Recommendations on the Draft of

"The Geospatial Information Regulation Bill, 2016"

I. BACKGROUND

Geospatial Technologies

Geospatial technologies collectively stand for the discipline of gathering, storing, processing and delivering geographic or spatially referenced information. These technologies broadly include Geographic Information Systems (GIS), Surveying (Land/Areal), Remote Sensing, Image Processing, Photogrammetry, Global Positioning Systems (GPS) and Navigation Systems. Output of the industry in this segment can be classified into four categories, viz., Geospatial Data (surveys, charts, maps, geotagged photos etc.), Products, Services and Solutions.

Geospatial information or data is the most vital component of geospatial applications, and success of the entire system largely depends on the accuracy of available data. In India, substantial amount of geospatial data has been created by various Government departments at different scales to meet projects specific requirements, however, access to relevant and updated geospatial data has been a challenge for many projects (both Governmental and on PPP mode).

Why these technologies are becoming important?

Geospatial technologies, today, touch every aspect of life. With the world getting more and more interconnected, every aspect of human engagement will have some element of spatial relationship. Geospatial technologies comprise a whole bunch of equipment, methods, platforms and services –, from information collection to analysis, decision making, planning, implementation, monitoring of the delivery method, and output. Location based applications have added another dimension to this ecosystem. These applications have helped in popularising the utility of geospatial technologies in the day-to-day life of the common man.

Till few decades back, knowledge of geospatial sciences was the subject of scientific research and usage of related tools and techniques were limited to Defence and other strategic sectors. Now, it is at the core of planning and management system of every sector of the economy, be it natural resources, power, water, sewage or agriculture. The main reason behind its current popularity is its utility in multi-sector developmental projects like Smart Cities. Cities like Barcelona, Vienna, Toronto, Paris, New York, London etc., have used GIS and related technologies for designing and functioning of city the framework.

A key enabler to transform mission mode projects into reality

The applications of geospatial technologies are used worldwide as effective administrative and management tools for decision making, and are helping planners in preparing sustainable

developmental strategies. Therefore, most of the mission mode projects are conceptualised and implemented using geospatial technologies. A GIS-based ICT framework can play a central role in establishing real time and transparent flow of information between Central and State governments, their departments and enforcement agencies, in order to ensure desired output for planning and smooth delivery of services to citizens.

The Government of India under the vision of the Hon'ble Prime Minister, Shri Narendra Modi has rolled out some transformational projects which are conceptualised to upgrade the life of citizens using various ICT-based approaches. Digital India, Smart City, Swatch Bharat Abhiyan, AMRUT, National Mission for Clean Ganga are some of the programmes which cut across many sectors of economy like Urban Planning, Infrastructure Development, Power, Water, Transportation, Land Records, Disaster Management, Homeland Security & Defence, Rural Development, Natural Resource Management etc., and therefore involvement of many ministries and departments of the Centre and State governments. Geospatial technologies have the capability to integrate multiple operational verticals at one plane and to enable various departments to monitor different aspects of a situation in real time for taking informed decisions.

Digital India is a flagship programme of the Government of India with a vision to transform India into digitally empowered society and knowledge economy. Its vision areas are centred on 'Digital Infrastructure as a Utility to Every Citizen', 'Governance & Services on Demand' and 'Digital Empowerment of Citizens'. It will provide a new paradigm in decision making by enabling geographical visualisation and representation of information. Collaboration between departments and hassle free sharing of data will also be possible which will save time and money by avoiding duplication in data creation.

Smart Cities is all about smart infrastructure and services. Such cities will require a massive network of sensors for generating information for making processes automated for intelligent monitoring and management. Spatial planning enable planners to conceptualise appropriate model for a particular city with efficient allocation of land and resources, taking into consideration the climatic and geological condition of the place. City administration will also be able to ensure safety and security of citizens, and delivery of essential services to them.

Nature of these projects demands appropriate ICT infrastructure and updated high-accuracy geospatial data. Hence, there is a need for both the public and private domains to join hands for managing geospatial data, and for using appropriate tools and technologies in order to make these projects a success in India.

II. PRESENT POLICY FRAMEWORK IN INDIA

At present, the geospatial domain is governed by the following policies, created to take care of different aspects of geospatial data:

- **The National Map Policy 2005 (NMP 2005):** The Policy defines scope, distribution and access of digital topographic maps of SoI

- **The Civil Aviation Requirement (CAR), 2012:** CAR 2012 describes procedures involved in issuance of flight clearances for agencies undertaking aerial photography & geophysical surveys

- **The Remote Sensing Data Policy (RSDP) 2001 & 2011:** RSDP 2001 & 2011 explain process for distribution of satellite images to different category of users

- **The National Data Sharing and Accessibility Policy (NDSAP) 2012:** NDSAP 2012 recommends open access for the data generated through public funds available with various government departments

- **The Delhi Geographical Spatial Data Infrastructure (Management, Control, Administration, Security and Safety) Act 2011:** The Act is the first to be promulgated in a state. It brings into its purview buildings, manholes, demographics, utilities and urban planning details of Delhi, and emphasises on sharing, accessing and utilisation of geospatial data.

