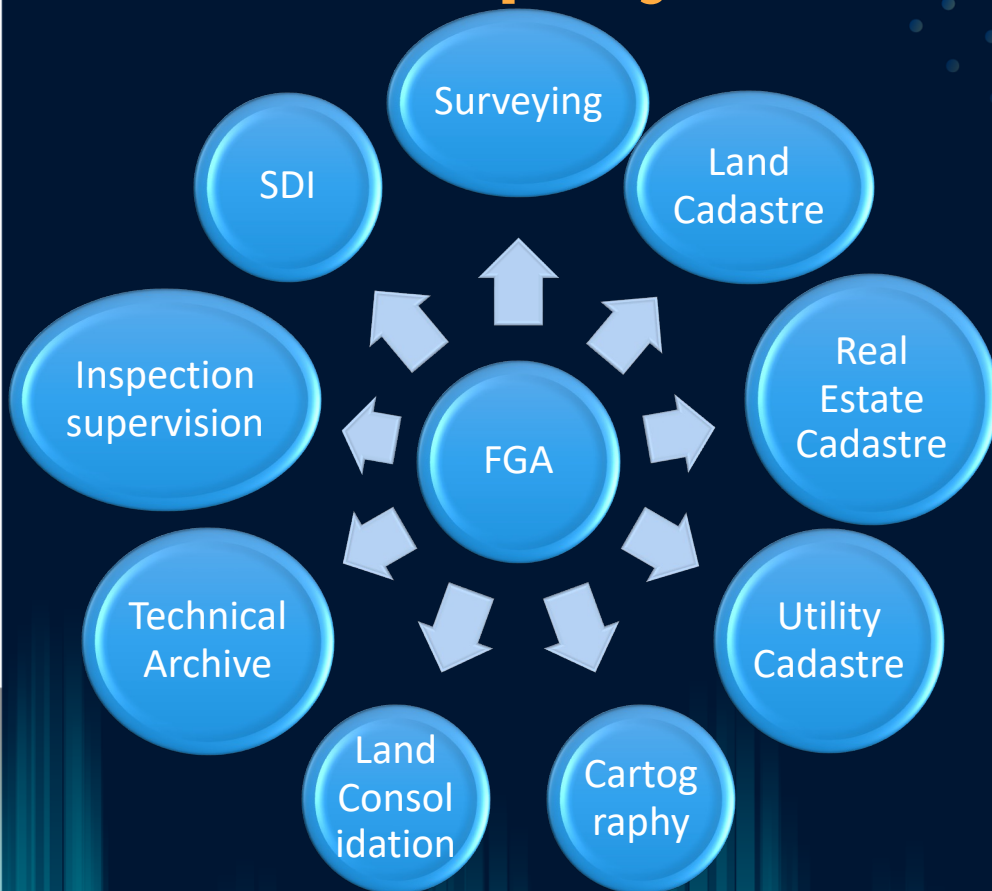


<b>Geographic Location</b>	
<b>Total Area</b>	19,767 Square Miles 51,197 Square Kilometers
<b>Land Area</b>	19,763 Square Miles 51,187 Square Kilometers
<b>Water Area</b>	4 Square Miles 10 Square Kilometers
<b>Land Boundaries</b>	956 Miles 1,538 Kilometers
<b>Irrigated Land</b>	12 Square Miles 30 Square Kilometers
<b>Border Countries</b>	Croatia 932 km, Serbia and Montenegro 527 km
<b>Coastline</b>	12 Miles 20 Kilometers
<b>Geographic Coordinates</b>	44 00 N, 18 00 E
<b>Terrain</b>	Mountains and valleys

# Federal Administration for Geodetic and Real Property Affairs - Sarajevo



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- *The organization of geodetic works in FBiH is decentralized*
- *High-level decision-making processes start at FGA, and are deployed throughout the Federation*
- *The FGA is under the authority of the FBiH Government/Prime minister*
- *Staff of approx. 40 personnel*
- *Cantonal Geodetic Administration and 79 cadastral offices within the cantonal governments and local self-government units*
- *Dual land administration system FGA and LSGU – cadastre*
- *FMoJ and LRO – land registry (with FGA as strong supporting influence)*

