

#### भारतीय सर्वेक्षण विभाग SURVEY OF INDIA



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#### Departmental Order No. J- 200 /2158- General Orders Dated 02-09-2025

The Survey of India, as the National Mapping Agency under the Department of Science & Technology, Government of India, plays a pivotal role in supporting development activities through its geospatial data and services. With a legacy spanning over two centuries, the Survey of India has evolved into a technologically advanced organization responsible for the geodetic and cartographic infrastructure of the country.

In view of the dynamic and expanding responsibilities of the organization, it is imperative to clearly define the roles and functions of its offices to ensure efficiency, transparency, and alignment with national objectives. It serves as a guiding framework for operational coordination, capacity enhancement, and strategic planning across all levels of the organization.

This document will aid in streamlining workflows, enhancing accountability, and fostering inter-office collaboration to meet the emerging challenges in the domain of geospatial science and technology.

Accordingly, the following order regarding the Roles & Functions of the offices of the Survey of India is hereby issued for information and strict compliance by all concerned.

#### **ROLES AND FUNCTIONS**

3.1 The Roles and Functions of offices of Survey of India are mentioned here under:-

### **Roles and Functions**

| Sl.<br>No. | Office   | Important Functions   |
|------------|----------|---|
| I.         | Surveyor | (1) Headquarters:   |
| No.        |          | -   |
|            |          | xii. Monitoring of implementation of procurement policies etc. in SoI. xiii. Sanction and high level monitoring of Capital Works in SoI |
|            |          | offices/estates.  |
|            |          | xiv. Coordination with PMO, DST, UPSC, SSC etc. for recruitment against vacancies.  |
|            |          | xv. Periodic revision of recruitment rules etc.   |
|            |          | xvi. Resolving the issues arising in service matters in coordination with DST.  |
|            |          | xvii. Promotions/Postings/ transfers of officers / staff.   |
|            |          | xviii. Development and monitoring the implementation of Training  |
|            |          | Policy in coordination with NIGST.  |
|            |          | xix. Organizational structure, Cadre related issues, Cadre Review, Welfare matters, Associations and JCM matters.                       |
|            |          | xx. Financial matters, budget allocation, expenditure monitoring  |
|            |          | xxi. Overarching role in monitoring the legal matters/court cases pertaining to SoI in coordination with DST.                           |

- xxii. Overarching role in Contracts management.
- xxiii. Conservation and Archival of Maps including scanning/digitalization.
- xxiv. Management of SoI Estates in Dehradun and Mussoorie.
- xxv. Monitoring of Surveyors' Certification and Registration.
- xxvi. Coordinating GDPDC activities and meetings and monitoring implementation of recommendations/decisions taken under the aegis of GDPDC.
- xxvii. Ensuring implementation of government orders on RTI, Welfare, Grievance etc. in all SoI office.
- xxviii. Disciplinary matters as per the related Rules.
  - xxix. Preparation, monitoring and implementation of Human Resource Development/ Management policy.
  - xxx. To liaise with social media agencies. To manage and operate the social media accounts of SoI with the help of hired social media agency.
- xxxi. Timely submission of reply to Parliamentary Questions
- xxxii. Preparation of Annual Report of SOI
- xxxiii. Timely submission of reports/returns to DST and monitoring reports/returns from Zones/Directorates

#### (2) Geodetic& Research Branch

- i. Establishment and Maintenance of the National Horizontal Reference Frame.
- ii. Establishment and Maintenance of the Vertical datum, Gravity Datum and Tidal Datum.
- iii. Establishment and maintenance of Ground Control Points in coordination with concerned GDs/Wings.
- iv. Establishment and maintenance of the HP Leveling Bench Marks in coordination with concerned GDs/Wings.
- v. Establishment and maintenance of Tidal network, gravity network and geomagnetic points network.
- vi. The broad planning for establishment of GCPs, HP Levelling network and CORS stations will be done by G&RB. While, the State Geospatial Directorates/Wings will carry out data acquisition for GCPs, HP Levelling etc. the network adjustment will be carried out by G&RB.
- vii. Development and updation of Geoid Model.
- viii. Assisting the Standards Wing in preparation and updation of standards for National Geodetic Reference Frame.
- ix. Development and maintenance of PNT infrastructure for SoI. Establishment and maintenance of CORS network in coordination with State GDs/Wings.
- x. Providing Positioning, navigation and time (PNT) services to
- xi. Dissemination of geodetic data.
- xii. Monitoring Tectonic plate movements and developing crustal deformation model.
- xiii. Other administrative functions as mentioned in Sl. No. xxi to xxxv

at III- Geospatial Directorates.

