

## 2019 Asia-Pacific Regional ITS Conference

On October 27-29, 2019, the International Telecommunications Society (ITS), along with local host the National Broadcasting and Telecommunications Commission of Thailand (NBTC), convened the 15<sup>th</sup> Asia-Pacific Regional Conference in Bangkok, Thailand, *Digital Transformation: Building a Sustainable Society*.

The plenary panel, **5G, IoT and AI for Building a Sustainable Society**, took place on October 29<sup>th</sup>. The panel featured distinguished policy-makers, industry representatives and academics from Canada, Taiwan, Thailand, China, Japan and South Korea, and was moderated by Professor Hitoshi Mitomo of the Graduate School of Asia Pacific Studies at Waseda University.

As 5G advances from aspiration to actuality in many countries across world, the panelists offered their regional and policy perspectives on building and supporting sustainable societies using this multifaceted and potentially transformative technology. Some of the key themes that emerged were (i) the importance of **timely and efficient spectrum allocation**; (ii) the early and potentially transformative **use cases of 5G technology**; and (iii) the **role of government in promoting deployment and adoption**.

The panel began with a Canadian perspective from ITS Chair, **Stephen Schmidt** of TELUS. Mr. Schmidt explained that Canada has faced some hurdles in its efforts to accelerate 5G deployment as a result of Canada's low population density, a delay in allocating 5G spectrum, and insufficient support for infrastructure deployment. Mr. Schmidt then highlighted best practices to support 5G deployment, including the need for the recognition of broader socioeconomic benefits of 5G, timely allocation and release of spectrum, efficient auction policy, and infrastructure deployment support. Mr. Schmidt's presentation can be found [here](#).

Professor **Li Tian**, from the School of New Media at Peking University in China, stressed the importance of national innovation strategies that work towards a unified infrastructure, integrated industrial ecology, and business drivers for 5G users. As Chinese global leadership in 5G remains a top priority, a mix of top-down and bottom-up strategies to deployment were described, and real use cases across various sectors including education, transportation, the medical industry, public security and banking were discussed. Professor Tian's presentation can be found [here](#).

Taiwan's spectrum policies to support 5G, IoT and AI ecosystems were explored next. Professor **Yu-li Liu**, of the City University of Hong Kong, explained that as Taiwan seeks to accelerate the country's digital transformation to support ICT leadership, policy makers are moving quickly to auction the relevant spectrum. The panel discussion centered around the introduction, development and cost of dedicated spectrum for private enterprise versus local carriers, as well as the timing of the spectrum auction from the perspective of the five local telecommunication companies and other players. Professor Liu's presentation can be found [here](#).

**Tomoyuki Naito** of the Japan International Cooperation Agency discussed Japan's 5G deployment and the application of 5G technology to developing countries. Rakuten's large-scale deployment of a Cloud-RAN mobile network in Japan was used as a case study. As its bid to disrupt the existing market has been hampered by slow progress, the question remains as to whether Cloud-RAN technology can be an innovative solution for emerging economies/developing countries to efficiently launch 5G. Mr. Naito's presentation can be found [here](#).

Provoking lively discussion, Professor **Youngsun Kwon**, the Dean of KAIST Academy, South Korea, debated the potential for AI to lead the growth of industrial 5G uses. The question of whether more AI necessarily equals a more sustainable society is controversial: the potential outcomes such as greater productivity, decreased use of natural resources and creative solutions for environmental protection were weighed against reduced jobs/increased income inequality, reduced privacy and reduced individual autonomy, and an imbalance in international political economy. Professor Kwon's presentation can be found [here](#).

Exploring the broad and far-reaching socioeconomic benefits of 5G, **Jackkit Sangkittiwat** of TIME Digital Co. Ltd., presented potential Thai 5G and IoT real use cases like smart healthcare, farming, environmental-monitoring, and tourism. As Thailand's 5G 'bio hub' in the eastern economic corridor is on track to trial smart precision farming, discussion arose as to how the Thai government and regulator can promote more 5G service adoption aimed at sustainable development. Mr. Sangkittiwat's presentation can be found [here](#).

The world is on the cusp of a further digital transformation as it harnesses the power of 5G and its corresponding technological innovation. As the panelists aptly illustrated, such revolutionary potential elicits significant enthusiasm (recognizing the seemingly endless possibilities for building sustainable societies) tempered by a pragmatic caution (a digital society necessarily involves compromises and tradeoffs).

The development and implementation of 5G policies is undoubtedly challenging, and as countries around the world find themselves in differing stages of digital transformation, the necessary policy discussions are highly nuanced. Governments, communication companies, industry stakeholders, and policy-makers all come to the table with diverse and important perspectives, and differing roles to play. International collaboration and cooperation is therefore vital to a country's digital transition and 5G success. The panelists' presentations and ensuing discussions, all with the unified goal of building sustainable societies, were timely and welcomed.

Stephen Schmidt  
Chair, International Telecommunications Society