ON THE WAY TO IGIF IMPLEMENTATION

UNWGIC, 10 – 14 October 2022, Hyderabad, India

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Ukraine – Brief information
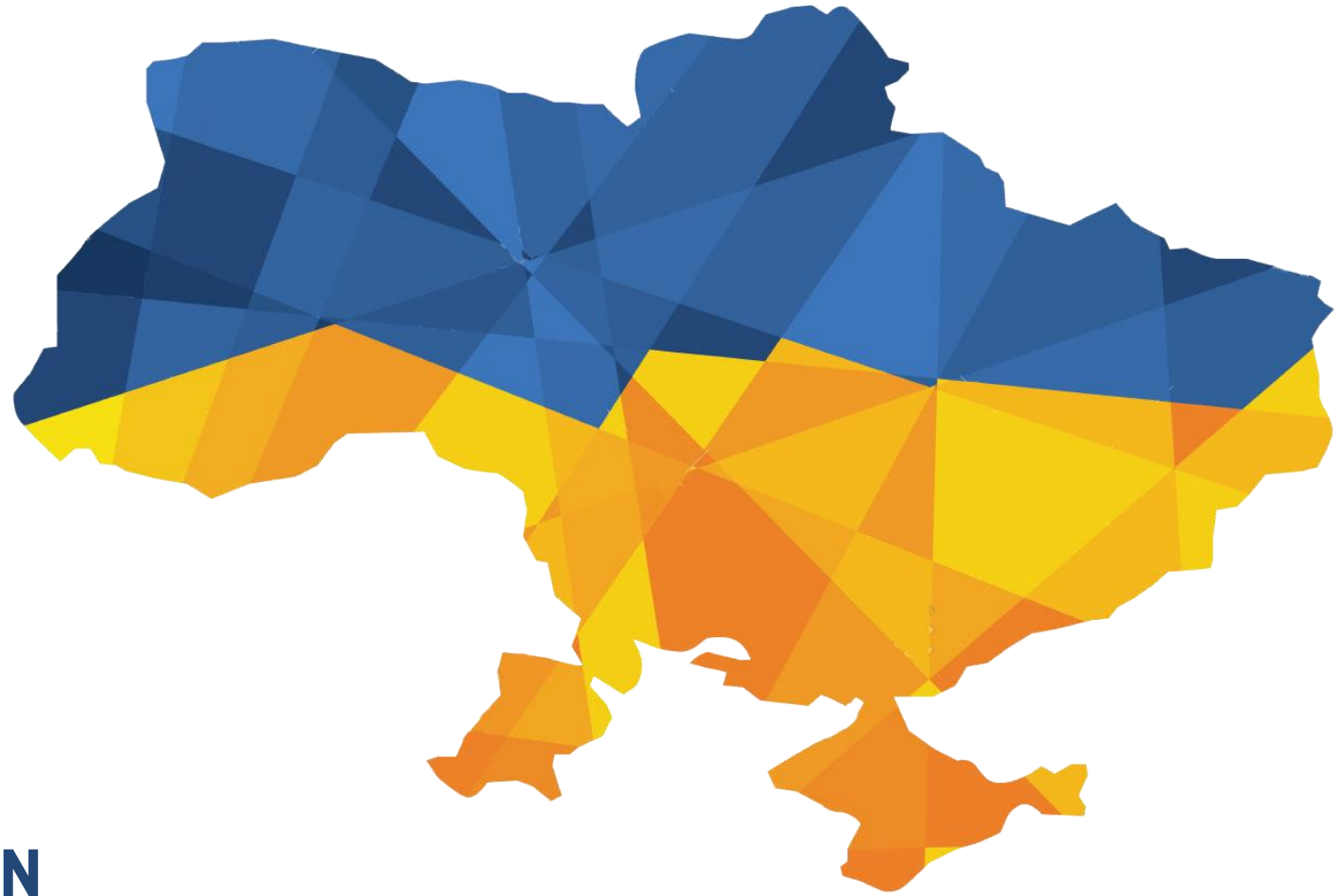
Also Known As UKRAYINA