## (3) National Geospatial Data Registry & Unified Geospatial Interface

- i. Scrutiny, Integration and Management of foundation dataset of entire country as generated by State GDs/Wings.
- ii. Developing and Operating the National Geospatial data Registry (NGDR) and Unified Geospatial Interface (UGI) in collaboration with BISAG-N and others.
- iii. The huge amount of data has to be stored, so there has to be a Data Centre (DC). As per standard practice, there should be a Disaster Recovery (DR) centre at another part of the country so that the data remains safe even if main DC is affected by some disaster. NGD-DR will act as a Disaster Recovery Centre.
- iv. Coordinating the development and maintenance of SoI webportals. Geospatial web services (GWS) include Web Map Service (WMP), Web Coverage Service (WCS), Web Feature Service (WFS), Web Processing Service (WPS).
- v. Data Dissemination through portal.
- vi. Coordinating the establishment and maintaining/ updating /upgrading the ICT infrastructure and providing ICT infrastructure support to all the offices of SoI.
- vii. Other administrative functions as mentioned in Sl. No. xxi to xxxv at III- Geospatial Directorates.

#### (3) (a) <u>Data Disaster Recovery Wing (erstwhile GIS&RS)</u>

- i. Function as a part of National Geospatial Data Registry & Unified Geospatial Interface.
- ii. Scrutiny, Integration and Management of part of foundation dataset of the country as generated by State Geospatial Directorates.
- iii. Function as the Data Disaster Recovery Centre for NGDR & UGI Directorate.
- iv. Timely submission of reports/returns including inputs for Annual Report of SoI.

#### (3) (b) Standards Wing

- i. Nodal role in development and adoption of standards under the aegis of BIS, related to fundamental geospatial data themes assigned to SoI in coordination with Thematic Working Groups.
- ii. Coordination with BIS and the departments dealing with geospatial data.
- iii. Assisting the Geospatial Data Promotion and Development

- Committee (GDPDC) in framing the standards.
- iv. Ensuring that various agencies are properly educated on the standards so that harmonization of the data sets is possible.
- v. Timely submission of reports/returns including inputs for Annual Report of SoI.

#### (4) Geo-ICT Infrastructure Branch

- i. Maintenance of the infrastructure for the Enterprise level Geospatial data production activities: Data acquisition, Data Processing, Workflow or Process Management etc.
- ii. Data & Process Integration Services
- iii. Data Management including storage and archival: Directorate level and Central-DR data management policies, strategies and building operational capacity.
- iv. Geospatial databases (Enterprise level) comprising accurate & updated foundation datasets like ORI, DEM, Topographic data layers for country.
- v. High Speed Secure Connectivity and SoI WAN: High speed & fully secure MPLS connectivity across SoI Offices in country as part of SoI Wide Area Network (WAN).
- vi. Enterprise Geo-spatial cloud environment: Hybrid and/or Multicloud environment, IaaS, PaaS, SaaS, Deployment of various applications/solutions etc.
- vii. Geospatial data platforms and API based delivery services.
- viii. Security Infrastructure: Designing and Establishment of security infrastructure, including but not limited to Network Security, Cyber Security, End Point Security, Security compliances, Tests, certifications etc.
- ix. Development of dashboards,
- x. Core Applications, Domain Applications,
- xi. IT Environment i.e. Development, Testing, Production & Disaster Recovery, Crowd Sourcing Applications.
- xii. Timely submission of reports/returns including inputs for Annual Report of SoI.

#### II. Zones

#### (1) **ZonalHeadquarters**

- i. Overall responsibility for the efficient performance of the Directorates under the Zone.
- ii. Finalizing the action plan and programme of technical work for Directorates/ wings.
- iii. Feedback and suggestions to SGI on matters pertaining to ORI, DEM, Elevation, Toponymy and Administrative Boundaries.
- iv. Act as a bridge between SGO and Geospatial Directorates/Wings.
- v. Monitoring and Periodic review of the technical and administrative work of Geospatial Directorates& Wings under the Zone.
- vi. Conduct of at least one review meeting of the Directors/Wing Incharges under the Zone every month.