In addition to these, recently the Department of Science & Technology, Government of India, after many rounds of consultations with other relevant government departments, industry and academia, has come up with draft "**National Geospatial Policy (NGP) – 2016".** The policy is in sync with existing policies in the domain (as mentioned above) and aims at standardisation of quality of data, products, services and solutions for efficient use of technology and public money.

With the help of these policies, the industry has been growing exponentially and has been contributing significantly to the economy by way of generating most valuable and critical geospatial data required for national development. Projects like interlinking of river, modernisation of cadastral mapping, smart cities, infrastructural projects etc., and applications of national importance like battlefield management programmes are dependent on high resolution geospatial data acquired by the geospatial industry in the country.

III. FICCI'S RECOMMENDATIONS ON THE DRAFT OF "THE GEOSPATIAL INFORMATION REGULATION BILL, 2016"

FICCI appreciates the efforts of the Ministry of Home Affairs, Government of India for taking geospatial information into consideration in view of ensuring security, sovereignty and integrity of the nation. There has been a requirement for a policy framework and well-articulated guidelines to regulate this sector, in order to allow public, private and public-private partnership projects to benefit from the geospatial technologies in a more legal and time-bound manner. An appropriate policy framework will help the geospatial industry to flourish without compromising national security. The industry would also be able to ensure proper planning, monitoring and execution of Government's developmental projects, and more efficient use of public money.

FICCI is pleased to bring together the views of the industry with regard to the 'Geospatial Information Regulation Bill 2016'. This document is based on extensive consultations with relevant industry segment experts. FICCI request the Ministry to kindly consider following observations and suggestions before finalizing the draft:

1. **Acquisition of Geospatial Information of India**

   - Geospatial information is highly dynamic and time sensitive in nature. Many of the location-based solutions (used by government departments, enterprises and individuals) require real-time information for which updates are done multiple times in a day. Licencing for data creation or for data acquisition may result in unfortunate delay and data redundancy.

   - Instead, there could be a registration process. It would serve the purpose of the government in is identifying people and agencies engaged in data creation and preventing those who violate the sovereignty, integrity and security of the nation.

   - We suggest that the Government of India may consider creating a **'Geospatial Data Registration Portal'** for making the process online, transparent and time saving.
     - During the registration process, agencies could be asked to disclose relevant information like, areas to be captured, mode of data acquisition, resolution, purpose etc., as deemed required by the Government.
     - After every successful registration, a registration/reference number could be generated by the portal and the relevant government department may advise the registered agencies to compulsorily highlighted registration/reference number on the data published.

   - Bringing each and every citizen under the purview of the Bill may not be required, especially when regulations ensure that only secured and authentic geospatial information is created and disseminated by agencies working in this area. Nowadays, a

common man uses variety of location-enabled gadgets and apps like, smartphones, cameras, online shopping and navigation apps, which can bring such users under scanner as per the provisions of the Bill in its present form.

2. Possession of Existing Data

The draft Bill appears to retrospectively regulate geospatial data even if it was acquired through legal means or the data which is already approved by the appropriate government authorities, prior to the implementation of the Bill. Not only does this clause seek to charge for this retrospective vetting, but also suggests that the permission to retain and use the data may be denied and the data would have to be surrendered/destroyed. This will severely impact businesses and projects under execution leading to penalties and losses.

3. Dissemination, Publication or Distribution of Geospatial Information of India

- Geospatial data which is key to several mission critical projects, like Smart Cities, Digital India, Swatch Bharat etc., should be freely available. Policies which are already existing in this domain, especially the proposed National Geospatial Policy (NGP 2016), aim to promote the use of geospatial information. It also talks about different data standards and the need of data sharing between different government departments, industry and citizens.
- There should be well-defined processes and guidelines to ensure smooth dissemination of geospatial data (especially non-sensitive data). The government may consider creating a regulatory body **'Geospatial Information Regulatory Authority'** with an objective to ensure hassle free sharing of data between various entities, and for quick access of data for businesses and individuals.
- The Bill could allow hosting of vetted data on public cloud and the internet, as Web and Cloud are becoming preferred platforms for hosting of content and services. It could also allow dissemination of data as a service on Web/Cloud.
- Crowd sourcing is another source of getting information from citizens. The Government could consider a provision for permitting crowd sourcing in certain cases like disaster management and emergency response.

4. Sensitive/Non-sensitive or Sharable/Non-sharable Information

- The Government could provide a list of critical establishments or provide broad guidelines of establishments of a particular nature that need to be masked. This clarity would help content creators in preparing maps and geospatial information as stipulated government guidelines. This will not only ease the flow of information, but will save time.

- Defence establishments and other vital installations could be masked in a way to minimise risk of retrieval of secured and non-sharable information about these installations from the base map/geospatial data.
- We suggest that instead of complete masking, critical installations could be named as 'Government Building' or something like a common identity. Rational behind the suggestion is that exterior features of such establishments are commonly known, but the most critical information about these places are the inside map/layout of these campuses/building and location of different installations inside the campus/building, which need to be completely masked.

