Multi-view SDI assessment of Kosovo

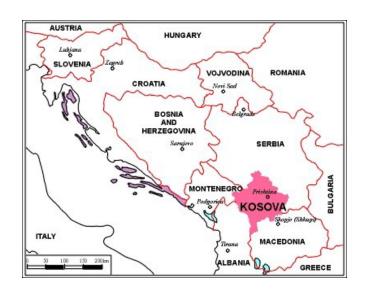
Developing a solid base to support SDI strategy development

Ir. Bujar Nushi MSc.

OTB Research Institute for the Built Environment b.nushi@geovox.nl



Republic of Kosovo



- Area about 11.000 km2
- 30 municipalities
- Population about 2.2 million
- Independency declaration in February 2008







Assessment Aproach

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: <u>SDI Readiness Index</u>, <u>State of Play and Maturity matrix</u>.
- The special focal point is given to the Organisational aspects.



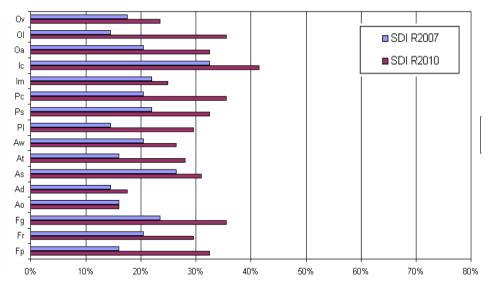
The SDI readiness of Kosovo

- 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.

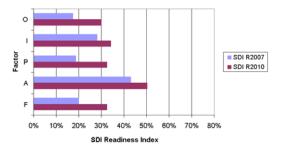


SRI Kosovo 2007- 2010

			SDI R2007	SDI R2010	SDI R-delta
Organizational	Politician vision regarding SDI	O۷	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	lc	0,33	0,42	0,09
Informational	Metadata availability	lm	0,22	0,25	0,03
People	Human Capital	Рc	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	Αw	0,21	0,27	0,06
Access network	Telecommunication infrastructure	Αt	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	Αo	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	Fр	0,16	0,33	0,17



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



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.

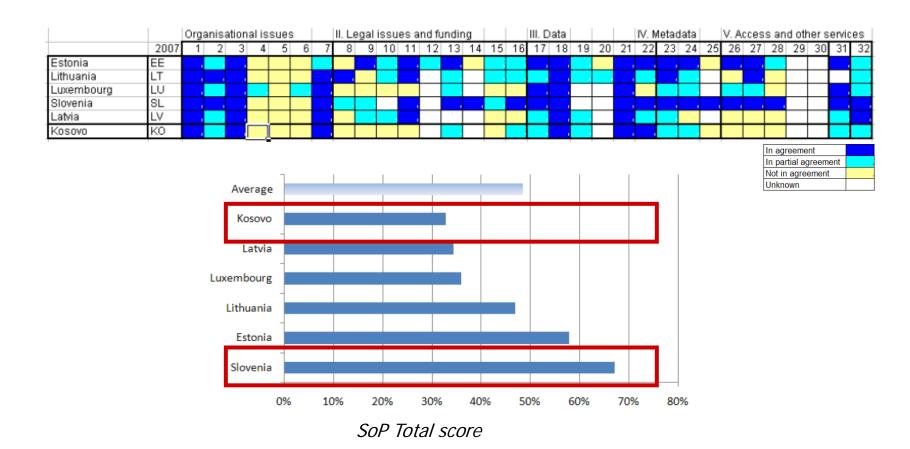


INSPIRE State of Play (SoP)

- 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 <u>Estonia, Lithuania, Latvia, Slovenia en</u> <u>Luxembourg</u> 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





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 <u>Slovenia</u> and <u>Estonia</u>.
- <u>Slovenia</u> has the most stabile SDI development with the highest total SoP score of 67%.
- <u>Latvia</u> (34%) and <u>Kosovo</u> (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, Selforganizing capacity, Awareness and Financial sustainability.