Capital: KYIV

Official Language: UKRAINIAN

Population over 41 MILLION

Total Area: 603 549 SQ KM

**Aspiration: EUROPEAN
AND EURO-ATLANTIC INTEGRATION**

Ukraine NSDI context

13.04.2020 → The Law on **NSDI** was adopted

09.09.2020 → **NSDI** Council was established

28.01. 2021 → SE «RIGC» was appointed **NSDI** Geoportal Administrator

26.05. 2021 → CMU Resolution for **NSDI** operation was approved

Successfully implemented the innovative pilot project of the **NSDI** National Geoportal

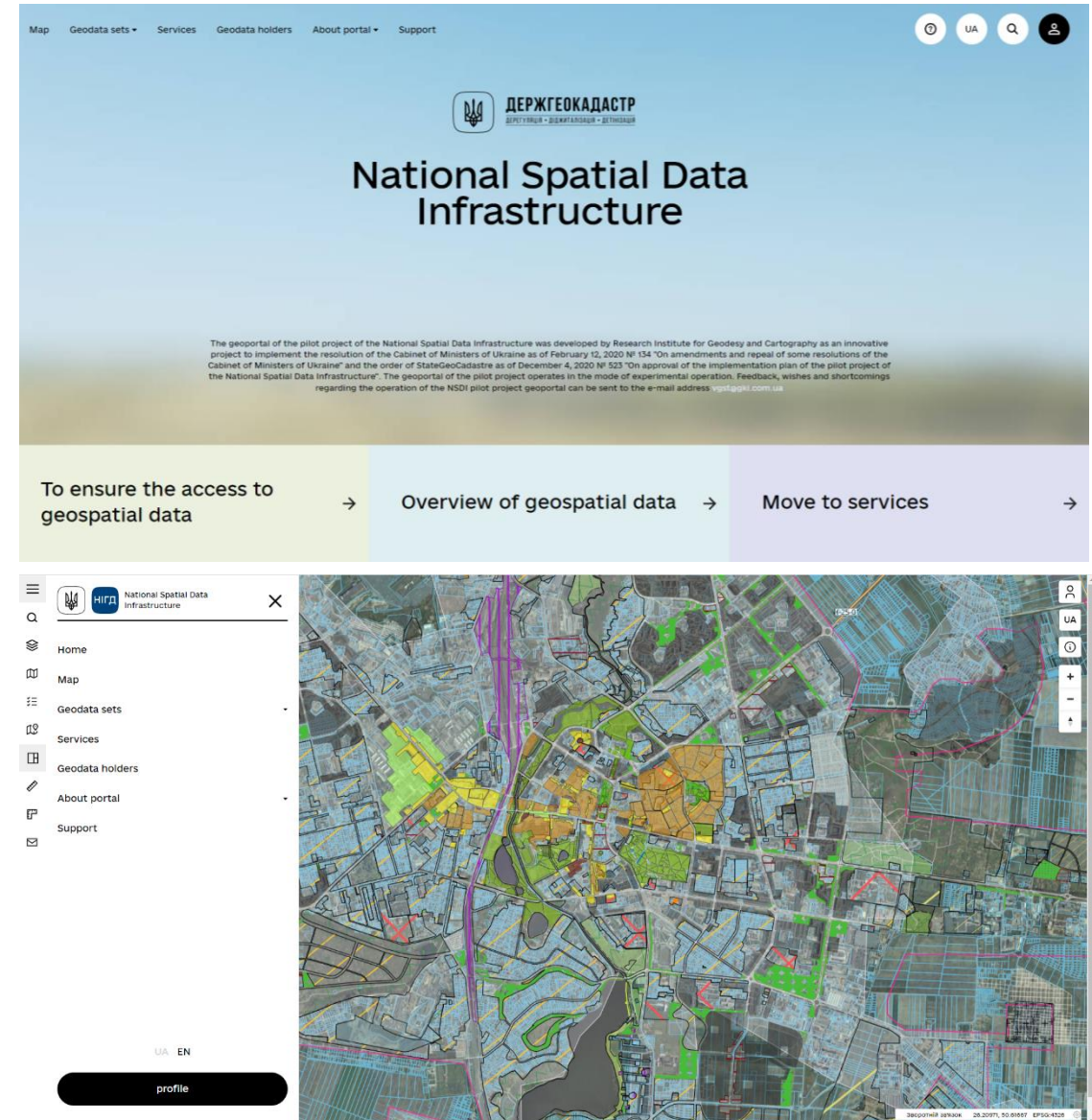Country Assessment and IGIF Implementation in the framework of Norwegian Support

