



NATIONAL MAP POLICY – AN OLD WINE IN A NEW BOTTLE

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ABSTRACT

“Maps, like faces, are the signature of history.” – Will Durant

Throughout the course of history geospatial information has played an important role in technological, economic, political and cultural dimensions of the human society. With technological developments taking place, the field of mapping – that is collection, analysis, and representation of geospatial data – is continuously evolving. On the face of it, creation of geospatial data seems to be an exclusive scientific and technological matter. However, the political and economic facets of geospatial data are often as predominant and complex as its scientific practice.

Continuing from the colonial era, the political facet of mapping emerged significantly in the public discourse from the 1990s onwards as digital technologies amplified the ability of non-governmental actors to collect, generate, and share geospatial data, in the form of maps or otherwise. This 'democratisation' of the ability to map and share private/user-generated maps structurally undermined the government's ability to have an authoritative and universal voice when it comes to geospatial depiction of the nation and its various components.

Similar to the other upsurges in the digitized world, which is often followed by an

introduction of legal provisions in order to keep access to and use of digital data under mechanisms of monitoring and permission, mapping in India has also been governed under policies addressing both terrestrial mapping and remote sensing. Concerns of national security, naturally, have driven much of these policies.

This paper focuses on providing an overview of the present configuration of laws, policies, and guidelines that provides the legal framework in India for governance of creation and sharing of geospatial data in India. The paper also aims to study these policies in action by describing the key legal cases around the creation and use of geospatial data.

INTRODUCTION

Maps make stories easier to understand. A map has a very special ability, i.e. breaking down complex details into a simple and a clear picture that brings out immediate clarity. The boundaries depicted by a map are often fundamental to the story. Thus, the accuracy of maps is peculiar concern which often requires navigating legal and regulatory paths in order to avoid argument and controversy.

The National Map Policy, 2005 (NMP) governs the use of maps in publications by private publishers and detailed guidelines have been issued by the Survey of India (SOI) in December 2016. By these guidelines, the SOI is vested with the copyright of both digital and analogue maps.

High quality spatial data is required for all socio-economic developmental activities, conservation of natural resources, planning



for disaster mitigation and infrastructure development. Diverse spatial data can be used in an integrated manner due to the technological upgradation. SOI is even vested with the responsibility for producing, maintaining and disseminating the topographic map database of the whole country. This is the very foundation of all spatial data. Recently, in order to take a leadership role in liberalizing access of spatial data to user groups, SOI has been mandated to do so without jeopardizing national security. This requires clarity in stating the policy on dissemination of maps and spatial data.

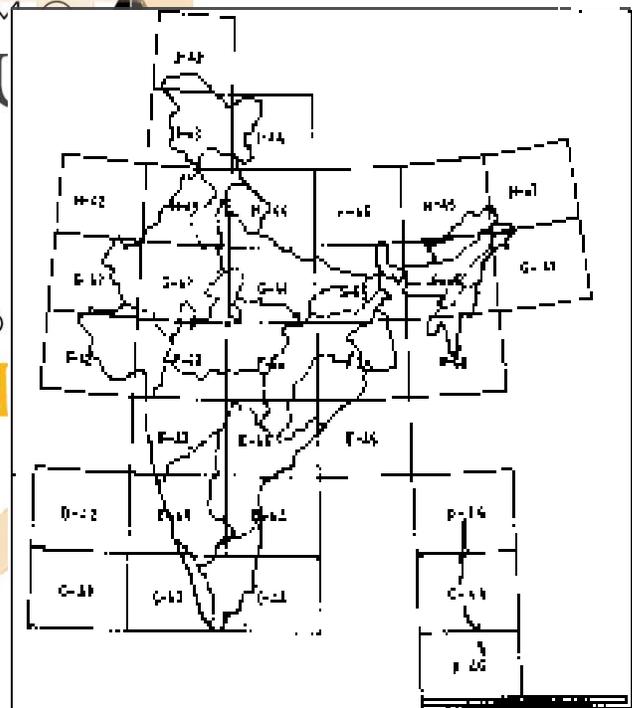
without much restriction. NMP proposed two series maps to achieve the objective of national security, namely Defence Series Map (DSM) – to cater for defence and national security requirements and Open Series Map (OSM) – for common civilian use.

The UTM projection system on WGS-1984 datum will be used to produce OSMs. The WGS-1984 series maps will be openly made available to civil users, in both paper and digital form. Indian region is covered fully by 6 UTM zones numbering from 42 to 47 (Fig. 1)¹.

The NMP is having two main objectives:

- It aims to provide, maintain and allow access and make available the National Topographic Database (NTDB) of the SOI in accordance with the national standards.
- In order to work towards a knowledge-based society, it aims to promote the use of geospatial knowledge and intelligence through partnerships and other mechanisms by all sections of the society.

NMP has been declared by National Topographic Database of SOI with the primary objective of unrestricted production, maintenance and dissemination of spatial data. This is an outcome of the consistent demand from several quarters including GIS industry to consider Topographic Database as national asset and to make it available



As per New Map Policy, topographic database of Indian region will take a new shape in the form of Open Series Maps

¹ Fig. 1 Figure showing the arrangement of UTM zones.