# Spatial Data Infrastructure

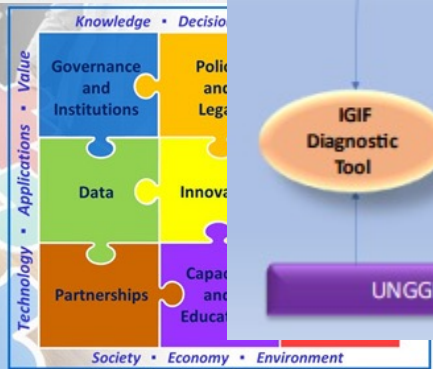
- New initiative in FB&H (only few years of activities)
- Law adopted in 2021
- We are working on the adoption of by-laws
- FGA is a Coordination Body for SDI
- SDI Council and Working Groups
- SDI Geoportal
  - Metadata platform
  - Viewer
  - Data source and Data provider registry
- Working with Institutions on all levels
  - Support
  - Building capacity
- Data digitization, harmonisation, establishing a Central Access Point for all spatial data
- Support projects from Sweden (CILAP & IMPULS), Netherlands (Spatial II); World Bank
- Regional and International Cooperation
- New SDI Strategy based on the IGIF (2023-2027)



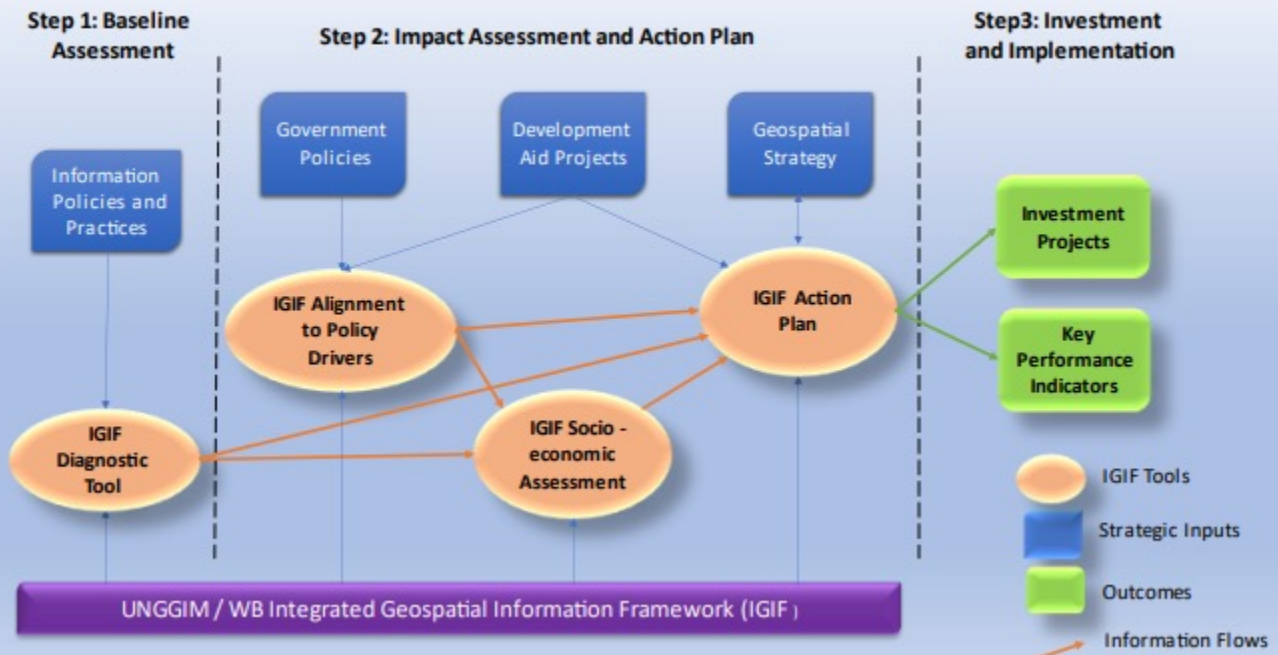
# SDI Strategy



Anchored by nine Strategic Pathways, the Integrated Geospatial Information Framework is a mechanism for articulating and demonstrating national leadership in geospatial information, and the capacity to take positive steps



