

## COMMENTS ON THE DRAFT NATIONAL GEOSPATIAL POLICY 2021

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### **A. Geospatial data should not be subject to mandatory sharing requirements under the proposed non-personal data framework:**

1. The Draft National Geospatial Policy (“**Draft NGP**”) proposes a National Data Registry which would include the geospatial data collected by the central and state level partnering agencies, including open access geospatial data, or geospatial data collected under the National Data Sharing and Access Policy. Importantly, the Draft NGP states that the data registry should not store or serve any proprietary information or data/metadata acquired under a license by the respective central and state level partnering agencies.<sup>1</sup>
2. In December 2020, a committee appointed by the Ministry of Electronics and Information Technology released its second report on a proposed framework for non-personal data (“**NPD**”) in India.<sup>2</sup> The report recommends a framework to enable mandatory sharing of ‘high value datasets’ with the government and other businesses. The committee has specifically recognized geospatial data as a high value dataset domain.<sup>3</sup> It is possible that these ‘high value datasets’ could include proprietary or licensed geospatial data.<sup>4</sup> To this extent, it is possible that the NPD framework that will be finalized may contradict the Draft NGP.
3. The government must recognize that collection and maintenance of geospatial data (and generally any non-personal dataset) involves investment in terms of technical and financial resources. This has also been acknowledged in the Draft NGP. Private sector entities invest heavy resources to collect geospatial data for various products or services. It is a proprietary business asset for the concerned entities. If such geospatial data is subject to mandatory data sharing requirements, then companies will not have any incentive to cultivate geospatial datasets. This could adversely impact the growth of the geospatial data sector in India.

**Recommendation:** The Department of Science and Technology (“**DST**”) should make a representation to the NPD committee on how geospatial data held by the private sector should be procured for government / public use through general commercial arrangements. Such geospatial datasets should not be classified as ‘high value datasets’ and be subject to compulsory data sharing requirements.

### **B. The government should adopt international standards for geospatial data use:**

1. The Draft NGP recognises the need to adopt or rely on international standards to the ‘maximum extent practicable’.<sup>5</sup> Lead agencies (i.e. central or state level partnering agencies)<sup>6</sup> will assist the Geospatial Data Promotion and Development Committee (“**GDPDC**”) to develop a plan to formulate and implement the required standards for foundational/thematic data assets. However, the Draft NGP also suggests that the GDPDC will develop and release standards after consultation with a broad range of

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<sup>1</sup> Para 7.6.2 of the Draft NGP.

<sup>2</sup> Report by the Committee of Experts on Non-Personal Data Governance Framework, 16 December 2020, [https://static.mygov.in/rest/s3fs-public/mygov\\_160922880751553221.pdf](https://static.mygov.in/rest/s3fs-public/mygov_160922880751553221.pdf).

<sup>3</sup> Pg. 24 of the NPD report.

<sup>4</sup> Para 7.6.2 of the Draft NGP.

<sup>5</sup> Para 7.5.4. of the Draft NGP.

<sup>6</sup> Para 7.4.1. of the Draft NGP.

data users/providers, adding that these may be national or international standards that are “adopted by voluntary and open standards consensus bodies”.<sup>7</sup>

2. The Draft NGP suggests that if geospatial data is democratized, it will enhance commercialization.<sup>8</sup> Digital technologies must be harnessed if India’s digital economy is to reach USD 5 trillion by 2024. This includes reliance on technology tools like artificial intelligence, machine learning, the Internet of Things, remote sensing technology, robotics, 3D printing, satellite imaging, mapping, and location technologies.<sup>9</sup>
3. Adopting internationally accepted standards for handling geospatial data would enable Indian companies to expand to international markets as their internal geospatial data handling processes and standards will be aligned to international standards. It would also make it easier for Indian companies to collaborate with foreign companies to provide geospatial data services in international markets. Developing India-specific standards for geospatial data would only force both foreign and Indian companies to comply with an extra set of standards, thereby increasing their compliance burden. This can affect ease of doing business for the geospatial data industry.