(OSM's). These maps will have reference datum as WGS 84 and coordinate system as UTM (Universal Transverse Mercator). This is different from the existing topographic maps, which are based on Everest 1830 as reference ellipsoid and Polyconic as projection system. In order to ensure compatibility among GIS theme databases, user community using Polyconic has two options, either begin using new database, whose availability in time is again in doubt, or accommodate the changes in existing database.

Old wine in a new bottle sums up the so called new map policy which claims to be prepared considering "the liberal economic regime and to accommodate the technological changes that have taken place in the field of Cartography and advancement in space based technology". There is no mention of digital technology, in particular GIS and the Internet, unless all these are convolved under the rubric of 'Cartography'.

CHAPTER I: MAPPING THE LEGAL JOURNEY OF GEOSPATIAL DATA: PAST TO PRESENT

"We know every inch of the nation, because we map every inch of it!" – Survey of India²
Aforementioned slogan has been adopted by the primary organization responsible for mapping all geospatial data in India. This slogan indicates the importance of the geospatial data and mapping the same. While it indicates the importance of having access to mapping data in order to be aware of the geospatial features of one's country, it also

cleverly reveals the vulnerability that having access to mapped data brings. The phrase can be said to imply that mapping every inch of the country helps us in getting information about every inch of the nation which can be used usefully if it is in the hands of the government agency but might cause harm to the security for the nation if this information gets in the hands of the external agencies. This conflict between the accessibility of such information about the country and the security concerns arising from such an access has led to a rich evolution of legal policies governing the same.

From the public depiction of sovereign territories to navigating treacherous seas to (wrongly) 'discover' the land of spices, the global history of cartography is closely linked with political needs and economic interests. In India, the regulations for making and using maps got a new turn with the publication of the draft Geospatial Information Regulation Bill, 2016. As opposed to the expectations arising out from the various government schemes, which are promoting the digital economy in India—from start-ups to the ongoing expansion of connectivity network – the bill seems to be undoing various economic and humanitarian efforts, and other opportunities involving maps, by imposing strict ruler and hefty amount of penalties on the use of maps by private actors, commercial or otherwise without the consent of the government.

Set up in 1767, SOI was required to map the terrains of India to fulfil the commercial and

² 'About Us', Survey of India, available at: <http://www.surveyofindia.gov.in/pages/view/10-about-us>, accessed June 11, 2019.



political convenience of the East India Company³. Back during the colonial times, maps were considered to be essential for governmental purposes and thus their dissemination to unauthorized persons was barred by Clause 5 of the Official Secrets Act, 1923⁴. Thus, till 1950s mapping was being governed by the colonial provisions that restricted maps to official use only⁵. After getting independence, the major function of the SOI shifted towards providing information for the defence forces⁶.

An important change came in the form of orders and notifications by Ministry of Defence (hereinafter “MOD”) during 1960s, the major one being the 1965 order that permitted distribution of maps of scale 1:4 M⁷. The Map Restriction Policy of the MOD, however, imposed categorical restrictions on sharing of maps, aerial photos, and all geophysical data for various parts of India - with a focus on international border areas in the North-Eastern state, and the coastal zone that included several large cities like Chennai, Kochi, Kolkata, and Mumbai⁸. Dr. Manosi Lahiri notes that “this had a far reaching effect on the mapping culture of independent India and perpetuated the

perception among many that maps were a security threat”⁹. By 1971, however, the functions of SOI extended to catering to inter alia all development activities and was hence brought under the ambit of Department of Science and Technology.

However, the catalytic transformation came in the form of National Map Policy, 2005 which made SOI the nodal governmental agency for dealing with all processes involving geospatial data. While harping for open access to geospatial data, the policy accompanied by corresponding guidelines have largely restricted the power to map geospatial data to SOI. The Policy and the guidelines have been discussed in detail as under.

1.1. NATIONAL MAP POLICY, 2005

The NMP was announced by the Central Government on May 19, 2005¹⁰. The preamble of the policy identifies the importance of high quality spatial data in various facets such as socio-economic development, conservation of natural resources, infrastructure development etc.¹¹ Topographic map database constitutes the foundation of all spatial data and its

³ Ibid.

⁴ R Ramachandran, 'Public Access to Indian Geographical Data,' [2000] 79 (4) Current Science 450.

⁵ Ibid.

⁶ Supra, 3.

⁷ Scale represents the relationship of the distance on the map/data to the actual distance on the ground. Map detail is determined by the source scale of the data: the finer the scale, the more detail”, available at: http://gif.berkeley.edu/documents/Scale_in_GIS.pdf accessed on June 11, 2019.

⁸ Dr. Manosi Lahiri, 'Survey & Mapping in India: The Regulatory Framework,' Directions Magazine

India, <https://www.mlinfomap.com/Pdf/Survey&Map-ping-Lahiri%202.1.pdf>, accessed June 11, 2019.

