October 12, 2023

Dear CEOS Chair Dr. Pakorn Apaphant:

Please accept this letter as an official request from Environment and Climate Change Canada (ECCC) to become an Associate Member of the Committee on Earth Observation Satellites (CEOS). As the largest civilian government user of satellite data in Canada, ECCC has established a leadership role in satellite Earth observation (EO) in Canada and equally recognizes the importance of being part of a strong international EO community.

ECCC relies heavily on EO to deliver on its mandate of ensuring a clean, safe, and sustainable environment for Canadians through science-based services, regulation, and enforcement. The department depends on EO as a critical data source for its operational weather and environmental monitoring programs and services and operates satellite reception networks for real-time access to both geostationary (GEO) and Low Earth Orbit (LEO) meteorological satellite data.

Satellite EO is also leveraged at ECCC to better understand climate change, inland and coastal water quality monitoring, and ecosystem assessment and further supports the department with enforcement of legislation and regulations concerning pollution and the protection of wildlife and habitats. Air quality, ozone and greenhouse gas monitoring applications within ECCC are consistently advancing towards improved operational products with the addition of new and advanced satellite missions and data assimilation processes.

Along with the Canadian Space Agency (CSA) and Canada's Department of Natural Resources (NRCan), ECCC co-led the development of Canada's Satellite Earth Observation Strategy, which guides Canada's national long-term EO investments and activities related to EO data, technology and partnerships. The strategy supports the objectives of ensuring that EO data is free, open and accessible to maximize science, innovation and economic development and that Canada harnesses EO to address climate change and issues that matter to Canadians and the global community alike.

Canada's EO Strategy is further supported by a federal roadmap that prioritizes investments in EO along the full value chain. With this, exciting new missions and EO-related initiatives are under development, including the planned Arctic Observing Mission, Terrestrial Snow Mass Mission and the future of the RADARSAT program. For many of these investments, international partnerships will be leveraged to ensure global benefits are realized. Associate membership in CEOS will allow ECCC to ensure the international CEOS community is well informed of Canada's plans and priorities around EO and can take advantage of data and service offerings.

The inherent power of international collaboration and coordination of civil EO programs, including the promotion of open data exchange to optimize societal benefits of EO and to inform sound decision making, is firmly planted in ECCC's approach to EO leadership. As a longtime active member of the international Group on Earth Observations (GEO), Canada has



consistently advocated for this and continues to do so as an observer with the Coordination Group on Meteorological Satellites (CGMS) as well. In addition, ECCC's leadership role in EO, coupled with expertise in biodiversity and ecosystem monitoring, will be leveraged to support CEOS as Canada, through the CSA, takes over as chair in 2024. Together with the CSA, ECCC will work to ensure that interlinkages between these international fora are strengthened and that the goal of leveraging EO to support global priorities is truly maximized.

Participation in CEOS provides ECCC with an opportunity to contribute its knowledge and expertise on EO, climate change, and ecosystem assessment to support collaboration and strengthen partnerships within this important international community. We see a great deal of potential to contribute to several CEOS working group activities. Currently, Canadian experts participate in the CEOS Ecosystem Extent Task Team (EETT), and ECCC is interested in exploring participation in other committees and working groups such the CEOS/CGMS Working Group on Climate, among others. We also look forward to learning from the experiences and best practices of other CEOS members for the benefit of Canada.

We would therefore like to nominate Mr. David Harper, Director General of Monitoring and Data Services at the Meteorological Service of Canada as the Principal Representative to CEOS from ECCC. Mr. Harper is ECCC's key senior representative on national EO activities and concurrently holds the role of GEO Principal for Canada, and observer representative for ECCC at CGMS. To support his involvement, we would also like to nominate Ms. Shannon Kaya as CEOS contact for ECCC.

Thank you for your kind consideration. Please do not hesitate to request any additional information you may need to support this request.

Sincerely,

David Harper

Director General, Monitoring and Data Services Directorate, Meteorological Service of Canada Environment and Climate Change Canada

cc:

Dr. Poramet Thuwakham, Chair Contact for the Committee on Earth Observation Satellites, Geo-Informatics and Space Technology Development Agency

Dr. Marie-Claire Greening, Executive Officer of the Committee on Earth Observation Satellites

Éric Laliberté, Director General of the Space Utilization Division, Canadian Space Agency

Shannon Kaya, Director of the Transformation, Innovation and Engineering Division, Environment and Climate Change Canada