**Recommendation:** The lead agencies and GDPDC should formulate geospatial data standards based on existing international standards framed by bodies such as the International Standards Organization (“ISO”). For example, the ISO provides standards for the metadata of geographic information,<sup>10</sup> and for the quality of geographic data.<sup>11</sup>

**C. The Draft NGP must discuss the privacy implications of geospatial data and the Personal Data Protection Bill, 2019:**

1. The Draft NGP discusses geospatial data only in the context of using it for governance purposes (for areas such as agriculture, health, land management etc.) or for commercial purposes. However, geospatial data can also qualify as personal data in certain situations.
2. For example, many app-based services like cab aggregators, food delivery aggregators or e-commerce platforms collect real-time location information of their users, either by accessing the device’s GPS location or by collecting the user’s address. In such situations, the location data / address collected by the app will be personal geospatial data. This is because these apps can identify an individual using her address or location data.
3. Under the Information Technology Act, 2000, geospatial data is not included in the definition of ‘sensitive personal data or information’ (“SPDI”) and is therefore not subject to obligations associated with it.<sup>12</sup> However, geospatial data can fall under the definition of ‘personal data’ under the Personal

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<sup>7</sup> Para 7.5.2 of the Draft NGP.

<sup>8</sup> Para 2 of the Draft NGP.

<sup>9</sup> *Geospatial industry leaders seek integrated geospatial policy under PMO-led agency*, Economic Times, 03 December 2019, <https://economictimes.indiatimes.com/news/economy/policy/geospatial-industry-leaders-seek-integrated-geospatial-policy-under-pmo-led-agency/articleshow/72353172.cms?from=mdr>.

<sup>10</sup> ISO19115:2014, Geographic information- Metadata, <https://www.iso.org/standard/53798.html>.

<sup>11</sup> ISO19157:2013, Geographic Information - Data quality, <https://www.iso.org/standard/32575.html>.

<sup>12</sup> Rule 3, The Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011.

Data Protection Bill, 2019 (“**PDP Bill**”).<sup>13</sup> The PDP Bill is largely based on the European Union’s General Data Protection Regulation (“**GDPR**”), which expressly includes location data in its definition of personal data.<sup>14</sup> A joint parliamentary committee is currently examining the PDP Bill which is expected to be tabled in the upcoming monsoon session of the Parliament of India.<sup>15</sup>

4. Thus, companies that use geospatial data such that it may qualify as personal data will have to comply with the various requirements under the PDP Bill such as taking the user’s consent before collecting the data, storing the data and implementing the user’s rights over such data. Some geospatial data applications which could have a high data privacy impact include land ownership, location traceability from the user’s device, route monitoring/traffic modelling and geospatial information system for health-related analysis.<sup>16</sup>

**Recommendation:** The Draft NGP should highlight the importance of geospatial data from a privacy perspective. It should state that geospatial data collected and used by companies may qualify as personal data under the PDP Bill, and they will have to comply with the various obligations under the PDP Bill.

**D. The Draft NGP should be implemented in a federal manner i.e. both at the central and state level:**

1. The Draft NGP currently suggests a centralized nationwide framework for collecting and providing access to geospatial data. The GDPDC will act as the central agency, and will operate through the central and state level partnering agencies. Among other things, these agencies will work with state government agencies, Panchayati Raj institutions and municipal bodies to collect geospatial data.
2. However, the Draft NGP should also provide for a parallel state-level framework to collect and promote access to geospatial data at the state level. A state level framework can help the GDPDC manage geospatial data effectively for the following reasons:
  - a. Many categories of geospatial data would fall under subjects that are covered in the State List under the Constitution of India. Health and agriculture are two such categories.<sup>17</sup> This means that state governments are empowered to create laws / regulations governing all aspects of such subjects, which can also include geospatial data. Thus, a state government could technically create a framework which may not necessarily be in line with the Draft NGP. To avoid this possibility, the Draft NGP could provide a model framework for geospatial data-related activities which all state governments can implement.
  - b. Many state governments have already implemented their respective initiatives on geospatial data. For example, the Delhi Government enacted a separate law for its geospatial data infrastructure.<sup>18</sup> Under this law, it created a separate company called Geospatial Delhi Limited, which maintains the Delhi State Spatial Data Infrastructure.<sup>19</sup> Similarly, the Andhra Pradesh government has an ‘AP GIS Portal’

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<sup>13</sup> Clause 3(28), PDP Bill.

<sup>14</sup> Article 4(1), GDPR.

<sup>15</sup> Joint Committee on the PDP Bill, [http://loksabhaph.nic.in/Committee/CommitteeInformation.aspx?comm\\_code=73&tab=1](http://loksabhaph.nic.in/Committee/CommitteeInformation.aspx?comm_code=73&tab=1).

