

World Bank - UNGGIM

Global Framework: Country Level Implementation

May 16, 2017

Strategic Partnership: World Bank GSURR – UNSD Agreement

“Bridging the Geospatial Digital Divide”: Two Key Activities



1. **Develop an overarching Geospatial Framework** for countries to reference when developing their national and sub-national spatial data infrastructures (SDIs).
2. Assist countries to **prepare and implement Country-level Action Plans** to operationalize the Geospatial Framework

Second Objective: Country Level Action Plans

Objective: To operationalize the Geospatial Framework taking into consideration national circumstances and priorities. The country level Action Plans include *identification of investment needs, priorities, analysis of socio-economic benefits and potential funding sources.*

Aim: Complete of 2-3 pilots by UNGGIM Plenary in August 2018

How?

1. Analytical Tools
2. Technical Assistance
3. Financing Options



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Characteristics of GIM in Developing Countries:

Challenges

- Weak link or communication gap between the political / policy level and geospatial expertise
- Uncoordinated planning, design and implementation of donor development projects
- Inadequate infrastructure support
- High quality data requirements
- Public sector monopoly
- Fragmented land institutions managing geospatial data
- Inadequate funding
- Low capacity

Opportunities

- Starting points for NSDI can be in the cities
- Availability of satellite imagery and AI services
- New sources of geospatial data: UAVs, point clouds and VGI
- Cloud computing and remote services
- Global datasets and private sector support
- Fit-For-Purpose geospatial data
- Availability of regional capacity-building structures and networks

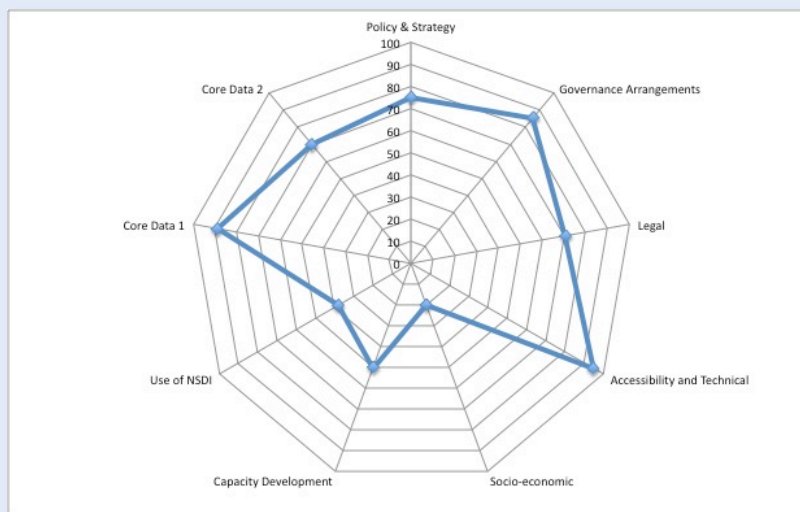
Step 1: Analytical Tools

Diagnostic Tool for Assessing SDI Readiness

Key Parameters: Standardized, Quick and Efficient
Completed in a one week mission

Outputs:

- Completed questionnaire based on interviews (2-3 hours)
- Scores for 9 categories- “the journey of SDI development”
- Assessment Report (standard format, approx. 10 pages)
- List of priority sectors and datasets for socio-economic