## IGIF World Bank Methodology



**02**

**Strategic document  
(2023-2027)**

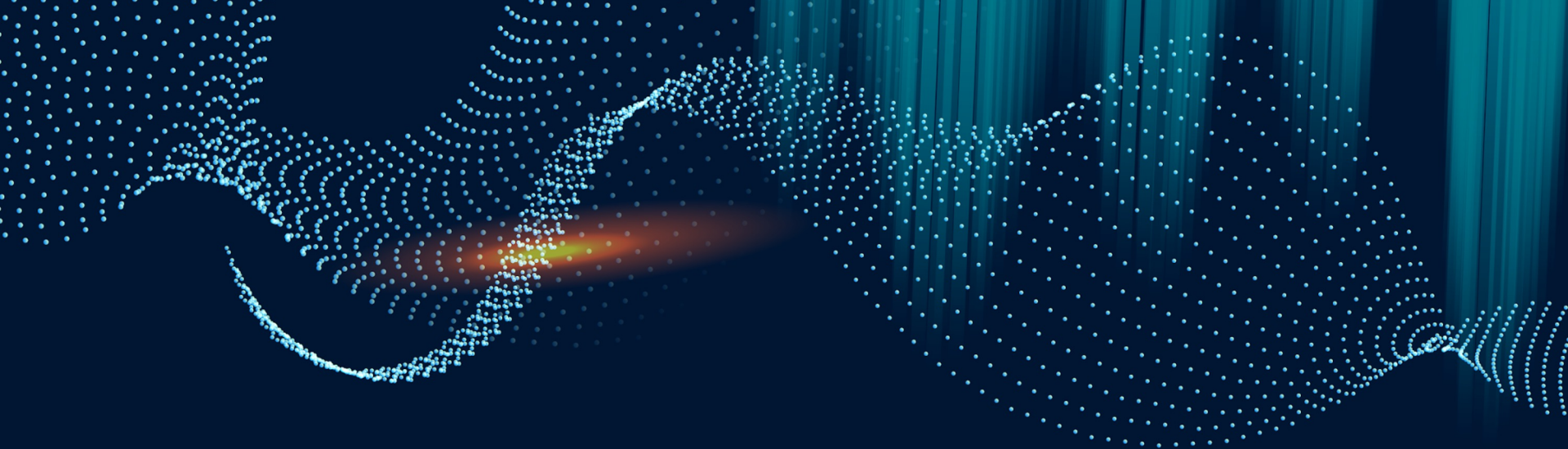
**01**

**Baseline  
Assesment**



**03**

**Action plan**



**01**

# **BASELINE ASSESSMENT**

IGIF Baseline Diagnostic Tool

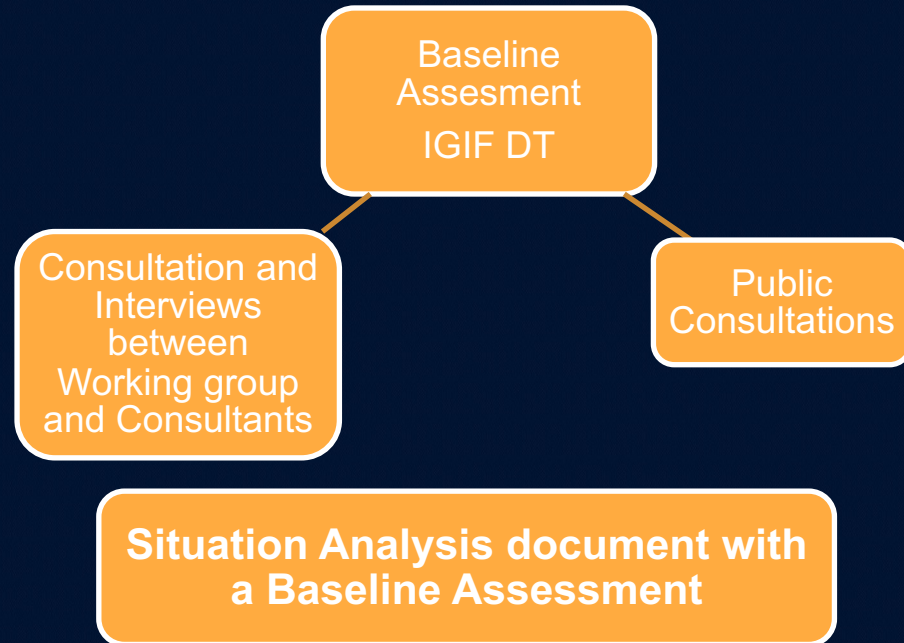


# Methodology

- All relevant Legal and other documents
- Regulation about developing a Strategic Documents
- Strategic documents of the Federation of B&H
- Law on SDI
- SDI Council Reports and Plans
- Projects
