

**Survey of India**  
**Department of Science & Technology**  
**Rashtriya Manchitran Niti**  
**NATIONAL MAP POLICY**

**1. PREAMBLE**

All socio-economic developmental activities, conservation of natural resources, planning for disaster mitigation and infrastructure development require high quality spatial data. The advancements in digital technologies have now made it possible to use diverse spatial databases in an integrated manner. The responsibility for producing, maintaining and disseminating the topographic map database of the whole country, which is the foundation of all spatial data vests with the Survey of India (SOI). Recently, SOI has been mandated to take a leadership role in liberalizing access of spatial data to user groups without jeopardizing national security. To perform this role, the policy on dissemination of maps and spatial data needs to be clearly stated.

**2. OBJECTIVES**

- To provide, maintain and allow access and make available the National Topographic Database (NTDB) of the SOI conforming to national standards.
- To promote the use of geospatial knowledge and intelligence through partnerships and other mechanisms by all sections of the society and work towards a knowledge-based society.

**3. TWO SERIES OF MAPS**

To ensure that in the furtherance of this policy, national security objectives are fully safeguarded, it has been decided that there will be two series of maps namely

- (a) Defence Series Maps (DSMs)- These will be the topographical maps (on Everest/WGS-84 Datum and Polyconic/UTM Projection) on various scales (with heights, contours and full content without dilution of accuracy). These will mainly cater for defence and national security requirements.

This series of maps (in analogue or digital forms) for the entire country will be classified, as appropriate, and the guidelines regarding their use will be formulated by the Ministry of Defence.

- (b) Open Series Maps (OSMs) – OSMs will be brought out exclusively by SOI, primarily for supporting development activities in the country. OSMs shall bear

different map sheet numbers and will be in UTM Projection on WGS-84 datum. Each of these OSMs (in both hard copy and digital form) will become "Unrestricted" after obtaining a one-time clearance of the Ministry of Defence. The content of the OSMs will be as given in **Annexure 'iA' at pages 12-13**. SOI will ensure that no civil and military Vulnerable Areas and Vulnerable Points (VA's/VP's) are shown on OSMs.

The SOI will issue from time to time detailed guidelines regarding all aspects of the OSMs like procedure for access by user agencies, further dissemination/sharing of OSMs amongst user agencies with or without value additions, ways and means of protecting business and commercial interests of SOI in the data and other incidental matters. Users will be allowed to publish maps on hard copy and web with or without GIS database. However, if the international boundary is depicted on the map, certification by SOI will be necessary.

In addition, the SOI is currently preparing City Maps. These City Maps will be on large scales in WGS-84 datum and in public domain. The contents of such maps will be decided by the SOI in consultation with Ministry of Defence.

#### **4. NATIONAL TOPOGRAPHICAL DATA BASE (NTDB)**

SOI will continue to create, develop and maintain the National Topographical Data Base (NTDB) in analogue and digital forms consisting of following data sets:

- (a) National Spatial Reference Frame,
- (b) National Digital Elevation Model,
- (c) National Topographical Template,
- (d) Administrative Boundaries, and
- (e) Toponymy (place names).

Both the DSMs and OSMs will be derived from the NTDB.

#### **5. MAP DISSEMINATION AND USAGE**

- Open Series Maps of scales larger than 1:1 million either in analogue or digital formats can be disseminated by SOI by sale or through an agreement to any agency for specific end use. This transaction will be registered in the Registration database with details of the receiving agency, end use etc.

- Through the agreement, SOI will allow a user to add value to the maps obtained (either in analogue or digital formats) and prepare his own value-added maps.
- The user should be able to share these maps with others – the information of all such sharing will also require to be logged in the Map Transaction Registry.

**6. APPLICABILITY OF PREVIOUS INSTRUCTIONS:**

The Ministry of Defence has from time to time issued detailed guidelines on various aspects of map access and use. These instructions shall continue to hold good but for the modifications cited herein.

## ANNEXURE -IA

RECOMMENDATIONS FOR INCLUSION OF DETAILS FROM EXISTING MAPS IN OPEN  
SERIES PUBLIC DOMAIN MAPS

S.NO.	MAJOR DETAILS	SUB DETAILS	REMARKS
1.	GENERAL	Latitude/Longitude	
2.		Name of State/District/Administrative index	
3.		Topo sheet Number/Year of Survey/Edition/Index to topo sheets	
4.		Magnetic variation from true North direction	
5.		Map reference	
6.		Bar scale/Representative Factor	
7.	ROADS	All Roads	
8.	TRACKS	All Tracks, pass, footpath	
9.	STREAMS/canals	All streams/canals	
10.	DAMS	All earthwork dams	
11.	RIVERS & River Banks	All rivers with details, banks, islands	
12.	WELLS	All wells/tube wells/springs	
13.	WATER FEATURES	All Tanks	
14.	EMBANKMENTS	All embankments, Road/rail/tank	
15.	RAILWAYS	All gauges with stations, tunnels	
16.	OTHER LINES	Light railways or tramway	
17.	CONTOURS	Contours with sub features	
18.	ICE FORMS	All features	
19.	SAND FEATURES	All sand features	
20.	TOWNS OR VILLAGES	Inhabited, deserted and forts	
21.	SETTLEMENTS	Huts, Towers, Antiquities	
22.	RELIGIOUS PLACES	All including tombs/graves	
23.	SHIP	Light ship, buoys, anchorages	
24.	LAND FEATURES	Mines, Vine on trellis, grass, scrub, cultivation limit	
25.	PLANTATIONS, Trees	All features	

26.	BOUNDARY, BOUNDARY PILLARS	International to village, Forest, all boundary pillars, village trijunctions	
27.	HEIGHTS	Spot, approximate	
28.	BENCHMARKS	Geodetic, tertiary, canal	
29.	OFFICES	All post/telegraphic/police stations	
30.	BUNGALOWS	All including camping ground	
31.	FOREST	Reserved Protected	
32.	NAMES	Administrative/Locality or tribal	