

Geo-Spatial Data Policy

February 23, 2021

The government has approved the new policy on geospatial data and services related to such data. The policy aims to liberalise the access to geospatial data among private Indian entities. The sweeping changes announced have given Indian private players the freedom to handle information related to mapping without prior approval or restriction.

In news: Government approves new policy on Geospatial data and related services

Placing it in syllabus: Science & Technology

Dimensions

- Geo-Spatial Data and its Importance
- Changes Made in the Policy
- Importance of the changes made
- Provisions of the existing Geospatial Data Policy

Content:

Geo-Spatial Data and Its Importance:

- Geospatial data refers to all the data regarding natural or man-made, imaginary or physical features, whether they are above or below the ground.
- Geo-spatial data carries the location information, the attribute information such as events, objects or phenomena and temporal information at a time at which the location exists.
- In this data about the objects and the events will have a location on the surface of the Earth.
- The location may be static in the short term such as a road location, an earthquake etc or may be dynamic data such as a moving vehicle or spread of an infectious disease.

Its Importance

- Location information is an integral part of the modern digital ecosystem and critical for unlocking economic, social and environmental opportunities for sustainable growth and development of the country.
- It is critical to the success of modern industry offering location-based services such as e-Commerce, delivery and logistics and urban transport.
- It is also essential for more traditional sectors of the economy such as agriculture, construction and development and mines and minerals.
- The availability of comprehensive, highly accurate, granular and constantly updated representation of Geospatial Data will significantly benefit diverse sectors of the economy.
- It will significantly boost innovation in the country and greatly enhance the preparedness of the country for emergency response.
- The availability of data and modern mapping technologies to Indian companies is also crucial for achieving India's policy aim of Atmanirbhar Bharat and the vision for a five trillion-dollar economy.
- There has been immense progress over the years in technology for capture of geospatial data through ground-based survey techniques, photogrammetry using manned/unmanned aerial vehicles, terrestrial vehicle mounted Mobile Mapping System, LIDAR, RADAR Interferometry, satellite-based remote sensing, mobile phone sensors and other techniques.

Changes Made in the Policy

- The government has approved the new policy on geospatial data and services related to such data.
- The policy aims to liberalise the access to geospatial data among private Indian entities.
- The data collected by the government using public funds,

except for classified data, would now be available openly.

- The requirement for private entities to get prior approval, undergo security clearance or obtain licence in order to collect or use Geospatial data has been done away with.
- Instead, the **private entities would be able to self-attest and adhere to these guidelines without any governmental monitoring.**
- Only Indian entities would be able to get unrestricted access to data regarding ground truthing/verification, augmentation services for real time positioning and Indian ground stations.
- Apart from that, street view survey, terrestrial mobile mapping survey and Indian territorial waters surveying would also only be permitted for Indian entities.
- The government has set threshold values for spatial accuracy and values and the digital maps and Geospatial data having values and accuracy up till the threshold, can be uploaded to the cloud.
- However, for maps and data going beyond the threshold, would only be allowed to be stored and processed on domestic servers or clouds.
- The government also clarified that for political maps of the country, state or any other boundary, the maps or digital boundaries published by Survey of India would be taken as standard and they would be made available for easy download.
- For private entities wanting to publish such maps, adherence to these standards would be needed.

Importance of the changes made

Gives a push to the 'Atmanirbhar Bharat' initiative:

- India presently relies heavily on foreign resources for mapping technologies and services. Liberalisation of the mapping industry and democratization of existing

datasets will spur

- domestic innovation and enable Indian companies to compete in the global mapping ecosystem by leveraging modern geospatial technologies.

Developing Local Solutions to Local Problems

- Since the Indian entities would get a push, it would lead to an increase in locally relevant maps.
- This would aid in better planning and management of resources customised and better suited for the Indian people.

Impetus to Blue economy

- India is working to bring more projects to undertake the exploration of its water resources.
- The Bathymetric Geospatial data would help in achieving this goal.
- Thus, Blue economy is also an area that would benefit from geospatial data.

Provisions of the existing Geospatial Data Policy

- Currently private entities are required to get prior approval, undergo security clearance or obtain licence in order to collect or use Geospatial data
- There are various restrictions put by the Government of India currently. The restrictions are imposed on the sales, usage, storage and collection of geo-spatial data and mapping.
- The problem was that the policy has not been renewed in the past few decades. This has caused internal and external security concerns.
- The sector so far has been dominated by the Indian Government as well as government aided agencies like Survey of India.
- The private organizations need to go through a system of permissions from various departments of the Government

of India as well as Defence and the Home Ministry. It is after this that they are able to collect or create or disseminate the data collected.

- Earlier the geo-spatial data was a matter concerned with security and was the prerogative of the defence forces and the government.
- GIS mapping was rudimentary too. The Government began investing in it after the Kargil war. This highlighted the dependence on foreign data and the requirement of indigenous sources of the data.

Mould your thought: New geospatial data policy opportunity for Indian industry. Analyse

Approach to the answer:

- Introduction
- Write briefly about Geospatial Data and its importance
- Discuss the changes made to policy
- Discuss the advantages of such changes for Indian Companies
- Conclusion