<center>**Concept Note: National Space Policy of Bhutan**</center>

I. **Background**

Bhutan's journey into space has taken off as a result of the vision of His Majesty the King to harness space resources and technologies for the benefit of our country, and to use related activities to create a greater sense of interest and passion in our youth for science, technology and innovation.

In line with the Royal Vision, a Division of Telecom and Space under the Department of Information Technology and Telecom with the Ministry of Information and Communications was created to take forward the initiative. Additionally, to assist the Ministry/Department/Division, a high level Satellite Technology Working Group (SWG) was also established.

As an initial step, the possibilities of using the two orbital slots allocated to Bhutan by the International Telecommunication Union (ITU) were explored and studied to operationalize these orbital slots. Further, to build local human capacity, Bhutanese Engineers were sent to the Kyushu Institute of Technology to study space engineering and to participate in the BIRDS-2 Project in 2016.

As part of the BIRDS-2 project, a Cubesat named Bhutan 1 was launched into the Orbit on 10th August 2018. It was Bhutan's first indigenously built satellite and thereby, a first major milestone in achieving His Majesty's vision.

With the Government of India (GoI) offering the South Asia Satellite (SAS) free of cost for use by the countries within the SAARC region along with availability of free transponder, a ground station for SAS was established in Thimphu. Bhutan has been using the SAS transponder for:

(a) Broadcasting of two BBS channels and four radio channels;
(b) Emergency communications during disasters;
(c) Backup backhaul communications links for Telcos (both for domestic and international links);
(d) Connectivity to off-grid gewogs e.g. Soe, Lingzhi and Naro; and
(e) Digital Satellite New Gathering.

To enhance the country's technical capability in the field of space science and technology, MoIC and the SWG have been holding meetings with other countries and International organizations to establish cooperation in space activities.

II. **Rationale**

With the initiation of space activities, the Division of Telecom and Space (DoTS), Department of Information Technology and Telecom (DITT), is mandated by the government to spearhead and coordinate activities related to the space sector. Some of the key responsibilities are as follows:

1. Formulate space law, policies and regulations;
2. Lead agency for coordination and implementation of space programs and activities;
3. Focal Administration for satellite filings and frequency coordination in consultation with Bhutan InfoComm and Media Authority (BICMA);
4. Coordinate resources allocated through Satellites;
5. Liaise with all relevant International Space Organizations;
6. Conduct research on space technologies used for space programs;
7. Conduct research work on Space and Satellite applications.

In order to fulfill the above mandates a guiding policy document is required. Some of the challenges of not having a space policy document are as follows:
1. Lack of coordination and duplication of space applications and data procurement within the country;
2. Non-utilization of space resources in an efficient and effective manner;
3. Lack of sustainable capacity building in space science and technology.

III.   **Policy Recommendations**

The proposed policy will, among others, address the issues and challenges highlighted above and in doing so, take the following broad parameters into consideration:

1. Harness satellite technology resources in all sectors to better the lives of Bhutanese people;
2. Provision of space data and technology for space applications across all sectors;
3. Inculcate national pride by having independent capability in space technology;
4. Encourage youth to pursue education and careers in Science, Technology, Engineering and Mathematics (STEM);
5. Cultivate a culture of innovation and entrepreneurship;
6. Encourage collaboration and space data sharing among governmental and non-governmental entities in the country;
7. Enhance International cooperation with other countries and organizations;
8. Enhance capability of both space service providers and users;
9. Strengthen the technical industry to support national development.

IV.   **Process and indicative timeline**

[Provide details on the process and indicative timeline that will be followed by developing the policy including likely need/use of TA. (If TA is to be used, the ToR must be shared with RED, GNHCS for comments)]

Activity	2020	2021

	5	6	7	8	9	10	11	12	1	2	3	4	5	6
Space Policy Inception	o													
Drafting of Concept Note	o													
Submission of Concept Note to GNHC	o													
Endorsement of Concept Note		o	o											
Drafting of Space Policy & Policy protocol report				o	o									
Stakeholder consultations						o	o							
Submission of draft policy to GNHC								o						
Endorsement of Space Policy								o	o	o				

V. **List of stakeholders who will be consulted**

1. All the Ministries and government agencies
2. Private/Corporate sector
3. Public/citizens/NGOs/Media