<sup>16</sup> *Geospatial information and privacy- Policy perspectives and imperatives for the Geospatial Industry*, World Geospatial Industry Council, February 2020, <https://wgicouncil.org/wp-content/uploads/2020/03/Geospatial-Infomaion-and-Privacy-report-Final.pdf>.

<sup>17</sup> Entries 6 and 14 of List II in the Seventh Schedule of the Constitution of India.

<sup>18</sup> Delhi Geospatial Data Infrastructure (Management, Control, Administration, Security and Safety) Act, 2011, [https://www.indiacode.nic.in/bitstream/123456789/13623/1/gSDL\\_act.pdf](https://www.indiacode.nic.in/bitstream/123456789/13623/1/gSDL_act.pdf).

<sup>19</sup> Delhi State Spatial Data Infrastructure, <https://gsdl.org.in/DSSDI.html>.

which is maintained by the Andhra Pradesh Space Applications Centre.<sup>20</sup> The Karnataka Government has the ‘Karnataka Geographic Information System’, which is maintained by the Karnataka State Remote Sensing Applications Centre.<sup>21</sup> The purpose of these initiatives is to provide their respective state government departments with access to useful geospatial data to perform governance functions. Instead of putting a new centralized framework in place, the Draft NGP should accommodate such existing state level initiatives.

- c. It is also more practical to have geospatial data-related policies operating at the state level. It is easier and more effective for state governments to collect detailed geospatial data information about their respective areas. Additionally, state government departments can benefit immensely from direct and quick access to state-level geospatial data.

**Recommendation:** The Draft NGP should harmonize various existing state-level geospatial data policy instruments / state-level geospatial data portals into the proposed national level framework. This will allow the Draft NGP to fully utilize such existing initiatives to their maximum potential, instead of putting in place a completely new framework. For example, the state level initiatives discussed above could possibly act as the state level partnering agencies under the Draft NGP, instead of forming new agencies.

Additionally, the Draft NGP should also include all existing central-level initiatives on collection and maintenance of geospatial data. This will ensure that the Draft NGP assimilates all geospatial-data related initiatives under one umbrella policy, and there is no duplication of effort.

#### **E. ISRO’s role in promoting the geospatial data industry in India should be included in the Draft NGP:**

As stated in the Draft NGP, access to geospatial data is heavily dependent on positioning and earth observation infrastructure. This comes under the domain of the Indian Space Research Organization (“ISRO”). Though the Draft NGP discusses this issue broadly, there are many existing initiatives of ISRO which are not discussed in as much detail in the Draft NGP-

1. ISRO had recently introduced two draft policies- the Draft Spacecom Policy 2020<sup>22</sup> and the Draft Space-based remote sensing policy of India 2020<sup>23</sup>. The latter, which will replace the current Remote Sensing Data Policy 2011, will bring about a huge change by opening up the remote sensing industry to the private sector in India. This will significantly improve access to, and marketing of geospatial data in India. However, there are some limitations in both policies which ISRO should address once these draft policies have been finalized. We have discussed these limitations in our comments to both these policies.<sup>24</sup>

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<sup>20</sup> AP GIS Portal, Andhra Pradesh Space Applications Centre, <https://apsac.ap.gov.in/dashboard-staging/>.

<sup>21</sup> Karnataka Geographic Information System, <https://kgis.ksrsac.in/kgis/aboutkgis.aspx>.

<sup>22</sup> Draft Spacecom Policy 2020 and Spacecom NGP 2020, [https://www.isro.gov.in/sites/default/files/draft\\_spacecom\\_policy\\_2020.pdf](https://www.isro.gov.in/sites/default/files/draft_spacecom_policy_2020.pdf).

<sup>23</sup> Draft ‘Space-based remote sensing policy of India’ and the draft ‘Norms, guidelines and procedures for implementation of Space RS Policy 2020’, [https://www.isro.gov.in/sites/default/files/spacers\\_policy\\_ngp\\_2020\\_draft.pdf](https://www.isro.gov.in/sites/default/files/spacers_policy_ngp_2020_draft.pdf)

<sup>24</sup> *Our comments on ISRO’s Space Remote Sensing Policy and Norms, Guidelines and Procedures 2020*, Ikigai Law, 06 January 2021, <https://www.ikigailaw.com/our-comments-on-isros-space-remote-sensing-policy-and-norms-guidelines-and-procedures-2020/>; *Our comments on: The Draft Spacecom Policy-2020 and Spacecom NGP-2020*, Ikigai Law, 06 November 2020, <https://www.ikigailaw.com/our-comments-on-the-draft-spacecom-policy-2020-and-spacecom-ngp-2020/>.