Main State Topographic Map scale 1:50 000 has been created (updated)

GNSS network development
(20 StateGeoCadastre`s Regional Offices +
40 Norwegian + 20 Trimble).

NSDI legal background

Baseline assessment in 2021

Strengths

Legal and policy

Digital transformation

International donor support

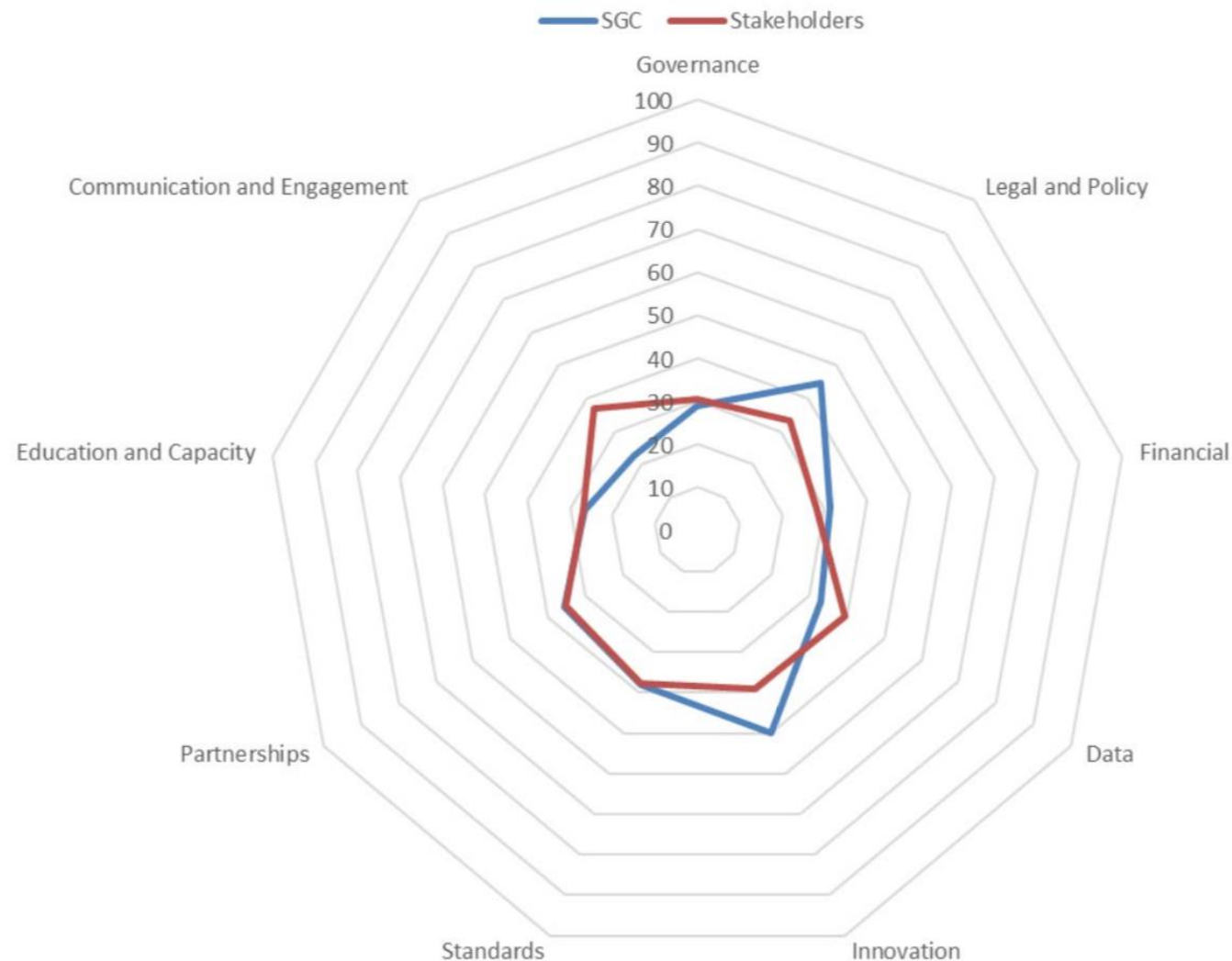**Capacity development**

Weaknesses

No sustainable business model

Lack of up-to-date fundamental geospatial data,

Under-developed partnerships between public

and private sectors

Lack of communication strategy

Total score 35

Radar chart comparing SGC and Stakeholders across: Governance, Legal and Policy, Financial, Data, Innovation, Standards, Partnerships, Education and Capacity, Communication and Engagement.

Stakeholders concerns

"Lack of comprehensive information about what NSDI is and what is the key goal"

"Mistrust of how the data would be used"

"Hardware and capacity challenge"

"Knowledge gaps of data producers on standards"

"Strong necessity of a single address registry and topographic map with a scale of 1:10 000"

National Report

STATEGEOCADASTRE
DIGITALIZATION ▪ DEREGULATION ▪ DESHADOWING

ConsultingWhere
Maximising the value of location information

Kartverket

INTEGRATED GEOSPATIAL
INFORMATION FRAMEWORK

WORLD BANK IMPLENTATION METHODOLOGY
BASELINE DIAGNOSTIC TOOL

BASELINE REPORT

UKRAINE

Version: 2.0

Date: 06 June 2021

Contents

THE PRESIDENT HAS SPOKEN ABOUT NSDI AS AN "INVENTORY OF THE NATION"

Key observations:

➢ Ukraine has a **mature history of NSDI understanding**

➢ The role of Government in NSDI evolution needs to **change from focusing on collecting data to collating and distribution**

➢ The strong role public policy in **stimulating innovation i**s being supported by Government but NSDI is not central to this initiative

➢ Partnerships between public sector bodies and with the private sector will be important going forward but **currently lack depth and levels of trust** to support rapid progress

➢ **A sustainable NSDI is achievable over the next 5 years** but can only be achieved by sustained participation of all stakeholders and the high profile

Alignment to Policy Drivers

1. EU Integration

2. Land Reform

3. Digital Transformation

4. Decentralization

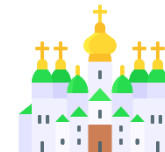5. Infrastructure Development (including transport)