- Online sources
- Working groups
- Public and Institutional Cooperation
- ....

1. Collection, study and analysis of existing sources (Regulations, Reports ...) and online sources.

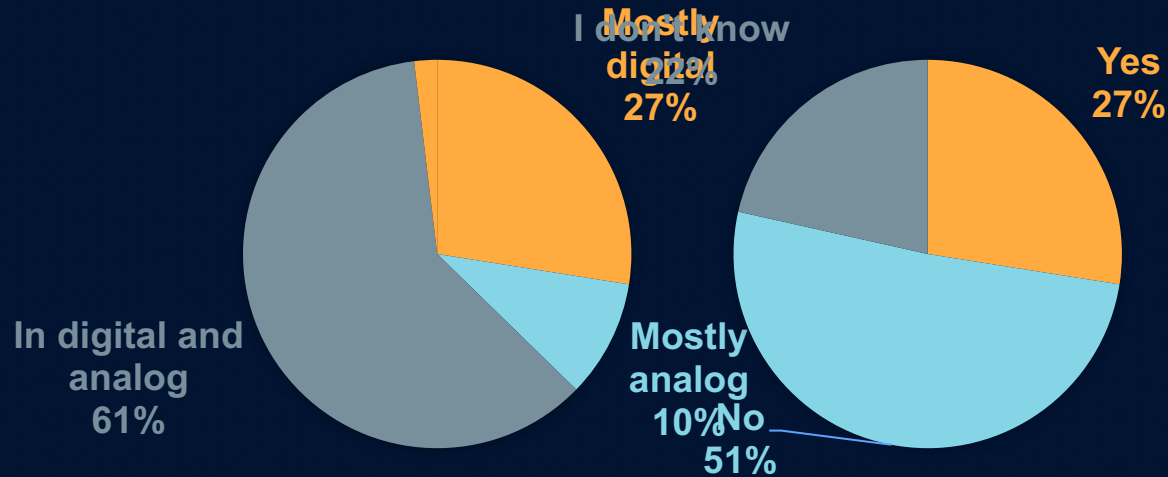
2. Conducting a survey for SDI subjects and Academic institutions



# Survey Reports

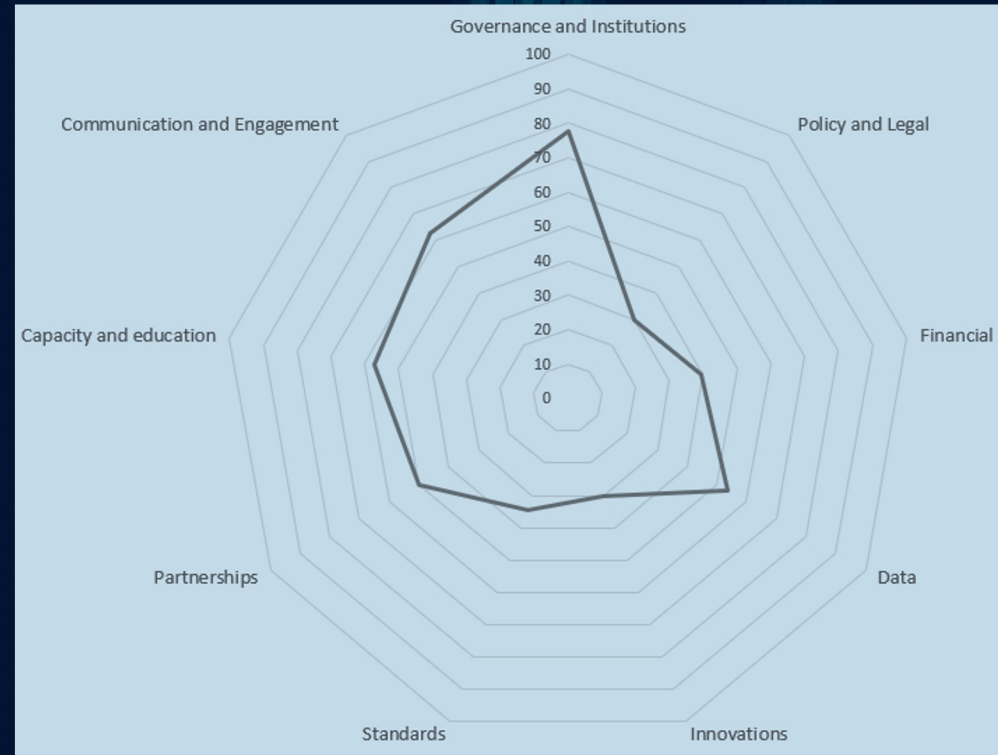
- Survey for Government Institutions, Public and Private Companies – 38 questions
- Survey for Academic Sector – 15 questions
- More than 55 % completed the survey