⁹ Ibid.

¹⁰ 'Guidelines for implementing National Map Policy,' Survey of India, available at: <http://surveyofindia.gov.in/files/nmp/Guidelines%20for%20Implementing%20National%20Map%20policy.pdf>, accessed on June 12, 2019.

¹¹ 'National Map Policy, 2005, Preamble,' Survey of India, available at: <http://surveyofindia.gov.in/files/nmp/National%20Map%20Policy.pdf>, accessed on June 12, 2019.



production, maintenance, and dissemination has been assigned as a responsibility to SOI, which is to "liberalize access" to spatial data without compromising upon security concerns. Thus, the conflict between national security and right to have access to information regarding one's country is clearly highlighted in the policy as a need for enactment of the same. Thus, the policy objectives include access to National Topographic Database (NTDB)¹² and promotion of geospatial based intelligence, subject to confirmation to national standards of SOI.

In order to realize the security concerns, inter alia, a dual-classification was created amongst the maps, namely –

- i) **Defence Series Maps ("DSM")** and
- ii) **Open Series Maps ("OSM").**

While the DSM caters towards providing information and topographical maps which prove as an helpful source to defence and security requirements of the country, the latter supports developmental activities. Hence, DSMs whether in analogue or digital form, fall under the classified category and the power to issue guidelines pertaining to their use vests digit mainly for developmental purposes, they are not openly accessible by ipso facto and need to gain the 'unrestricted' tag after clearance from MOD. A table specifying the distinction between DSMs and OSMs in detail has been provided below:

Parameter	Defence Series Maps ("DSM")	Open Series Maps ("OSM")

Why are these maps used?	The maps under this series cater to defence and security requirements of the country.	The maps under this series are useful in supporting various developmental activities in the country.
What are the technical classifications?	Everest/WG S-84 Datum and Polyconic/UTM Projection) on various scales (with heights, contours and full content without dilution of accuracy).	In UTM Projection on WGS-84 datum, bearing different map sheet numbers. (And as provided in Annexure B of the NMP)
Who can use these maps?	Maps (in analogue or digital forms) for the entire country will be classified.	The hard copy and digital form both of them will become "Unrestricted" once a one-time clearance has been obtained from the Ministry of Defence.

¹² Ibid, Objectives.



<p>How can the maps be used?</p>	<p>Guidelines regarding the use of DSMs will be formulated by the Ministry of Defence.</p>	<p>Guidelines regarding the use of OSMs will be formulated by SOI regarding aspects like procedure for access, further dissemination /sharing, ways and means of protecting business and commercial interests of SOI etc.</p>
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important part of the NMP, no such registry information has been made available on the official website of SOI.

The policy allows users to publish maps on hard copy or web (with or without GIS interface) subject to a certification from SOI in case of depiction of international boundaries. The policy also upholds the validity of the previous MOD notifications pertaining to mapping subject to the modifications introduced by the policy and authorises SOI to issue further guidelines corresponding to the policy.

I.2. GUIDELINES ISSUED BY SURVEY

Under the powers vested by the NMP, SOI has issued detailed guidelines, having utmost clarity, in furtherance of the policy. The restrictions arising on mapping of geospatial data can be attributed to two major factors namely, Security concerns and Copyright provisions¹³. Under the guidelines, copyright of both digital and analogue maps has been vested with the SOI. Penal consequences have been mentioned as a result of violation of SOI's copyrights. In furtherance of security concerns, the guidelines uphold the Ministry of Finance (Department of Revenue) Notification No. 118-Cus./F.No.21/ 5/62-Cus. I/VIII dated 4th May 1963 which prohibits the export of all maps/digital data in 1: 250K and larger scales through any means. Digital Topographical data has been an exclusive licensing domain of only Indian individuals, organisations, firms or companies.

While paper maps can be accessed from SOI offices against payment of price, digitisation of maps has been strictly made forbidden by

While the DSMs are completely classified, restrictive provisions regarding usage and dissemination of OSMs have also been incorporated in the policy. OSMs are not allowed to show any civil and military Vulnerable Areas and Vulnerable Points (VA's/VP's). OSMs on a scale larger than 1:1 needs to be disseminated either by sale or an agreement, which will allow the agency to add its own value to the maps obtained, and to share these maps with others.

The primary transaction between SOI and the agency as well as all the subsequent transactions between the agency and other users have to be registered in the Map Transaction Registry for records. While the Map Transaction Registry forms an

¹³ Supra, 4.



the guidelines. Ownership of digital data has been vested completely with the SOI and can only be gained against payment after application through a specified format.

I.3. REMOTE SENSING DATA POLICY (RSDP)

In 2011, the confusion pertaining to applicability of NMP to both territorial and satellite mapping was resolved with the release of the Remote Sensing Data Policy (RSDP). The policy recognized the importance of remote sensing data and noted that it was largely used by government and non-government users from Indian and foreign remote sensing satellites. However, again banking upon the need for security considerations, the policy was released with the purpose of "...managing and/ or permitting the acquisition/dissemination of remote sensing data in support of developmental activities"¹⁴. Department of Science (DOS) was made the nodal government agency for all actions pertaining to remote sensing data under the policy.

