Proposed Topic for Side Event at COP25, Thai Pavilion, Spain

Side Event Title: Digital Belt and Road (DBAR): Harnessing Big Earth Data to Understand Climate Change and Monitor SDGs in Asia and the Pacific

Responsible Person/Org: Dr. Monthip Sriratana, Director, DBAR ICoE-Bangkok, NRCT

Format of the Side Event: Expert presentations, panel discussion, Q&A with participants

Date and Time: 11 Dec 2019 at 10:00 am

Rationale:

Thailand hosts one of the world's eight Digital Belt and Road (DBAR) International Centers of Excellence, DBAR ICoE-Bangkok. DBAR ICoE-Bangkok is administered through the NRCT and has four core partners: Asian Institute of Technology (AIT), Geo-Informatics and Space Technology Development Agency (GISTDA), NRCT and Ramkhamhaeng University. Although ICoE-Bangkok focuses much of its program on Thailand, it is a regional center covering the 10 countries of Southeast Asia and ASEAN.

The Digital Belt and Road Program (DBAR) is an international venture based in China to share expertise, knowledge, technologies and data to demonstrate the significance of Big Earth Data applications (e.g., data from satellites) for large-scale sustainable development, including climate change challenges. DBAR's objectives are to: (i) address knowledge gaps in earth system processes that constrain the attainment of the SDGs in the Belt and Road countries; (ii) promote advanced science and decision support services to extract effective information from massive and diverse data from ever-growing volumes of Big Earth Date; and (iii) enhance capacity building and technology transfer towards a system of partnerships and research networks.

A central component of DBAR is a highly sophisticated data platform called "CASEarth", which was developed by 1,200 scientists from 130 institutions around the world at a cost of nearly $300 million. The objective of CASEarth is to establish an International Center of Big Earth Data Science with the mission of: (i) building the world's leading Big Earth Data infrastructure to overcome the bottlenecks of data access and sharing; (ii) developing a world-class Big Earth Data platform to drive the discipline; and (iii) constructing a decision-support system to serve high-level government authorities and solve multiple issues. Climate change is among the major focal areas for CASEarth.

Proposed Speakers/Panelists:

Moderator: Dr. Monthip Sriratana, Director, DBAR ICoE-Bangkok

Keynote Speaker: Jia

Speakers: DG, NRCT / Representative, UNESCAP / Representative, UNDP
Representative, NASA / Representative, APN

Topics for Discussion:

1. Introduction to the side event (DBAR ICoE-Bangkok)
2. Introduction to Big Earth Data, Climate Change and the SDGS and the role of DBAR ICoE-Bangkok (DG, NRCT)
3. A description of CASEarth and a live demonstration of its application to climate change and SDGs (DBAR)
4. UNESCAP's Asia-Pacific Plan of Action on Space Applications for Sustainable Development (2018-2030) (UNESCAP)
5. How UNDP and DBAR are using CASEarth to improve global learning on climate change adaptation (UNDP)
6. DBAR/NASA cooperation in the field of Big Earth Data and how this can benefit climate change action in Thailand and Southeast Asia (NASA)
7. Options for developing a technical assistance program to improve technical capacity in the use of Big Earth Data to further climate change and SDG objectives (APN)