## IN WHAT FORM IS SPATIAL DATA USED IN A PRACTICE OF DOCUMENTING YOUR ORGANIZATION? METADATA IN YOUR ORGANIZATION?



# Baseline Assessment Results

	Current state
Governance and Institutions	78
Policy and Legal	30
Financial	39
Data	54
Innovations	30
Standards	34
Partnerships	50
Capacity and education	57
Communication and Engagement	63
Total	49



# SWOT Analysis

	Positive	Negative
<b>Internal</b>	<b>Strengths</b> <ul style="list-style-type: none"><li>• Existing institutional framework</li><li>• Law on SDI</li><li>• Communication and engagement</li><li>• Coordination body (FGA)</li></ul>	<b>Weaknesses</b> <ul style="list-style-type: none"><li>• Lack of capacity</li><li>• Lack of standards</li><li>• Lack of agreements and licenses</li><li>• The importance of IPP is insufficiently recognized</li><li>• Spatial data is underutilized for innovation</li><li>• Analog spatial data</li></ul>
<b>External</b>	<b>Opportunities</b> <ul style="list-style-type: none"><li>• Capacity building</li><li>• Harmonization of data</li><li>• Better involvement of SDI subjects and mutual coordination</li><li>• Better cooperation with the academic community</li><li>• New technologies</li><li>• Adoption of new EU strategies and initiatives (e.g. open data, smart cities, digital twins, etc.), projects and funding</li><li>• Voluntary geoinformation (citizen involvement)</li></ul>	<b>Threats</b> <ul style="list-style-type: none"><li>• Sustainable business model and financing</li><li>• Not accepting changes</li><li>• Disinterestedness of the subjects</li><li>• Time-slow implementation of changes</li><li>• Lack of users</li></ul>



02

# STRATEGIC DOCUMENT

Situation Analysis, Baseline  
Assessment (DT), SWOT – Base  
documentation for Strategic  
Document