A basic perusal of the policy indicates a parallelism between the RSDP and the NMP. Thus, similar to NMP, RSDP assures of a government managed Indian Remote Sensing Satellites (IRS) Programme, the data produced by which will be solely owned by the government and other users could only be provided with licences if need be. Any attempt at acquiring and/or dissemination of remote sensing data within India requires permission through the nodal government agency. National Remote Sensing Centre (NRSC) of the Indian Space Research

Organisation (ISRO)/ DOS is vested with the authority to acquire and disseminate all satellite remote sensing data in India, both from Indian and foreign satellites. NRSC is also supposed to maintain a systematic National Remote Sensing Data Archive, and a log of all acquisitions/ sales of data for all satellites. Thus, nodal government agencies were created for both terrestrial mapping and satellite imagery, former being SOI and latter NRSC.

I.4. CIVIL AVIATION RULES

Aerial instruments and aircrafts act as important instruments for geophysical surveys and mapping. Thus, this area does not go unregulated. While, till date, India doesn't impose an explicit bar on foreign registered aircraft overflying its territory for aerial photography and geo-physical survey, the same is subject to prior clearance under rule 158 and 158A of the Aircraft Rules, 1937 on account of safety and security concerns, the procedure for which has been given under Civil Aviation Rules (CAR)¹⁵. CAR is applicable to inter alia agencies undertaking aerial photography, geophysical surveys etc. An application is required to be made as per Annexure E which inter alia requires confinement of photography/sensing to the exact area as applied and cleared by the Ministry of Defence. The application is forwarded by DGCA to the Ministry of Defence and other agencies responsible for issuing NOC.

DGCA's restrictions extends to voluntary geographic information with prohibition of civilian drones in India. Unmanned drones

¹⁴ 'Remote Sensing Data Policy, 2011', National Remote Sensing Centre, Indian Space Research Organisation, available

at: http://www.nrsc.gov.in/Remote_Sensing_Data_Policy, accessed on June 12, 2019.

¹⁵ Civil Aviation Requirement Section 3 Air Transport Series 'F' Part I Issue I.



are an important equipment used for the purpose of collecting geo-spatial data. The ban on flying drones in India exist from October, 2014 but is not in common knowledge¹⁶. While it is argued that drones could harm people and lead to chances of crashing, the major argument has always been the use of drones by anti-national elements to peruse sensitive places for plotting terror attacks¹⁷. While there is an ambiguity regarding using drones in India, flying drones over defence establishments and historical places is completely banned¹⁸. Thus, civilians using drones for clicking pictures of monuments etc. have often been confronted by the police¹⁹.

Thus, there is no single policy that acts as a deterrent for mapping in India but an accumulation of multiple policies, guidelines and legal provisions that are used by departments of government to restrict mapping in the name of security.

CHAPTER II: CONSEQUENCES GOVERNANCE CHALLENGES

II.1.LEGAL CONSEQUENCES OF DEPICTING INACCURATE EXTERNAL BOUNDARIES AND COASTLINES OF INDIA

There are various meanings of showing fallacious boundaries, and the exact legal

outcome depends on the nature of the depiction itself. These range from various legal effects such as those under the Official Secrets Act, 1923 (restricting the collection and sharing of information about 'prohibited places'), the Customs Act, 1962 (prohibiting the export and import of certain maps), to the Criminal Law (Amendment Act) Act, 1990.

II.1.i. Criminal offence

In general terms, the publication of maps portraying inexact external boundaries and coastlines of India is treated as doubting the territorial integrity of India as a country of great virtues, and a person found guilty of such offence may be punishable with imprisonment or with fine or both.

II.1.ii. Trading in official secrets

A more severe offence is found in Section 5 of the Official Trade Secret Act, 1923, is one which deals with wrongful communication of information.

It presents a person guilty of an offence, if that person unlawfully communicates or otherwise uses any map, among other things, over which that person has control, whose disclosure can affect the sovereignty and integrity of the country or the state security. The offence includes communication, using the information for the benefit of a foreign power, and failing to take reasonable care of

¹⁶ Nandagopal Rajan, 'Why India needs rules for flying drones, soon' (The Indian Express, 9 July, 2015), available at: <http://indianexpress.com/article/technology/gadget/s/why-india-needs-rules-for-flying-drones-soon/> accessed on June 11, 2019.

¹⁷ TNN, 'Now, flying a drone can land you in prison' (The Times of India, 15 February, 2016) available

at: <http://timesofindia.indiatimes.com/city/jaipur/Now-flying-a-drone-can-land-you-in-prison/articleshow/50990613.cms>, accessed on June 12, 2019.

¹⁸ Ibid.

¹⁹ Supra, 16; 17.



the information that is in one's possession that will put the security of the nation in danger. Results can include imprisonment of anything up to 10 years, depending upon the gravity of the offence committed.