NSDI Diagnostic Tool Template: Guide to Scoring Indicators				
1. Policy & Strategy				
No	Indicator	Scoring guide	Comments	Score and notes
1.1	Does a NSDI policy and/or strategy exist, and is it “signed off” by government	None / not discussed=0; Planned /being drafted=25; Draft exists=50; Under Review=75; Exists and signed off=100	Policy should include vision / mission statements and road map.	Yes =100
1.2	Is there a NSDI policy and/or strategy Monitoring and Evaluation Framework / Mechanism set up?	None=0; Being drafted=25; Draft exists=50; Under Review=75; Exists and is being implemented=100	Is there a way of checking to see if the policy, if it exists, is achieving its objectives?	Yes=100
1.3	Is the NSDI aligned to high-level Government information policies (e.g. e-Government, Open Data, Statistics)	No=0; Aligned to some=50; Yes, fully integrated/harmonised=100	When the NSDI policy is designed was it done with overall Government policy in mind? – i.e. is it designed to support Gov’ policy – in planning, implementation etc	Yes=100
1.4	Is there a NSDI Engagement strategy?	None=0; Being drafted=25; Draft exists=50; Exists and being implemented=100	Or a communication plan? including stakeholder analysis, segmentation and targeted activities	Yes=100
1.5	Is there a policy to make geospatial (and other) data accessible through “Open Data”?	None=0; Being drafted=25; Draft exists=50; Under Review=75; Exists and is being implemented=100	Is there an Open Data policy, and does this recognise and include NSDI?	Yes=100
2. Governance arrangements				
No	Indicator	Scoring guide	Comments	Score and notes
2.1	Is there a NSDI “champion” in Government?	None=0; Exists=50; Exists and active=100	Is there a clearly identifiable individual(s) actively promoting NSDI, resulting in tangible outcomes towards development and implementation of NSDI?	General Director of ALRC is also a member of the Government=100
2.2	Is there a NSDI Coordinating body? (policy/funding level)	None=0; Exists=50; Exists and active=100	This should be cross sector, and across levels of Government. Could be officially designated or de facto.	Steering body being created for NSDI – in draft = 50
2.3	Is the NSDI Coordinating body represented at senior / top level in government?	No=0; Yes=50; Yes, by a senior Minister=100	Is there someone from the co-ordinating body representing it in the top level of Government e.g. a cabinet level minister?	“Steering Body” Being designed, awaiting government approval = 50
2.4	Is the coordinating body involved in developing e-Government / Open Data / Statistics governance policy	No=0; Involved to some extent, some communication between players=25; Considerable communication between players=50; Yes, fully integrated / involved with relevant policy development=100	When Government policy is being decided, is there anyone to speak up for the role NSDI can play?	No, steering body still being designed and put in place=50



SDI DIAGNOSTIC TOOL

Launched in December 2016

CONDUCTED IN 13 COUNTRIES IN AFRICA, ASIA, EUROPE AND LATIN AMERICA

Albania
Colombia
Croatia
Honduras
Indonesia
Kosovo
Malaysia
Moldova
Scotland
Serbia
Sierra Leone
Zambia

Palestine (upcoming)

- Policy and Strategy
- Governance arrangements
- Legal Framework
- Accessibility and Technical Infrastructure
- Socio-economic impact
- Capacity Development
- Use of NSDI / Applications
- Core Datasets (the availability/status of 15 core datasets from UNGGIM)
- Thematic datasets: tailor/target datasets linked to a country's priorities
- Developing a methodology for socio-economic business case
 - Focus on middle and low income countries
 - First case study completed



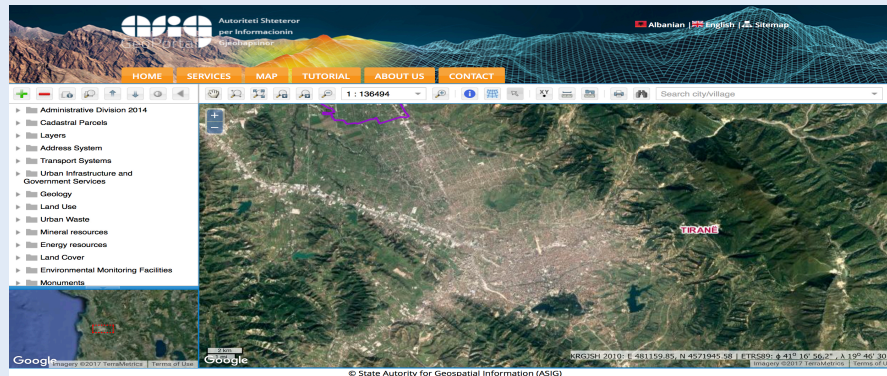
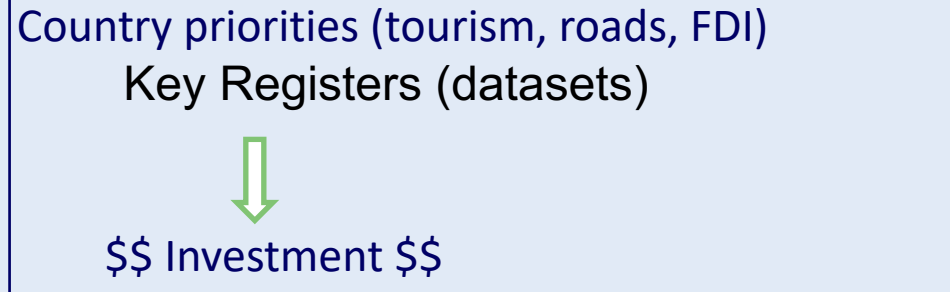
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Step 2: Technical Assistance

