

## ANNEX A: SOCIO-ECONOMIC BENEFITS OF NSDI IN SERBIA QUESTIONNAIRE

### Introduction and Basic Info

Within the "Improvement of Land Administration in Serbia" project, which is being implemented in the Republic Geodetic Authority with the support of the World Bank, a socio-economic study of the impact of the National Geospatial Data Infrastructure (NIGP) on society in the Republic of Serbia is being conducted.

In that sense, the Republic Geodetic Authority hired a team of experts for the realization of this multifaceted study, in order to present an analysis of the benefits of NSDI in the Republic of Serbia.

This questionnaire was prepared with the aim of determining the benefits that your organization has had or will have thanks to the NSDI. Part of the analysis is based on your answers, which are essential to us, with special emphasis on your answers to questions about the quantification of benefits, and which are the basis of the study as a whole.

Please give the best possible answer to the questions and in accordance with the available data. Questions marked with an asterisk (\*) are required.

\* 1. Name of organization:

2. Organizational unit within your organization:

\* 3. Organization address:

\* 4. Contact person within the organization:

Name:

Email:

Phone no.:

\* 5. Type of the organization:

- State Authority
- Autonomous province body
- Public enterprise
- Company
- NGO
- Other (please specify):

\* 6. Please select the thematic policy areas in which your organization is operating in. For each selected thematic policy area describe what your organization contributes to the area?

(More than one answer is allowed. Please explain the contribution. Description is mandatory.)

Economic & Financial  
Affairs; Description:

Public Administration  
Reform & e-Government;  
Description:

Spatial Development;  
Description:

Safety; Description:

Agriculture; Description:

Environment; Description:

Transport & Energy;  
Description:

Health; Description:

Tourism & culture;  
Description:

\* 7. Do you have experiences in matters related to the following investment initiatives? (If yes, please describe what were the benefits for your organization.)

Digital cadastral data;

Benefits:

Improved buildings register  
in terms of data quality;

Benefits:

Improved utility register in  
terms of data quality;

Benefits:

Improved address register  
in terms of data quality;

Benefits:

Mobile application of  
cadastral data; Benefits:

None of the above:

8. Are there any other investment initiatives, related to geospatial information, excluding the ones listed in the previous question, that benefited your organization? If yes, please describe all relevant initiatives and their benefits for your organization. (This question is optional. In case you decide to fill it, more than one answer is allowed)

Investment initiative 1 and  
its benefits:

Investment initiative 2 and  
its benefits:

Investment initiative 3 and  
its benefits:

\* 9. Please describe in your own words what is the Serbian National Spatial Data Infrastructure.

\* 10. What is the (potential) primary role of your organization within the NSDI? (Please, select only one relevant option.)

Data user

Policy/Decision maker

Data provider

Financier

Data user and provider

Service provider

Other (please specify)

\* 11. Is your organization a member of the NSDI Council, in accordance with Article 5 of Law on National Spatial Data Infrastructure?

Yes

No

\* 12. Does your organization utilize satellite imagery?

Yes

No

## Satellite imagery

**Considering the importance of satellite imagery as a set of geospatial data and as an investment initiative, questions regarding them have been specially emphasized.**

\* 1. Please describe the benefits that your organization has experienced in using satellite imagery. (More than one answer is allowed. Description is mandatory.)

Meeting the requirements of legislation; Description:

Enhanced standards conformance; Description:

Increased customer satisfaction; Description:

Improved quality of data; Description:

Improved quality of services delivered; Description:

Increased efficiency; Description:

Reduced risk; Description:

Increased capacity building; Description:

Increased productivity; Description:

Lower costs; Description:

Increased revenue; Description:

Other; Description:

\* 2. Which 2-3 benefits of the ones described in the previous question are the most important for your organization?

\* 3. The columns specify the nature of every benefit. Please mark the nature of each benefit you have selected as the most important in the previous question. (Before ticking all the relevant one(s), it is strongly recommended to read the footnotes for each type under this question. Ticking more than one answer is allowed.)