II.1.iii. Copyright violation

Violating SOI's copyright in announcing its maps without authority and appropriate sanction and credit can head to an offence of copyright breach as well. The copyright of all maps published by the SOI vests with the Government of India completely and these maps may not be replicated or used as the basis by publishers without the approval of the Surveyor General of India. Any unauthorized reproduction of SOI maps may lead to imprisonment of anything between 6 (six) months to 3 (three) years and with a fine or both.

II.1.iv. Customs violations

Mere publication of an inexact map is not the only act that may lead to an offence. It is forbidden to also import into India any notification containing any works, signs or visible representations which directly or indirectly question the frontiers of India in any manner. Similarly, it is prohibited to export maps on a scale of one-fourth inch or more equal to a mile and the micro-films obtained from such maps describing any part of India including its foreign boundaries and showing topographical features by contours.

II.2. GOVERNANCE CHALLENGES

The United National Development Programme [UNDP] (1997) describes governance as the use of economic, political, and administrative authority to manage a

country's affairs at different levels. It includes the mechanisms, processes, and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations, and mediate their differences. According to Stewart (2003), governance is a method of multi-stakeholder involvement, multiple interest resolution, compromise rather than confrontation, negotiation rather than administrative fiat. Thus, there are numerous alternative conceptualizations of governance that identify the plurality of actors. Governance in this wider sense includes the lawful power exercised in the purpose of government power and in the administration of public affairs. There is greater emphasis on participation, decentralization, accountability, and responsiveness and even broader concerns such as those of social equity and justice.

Governance, therefore, has a much wider canvass than government and envisages the roles of all stakeholders: the state, private sector, civil society, and citizens at large.

The role of GIS in governance is extensive and its use in the field of development has powerful effect on transparency and effective implementation. Governance provides a platform for transactions between diverse stakeholders. This platform displays a level playing field when different stakeholders have access to information for decision making. Based on these discussions, a working model of governance is recommended and shown in Fig. 2.

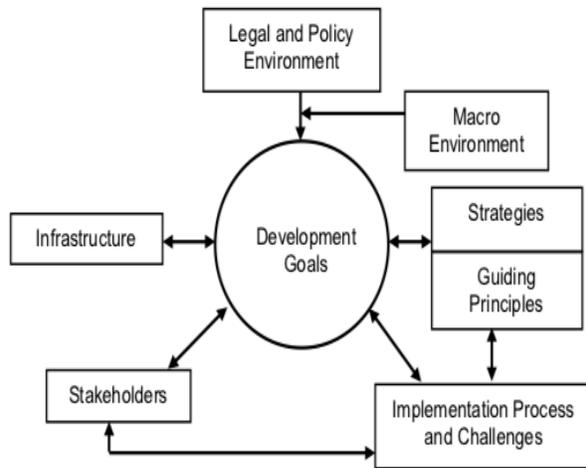


Fig. 2 – Governance Framework

As it is clear from Figure 2, the whole governance method spins around the growth goals. Community goals are determined by the macro- environment and the legal and policy environment. Sufficient infrastructure is essential for the fulfilment of development goals. Guiding policies not only guide the accomplishments of development goals but also guide the implementation method. Stakeholders influence and get affected by the implementation process and development goals. The correct kinds of policies are also needed to approach the implementation difficulties and surmise the development goals.

CHAPTER III: INCIDENCES OF LEGAL ACTIONS FACED BY AGENCIES

Since the advent of restrictive mapping policies, a number of incidents have come to

light when agencies have found themselves challenged by legal actions for violation of such policies. In contemporary times, such incidents were publicly highlighted in 1998 when the sale of the CD-ROMs of Delhi Guide Maps created by Eicher were prohibited²⁰. After the implementation of NMP, we have witnessed two major legal controversies, both involving SOI on one hand and Google on the other.

III.1. GOOGLE'S MAPATHON IN LEGAL TROUBLE

In furtherance of Google's aim to have every nook and corner mapped, it holds a competition called 'Mapathon' every year²¹. The competition invites people from various areas to map their local surroundings incentivised by lucrative prizes to winners. However, this initiative launched for purely mapping purposes had to face a large legal hurdle in the year of 2013. Google-Mapathon, 2013, held in February-March, had declared Vishal Saini as the 1st winner who had mapped the military-prone city of Pathankot. According to legal provisions governing mapping practices in India, civil and military Vital Areas (VAs) /Vital Points (VPs) cannot be shown on maps in the public domain²² for security reasons. Thus, the tech-giant found itself tangled in legal controversy for having held the competition without permission from Survey of India after a concern raised by BJP's Tarun Vijay. A case was filed by SOI at the R.K. Puram Police Station regarding the same. The primary contention of the case was that the "Mapathon 2013 activity is likely to

²⁰ Supra, 4.

