

# Multi-view SDI assessment of Kosovo

Developing a solid base to support SDI strategy  
development

Ir. Bujar Nushi MSc.

OTB Research Institute for the Built Environment

[b.nushi@geovox.nl](mailto:b.nushi@geovox.nl)

# Republic of Kosovo



- Area – about 11.000 km<sup>2</sup>
- 30 municipalities
- Population – about 2.2 million
- Independency declaration in February 2008



# Assessment Approach

*Goal: By synchronized use of three assessment approaches author expected to create a much broader and more comprehensive picture of SDI of Kosovo.*

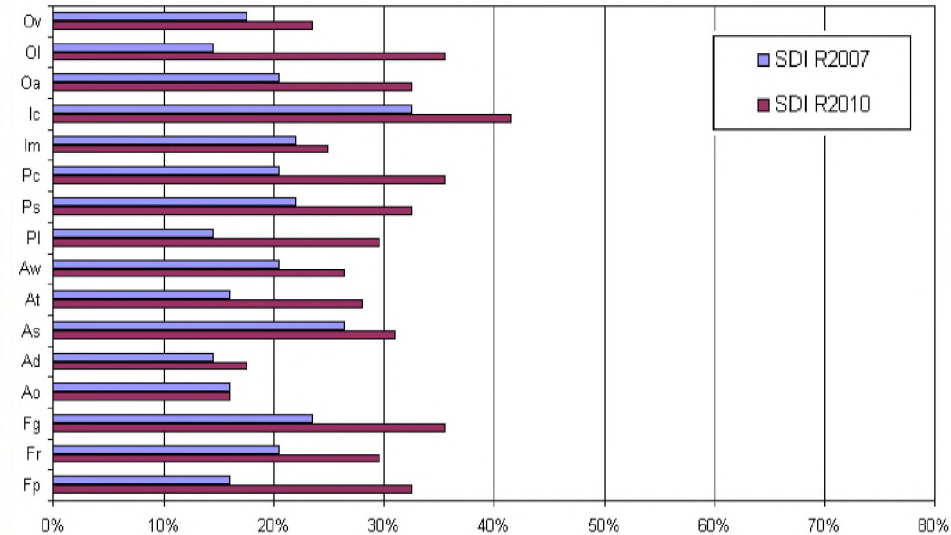
- *Three assessment approaches are used: SDI Readiness Index, State of Play and Maturity matrix.*
- *The special focal point is given to the Organisational aspects.*

# The SDI readiness of Kosovo

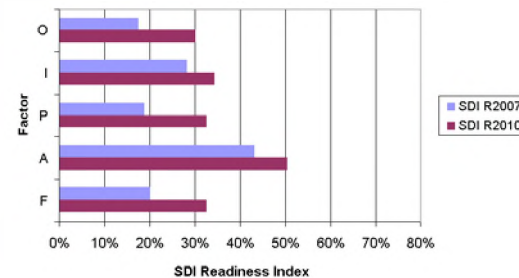
- ***Intention:*** To assesses whether a country is ready to embrace SDI development. (Delgado Fernández and Crompvoets, 2007).
- ***Goal:*** The difference in SDI readiness in Kosovo in two separate time frames (2007 and 2010).
- ***Factors:*** Organizational , Information, Access network, People and Financial resources.

# SRI Kosovo 2007- 2010

			SDI R2007	SDI R2010	SDI R-delta
Organizational	Politician vision regarding SDI	Ov	0,18	0,24	0,06
Organizational	Institutional leadership	OI	0,15	0,36	0,21
Organizational	Umbrella legal agreement(s)	Oa	0,21	0,33	0,12
Informational	Digital cartography availability	Ic	0,33	0,42	0,09
Informational	Metadata availability	Im	0,22	0,25	0,03
People	Human Capital	Pc	0,21	0,36	0,15
People	SDI culture	Ps	0,22	0,33	0,11
People	Individual leadership	PI	0,15	0,30	0,15
Access network	Web connectivity	Aw	0,21	0,27	0,06
Access network	Telecommunication infrastructure	At	0,16	0,28	0,12
Access network	Geospatial software availability	As	0,27	0,31	0,05
Access network	Own geoinformatics development	Ad	0,15	0,18	0,03
Access network	Open source culture	Ac	0,16	0,16	-
Financial Resources	Government central funding	Fg	0,24	0,36	0,12
Financial Resources	Return on investment	Fr	0,21	0,30	0,09
Financial Resources	Private sector activity	Fp	0,16	0,33	0,17