6. Energy

7. Environment

8. Public Health

9. Education, Science, and Innovation

10. Culture and Tourism

11. Defense and Intelligence

Socio-Economic Benefit Analysis and Use Cases

Ref	Case Study Title	Evidence	Methodology	Benefit Recipients	Net Discounted Value of Benefits	
					UAH, mln	USD, mln
1	Impact on GNSS of CORS Network	Local and international expert opinion Australian economic study	Benefits Transfer based on Australian economic benefits study	Private Surveyors, Scientific Research, Government	438	16
2	National Address Data Sharing	Local Market Survey to assess level of duplication, International studies	Scaled costs of duplication from international studies	Government, Business	1104	40
3	Precision Agriculture	National Agriculture and Land market statistics, US and Danish studies	Commissioned Study by Kiev school of Economics	Government, Farmers	2124	78
4	Open Geospatial Data Benefits	Stakeholder interviews Danish economic study	Benefits Transfer, scaling on GDP from Danish study	Business, Software developers, NGOs, Citizens	257	9
5	Geospatial Products and Services Growth	Industry interviews, National IT industry statistics, Market knowledge	Benefits transfer from global geospatial industry study	Government (tax income), IT industry, Business	671	25
6	Local Government Efficiency	Interviews with City Municipalities identified similar user cases in other countries	Benefits Transfer based on England and Wales economic benefits study	Local Government, Citizens	1826	67
7	Reduced Land Transaction Costs	Expert Opinion Land market knowledge	Commissioned Study by Kiev school of Economics	Government, Farmers, Agribusiness	91	3
8	Consumer Mapping Value	Internet and Smartphone usage statistics	Benefits transfer, scaling from global willingness to pay survey	Citizens	1218	45
9	Emergency Services Response	Local emergency services statistics, Local web research	Benefits transfer by applying global economic and Value of a Statistical life studies to national statistics	Government, Citizens	504	18
TOTAL NET BENEFITS					8235	302

Country Action Plan

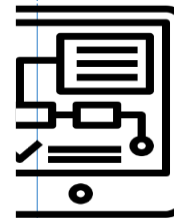## Draft Recommendations for 5-year period of investment

Agreement of **Geospatial data sharing** protocols to reduce costly data duplication and improve quality and consistency
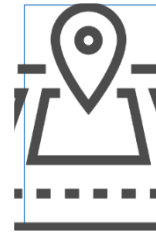
Completion of the Land Cadastre for all parcels

Create a single **National Geocoded Street Address database**

Define and implement a **sustainable business model** for the NSDI

**Enhancement of the geodetic framework** including the network of Continuously Operating Reference Stations (CORS)

Build a Scalable National Geoportal providing **online access to fundamental geospatial data through web viewing and APIs**

Draft Recommendations for 5-year period of investment – Continued
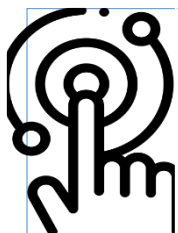
Digitization and Quality improvements for additional fundamental geospatial data themes
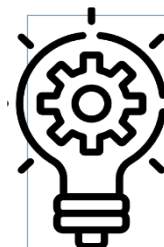
**Sponsoring innovation** in the development of new applications using the NSDI

Adoption of **international data specifications** for foundation themes and creation of national profiles where necessary

Upskilling Government Agencies, including but not limited to SGC, to be able to provide leadership and coordination more effectively

Growing the geospatial ecosystem by partnering more effectively with a wider range of users, particularly in the commercial sector
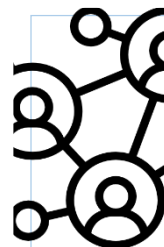
Raising the profile of NSDI based on a wide ranging communications strategy, stressing messages of its role in digital transformation and positive impacts it brings to many sectors of the economy

Challenges during the war

From February 24, 2022 NSDI Geoportal is working in a limited access mode

StateGeoCadastre is on the way to re-think the chosen NSDI model concerning the data transparency to public

Registration & Verification of amalgamated territorial Communities on the NSDI geoportal

Limited state budget resources as a consequence of martial law and urgent defense needs

For defense and reconstruction Ukraine needs updated maps at scales of 1:10 000 and 1:25 000
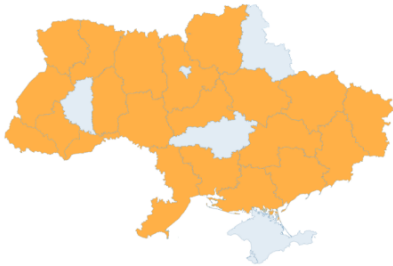
During the war, an urgent issue has arisen regarding the protection and preservation of data