²¹ tech2 news staff, 'Why is Google's Mapathon in hot waters in India? All you need to know' (Tech-2, 12 Aug, 2015), available at: <http://tech.firstpost.com/news-analysis/why-is->

[googles-mapathon-in-hot-waters-in-india-all-you-need-to-know-228810.html](http://www.google.com/maps/about/mapathon-in-hot-waters-in-india-all-you-need-to-know-228810.html), accessed on June 12, 2019.

²² Supra, 10.



jeopardise national security interest and violates the National Map Policy. Citizens of the country, who are ignorant of the legal consequences, are likely to violate the law of the land”²³.

Considering the involvement of a U.S. based company, the investigation was handed over to CBI. During the probe, it was alleged by then Surveyor General of India Swarna Subba Rao that Google did not refrain from “polluting”²⁴ the internet with classified material despite having been asked so. Further, then Additional Surveyor-General of India R.C. Padhi claimed that “The Survey of India is only mandated to undertake ‘Restricted’ category surveying and mapping, and no other government/private organisations or any individual are authorised to do so”. He told Reuters that some of the information provided by locals to Google could be ‘sensitive’ and the security of the nation could not be compromised at any cost²⁵.

Google on the other hand said that its primary motive was to map local information of daily needs such as hospitals, restaurants, markets

etc. and the competition was in consideration with national laws.²⁶ Further, it was heard that Google had been approached regarding Mapathon by SOI and it had replied with intimation of willingness to talk to SOI. However, SOI had not reverted back and Google was always ready and willing to talk out the matter. However, the much hyped case did not have a substantial result and CBI had to close the probe on account of lack of evidence.

Considered a thing of past, the controversy resurfaced in January, 2016 post the Pathankot Air Base strike²⁷. Google was dragged to the court for having displayed sensitive geospatial data regarding Pathankot that made it possible to conduct an airstrike at the location. An injunction was sought to refrain Google from showing sensitive military areas and defence establishments on the maps made available by it. While the injunction was refused, Delhi High Court had asked the centre and the additional solicitor to look into the same and keep the court apprised about the issue. Thus, this can be

²³ Supra, 21.

²⁴ ‘PTI, ‘Google ‘polluted Internet’ with classified material: Survey of India’ (The Hindu, 10 August, 2014), available at: <http://www.thehindu.com/sci-tech/technology/internet/mapathon-2013-row-google-polluted-internet-with-classified-material-says-survey-of-india/article6300853.ece>, accessed on June 11, 2019.

²⁵ Sandeep Joshi, ‘Google didn’t take permission for Mapathon’ (The Hindu, 24 April, 2013), available at: <http://www.thehindu.com/news/national/google-didnt-take-permission-for-mapathon/article4648589.ece>, accessed on June 12, 2019.

²⁶ Abhishek Sharan, ‘CBI may close probe against Google in Mapathon case’ (Hindustan Times, 12

February, 2015), available at: <http://www.hindustantimes.com/india/cbi-may-close-probe-against-google-in-mapathon-case/story-CgZYWoP9NgYA3xVepjr5bN.html>, accessed on June 11, 2019.

²⁷ PTI, ‘Pathankot attack: Sensitive sites on Google Maps under Delhi HC scanner’ (Times of India, 15 January, 2016), available at: <http://timesofindia.indiatimes.com/tech/tech-news/Pathankot-attack-Sensitive-sites-on-Google-Maps-under-Delhi-HC-scanner/articleshow/50596143.cms>, accessed on June 13, 2019.



termed as an open and unfinished matter ongoing legal contemplation.

While it is understandable that some areas are considered as vulnerable due to security concern. The laws keeps changing often leading to transgression into security places. But the major point being the list of vulnerable areas is classified and not released to public. In absence of such a list, how is it possible for google to vet its data to comply with security concerns.

III.2. One Country – Two Boundaries

Another major legal controversies in the field of geospatial mapping has been with regards to wrong depiction of international boundaries of India by Google. A brief perusal of the official website of SOI provides a list of only three documents under the tab of 'Public Awareness', all dealing with the crimes of depicting wrong Indian boundaries²⁸. While one of them includes the certified map with correct boundaries to be complied with, other is a gazette notification bringing the Criminal Law Amendment Act, 1961 which criminalized the act of showing wrong depiction of boundaries. Section 69A

of the IT Act has also been used earlier to restrict access to links depicting incorrect maps of India²⁹ though it only speaks about restricting public access to data, necessary in the interest of Sovereignty and Integrity inter alia, the section per se does not deal with dissemination of geospatial data.

It was in the year of 2014, that on the directions of Department of Science and Technology, SOI filed a complaint against Google at the Dehradun Police Station for depiction of international boundaries not in a "wrong manner" i.e. not in consonance with Government of India authentication³⁰. The result was that today Google shows different boundaries on Indian domain, in compliance with SOI and different on International domain.

Google was also involved in a controversy when in 2009, Google maps for India marked areas of Arunachal Pradesh, including its capital Itanagar and Tawang, in China³¹. It was followed by an apology from Google and an immediate rectification for Indian users. However, Google uses a different version for China and the world creating disparity in the boundary depiction³².