Factor		SDI R2007	SDI R2010	SDI R-delta
Organizational	O	0,17	0,30	0,13
Informational	I	0,28	0,34	0,06
People	P	0,19	0,32	0,14
Access network	A	0,43	0,50	0,07
Financial Resources	F	0,20	0,33	0,12
<b>SDI Readiness Index (2010)</b>		<b>0,26</b>	<b>0,36</b>	<b>0,11</b>



*Comparison SDI Readiness Index of Kosovo (2007 - 2010)*

# Conclusions (SRI)

- *There is a self-effacing increase from 0.26 in 2007 to 0.36 in 2010.*
- *The main merit for this increase is the very low SRI in 2007.*
- *The largest SRI increase is in aspects '**People**' (from 0.19 to 0.32) and '**Organisational**' (from 0.17 to 0.30) index.*
- *The lowest SRI increase is at aspects '**Informational**' (from 0.28 to 0.34) and '**Assess network**' (from 0.43 to 0.50) index.*

# INSPIRE State of Play (SoP)

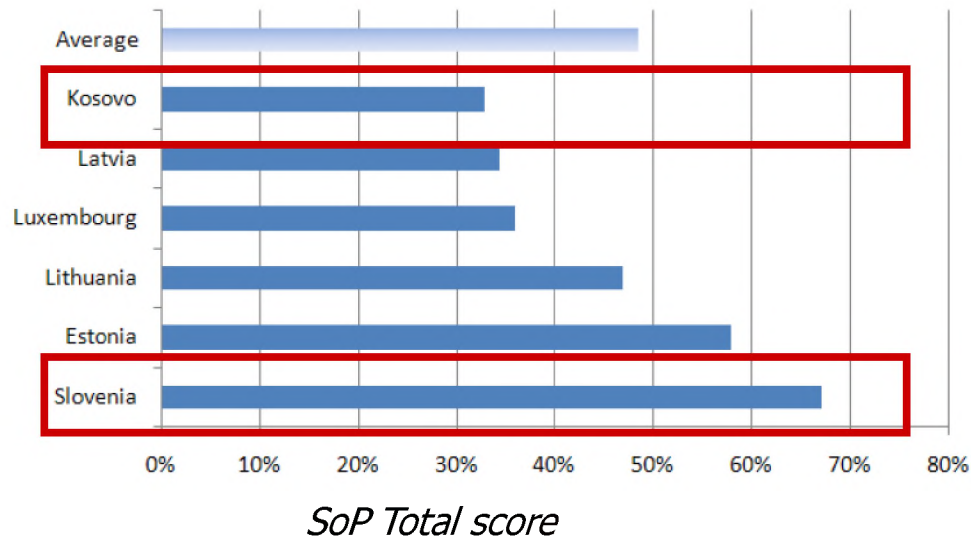
- ***Intention:*** To measure, describe, monitor and analyze activities related to SDI's in the European Community.
- ***Goal:*** Observing the differences and similarities between the SDI developments of *Estonia, Lithuania, Latvia, Slovenia en Luxembourg* and defining the SoP of SDI of Kosovo in 2007.
- ***Components:*** organizational aspects; the legal and funding framework; spatial data; metadata; access and other services; standards and thematic environmental data.