	Time saved (1)	Workflows made more efficient (2)	Expenditure reduced (3)	Improved health outcomes (4)	Environmental improvements (5)	Consumer surplus (6)	Innovative status/reputation (7)
Meeting the requirements of legislation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enhanced standards conformance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased customer satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved quality of Data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved quality of services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased efficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased productivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lower costs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased revenue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (if you have listed a benefit by yourself as one of the most important benefits in question no. 1 on this page, please list it here as well and describe its nature):

1 - e.g. time saved per unit (transaction, incident) or staff member, customer, equipment, procedure etc;

2 - e.g. reduction in process time, money savings, less manual workflows, reduced errors and duplications, more cooperation between organizations, better accessibility of data, job creation etc;

3 - e.g. money spent externally on data and software licenses, equipment, outsourcing, office space, equipment, burden reduction etc;

4. - e.g. lives saved, injuries reduced, stress reduced, more leisure, increased motivation of the staff etc;

5. - e.g. reduced carbon dioxide emissions, radioactivity, spreading of disease, forest fires, farm fires, disaster risk reduction/ disaster prediction etc;

6. - e.g. consumer surplus is possibility to purchase a product for a price that is less than the highest price which the consumer was originally being willing to pay. Saving in time (hours/month; increases in sales (RSD/month) saving in licenses(RSD/month); reduction of maintenance time and costs;

7. - openness and transparency, participations, better marketing (increased business, easier sales), strategic (better policy making outcomes, efficient interaction with government, participate in public life).

\* 4. For every benefit you have chosen in question no. 2 on this page, quantify every nature of the benefit you have marked in question no. 3 for that benefit (e.g. hours; number; month; or RSD; hours/month; number/month; hours/month; or RSD/month; etc.)

(This question is of the utmost importance for the successful socio-economic analysis of NSDI. Please provide answers as precise as possible. Before answering this question see the examples of answers under this question.)

#### Example of filling in quantification questions

The respondent in question no. 1 indicated the following answers: meeting the legislation requirements, improved data quality, reduced risk and lower costs.

In question no. 2 the respondent opts for the two most important benefits: risk reduction and lower costs.

In question no. 3 for "risk reduction" the respondent ticks improved health outcomes and environmental improvements, and for "lower costs" ticks the time saved, expenditures reduced and consumer surplus.

In question no. 4 the respondent for each selected benefit quantifies each selected nature of these benefits from question no. 3: For reduced risk, the user quantifies "health outcomes" as "reduction of injuries at work by 20% and reduction of serious injuries at work by 10%", and "environmental improvements" are quantified as "reduction of carbon dioxide emissions" "by 15%, and states that thanks to satellite imagery, one flood was prevented, the damage from three weather disasters was drastically reduced and that fire protection was organized more rationally.

For lower costs, the user quantifies the "time saved" as 8 hours per month based on a smaller volume of processing of financial transactions, "expenditures reduced" quantifies as 5,600,000.00 RSD / month, and "consumer surplus" quantifies as 250,000, 00 RSD / month saved money.

If you need additional clarification or instructions when filling out this question, feel free to call the contact person from the email you received with a link to this questionnaire.

\* 5. For each of the 2-3 most important benefits you selected in question 3 on this page, were there additional costs that had to be incurred to realize the benefits? If yes, which one(s)? (Tick all the relevant one(s) –more than one is allowed).

	New hardware	Software licenses	Additional datasets either licensed or acquired	Extra staff	Staff training	Professional services	No additional costs
Meeting the requirements of legislation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enhanced standards conformance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased customer satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved data quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved quality of services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased efficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased productivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lower costs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased revenue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (if you have listed as the most important benefit something by yourself in question 1 on this page, please list the benefit and describe its nature):

## Geospatial Data

**This part of the questionnaire refers to all sets of geospatial data, including satellite imagery.**

\* 1. Does your organization use geospatial data? (Including satellite imagery)

Yes

No

## Users of Geospatial Data

\* 1. Please provide us an example(s) of how your organization utilizes geospatial data.

\* 2. Please describe the benefits that your organization has experienced in using the current NSDI. (More than one answer is allowed. Description is mandatory.)

