

Beijing Declaration on Earth Observation for Belt and Road

May 17, 2016

We, scientists, researchers, academics, engineers, educators and administrators from more than 20 countries, and representatives of international organizations, met in Beijing, China, at the International Symposium on Earth Observation (EO) for Belt and Road (EOBAR), co-hosted by the Division of Earth Sciences of the Chinese Academy of Sciences (CAS) and related ministries, commissions, and international organizations, on 16 and 17 May 2016.

Background

The Belt and Road initiative, formed by the "Silk Road Economic Belt" and the "21st Century Maritime Silk Road" international cooperation framework, is a crucial endeavor to meet the development challenges in the future for nations in the region. The initiative covers a vast area and involves many countries and a large population, facing numerous problems related to sustainable development that need to be addressed by nations and international communities through close cooperation, supporting to cope with economic, developmental and environmental challenges and to serve the overall collaboration in the region.

Welcoming

the Belt and Road initiative of the Chinese Government for developing partnerships to promote our mutual benefit between China and partner countries of the Belt and Road initiative, particularly through promotion of academic exchanges, joint programs/activities and strengthened cooperation for designing and launching joint research, "big science" centers, and international development cooperation projects.

Noting

 a) that the significant global-scale developments on earth observation have been achieved over the past decades, as well as parallel advances in space, geospatial and insitu technologies, space-based information, GNSS, GIS, mapping, geophysical processes surveying and modelling, information and communication networks technology;

b) that big data and data-sharing for public applications are now accessible to hundreds of millions of people, enhancing both the productivity and wellbeing and lifestyle of humankind.

Recognizing

- a) that the increasing complexity of the international socio-economic setting and the environmental stresses endangering our world have deepened the importance of ensuring the maximum use of earth observation for international cooperation;
- b) that common challenges and opportunities (data receiving/collection and information infrastructure, big data needs, sustainability) and risks have laid out a panoramic scenario for the future growth of earth observation;
- c) that earth observation will be subjected to increasing demand in the years to come to serve the sustainable development goals, particularly in the countries participating in the Belt and Road initiative.

Further Recognizing

- a) that earth observation have great potential to contribute to alleviating poverty, ensuring food and water security, mitigating and adapting to climate change, delivering prompt disaster relief and sustainable urban development, ecological restoration and natural resource management;
- b) that the earth observation community is eager to join forces and address challenges, in close cooperation with other scientific disciplines and international development and financial institutions.

Recommend

a) the development of bilateral and multi-lateral

cooperation mechanisms and frameworks, to coordinate the optimal use of earth observation data, science and technologies for development planning along the Belt and Road region and sharing of scientific research findings and applications of earth observation to address sustainable development challenges;

- b) that countries along the Belt and Road strengthen their cooperation at the bi-lateral, multi-lateral as well as regional levels on earth observation infrastructure, capacity building and data sharing, constellations of virtual and ground receiving stations, exchange of EO data sets etc;
- c) that particular attention be given to scientific research, education, open access to data, validation, application and extension of earth observation to fields related to climate change, disaster risk reduction and management, agriculture and food security, water resources management, environment monitoring, urban infrastructure and environmentally-sustainable resources development as well as natural and cultural heritage conservation:
- d) that cooperation between government departments, international scientific organizations, educational and scientific research communities, as well as business and private sector partners engaged in the development and application of earth observation technologies be

strengthened and further expanded;

e) that regular international symposia as well as focused dialogues between earth observation and international development financing communities on earth observation for Belt and Road be organized, at periodical intervals, particularly in the countries along the Belt and Road.

Call for

- a) decision-makers to be involved at all levels in the development of strategies, plans, policies, regulations, standards and criteria related to earth observation, to provide support on the cooperation and its development;
- b) decision-makers to provide appropriate funding in order to enable joint scientific research, technology transfer and education for promoting the benefits of earth observation in the countries along the Belt and Road in order to address the common challenges;
- c) the implementation of the 'Digital Belt and Road (DBAR)' initiative, a science and technology partnership for optimal use of EO for the sustainable development of the Belt and Road region, proposed by the Institute of Remote Sensing and Digital Earth (RADI), Chinese Academy of Sciences, be given the fullest support by countries along the Belt and the Road.

(Agreed at the EOBAR on May 17, 2016 in Beijing, China)