NSDI as the instrument for successful post-war reconstruction

The Portal for monitoring the state of social and administrative infrastructure of the regions affected by the Russian invasion was created **on the basis of the NSDI Geoportal**, which contains:

➤ Register of objects and destructions
➤ Register of restoration objects
➤ Interactive map

Портал моніторингу стану соціальної та адміністративної інфраструктури регіонів, що постраждали від вторгнення РФ
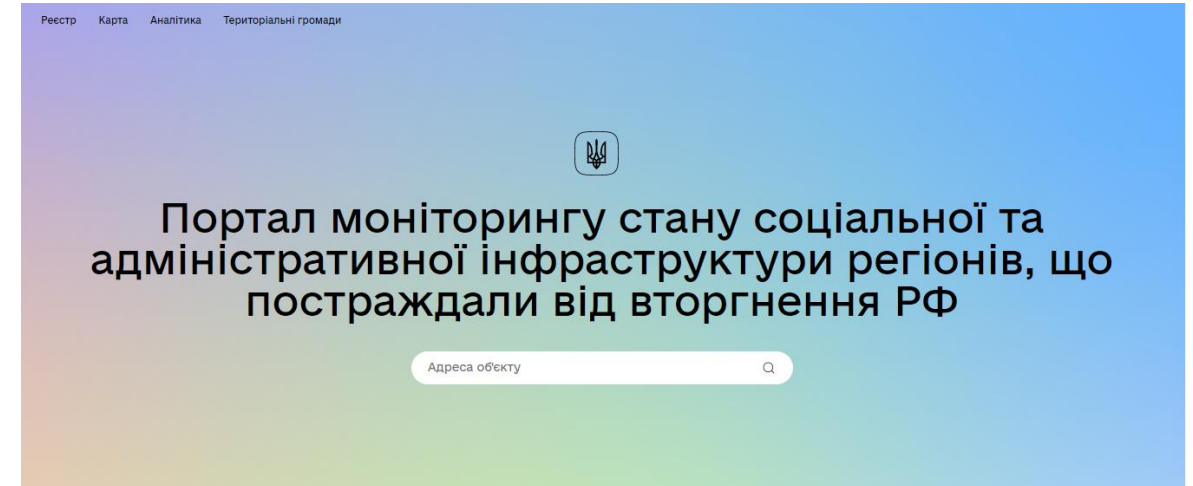
Реєстр об'єктів та руйнувань

Реєстр об'єктів відновлення
Доступ до відомостей про відновлені об'єкти у режимі 24/7

Інтерактивна карта
Зручний пошук та відображення інформації про об'єкт

The National Council for the Reconstruction of Ukraine has developed the **Action Plan for post-war reconstruction** and development of Ukraine, which includes item **"Mapping of the territory of Ukraine and creation of the National Geospatial Data Infrastructure"**

Further StateGeoCadastre`s activities

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New International Technical Assistance Project «**Capacity Development Project for Utilizing the National Spatial Data Infrastructure» was launched**, 07.02.2022 - 28.02.2025 (37 months).

Overall objective of the Project: Improving the access of Ukrainian citizens to basic and comprehensive information on natural resources, roads, cultural heritage sites, etc. that is necessary for economic and social activities of the population.

The Project also contains the initiative of **rapid topographic mapping of the territory of Odesa, Kherson and Mykolaiv at a scale of 1:10 000** for post-war reconstruction

Within the framework of the **Memorandum of Understanding between the StateGeoCadastre and the Netherlands Agency for Cadastre, Land Registry and Cartography** on institutional and partnership cooperation in the field of National Spatial Data Infrastructure, the potential direction of cooperation regarding **knowledge exchange** on created/updated 1:10 000, 1:25 000 scales maps is in the process of discussion

Discussion of the draft document «**Towards a sustainable geospatial ecosystem beyond SDIs»**

Organization of the future **training course «Geospatial data specification» for Ukrainian experts**

Initiative of signing the joint Memorandum

THANK YOU
for your attention!

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