²⁸ 'Public Awareness,' Survey of India, available at: <http://www.surveyofindia.gov.in/pages/display/190-public-awareness>), accessed on June 13, 2019.

²⁹ Aman Sharma, '7-year jail, Rs 100 crore fine soon for showing PoK, Arunachal as disputed' (The Economic Times, 05 May 2016) available at: <http://economictimes.indiatimes.com/news/politics-and-nation/7-year-jail-rs-100-crore-fine-soon-for-showing-pok-arunachal-as-disputed/articleshow/52117889.cms>, accessed on June 14, 2019.

³⁰ Jaspreet Sahni 'Survey of India files complaint against Google maps for wrong depiction of India's boundaries' (News18, 13 December 2014), available

at: <http://www.news18.com/news/india/survey-of-india-files-complaint-against-google-maps-for-wrong-depiction-of-indias-boundaries-731101.html>, accessed on June 14, 2019.

³¹ Itanagar agencies, 'Arunachal fumes over wrong map on iPhone4' (Deccan Herald, 04 October, 2010) available at: <http://www.deccanherald.com/content/101784/F>, accessed June 14, 2019.

³² CC, 'How Google represents disputed borders between countries' (The Economist, 04 September, 2014), available at: <http://www.economist.com/blogs/economist-explains/2014/09/economist-explains-1>, accessed June 14, 2019.



Google has not been the only platform having faced the anger of Indian community for wrong depiction. In 2011, copies of the Economist Magazine were seized for having depicted the map of Kashmir divided between India, Pakistan and China³³ which was also a matter of political concern. For similar reasons, Al-Jazeera was taken off air by the Indian government after a 5-day ban imposed under Section 69A of the IT Act³⁴. Modi's visit to Queensland University of Technology was accompanied by an "unqualified apology" from the authorities for having depicting Indian map without portions of Kashmir³⁵. Urban Development Department of Bihar also ended up showing causing one of its employees for putting up wrong map on its website and substituting the same with SOI's version after media attention³⁶. India seems to be the country often furious due to wrong depictions of maps.

While India seems to be actively involved in Geo-politics, it isn't the only country Google has fallen in legal trouble with, for wrongly depicting International Boundaries. In 2010, Google gained a lot of media attention for allegedly starting the 'First Google Maps War'³⁷. It occurred when a Nicaraguan official led his forces to the Costa Rican territory on other side of the customary border and used Google Maps as a proof to deny trespassing. Nicaragua and Costa Rica have a long territorial dispute and Google

seem to have fuelled it by depicting the Nicaraguan version of border according to which that area of Costa Rican territory came within the boundaries of Nicaragua. Despite Nicaragua's petition to Google to not accept Costa Rica's petition to shift borders, Google voluntarily changed its borders to comply with the Costa Rican stance.

Another such incident followed in the case of Google's depiction of Dutch-German border with respect to Dollart Bay³⁸. Germany claimed the border to be closer to Dutch land while Dutch claimed it to be more towards centre. Google, however, chose to depict a self-version that transferred the German city of Emblich to the territorial control of Netherlands. This infuriated the city which resorted to expressing its displeasure and asking Google to change the depiction. Google, this time, however remained dormant and no amendment in the depiction of Dutch-German border could be witnessed.

At the time of Crimean referendum supporting independence, U.N. had passed a resolution condemning the same and supporting territorial integrity of Ukraine. Google, however, believed in the contrary and was quick to bring changes into its maps to depict formation of independent Crimea. Rather than a mistake, this time, Google had adopted a stance against the UN resolution and used its maps to vocalize the same.

³³ The Kashmir Walla, 'Ten Maps of Kashmir That Angered India' (The Kashmir Walla, 14 May, 2015), available at: <http://thekashmirwalla.com/2015/05/ten-maps-of-kashmir-that-angered-india/> accessed June 15, 2019.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Frank Jacobs, 'The First Google Maps War' (The New York Times, 28 February, 2012), available at: <http://opinionator.blogs.nytimes.com/2012/02/28/the-first-google-maps-war/>, accessed June 15, 2019.

³⁸ Europe, 'Google map gives German harbour to Netherlands' (BBC, 23 February, 2011) <http://www.bbc.com/news/world-europe-12558741>, accessed June 15, 2019.



Similarly during the inclusion of South Sudan in the U.N.G.A., while members voted, they were unaware of the exact territorial division between North and South Sudan. It was then that Google initiated the process of collecting geo-spatial information regarding South Sudan from locals in order to better the territorial integrity.

Thus, Google has times and again being accustomed to criticism for wrong depiction of international boundaries and even varied depictions of boundaries as per the perspective of the political entity. However, “Popularity does not bestow authority” and Google’s maps cannot be accurately relied upon for proving sovereign territorial holds. Thus, most of the international incidents have witnessed countries resorting to peaceful petitions to Google informing it regarding the inaccuracy of the border and requesting a shift in the same. Hardly has the world witnessed penal provisions being invoked against Google for depicting versions other than the perceived ones.