Maturity matrix

Stage Aspect	Stand alone/ initiation	Exchange/ standardization	Intermediary	Network
Vision	Focus on individual orgal ation	Developed with all stakeholders	Implementation	Commonly shared, and frequently reviewed
Leadership	Focus on indivioual organisation	Questioned	Accepted	Respected by all stakeholders; 'champion'
Communication	Focus on individual organisation	Open between public arties	Open between all stakeholders	Open and interactive between all
Self-organising ability	Passive problem rec_nition	Neutral problem recognition	Actively helping to solve identified problems	Actively working on innovation
Awareness for GII	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 products	Neutral	Guaranteed for certain period	Sustainable but frequently reviewed

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 parties	Open between all stakeholders	Open and interacti∨e between all
Self-organising ability	Passive problem recognition	Neutral problem, recognition	Actively helping to solve identified problems	Actively working on innovation
Awareness for GII	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, eriod	Sustainable but frequently reviewed

Maturity matrix of Kosovo SDI

Maturity matrix of Slovenian SDI

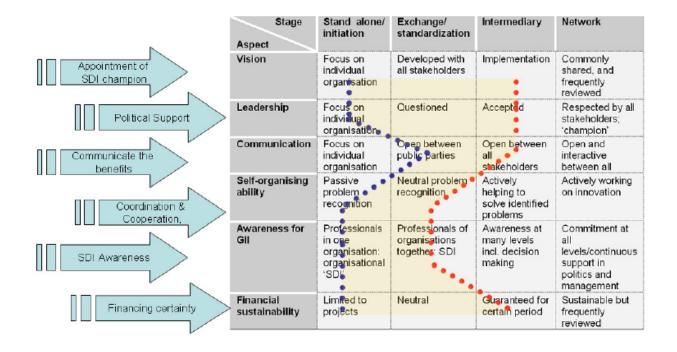


Conclusions (MM)

- Most significant gap occurs in <u>Vision, Leadership</u> and <u>Financial</u> 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
 <u>Communication</u> (stage 2 to 3), <u>Self-organizing ability</u> and
 <u>Awareness for GII aspect</u> (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.



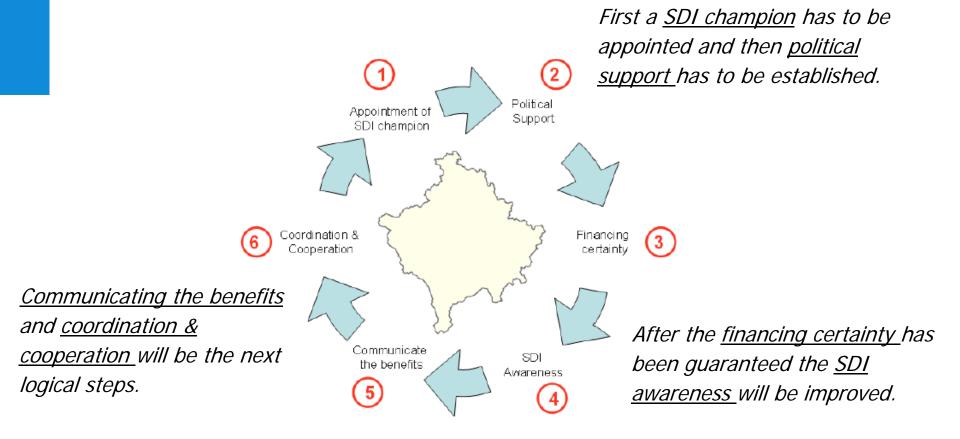
The driving forces (DF)



Driving forces projected in the Maturity matrix



Prioritizing the DF of Kosovo.





Recommendations

- The <u>politicians</u> 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 <u>public project</u> of permanent character.
- Creation of an <u>independent multidisciplinary body</u> is to be considered.
- Encourage <u>international capacity</u> building projects.
- Stimulate the individual leadership in person of <u>SDI Champion</u>.



Thank you for your attention!

Questions?