- vii. Monitoring the implementation of Training Policy in the Directorates under the Zone.
- viii. Monitoring the implementation of MoUs signed at Zonal/state Geospatial Directorate level.
  - ix. Closely monitor the implementation of projects undertaken by Directorates under the Zone.
  - x. Interaction with stakeholders including central /state govt departments/ organizations/ industry etc. and advising them in the matters pertaining to Geospatial data/ information.
  - xi. Interaction with central/state govt. authorities at appropriate level in order to resolve the issues, if any, related to activities of Geospatial Directorates.
- xii. Attending important meetings called for by the State Governments.
- xiii. Promote the awareness about available products and services of the department.
- xiv. Partnerships and collaboration at regional/ state level.
- xv. Monitoring the data reengineering and digitalization carried out by Directorates/Wings for making it ready for dissemination through online portals.
- xvi. To liaise with the professional service providers.
- xvii. Appointment/ Hiring of firms for Non-consultancy and/or professional services for running the various offices in the Zone.
- xviii. Upkeep of maps/records including scanning and cataloguing.
- xix. Ensuing regular weeding out of old files/records and condemnation of unserviceable store items by the Directorates.
- xx. General administration at Zonal level.
- xxi. Ensuring timely requisition and recruitment against vacancies in coordination with SoI HQ and Geospatial Directorates as per the recruitment rules.
- xxii. Close monitoring of sanctioned Capital Works within the Zone.
- xxiii. Submission of consolidated budget estimate.
- xxiv. Ensuring proper projection of B.E. and R.E. by the Directorates/Wings under the Zone.
- xxv. Ensuring optimum utilization of the budget allotted to the Directorates/Wings under the Zone.
- xxvi. Close monitoring of contract management in Directorates/Wings under the Zone.
- xxvii. Disciplinary matters as per the related Rules.
- xxviii. Ensuring implementation of government orders on RTI, Welfare, Grievance etc. in the Zone.
  - xxix. Timely submission of reports/returns to SGO including inputs for Annual Report of SoI.
  - xxx. All International Boundary work will be coordinated by the Addl. Surveyor General, Northern Zone, New Delhi.

#### (2) International Boundary Directorate &DSA

#### (i) International Boundary Directorate:

- i. Demarcation of International Boundary in coordination with state GDs/Wings as mandated by MEA.
- ii. Coordination of the boundary survey works carried out by concerned GDs.
- To act as a Nodal office for all the correspondence between SOI offices and MEA.
- iv. Follow up the matter related to foreign visits of SoI officials with MEA/MHA/DST.
- v. Timely submission of reports/returns including inputs for Annual Report of SoI.

#### (ii) Directorate of Survey Air:

- i. Data acquisition for Geodetic Reference Frame within their AoR.
- ii. Maintenance of GT Stations, GCPs, CORS network stations, BMs, Tidal infrastructure within their AOR and keep the inventory of Geodetic Assets.
- iii. Generation of ORI and DEM (Delhi).
- iv. Demarcation of Inter State Boundaries in coordination with state GDs/Wings.
- v. Toponymy within their AoR.
- vi. Matters related to Air Survey. Aerodrome Surveys to prepare different products.
- vii. Facilitating the State Government in generation of geospatial data/information.
- viii. Collaboration with other organizations/private sector for data generation.
  - ix. To attend various meetings on behalf of SoI in DST and Central Govt. Ministries as and when directed. Report of discussion should be submitted to SGO.
  - x. Coordinate with various central government organizations on geospatial matters.
- xi. Work related to GDPDC and NGP. To provide secretarial assistance to GDPDC Secretariat.
- xii. Other administrative functions as mentioned in Sl. No. xxi to xxxv at III- Geospatial Directorates.