Country Level Action and Investment Plans



Integrated Land Management Program for Albania: **Detailed and Costed Roadmap for Land Market & Tourism**

June, 2017

World Bank Technical Assistance to the Government of Albania

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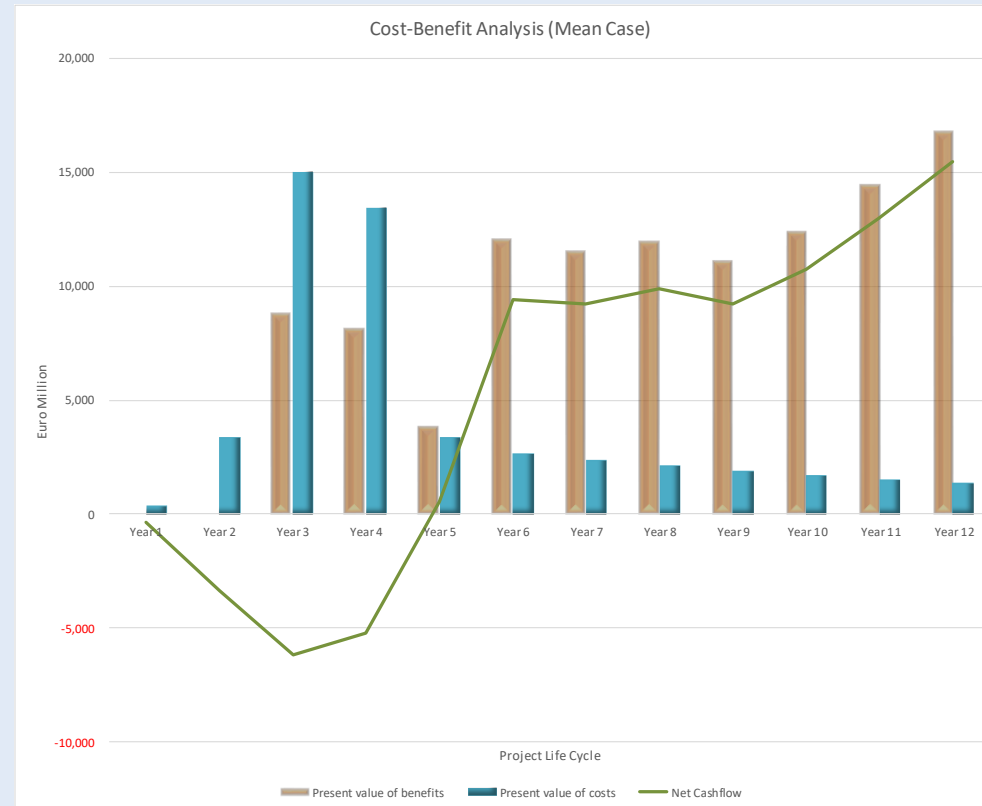


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Step 3: Financing

Valuing Geospatial Information

Albania:
First Geospatial Investment
Calculation
with
Return of Investment (RoI)
in low/middle income
country