Goals, Priorities & Measures

## Vision

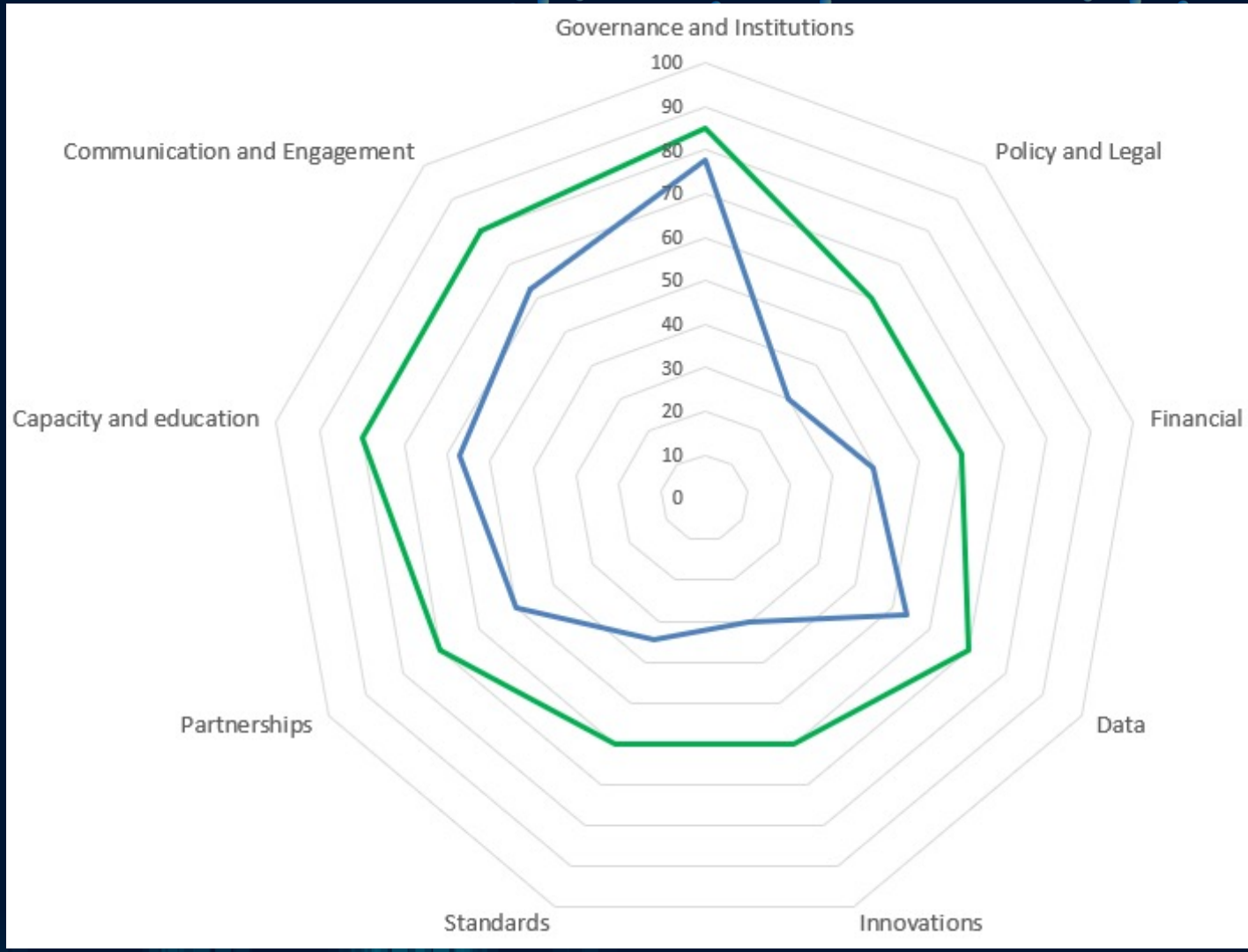
- The spatial data infrastructure of the Federation of Bosnia and Herzegovina will enable everyone to easily, quickly and efficiently find and use harmonized spatial data and create a geo-enabled society.

## Mission

- The establishment of an effective Spatial Data Infrastructure of the Federation of Bosnia and Herzegovina that provides access, exchange and use of spatial data and services to all SDI bodies, the public and private sector, the academic community and citizens.

# Strategic Goal

Strategic Goal	Indicator	Initial value	Target value
Effective use and exchange of harmonized spatial data and services for effective measurement, monitoring and achievement of sustainable social, economic and environmental development	Total IGIF assessment by strategic pathways	49	70





# Priorities

No	Priority	Indicator	Initial	Target
1	Improve the functionality of SDI through effective management, cooperation and work of SDI bodies and entities	<ul style="list-style-type: none"> <li>1. Government and Institutions</li> <li>2. Policy and Legal</li> <li>3. Financial</li> <li>5. Innovations</li> <li>7. Partnerships</li> </ul>	45	67
2	Harmonize SDI with the European acquis and standardization framework	<ul style="list-style-type: none"> <li>1. Government and Institutions</li> <li>2. Policy and Legal</li> <li>4. Data</li> <li>5</li> <li>7. Partnerships</li> </ul>	49	69
3	Simple, fast and efficient access and use of harmonized spatial data based on relevant modern technologies	<ul style="list-style-type: none"> <li>4. Data</li> <li>5. Innovations</li> </ul>	42	65
4	Sustainable financial framework for the development and functioning of SDI FBiH Priority	<ul style="list-style-type: none"> <li>3. Financial</li> <li>7. Partnerships</li> </ul>	45	65
5	Build capacities	<ul style="list-style-type: none"> <li>7. Partnerships</li> <li>8. Capacity and education</li> <li>9. Communication and Engagement</li> </ul>	57	77