## III. Geospatial Directorates

#### (1) State Geospatial Directorates (GDs)/ Wings

- i. Assisting G&RB in establishing and maintaining the Geodetic Reference Frame.
- ii. Data acquisition for Geodetic Reference Frame within their AoR.
- iii. Maintenance of GT Stations, GCPs, CORS network stations, BMs,

- Tidal infrastructure within their AOR and keep the inventory of Geodetic Assets.
- iv. Generation of ORI and DEM.
- v. Data Harmonization.
- vi. Demarcation of International Boundaries, preparation of Boundary Strip Maps and all other associated tasks. (Where the International Boundary Survey is in AoR of the GD)
- vii. Demarcation of Inter State Boundaries. Integration of all boundary data pertaining to Inter-State Boundary, District Boundary and all Administrative Boundaries upto Village Level& Ward Level.
- viii. Toponymy within their AoR.
  - ix. Implementation of various projects.
  - x. Implementation of Training Policy.
  - xi. Data reengineering and digitalization for making it ready for dissemination through online portals.
- xii. Contract management of all contracts pertaining to the Directorate/Wing.
- xiii. Facilitating and coordinating with the State Government in generation of geospatial data/ information.
- xiv. Collaborating with State Remote Sensing Centres/ other organizations/private sector for data generation.
- xv. Partnership and collaboration with other organizations and academia at state level, in coordination with the Zonal head.
- xvi. Attending the meetings called for by the State Government or District administration.
- xvii. Responsibilities as given to Directors in implementation of IDSF.
- xviii. Data dissemination.
- xix. Outreach program.
- xx. Printing of Maps as per requirements.
- xxi. Upkeep of maps/records including scanning and cataloguing.
- xxii. Regular weeding out of old files/records and condemnation of unserviceable store items in the Directorate/Wing.
- xxiii. Regular updation of stock register and conduct of auction for disposal of condemned and obsolete items.
- xxiv. General administration at Directorate/Wing level.
- xxv. Ensuring timely requisition and recruitment against vacancies as per the recruitment rules, in coordination with Zonal office.
- xxvi. Ensuring proper execution of Capital Works within the Directorate/Estate in close coordination with the CPWD authorities.
- xxvii. Proper projection of B.E. and R.E.
- xxviii. Ensuring optimum utilization of budget allocated to the Directorate/Wing.
  - xxix. Appointment / Hiring of firms for Non-consultancy and/or professional services for running the office.

- xxx. Close monitoring of the legal cases as assigned by SGO. Coordination with Government Counsel and timely completion of all legal formalities.
- xxxi. Preparation of brief note, counter affidavit for all the court related matters of SoI in CAT, local courts, High Court, Supreme Court and other courts.
- xxxii. Management of Estate.
- xxxiii. Disciplinary matters as per the related Rules.
- xxxiv. Implementation of government orders on RTI, Welfare, Grievance etc. in Directorate/Wing.
- xxxv. Timely submission of reports/returns to Zone/SGO including inputs for Annual Report of SoI

# IV. National Institute of Geoinformatics Science & Technology (NIGST)

#### (1) NIGST HQ:

- i. Coordinating and monitoring the capacity building and research activities.
- ii. Implementation of Training Policy.
- iii. Preparation of Calendar for Training and Capacity Building.
- iv. Periodically Update and Upgrade the syllabi of the courses.
- v. Collaboration with various agencies & academic/ research institutions.
- vi. Outreach program for training and capacity building. Coordination with other Training Institutes/Universities for specialised courses.
- vii. Lead role in development of Geospatial Skill Council.
- viii. Lead role in development of mechanism for Surveyor's Registration in coordination with MSDE, industry and academia.
  - ix. Other administrative functions as applicable.
  - x. Timely submission of reports/returns to SGO including inputs for Annual Report of SoI.

#### (2) Faculties:

- i. Activities pertaining to training and Capacity Building.
- ii. Impart training and conduct basic as well as advanced courses in respective specialized subjects.
- iii. Explore the mechanism and suggest collaboration with various agencies & academic/ research institutions.
- iv. Suggestions pertaining to updation and upgradation in the syllabi of various courses.
- v. Prepare material for iGOTKarmayogi platform.

#### (3) R&D Directorate

- i. Research & Development in the geospatial field in Collaboration with various agencies & academic/research institutions.
- ii. Recommend induction of latest technology.
- iii. Undertake research and innovation to improve existing workflows and induct new and emerging technologies in business process of

|  | SoI. iv. Development of Standard Operating Procedure & Standards for |
|--|--|
|  | various Surveying & Mapping Activities                               |

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#### **Distribution:-**

- (i) All the Addl. SGs, for information and compliance please.
- (ii) All DSGs/ Directors/ Wing In-charges, for information and compliance please.
- (iii) All Sections of SGO, Dehradun, for information please.
- (iv) PS to SGI, for information please.