III.3. J. MOHANRAJ V. GOOGLE AND OTHERS³⁹

Apart from the above two incidents, another pertinent case is the 2008 judgment by the Madras High Court in J. Mohanraj v. (1) Secretary To Government, Delhi; (2) Indian Space Research Organisation, Bangalore; (3) Google India Private Limited, Bangalore . A writ petition was filed by Mohanraj seeking a complete ban on Google Earth and ‘Bhuvan’; mapping initiatives by Google and ISRO respectively.

The petition was allegedly filed in public interest considering the security of Indian

Government along with the threat posed by the terrorists. The petitioner claimed that the initiatives such as Google Earth used high quality satellite imagery to display bird’s eye view of various establishments including minute details and were bound to cover defence establishments and sensitive areas, posing a threat to Indian security. Dr. A.P.J. Abdul Kalam’s speech was referred to indicate his views against such open creation of geospatial data. The provisions of the NMP was highlighted and it was alleged that such mapping practices violated the individual rights of a person under Article 21 of the Constitution. Further, it was claimed that such practices could only be taken up by SOI and were outside the purview of private organizations.

However, the Court held that the petitioner was unable to produce any specific “Guidelines/Rules/Law laid down by the Central/State Governments, prohibiting the private organisations or any other individuals to Interactive Mapping Program, covering vast majority of the Planet”. Since the court could only interpret existing provisions and not lay down guidelines, passed the judgment against the petitioners.

From the above explained incident it seems that the NMP per se does not refrain creation of mapping data by agencies other than SOI. The centre of the conflict seems to lie with the interpretation of the policy by SOI claiming itself to be the exclusive agency entitled to map data. Hence, often though complaints and cases are filed against such activities, no concrete consequence emerges from the same. Further, the courts have also

³⁹ J. Mohanraj v (1) Secretary To Government, Delhi; (2) Indian Space Research Organisation, Bangalore;

(3) Google India Private Limited, Bangalore, 2008 Indlaw MAD 3562.



neglected the grievance of the issue and given ambiguous judgments in most cases.

Thus no judicial sanction or opposition to the SOI's guidelines exist till date often allowing SOI to continue with following its own version. While these cannot be termed as a solution, they definitely indicate towards the root of the problem. Therefore, it becomes an old wine in a new bottle.

CHAPTER IV: JUDICIOUS REFLECTION ON JUDICIAL REFORM – RECOMMENDATIONS AND CONCLUSION

There is urgent need to review the National Map Policy framework to align with technologies, public expectations and support government in delivering services. It is time to streamline the procedures to implement them. Here are some recommendations for review and urgent change.

1. The time has come to frame one overarching Geo-spatial policy to consider all aspects of spatial products and activities. One regulatory authority to oversee all aspects of Geo-spatial data, institutions, policies and laws would help in removing uncertainties in interpretation of regulations. This policy must be framed after public debate and guidelines framed with a view to enabling compliance.
2. As of now, industry approaches several agencies for survey permissions and map clearances. A single window for survey permissions and map clearances is required. One Geo-spatial portal with a comprehensive checklist of all laws, policies, regulations, documents, processes and timelines would go a long way to simplify engagements with regulators.
3. S&M often form a part of other large projects. Time taken to complete them has critical impact on the rollout of the overall project. Development projects get stalled because of the delay in providing survey results on time. So regulators must be time bound in giving approvals and to clear applications.
4. Over a period of half a century, some regulations have become archaic. The topography of restricted areas in India is seen on Web maps offered from overseas data centres via the Internet. So the restriction on export of maps, paper or digital, serve no purpose. The OSM maps, cleared by Ministry Of Defence for public distribution in India, should be available for export also.
5. Some policies may not withstand legal and constitutional scrutiny and have become superfluous. The RTI Act 2005, sections 4(1), (2) & (3), mandates all public authorities for proper documentation of data and provide its easy access to every citizen of the country. But the National Data Sharing And Accessibility Policy, 2012 promotes sharing data between government organizations only. The public should get access to maps, created by public funds.
6. The National Remote Sensing Centre is the sole distributor of satellite images in India. The Remote Sensing Data Policy protects its commercial interests, and this can be viewed as discriminatory in law. This practice negatively affects Indian industry and must be discontinued. Satellite images and data from foreign sensors can be sourced at lower prices, in shorter delivery time from overseas.
7. Mobile Smartphones, 3D videography, ubiquitous GPS enabled devices, HR satellite images downloads from the Internet, are today's realities. Crowd



sourcing data rapidly and inexpensively, using diverse platforms, is here to stay. Regulators must adopt internal process automation to quickly validate Industry's pre-publication data using digital processes. This will reduce transaction cycle times for Survey & Mapping companies.

8. The National Map Policy should make it possible to distribute the certified international boundaries of India in digital form by the regulator from the SOI portal and Map Sales Offices, without the requirement for further approvals by the publisher. The international boundary files of India should be offered at different scales, approved by the regulator and acceptable by law.