# SoP Cross-country comparison

		I. Organisational issues							II. Legal issues and funding								III. Data				IV. Metadata				V. Access and other services								
2007		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Estonia	EE	In agreement	In partial agreement	In partial agreement	Not in agreement	Not in agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	
Lithuania	LT	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	
Luxembourg	LU	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	
Slovenia	SL	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	
Latvia	LV	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	
Kosovo	KO	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	In agreement	

In agreement	In agreement
In partial agreement	In partial agreement
Not in agreement	Not in agreement
Unknown	Unknown



# Conclusions (SoP)

- *All studied cases have similar levels of SDI and are developing a truly national SDI.*
- *Data, metadata and services are quite developed, especially in Slovenia and Estonia.*
- *Slovenia has the most stabile SDI development with the highest total SoP score of 67%.*
- *Latvia (34%) and Kosovo (33%) have lower score.*

# Maturity matrix (MM)

- ***Intention:*** To assess the coherence of the geoinformation community. A more 'mature' SDI is more successful (Kok and Van Loenen, 2005).
- ***Goal:*** Defining the difference of Slovenian en Kosovar SDI.
- ***Components:*** Vision, Leadership, Communication, Self-organizing capacity, Awareness and Financial sustainability.

# Maturity matrix

Stage \ Aspect	Stand alone/ Initiation	Exchange/ standardization	Intermediary	Network
Vision	Focus on individual organisation	Developed with all stakeholders	Implementation	Commonly shared, and frequently reviewed
Leadership	Focus on individual organisation	Questioned	Accepted	Respected by all stakeholders; 'champion'
Communication	Focus on individual organisation	Open between public entities	Open between all stakeholders	Open and interactive between all
Self-organising ability	Passive problem recognition	Neutral problem recognition	Actively helping to solve identified problems	Actively working on innovation
Awareness for GI	Professionals in one organisation: organisational 'SDI'	Professionals of organisations together: SDI	Awareness at many levels incl. decision making	Commitment at all levels/continuous support in politics and management
Financial sustainability	Limited to projects	Neutral	Guaranteed for certain period	Sustainable but frequently reviewed

*Maturity matrix of Kosovo SDI*

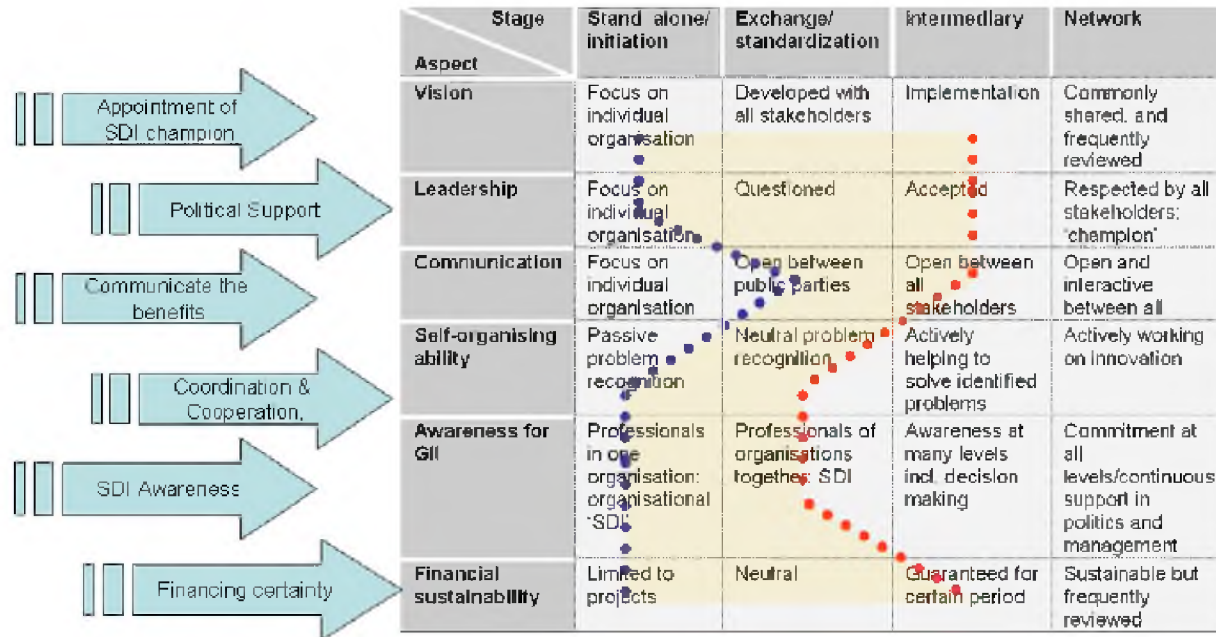
Stage \ Aspect	Stand alone/ Inflation	Exchange/ standardization	Intermediary	Network
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## *Maturity matrix of Slovenian SDI*