2. ISRO is also working on increasing the adoption of the Indian Regional Navigation Satellite System (“**IRNSS**”) or NavIC. In December 2020, the IRNSS was recognized by the International Maritime Organization as a component of the World-Wide Radio Navigation System.<sup>25</sup> Some smartphone manufacturers like Realme have also included NavIC chipsets in their smartphones.<sup>26</sup> The telecom secretary recently stated that NavIC should be made mandatory for smartphones released in India.<sup>27</sup>
3. ISRO’s Bhuvan portal should also be included in the Draft NGP. It contains a plethora of geospatial data-related information across different sectors such as agriculture, forestry, water, urban planning, rural areas and tourism.<sup>28</sup> It also contains state-wise maps for different themes. The Bhuvan portal has also been used by the government in COVID-19 activities. A lot of geospatial data from the Bhuvan platform could be included in the proposed National Data Registry in the Draft NGP.
4. ISRO’s Indian Institute of Remote Sensing has a ‘Geospatial Technology and Outreach Programme Group’.<sup>29</sup> This group conducts various education and training programmes and research projects on various areas related to geospatial data, including geospatial technology developments, aerial and terrestrial photogrammetry, spatial data processing and analysis techniques. It also conducts online courses. The Draft NGP should include a reference to this group in its section on geospatial education and skill development.

**Recommendation:** The Draft NGP should be developed closely in collaboration with the ISRO/Department of Space, and should include ISRO’s existing projects under its various headings. These projects should be expressly referred to in the Draft NGP.

**F. The Draft NGP should highlight the importance of a fast-track approval process for using drones for geospatial data-related activities:**

1. The geospatial data guidelines were released to liberalise access and use of geospatial data by the private sector.<sup>30</sup> The guidelines state that there has been immense progress in capturing geospatial data by tools like drones.<sup>31</sup>
2. The Ministry of Civil Aviation (“**MoCA**”) recently notified the Unmanned Aircraft Systems Rules, 2021 (“**Drone Rules**”).<sup>32</sup> These Drone Rules provide a detailed licensing framework for drone

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<sup>25</sup> *India’s own GPS-like navigation system NavIC gets IMO recognition*, Business Standard, 08 December 2020, [https://www.business-standard.com/article/technology/india-s-own-gps-like-navigation-system-navic-gets-imo-recognition-120120801062\\_1.html](https://www.business-standard.com/article/technology/india-s-own-gps-like-navigation-system-navic-gets-imo-recognition-120120801062_1.html).

<sup>26</sup> *India’s first smartphone with ISRO’s NavIC tech is already available for purchase*, Hindustan Times, 27 February 2020, <https://tech.hindustantimes.com/tech/news/india-s-first-smartphone-with-isro-s-navic-tech-is-already-available-for-purchase-story-ulYtgIHZBm0ntka6qQhj9H.html>.

<sup>27</sup> ISRO NavIC Should be Made Mandatory for Mobiles Released in Indian Market: Anshu Prakash, Telecom Secretary, Dataquest, 30 April 2021, <https://www.dqindia.com/isro-navic-made-mandatory-mobiles-released-indian-market-anshu-prakash-telecom-secretary/>.

<sup>28</sup> Bhuvan- Indian geo-platform of ISRO, [https://bhuvan.nrsc.gov.in/bhuvan\\_links.php#](https://bhuvan.nrsc.gov.in/bhuvan_links.php#).

<sup>29</sup> Geospatial Technology and Outreach Programme Group (GT&OP Group), Indian Institute of Remote Sensing, ISRO, <https://www.iirs.gov.in/Remote-Sensing-Geoinformatics-Group-Head>.

<sup>30</sup> Guidelines for acquiring and producing Geospatial Data and Geospatial Data Services including Maps, DST, 15 February 2021, <https://dst.gov.in/sites/default/files/Final%20Approved%20Guidelines%20on%20Geospatial%20Data.pdf>.

