

# National Geospatial Programme (NGP) and National Spatial Data Infrastructure (NSDI) – DST, Govt. of India



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## Indian National Geospatial Policy – An Enabling Policy Framework

Side Event on  
“Indian Evolving Geospatial Ecosystem: Dialogue with Global  
Stakeholders”

Second UNWGIC, Hyderabad, 10 October 2022

# Indian National Geospatial Policy – An Enabling Policy Framework

1. Theme of the event - “Geo-enabling the global village - no one should be left behind” - National Geospatial Policy is primarily proposed to enable the complete ecosystem
2. Guidelines deregulate but Policy seeks to lay down an overarching framework for holistic development of the Geospatial Ecosystem.
3. Strategy and Approach - Self-reliance, Liberalisation to continue further; Democratisation of Geospatial Data; Geospatial Information Integration involving Geo-ICT Infrastructure; Innovation; Standards; Capacity Development;
4. Institutional framework (GDPDC, NSDI EC; Legal/ Technological/ Project-based Sub-Committees)

# Indian National Geospatial Policy – An Enabling Policy Framework (Contd..)

## 5. Strengthening Geospatial Infrastructures

Data Infrastructure - NDR and Geo-platform

Mapping Infrastructure - NMA roles for geodetic reference frame, functional areas and toponymy besides anchoring role to other departments

Sub-Surface & Hydrographic Infrastructure

Digital Twin covering GNSS, Resilient PNT and IoT sensors

Geospatial Knowledge Infrastructure (GKI) - in transition from data to information to knowledge, industry to play a key role

# Indian National Geospatial Policy – An Enabling Policy Framework (Contd..)

## 6. Geospatial Education and Skill Development

- \* Standardisation of Geospatial Education Curriculum
- \* National Skill Development Council (NSDC)/ National Skill Qualification Committee (NSQC)
- \* National Skill Qualification Framework (NSQF)
- \* Surveyor Registration
- \* R&D programmes

## 7. Geospatial Enterprise

Rs.52,000 Crores (US \$6,500 m) by 2025  
Geospatial Industry Development Board (GIDB)  
Geospatial Innovation Centres (GIC)  
Geospatial Industry Accelerators (GIA)

## 8. Responsibility Matrix identifying different roles for different Partnering Agencies

....Towards the Integrated Geospatial Information Framework



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**Thank You**

# National Geo Spatial Programme (NGP) & National Spatial Data Infrastructure (NSDI)

**Vision:** Catalysing the National Geospatial Ecosystem

**Mission:** Promoting Geospatial Science and Technology, Policy, Solution, capacity building, entrepreneurship and International cooperation for sustainable socio-economic development at all levels of Governance.

## **Objectives:**

- Promotion of R&D in emerging areas of Geospatial science and technology.
- Development of geo-spatial solutions for sustainable socio-economic growth in alignment with Sustainable Development Goals (SDGs) and National Developmental Priorities up to panchayat and ward levels.
- Build knowledge and adaptation capacity of geospatial technologies at various levels of governance in collaboration with academia and user agencies.
- Stimulate the growth of Geospatial technology innovation.
- Develop the national capacity for Geospatial Science and technology development, acquisition and transfer through International cooperation.