# Conclusions (MM)

- Most significant gap occurs in Vision, Leadership and Financial sustainability in which SDI of Kosovo should put together a largest leap from stage 1 (stand alone) to stage 3 (Intermediary).
- On the other hand the gap is slightly smaller in Communication (stage 2 to 3), Self-organizing ability and Awareness for GII aspect (stage 1 to 2).
- SDI of Kosovo can follow the development trend of SDI of Slovenia to be geared up to meet all challenges and future needs in line with INSPIRE directives.

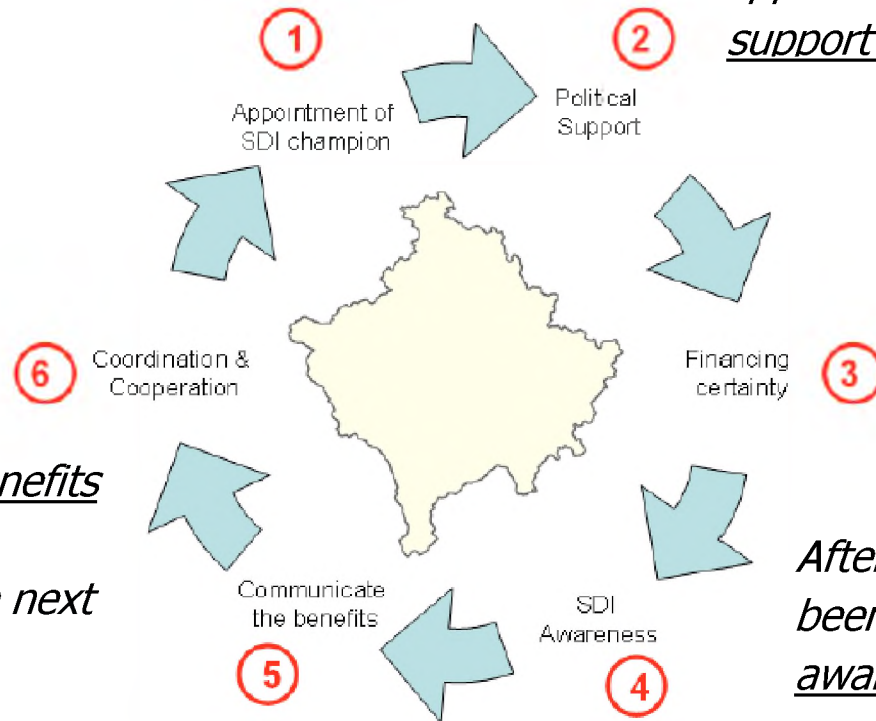
# The driving forces (DF)



*Driving forces projected in the Maturity matrix*

# Prioritizing the DF of Kosovo.

*First a SDI champion has to be appointed and then political support has to be established.*



*Communicating the benefits and coordination & cooperation will be the next logical steps.*

*After the financing certainty has been guaranteed the SDI awareness will be improved.*



# Recommendations

- *The politicians have to take an active role in steering of the Kosovo's SDI.*
- *Improvement of the existing SDI of Kosovo is to be treated as a public project of permanent character.*
- *Creation of an independent multidisciplinary body is to be considered.*
- *Encourage international capacity building projects.*
- *Stimulate the individual leadership in person of SDI Champion.*

Thank you for your attention!

Questions?