Base Case:
Project Life: 12 years
Investment: US\$50m
Discount Rate: 12%

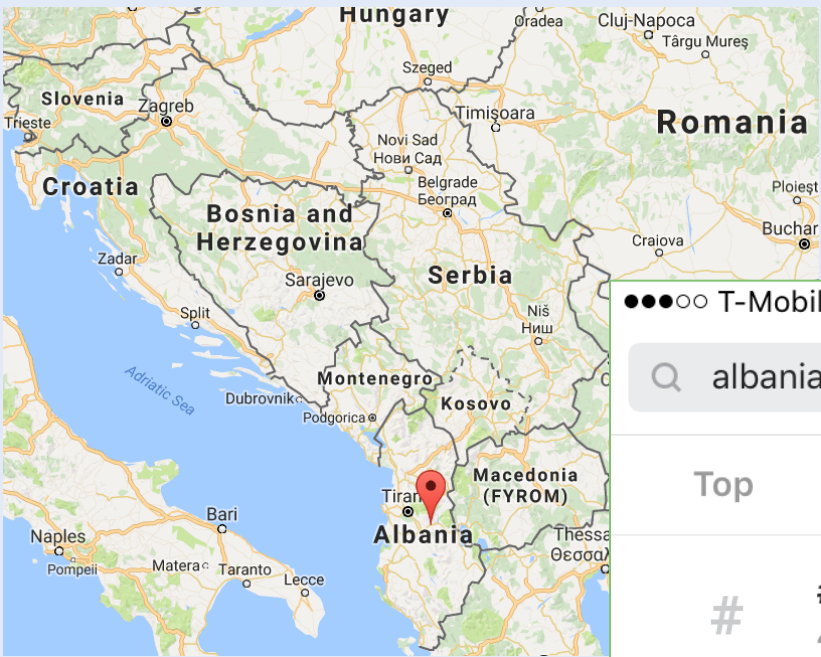
RoI: 2.5 : 1 (conservative)



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Non Traditional Sources of Data: Big Data/Social Media: Instagram Hashtags to Determine Tourism Potential



Valuable when traditional data sources not available

Shows potential but not used in official calculations as needs further work to prove causal relationship

●●●○ T-Mobile 11:54 100%		Tourism Potential in Albania		
Q albania				
Top	People	Instagram Hashtags	Coastline	Hashtags/Km Coastline
		Million	Kilometers	#/km
#	#albanian 494,881 posts	Croatia	6.48	4,058
		Montenegro	1.60	295
		Albania	0.48	476
#	#albania 1,049,301 posts	Albanian Potential based on...		
		Croatia	1.58x	
#	#albania 🇦🇱 5,994 posts	Montenegro	5.36x	

Remote Diagnostic Completion: Sierra Leone

Cross Regional Knowledge Sharing: with Serbia

SERBIA



SIERRA LEONE



- REMOTE KNOWLEDGE SHARING
- REMOTE SDI DIAGNOSTICS COMPLETION
- REMOTE DEVELOPMENT OF ACTION PLAN



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FROM NATIONALTO SUB-NATIONAL





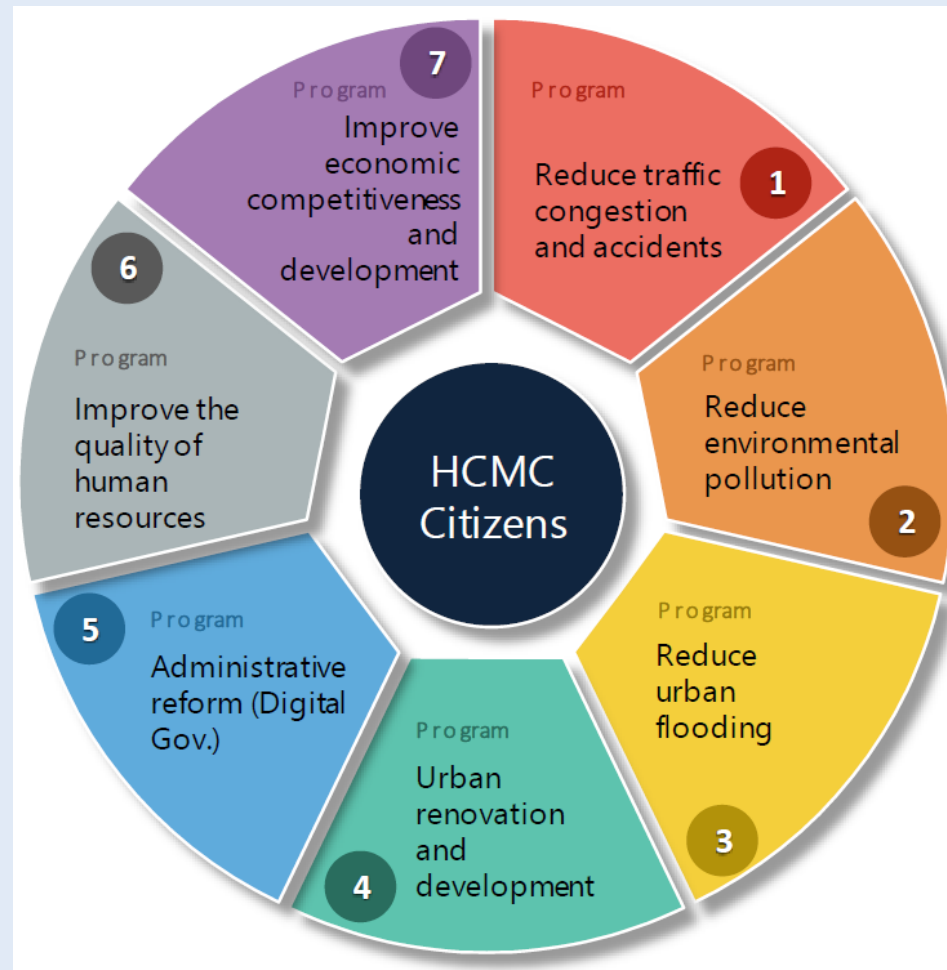
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HO CHIMINH CITY, VIETNAM