5. **Wrong Depiction of the Map of India or Misrepresentation of Indian Borders**

- FICCI is in full agreement with the intent of the Government of India to correctly depict national boundaries so as to ensure that sovereignty and integrity of the nation is maintained.
- Indian borders should be represented appropriately (as per the Government of India norms). We suggest that in order to maintain and ensure the usage of right International boundary, the ideal scenario would be that the government provides the same at a high resolution to all registered organisations for use in all published maps.

6. **Security Vetting**

- Vetting should be limited to base maps and should not be applied on value added products and services. In addition, it should focused only on the sensitive data, i.e., administrative boundaries, restricted areas and points of interest. Changes to all other features of the map cannot be subject to approval as such content do not have any impact on national security.
- The vetting process needs to be detailed out in details with clearly given criteria for acceptance or rejection of any application for licence. Global/local mapping companies in India are heavily investing in developing map solutions for the citizens as a contribution to the 'Digital India' mission and at the same time contributing to the 'Make in India' programme, thus generating employment for thousands of Indians.
- Thousands of government and business applications run on real-time data, like traffic updates, GPS tracking, logistics and distribution etc., which ensures quality of services to the citizens.

Taking real-time data out from the system and sending it for vetting instead of its actual site of application, would not be practical for the agencies who create such data. It is suggested

that data creators provide access to the data being generated to the Security Vetting Authority in a form which is practical, efficient and can protects the IP rights of the creator. Anyone publishing/disseminating a map should clearly depict who has the IP ownership, i.e., who is the creator of the map so that if the map is wrong, the publisher and the creator can be asked to fix the loopholes.

It may also be considered that after a due registration the data acquired / developed by the concerned company can be put to use simultaneous to its submission for vetting. The objectionable elements in data (if any) found in violation to guidelines will result in removal of the data and related applications from public access.

7. **Offences and Penalties**

- There should be a provision of giving warning or notice to those who are found responsible (directly/indirectly) for misrepresenting Indian territories and boarders.
- Warning or notice should ask the publisher to either take down the entire map/content or correct a specific part which is found to misrepresent the India boundaries, within a stipulated time frame.
- Heavy penalty should be imposed on those who do not correct the maps and to repeat offenders.

IV. CONCLUSION

National security, sovereignty and integrity is paramount. FICCI fully understand and appreciate that the draft 'Geospatial Information Regulation Bill, 2016' is intended to regulate geospatial data pertaining to international boundaries and national security. However, the draft Bill needs certain modifications. We recommend that the Government of India could take steps to freely provide accurate boundaries for India in order to encourage correct representation of Indian territories.

The flagship projects of the Government like AMRUT, Smart City, Digital India etc., envisage involvement of industry and demand use of modern technologies, like IoT-enabled and location-intelligent devices to fulfil their objectives. In addition to developmental planning, geospatial information is heavily used by various relief organisations, NGOs as well as citizens during emergencies, disaster or calamity in saving lives and rehabilitation. Various procedural barriers mentioned in the draft Bill could result in delays in clearance/license, and hence the interruption in nation building exercise and relief efforts.

Besides the data creating organisations, the Bill in its present form would also limit growth of other user industry verticals and negatively affect nation's competence in delivering developmental projects. It is therefore important to ensure that the upcoming policy regarding geospatial information must be synchronized with the existing policies in the sector.

We recommend that the Government of India may kindly reconsider some aspects of the draft Bill, especially mechanism for acquisition, storage, dissemination and distribution of the data so that,

- the growth of the industry is not adversely impacted,
- the benefits of this technology to citizens enjoying should not be hampered,
- the initiatives of the Government of India, like Smart Cities and Digital India, do not get adversely affected.

We sincerely hope that the Ministry of Home Affairs will look into the observations given in this document on various sections of the draft Bill, and will also positively consider the recommendations made by the industry.

FICCI will be happy to furnish more information on any of the points included in this document. FICCI Committee on Geospatial Technologies would be happy to meet the officials in the Ministry for any further discussion on the draft Bill.

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About FICCI

Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies.

A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry. From influencing policy to encouraging debate, engaging with policy makers and civil society, FICCI articulates the views and concerns of industry. It serves its members from the Indian private and public corporate sectors and multinational companies, drawing its strength from diverse regional chambers of commerce and industry across states, reaching out to over 2,50,000 companies.

FICCI provides a platform for networking and consensus building within and across sectors and is the first port of call for Indian industry, policy makers and the international business community.

CONTACTS

Mr. Sumeet Gupta   **Mr. Gaurav Gaur**
Director   Senior Assistant Director
E: sumeet.gupta@ficci.com   E: gaurav.gaur@ficci.com

FICCI, Federation House, Tansen Marg, New Delhi - 110 001, India
T: +91 - 11- 23487443, 23487237
F: +91-11-23765333