<sup>31</sup> Para 2, DST Geospatial Data Guidelines, <https://dst.gov.in/sites/default/files/Final%20Approved%20Guidelines%20on%20Geospatial%20Data.pdf>.

<sup>32</sup> Unmanned Aircraft Systems Rules, 2021 <https://egazette.nic.in/WriteReadData/2021/225860.pdf>.

activities, which also include requirements directly related to geospatial data. For example, all drones need to be equipped with a global navigation satellite system and geo-fencing capabilities.<sup>33</sup>

3. Previously, the MoCA has provided fast-track approvals for use of drones by government departments or public sector undertakings for different mapping activities. For example, the MoCA granted a separate approval to the Survey of India to use drones for its SVAMITVA scheme.<sup>34</sup> The MoCA also has a portal for ‘Government Authorisation for Relief Using Drones’, called the GARUD portal, which provides fast-track approvals for COVID-19 related activities.<sup>35</sup> However, these are all ad-hoc initiatives which are formulated on a case-by-case basis for government mapping projects that involve the use of drones.
4. The DST can work with the MoCA to devise a single set of regulations for fast-track approvals for certain categories of geospatial data-related activities involving the use of drones. Such regulations can be narrower and more liberalized than the comprehensive licensing framework given under the Drone Rules. Both public sector and private sector entities can benefit from a separate fast-track approval process for drone mapping activities in crucial areas such as agriculture, health and weather tracking. The central government can notify a more liberalized fast-track approval process for drone activities by way of exercising its exemption powers under the Drone Rules itself.<sup>36</sup>
5. Additionally, certain geospatial data-related requirements under the Drone Rules may also require inputs from the DST. For example, to allow all drones to incorporate geo-fencing capabilities, the DST can prescribe standards. It can also work with the MHA to provide details of the restricted geographical areas of India to drone manufacturers.
6. The ISRO can promote the use of the NavIC system by helping drone companies incorporate it in their drones. This will allow drone manufacturers and operators to comply with the compulsory requirement of having a global navigation satellite system under the Drone Rules.

**Recommendation:** The Draft NGP should include a separate section on the importance of drones for the geospatial data sector. It should include a reference to the Drone Rules, and how the government should provide a separate fast-tracked approval procedure for use of drones for mapping-related activities in important sectors of public interest such as agriculture and health. The DST can make a representation to the MoCA on this issue.

**G. The Draft NGP should provide for stakeholder consultations for important executive decisions related to geospatial data:**

1. The Draft NGP states that the Chair of the GDPDC will have the power to restrict any geospatial data from being disclosed if it poses any risk of damage to the national interest, security and sovereignty of the country.

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<sup>33</sup> Rules 9(8)(a) and 9(8)(c), Drone Rules.

<sup>34</sup> Survey of India gets permission to use drones in villages, Geospatial World, 17 June 2020, <https://www.geospatialworld.net/news/survey-of-india-gets-permission-to-use-drones-in-villages/>.

<sup>35</sup> Conditional exemption to Government entities for COVID-19 related Drone/RPAS operations via GARUD portal, Press Information Bureau, 05 May 2020, <https://pib.gov.in/PressReleasePage.aspx?PRID=1621250>.

<sup>36</sup> Rule 70, Drone Rules.



2. However, the Draft NGP does not state that the GDPDC will make this decision after consulting the industry and other relevant stakeholders. This can result in a situation where a decision of the GDPDC may not actually be in line with larger interests of the industry or the public. Restricting the disclosure of any category of geospatial data affects both commercial and public interests, as it will reduce access to geospatial data and transparency. Stakeholders may be able to provide alternative suggestions to the GDPDC which could help balance the interests of the government, public and the industry.
3. The Draft NGP itself recognizes the importance of stakeholder consultations by stating that it will consult a broad range of stakeholders to establish standards for geospatial data.<sup>37</sup>

**Recommendation:** We recommend that before taking decisions such as restricting disclosure of geospatial data, the GDPDC should hold stakeholder consultations. Such process was also followed for both the geospatial data guidelines and the Draft NGP. It will also be easier for the government to implement its decisions if all stakeholders are aware of these decisions before they are finalized, and given an opportunity to express their concerns. This will enable a continued dialogue between the government and external stakeholders.

Additionally, the DST should include members representing the industry and civil society in the GDPDC to ensure that the interests of all stakeholders are represented in the committee's composition.

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<sup>37</sup> Para 7.5.2 of the Draft NGP.