

## Consultative Workshop on

# Knowledge-focused Geospatial Infrastructure to Support National Development Mandates in South Africa

### Background

The partner alliance project '**Advancing Role of Geospatial Knowledge Infrastructure (GKI) in World Economy, Society and Environment**', initiated by the **United Nations Statistics Division (UNSD)** and **Geospatial World**, brings together key stakeholders (government, industry, research, academia, etc.) from the geospatial, digital, and user industries to build an inclusive ecosystem for developing geospatial knowledge enabled digital infrastructures. With the expansion and evolution of the geospatial stakeholder ecosystem in the digital economy, it is imperative to bridge the gap between the geospatial, digital, and user communities to develop better geospatial knowledge products. Over three phases, the project aims to create strategies and action plans for making fit-for-purpose geospatial data and knowledge services accessible on demand for use cases across sectors supporting sustainable development.

As part of the first phase of the project (January 2020 – May 2021) the geospatial knowledge concepts were developed, and the elements of GKI were defined through consultations with geospatial stakeholders from around the world. The defined concepts and elements were developed into a GKI white paper that moved the debate from data to knowledge.

As part of the second phase of the project (June 2021 – October 2022), the project expanded the engagement beyond the geospatial stakeholders to 8 defined user communities, and the digital ecosystem, with the aim of understanding the evolving needs of user sectors, and developing better demand-driven geospatial products in collaboration with the digital industry. The second phase concluded with the release of the GKI Readiness Index and Value Proposition in World Society, Economy, and Environment report at the 2<sup>nd</sup> United Nations World Geospatial Information Congress.

The GKI report which defined the value proposition of integration of GKI elements in the sectoral workflows, and ranked 50 countries based on their readiness for transition to a knowledge-focused geospatial infrastructure, laid the foundation for the Phase 3 activities. Across 2 phases, the project has developed the GKI concept, engaged with industry to position it across a number of sectors and looked at national readiness to move from geospatial data to knowledge as a driver. Phase 3 of the project which is now underway, considers the implementation of GKI concepts through deep dive engagements at the national level of five selected countries.

South Africa is ranked 29<sup>th</sup> in the GKI Readiness Index 2022, and is the highest ranked African country in the list. Geospatial knowledge is crucial for the successful implementation of National Development Plan 2030 in South Africa, and is key to enabling decision-making that supports planning and service delivery in key sectors like agriculture, land administration, etc., and also fighting inequality by enabling government efforts to integrate historically deprived

groups/ areas into the country's economy. With geospatial knowledge being increasingly adopted across national development projects, it is imperative that the geospatial sector in the country grows and evolves to support the development mandates across priority sectors.

## Vision

The vision of the deep dive engagement is to bring the public and private geospatial sector together and to develop a country-specific report making strategic recommendations incorporating GKI concepts and elements, for the growth and evolution of the geospatial sector in South Africa, to support national development mandates and programs.

## Objectives

- To identify evolving demand for geospatial knowledge across development priority sectors in South Africa
- To initiate conversations with national geospatial and digital agencies regarding evolving role in the move towards future knowledge-focused geospatial ecosystem
- To enable collaboration with private geospatial and digital industry for the development of innovative fit-for-purpose solutions to address nation's key challenges and meet national development mandates
- To facilitate discussions regarding long-term thinking and development of geospatial strategy for South Africa

## Methodology

The deep-dive engagement at the national level which will consist of the following activities:

- A closed invitation-only consultative half-day workshop with prime stakeholders crafting a debate around GKI & national development.
- 1-day of briefings and 1:1 meetings with geospatial and digital agencies, and industry stakeholders

## Outcomes

The workshop will help socialize the concept of Geospatial Knowledge Infrastructure (GKI) in South Africa, through the engagement with diverse stakeholders of the geospatial industry in the country. The workshop will also define the relationship between GKI and IGIF, and how an integrated GKI and IGIF thinking can enable the development of a holistic geospatial infrastructure in the country. The inputs and findings from the workshop and the meetings will be presented as part of a short nation-specific report, which will provide strategic recommendations for the growth and evolution of the geospatial sector in the country to support national development mandates. The findings from the report will also be disseminated with key geospatial stakeholders in the country through an online presentation.

