PPSTI Statement on Open Science

The Policy Statement on Science, Technology and Innovation Communication endorsed by the 2017 APEC PPSTI-10 in Viet Nam recognized the importance of open science and open access and the need to set clear policies that will help increase the returns from public and private investment, reinforcing cooperation and open scientific inquiry, as evidenced by the COVID-19 pandemic, and promoting research in new areas, which can have regional and global benefits.

Open Science represents an approach to the scientific process which is based on cooperative work and new ways of disseminating knowledge by using digital technologies and new collaborative tools. The idea captures a systemic change to the way science and research have been carried out for the last fifty years: complementing the standard practices of publishing research results in scientific publications by sharing and using all available knowledge at an earlier stage in the research process.

The recent response of the scientific community to the COVID-19 pandemic has demonstrated how Open Science can accelerate scientific solutions to a global challenge. The genetic sequence of the SARS-CoV-2 virus was posted in an open access repository and made freely available for all researchers. Several companies also made the designs for protective face shields open-source, allowing these shields to be freely 3D printed in cities and societies where they are needed the most.

Open Science does not require that all data are fully open and accessible. They should be available under well-defined conditions and that is why we support the FAIR guiding principles, rendering data Findable, Accessible, Interoperable and Reusable. Our emphasis also includes the collective benefits, authority to control, responsibility and ethics, including principles such as the CARE Principles for Indigenous Data Governance. These principles will cultivate a culture of openness and transparency, whilst at the same time ensuring ethics and integrity are maintained.

Pursuant to this, we recognise that Open Science has a vital role in fostering sustainable and inclusive economic growth and development, bringing with it the full benefit of innovation. This can only be realized by increasing the commitment of the public and private sector to a robust Open Science ecosystem which will underpin the aspirations of society for a more equitable sharing of scientific information.
Additionally, we recognize that Open Science will support seamless access to data and provide interoperable and shared services for the research data cycle, including discovery, mining, storage, management, analysis, and reuse across borders and scientific disciplines.

Therefore, we call on all APEC Economies to support Open Science with the aim to make data-intensive science as a fundamental resource in addressing regional challenges, promoting science-based evidence in the promulgation of domestic policies and to advocate for Open Science in fostering sustainable, innovative, and inclusive growth. This includes enhancing collaboration of the Asia and the Pacific region, amongst APEC Economies and beyond, through capacity building as well as experience-sharing.