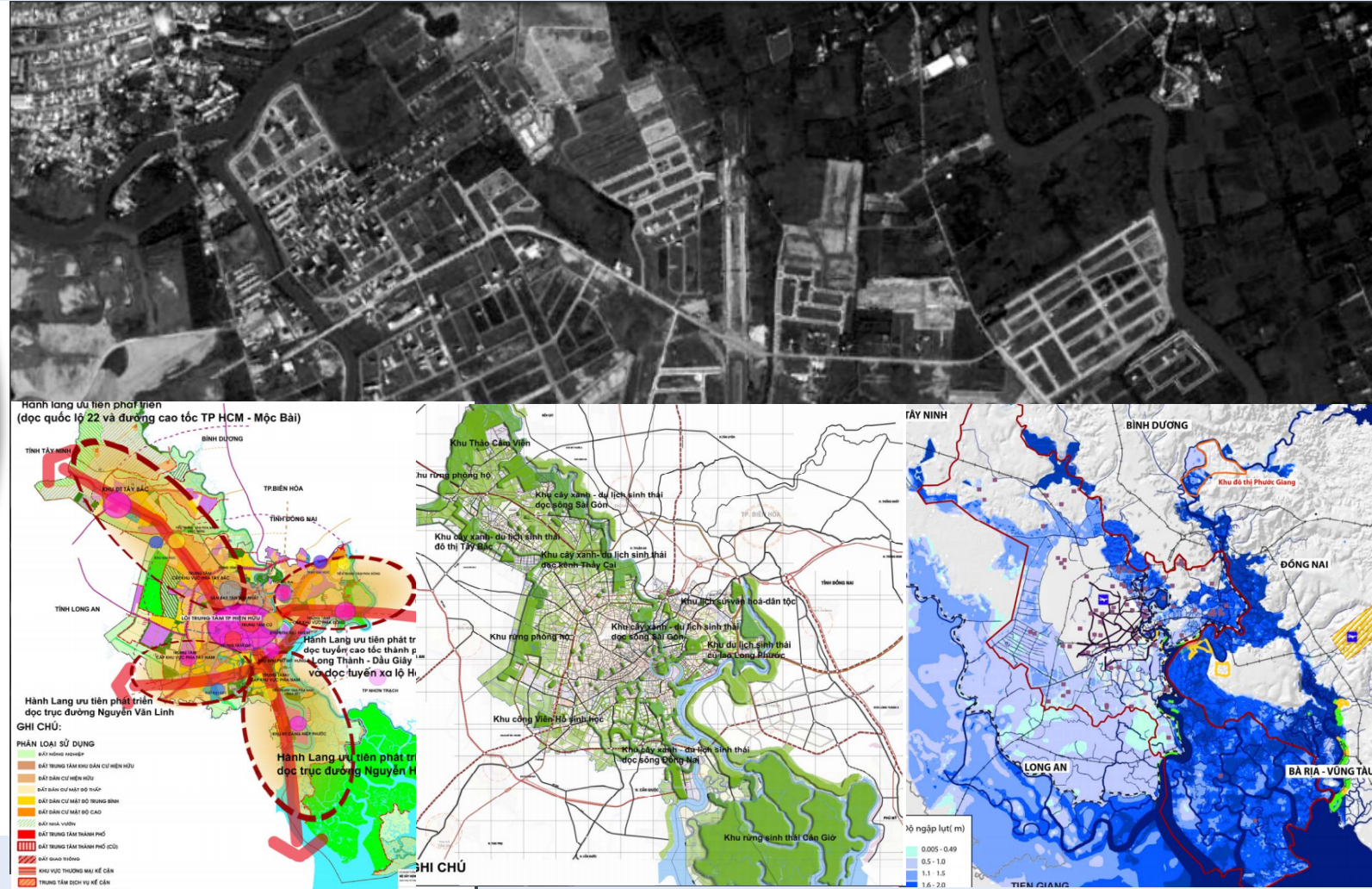
Smart City Program



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HO CHI MINH CITY
7 BREAK-THROUGH PROGRAMS
2016-2020

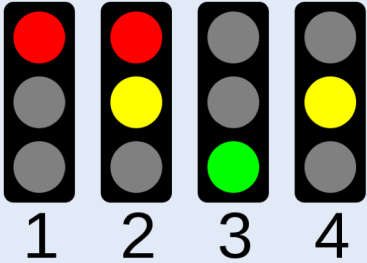


PRIORITY CORRIDORS GREEN SPACE PLAN FLOODING SCENARIO 2050

HO CHI MINH CITY: ASSESSMENT FRAMEWORK

LINKING DIGITAL GOVERNMENT + OPEN DATA + MUNICIPAL SDI – UNDER DEVELOPMENT

DIGITAL GOVERNMENT



Leadership

Security

User Focus

Capabilities

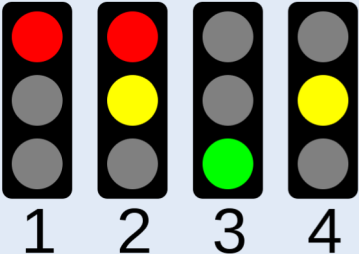
Processes

Infrastructure

Data Analytics

Common Data

OPEN DATA



Leadership

Infra/Tech/S kills

Policy/Legal Framework

Financing

Institutional Structure

Ecosystem

Data in Govt

Demand

MUNICIPAL SDI – UNDER DEVELOPMENT

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FROM NATIONAL TO MUNICIPAL SPATIAL DATA INFRASTRUCTURE (MSDI)

What? A questionnaire with scores and set of indicators to assess the City's Geospatial Maturity

- Policy and Strategy
- Governance arrangements
- Legal Framework
- Accessibility and Technical Infrastructure
- Socio-economic impact
- Capacity Development
- Use of Spatial Data / Applications
- Core Datasets (the availability/status)
- Specialized datasets: tailor/target datasets linked to a city's priorities

- Use Cases – linked to sub-national priorities

USE CASE	DATA SETS	STAKEHOLDERS	DISRUPTIVE TECHNOLOGY <ul style="list-style-type: none">• Cloud-based resources• Big data mining• Machine Learning/AI• Block-chain Models• Crowdsourcing• HR and VHR Imagery• UAV• Mobile Applications• Social Media• ...
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WHAT IS NEXT?

GLOBAL AND NATIONAL LEVEL

- Eurogeographics Extraordinary General Assembly: 16 May 2018 in Leuven (Belgium)
- UNGGIGlobal Consultation with UN Member States: May/June 2018
- Committee of Experts Endorsement of the Global Framework: August 2018 in New York
- Harmonizing the Framework with Country Level Action Plan toolkit
- Seek partnerships for capacity development and south- south cooperation
 - Development of a Volunteers Program to support implementation in partnership with FAO

SUB-REGIONAL LEVEL

- Present two pilot MSDI Action Plans: July 2018 in Bangkok at City Resilience Program
- Development of a MSDI Toolkit in partnership with City Resilience Program: end 2018