## Timeline

November – December 2023

### Half-Day Workshop Agenda

The consultative workshop on **28<sup>th</sup> November 2023** will kickstart the deep-dive engagement in South Africa. The agenda of the workshop is given below:

Time (in hrs.)	Program
0900-0930	Introduction and Opening Keynote: State of geospatial sector in South Africa, challenges faced, and way forward – <i>representative from the Branch: Spatial Planning and Land Use Management, DALRRD</i>
0930-1000	Introduction to GKI concept, project, activities, and its outcomes – <i>GKI team</i>
1000-1100	Discussion 1: Evolution of user demand in development priority sectors <ul style="list-style-type: none"><li>• What is the state of adoption and impact of geospatial technology and knowledge in the country's national development programs/ projects?</li><li>• How is the demand for geospatial knowledge evolving in the development priority sectors in the country?</li><li>• How should the geospatial sector in the country evolve to develop knowledge products that meet the evolving user demand?</li></ul>
1100-1115	Networking Break
1115-1215	Discussion 2: National Geospatial and Digital Agencies – Evolving Roles and Mandates in the move towards a knowledge-focused geospatial infrastructure <ul style="list-style-type: none"><li>• How to identify evolving user demand for development of better knowledge products?</li><li>• Do geospatial agencies transition from data collector to facilitator/ enabler?</li><li>• How will the integration of frontier technology in national geospatial agencies enable knowledge creation?</li></ul>
1215-1315	Discussion 3: Collaborations for developing a geospatial-enabled knowledge economy <ul style="list-style-type: none"><li>• How does government support private sector development and innovation in South Africa?</li></ul>

	<ul style="list-style-type: none"> <li>• What are the existing collaborations for geospatial knowledge creation in development priority areas, and what are the associated benefits and challenges?</li> <li>• What are the new collaborations between the private industry and governments that are likely to emerge?</li> </ul>
1315-1330	Closing Remarks – Key Take Aways

The workshop will begin with an introduction and opening keynote by a representatives from *the Branch: Spatial Planning and Land Use Management*, DALRRD on the state of geospatial infrastructure in South Africa, challenges faced, and the way forward. It will be followed by a presentation by the GKI team on the project, its objectives, activities, and the outcomes. The introduction from the GKI team will be followed by interactive roundtable discussions around the topics mentioned in the agenda. Each discussion will begin with a presentation by the GKI team to set the tone and provide talking points for a free-flowing discussion among all the attendees of the workshop. Alternatively, if required, the attendees can be split into smaller roundtables to have detailed discussions on certain elements of the agenda.

### Target Audience

The workshop will have around 50 key government and private stakeholders from geospatial, digital, and user industry, including:

- Department of Agriculture, Land Reform and Rural Development
- Department of Forestry, Fisheries and Environment
- South African Post Office
- Department of Planning, Monitoring and Evaluation
- South African National Space Agency
- Council for Geoscience
- South African National Defence Force including the South African Navy Hydrographic Office
- Statistics South Africa
- Department of Communications and Digital Technologies
- Department of Mineral Resources and Energy
- Department of Trade, Industry and Competition
- Department of Science and Innovation
- Department of Public Works and Infrastructure
- Department of Social Development
- South African Bureau of Standards
- National Treasury
- South Africa Revenue Services
- Other Key Government User Departments
- At least nine provincial and ten local government representatives
- Geospatial Industry
- Digital Industry

- Academia and Research Institutions
- Non-Profit Organizations, etc.

The list of attendees will have equal representation of both geospatial knowledge producers, and users. The invitation list will be developed in consultation between the national lead project partner and the GKI project team. The project team would require the support of the national lead project partner in the logistics of organizing the workshop, including finalization of venue for the workshop and reaching out to the invitees.