Meeting the requirements of legislation; Description:

Enhanced standards conformance; Description:

Increased customer satisfaction; Description:

Improved quality of data; Description:

Improved quality of services delivered; Description:

Increased efficiency; Description:

Reduced risk; Description:

Increased capacity building; Description:

Increased productivity; Description:

Lower costs; Description:

Increased revenue; Description:

Other; Description:

\* 3. Which 2-3 benefits of the selected ones in the previous question are the most important for your organization?

\* 4. The columns specify the nature of every benefit. Please mark the nature of each benefit you have selected as the most important in the previous question. (Before ticking all the relevant one(s), it is strongly recommended to read the footnotes for each type under this question. Ticking more than one answer is allowed.)

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Meeting the requirements of legislation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enhanced standards conformance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased customer satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved quality of Data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved quality of services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased efficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased productivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lower costs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased revenue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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If you need additional clarification or instructions when filling out this question, feel free to call the contact person from the email you received with a link to this questionnaire.

\* 6. For each of the 2-3 most important benefits you selected in question 3 on this page, were there additional costs that had to be incurred to realize the benefits? If yes, which one(s)? (Tick all the relevant one(s) –more than one is allowed).

	New hardware	Software licenses	Additional datasets either licensed or acquired	Extra staff	Staff training	Professional services	No additional costs
Meeting the requirements of legislation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enhanced standards conformance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased customer satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved data quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved quality of services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased efficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased productivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lower costs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased revenue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (if you have listed as the most important benefit something by yourself in question 1 on this page, please list the benefit and describe its nature):

## Benefits Relating to Society and Organizations

\* 1. Have you noticed any of the listed benefits of NSDI for the society? (More than one answer is allowed. Please describe each benefit that you list. Description is mandatory.)

1. Cost and time saved;  
description:

2. Simplification of  
processes; description:

3. More innovation;  
description:

4. More effective decision-  
making and policy  
making/evaluation;  
description:

5. Increased cooperation;  
description:

6. Better service delivery;  
description:

7. Delivery of new services  
and products; description:

8. Higher transparency;  
description:

9. Greater citizen  
engagement; description:

10. Enhanced economic  
development; description:

11. Establishment of new  
companies; description:

12. More job creation;  
description:

13. More trust in the public  
sector; description:

14. More open and  
transparent government;  
description:

15. Emergency support  
and disaster risk reduction;  
description:

16. Social inclusion;  
description:

\* 2. Which 2-3 benefits of the selected ones in the previous question are the most important?

\* 3. In the context of your organization, please describe in words the benefits that your organization would like to experience in the (near) future when using the NSDI? (More than one answer is allowed. Please describe the benefits for every answer listed. Description is mandatory.)

1. Meeting the requirements of legislation; description:

2. Enhanced standards conformance; description:

3. Increased customer satisfaction; description:

4. Improved data quality; description:

5. Improved quality of services; description:

6. Increased efficiency; description:

7. Reduced risk; description:

8. Increased capacity; description:

9. Increased productivity; description:

10. Lower costs; description:

11. Increased revenue; description:

12. Other; description:

\* 4. Which 2-3 benefits of the selected ones in the previous question are the most important?

\* 5. Which of the following societal benefits do you expect of the NSDI in the (near) future? (More than one answer is allowed. Please describe the societal benefit for every answer provided. Description is mandatory.)

1. Cost and time saved; description:

2. Simplification of processes; description:

3. More innovation; description:

4. More effective decision-making and policy making/evaluation; description:

5. Increased cooperation; description:

6. Better service delivery; description:

7. Delivery of new services and products; description:

8. Higher transparency; description:

9. Greater citizen engagement; description:

10. Enhanced economic development; description:

11. Establishment of new companies; description:

12. More job creation; description:

13. More trust in the public sector; description:

14. More open and transparent government; description:

15. Social inclusion; description:

\* 6. Which 2-3 future societal benefits selected in the previous question are the most important?

7. Are there any other points, comments you would like to make and/or questions you would like to ask regarding this questionnaire?