# Measures

- Each priority and accompanying measure
- The tables contain links to strategic goals, measures and indicators for monitoring target values.
- Priority monitoring indicators are related
- Each priority is linked to one or more strategic measures and includes accompanying indicators.
- The initial state of the indicators by strategic goal given in the Baseline Assessment, and the target values proposed to be determined in the first year

Priority	1.4 1.3 Sustainable financial framework for the development and functioning of SDI FBiH		
Relation to IGIF Strategic Pathways	3. Financial 7. Partnerships		
Measure name	1.4.1 Adoption and application of the SDI business model		
Description of the measure with an outline areas of activity	This measure includes the adoption of a business model and a clear definition of the pricing policy for spatial data and services. The business model must be compliant with the licensing framework. The measure will identify financial partnerships and investment needs, i.e., means for financing SDI, as well as identifying milestones for the realization of benefits that will achieve and maintain momentum. The adoption of the business model will achieve an understanding of the financial plans needed to implement and maintain the SDI, as well as a long-term investment program that enables the Government to respond to the growing social, environmental and economic demands for spatial data.		
Strategic Projects	<ul style="list-style-type: none"> <li>• SDI Support Project</li> <li>• Digital Enhancement of Land Management for the European Future of Bosnia and Herzegovina</li> </ul>		
Monitoring indicators of the results of the measure	Indicators	Initial values*	Target values**
	Adopted SDI Business Model	NO	YES
The development effect and contribution of the measure to the achievement of priorities	This measure will show the benefits of SDI in the sectors that use spatial data and services the most, but also as support for the overall economic and sustainable development of FBiH.		
Indicative financial construction with sources of financing	Amount: 30 000 EUR Source: 50% Budget, 50% Projects		
Implementation period	2023.-2025.		
Institution responsible for coordination	Coordinating body of SDI		
The bearers of the measure	Council, Working groups, Coordinating body		
Target groups	SDI Subjects		

# Strategic Projects

- The realization of the vision, mission and goal of the future development of the FBiH SDI through priorities and measures relies to a large extent on the budget of the FGA, the budgets of the SDI subjects, but also on the support of strategic projects.
- FGA plans to implement the following projects in the future period
  - SDI Support Project (World Bank) 
  - DELEF Project (Sweden – SIDA & Lantmateriet) 
- Support for Institutions
- Hardware, software, building capacity
- Develop a new architecture and Geoportal
- Data access, data quality, digitizing, ...
- Future strategic projects for the support of SDI FBiH should go in the direction of the priorities of the European Commission first of all:
  - Support for the European Green Plan
  - Europe ready for the digital age
  - Economy in the interest of citizens

# Financial Frame

Total from the Strategic Document		<b>3.115.090,00 EUR</b>	100%
Review by sources			
Budget Funds	Credit Funds	EU Funds	Donations
<b>789.003,00 EUR</b>	<b>2.024.808,00 EUR</b>	- EUR	<b>301.279,00 EUR</b>
25,33 %	65,00 %	- %	9,67 %



**03**

# **ACTION PLAN**

Ongoing activity

# Summary & What's next?

- Baseline Assessment – Done
- Strategic Document – Done
- Financial frame, Risk Analysis, etc.. – Done
- Action plan – In progress
  
- Referral to the procedure for official acceptance of Strategy
- Monitoring and evaluation
  - Indicators for goal, priorities and measures
  - Monitor of realization by IGIF strategic pathways
  - Annual base monitoring
  - On-going evaluation
- Reporting
  
- **IMPLEMENTATION (2023-2027)**
  
- *Where are we in 2027?*

# THANKS

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