## Strategies for 2021-22 to 2025-26

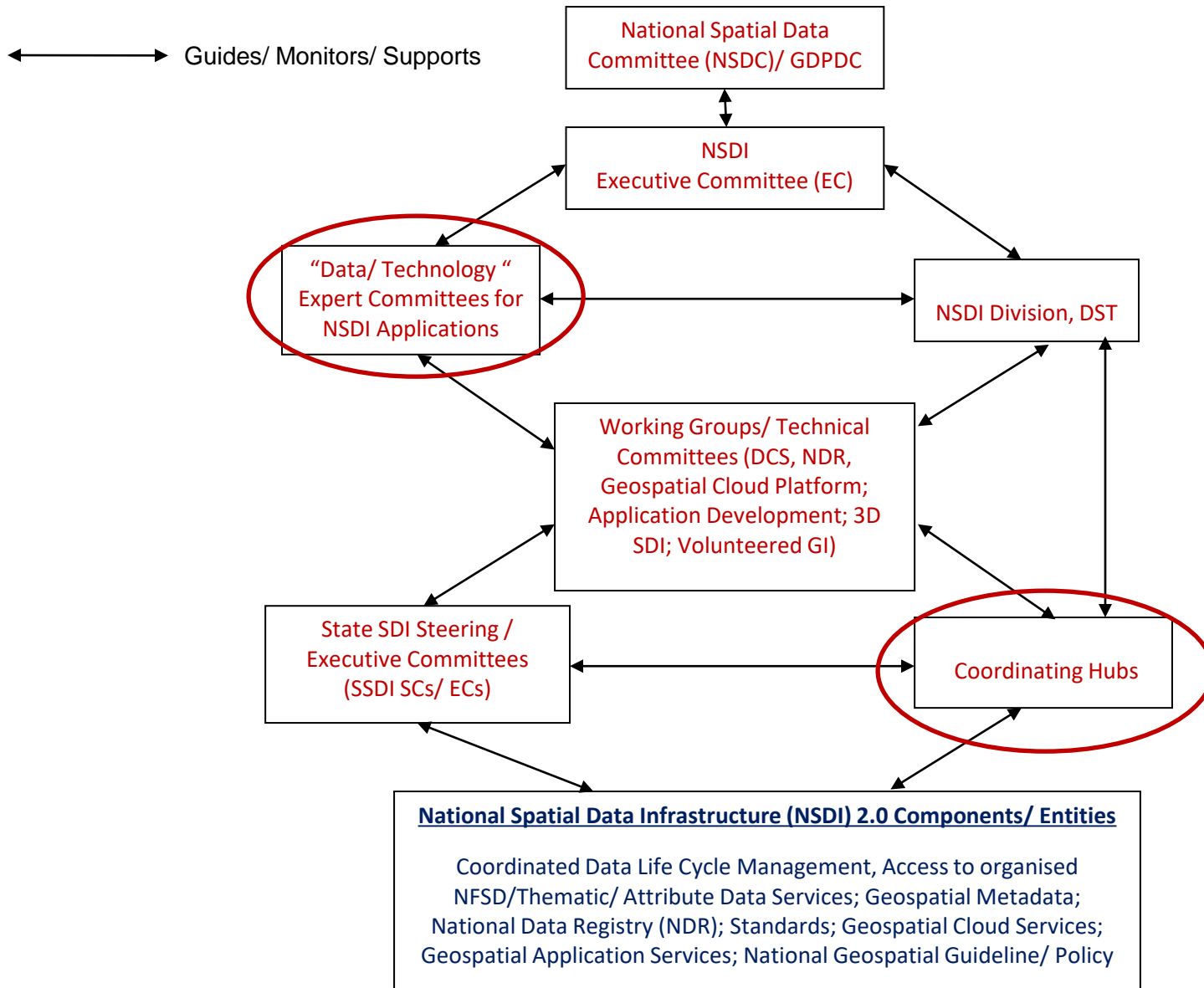
A set of 6 major sub-programmes proposed for the next 5 years:

- Geospatial Science (**Geodesy**, Analytics, Hydrology through space-borne Gravity data - GRACE)
- Geospatial Technology (Data Capture and Gathering, **Management**; Processing; **Data Registry**; **Geo-Cloud Platform**)
- Geospatial Solutions addressing National Priorities and Sustainable Development Goals (Urban Governance, SDGs; **Data Nodes**; **Application/ Solution Services**; **Policies**; **Standards**)
- Spatial Disaster Risk Reduction (Landslides, Coastal Hazard & Risk Assessment; Urban Floods; GLOFs; EWSs: Establishment of National Centre)
- Capacity Building (Training, GCPs; Modules/ Kits; **Strengthening of Institutes**)
- International Collaboration (UNGGIM, UNGGIM-Aisa Pacific, **OGC**)

<b>NSDI Tasks (approved) – 2021-22 to 2025-26</b>
National Data Registry – Maintenance and Upgradation
Standards-based Data Nodes at Central/ State SDI Partnering Agencies for Interoperable sharing of geospatial data
Geo-platform (Cloud-based) for hosting geospatial data/ information services of Central Agencies, State SDIs, and Applications
GIS Data Asset development, maintenance, publication
Application development (Urban Governance, Railways, Disaster Management, Water Resources, Environment, Mining)
International linkages - OGC/ ISO/ UNGGIM – UNWGIC
National Geospatial Policy – Compliance Framework and Implementation of GDPDC recommendations
Training Modules/ kits and Capacity Building
Research & Development – 1-Interoperability, 2-3D SDI
Standards Development and Utilisation – Linkage with BIS



# Management Structure



# Provision in the “Guideline on Geospatial Data”

(15.02.2021)

8 (xiv). All citizens, companies, and organizations including Government agencies, producing Geospatial Data and information shall be encouraged to collaborate in mutually beneficial manner and work towards open-linked Geospatial Data. Government agencies will make all efforts to collaborate for acquiring Geospatial Data.