

2022/TEL65/PLEN/003 Agenda Item: 4

64th Telecommunications and Information Working Group Meeting - Chair's Report

Purpose: Information Submitted by: TEL Chair



65th Telecommunications and Information Working Group Plenary Meeting 25-28 October 2022

The 64thAPEC TELECOMMUNICATIONS AND INFORMATION WORKING GROUP MEETING (APEC TEL64)

9 - 14 May 2022 Bangkok, Thailand Hybrid Meetings combining in-person and remote attendance

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Chair's Report The 64th APEC Telecommunications and Information Working Group Meeting 9 - 14 May 2022 Bangkok, Thailand Hybrid Meetings combining in-person and remote attendance

1. Introduction

The 64th APEC Telecommunications and Information Working Group (TEL64) meeting was held in Bangkok, Thailand from 9 to 14 May 2022, 9 May 2022 as a preparatory day, in a hybrid format combining in-person and remote attendance.

This report highlights the agenda items discussed at the plenary sessions of TEL 64 and the development of its steering groups' work programs.

2. List of Participants

19 member economies, as well as the Guests and Observers of APEC TELWG including the Asia Pacific Network Information Centre (APNIC), the International Chamber of Commerce (ICC), the South-East Asia Regional Computer Confederation (SEARCC) and The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) attended TEL 64 Plenaries.

Chair:	Dr. NAM Sang-yirl (Korea)
Vice Chair:	Mr. Victor Manuel Martinez Vanegas (Mexico)
Program Director:	Mr. Kirill Makhrin (APEC Secretariat)

Economies:

i.	Australia	xi.	Papua New Guinea
ii.	Brunei Darussalam	xii.	Peru
iii.	Chile	xiii.	The Philippines
iv.	People's Republic of China	xiv.	Russia
V.	Indonesia	XV.	Singapore
vi.	Japan	xvi.	Chinese Taipei
vii.	Republic of Korea	xvii.	Thailand
viii.	Malaysia	xviii	The United States
ix.	Mexico	xix	Viet Nam
х.	New Zealand		

The following member economies were unable to attend the meeting:

- i. Canada
- ii. Hong Kong, China

3. Welcome and Opening Ceremony

TEL64 was officially opened on 10 May 2022 with two speeches by H.E. Mr. Chaiwut Thanakamanusorn, Minister of Digital Economy and Society of Thailand, and Dr. NAM Sang-yirl, the TEL Chair.

In the opening remarks, Minister Chaiwut Thanakamanusorn warmly welcomed all the member economies to the 64th meeting of the TELWG in Bangkok, Thailand. He noted the work of TELWG to ensure the region's affordable access to ICT and Internet. He confirmed the Thai Government's commitment to support the work of TELWG and collaborate with member economies to develop ICT innovation, to promote secure, resilient and trusted ICT environment, and to strengthen cooperation in the region.

He highlighted that the Thai Government put emphasis on transforming Thailand into digital economy by implementing digital policies. The Thai Government is working continuously to achieve the goals of bridging the digital divide, enabling digital growth, providing 5G infrastructure, enforcing digital laws, protecting people from illegal online activities, and nurturing digital manpower.

He pointed out the importance of trust and security as major challenges which need to be addressed and require collective efforts to ensure secure and trusted ICT environment. He noted that it will be a key for boosting inclusive and sustainable growth in the APEC region during the postpandemic era.

Finally, he hoped that the 64th TEL meeting will further strengthen collaboration in the ICT field and contribute to key deliverables that lead the region to an inclusive and balanced recovery.

Dr. NAM Sang-yirl, the Chair of the TELWG, extended his gratitude to the Honorable Minister Chaiwut Thanakamanusorn for his opening speech and to Thailand for hosting the meeting. He welcomed all the APEC TEL colleagues, guests and observers to the TEL 64 Plenary meeting.

He highlighted the important TELWG issues that need to be addressed in the meetings including the TELWG Strategic Action Plan (SAP) 2021-2025, the new TELWG Terms of Reference (ToR) 2022-2025, etc. Furthermore, as one of the responsible fora which support implementing 'The APEC Internet and Digital Economy Roadmap', he emphasized the role of TELWG and encouraged members to propose projects, especially utilizing the APEC Digital Innovation Sub-Fund.

Lastly, he thanked the Government of Thailand for hosting the TEL64 meetings and expressed gratitude to all the TEL colleagues for enthusiasm, commitment, and contribution to the TELWG.

4. Adoption of Agenda

The meeting adopted the agenda (2022/ SOM2/TEL64/PLEN/001).

5. Introduction to the APEC 2022 Priorities

The SOM Chair's Assistant briefed the meeting on Thailand's Theme and Priorities of APEC 2022 (2022/SOM2/TEL64/PLEN/002).

The SOM Chair's Assistant explained the APEC theme and priorities of 2022. Under the theme of 2022, 'Open, Connect, and Balance', the priorities are to make APEC open to all opportunities, connect in all dimensions, and balance in all aspects.

He explained the underlining ideas of the theme as; firstly, they need to be built on the previous works of APEC, namely the Putrajaya Vision 2040 and the Aotearoa Plan of Action (APA). And secondly, it is considered that development should be beneficial to everyone in the society.

Lastly, he explained the concept of the Bio-Circular-Green (BCG) economy model which requires a holistic approach. He pointed out that the key factors of the BCG model are the application of STI (Science, Technology, and Innovation) and the whole of society approach.

6. Report on APEC Development

The APEC Secretariat Program Director provided an overview of recent developments of APEC and the APEC projects. (2022/SOM2/TEL64/PLEN/003).

The Program Director introduced the Aotearoa Plan of Action (APA) which is a guidance for implementing the APEC Putrajaya Vision 2040. The APA sets out individual and collective actions towards achieving the vision, along with the measure to evaluate the progresses.

He also shared the overall outcomes of Project Session 1 and 2 in 2021 and shared the results of Project Session1 in 2022.

The APEC Secretariat informed that the Longer-Term Evaluation of APEC Projects (LTEAP) Survey was conducted to assess the relevance, effectiveness, sustainability, and efficiency of APEC projects after 6 to 12 months of its completion. The survey results revealed three key areas for improvement; more effective targeting of project participants, greater

application of project learning by participants at 'home', and increased participation rates.

Before concluding, he introduced the references for APEC projects such as Project Overseer Toolkit and Project Quality: Training and Guidance.

Russia inquired whether APEC has plans to develop new indicators specific to each project, which could better assess the effectiveness of projects. APEC Secretariat replied that he needs to inquire about it to the Project Management Unit (PMU), but generally all projects are to be assessed the same. LSG convenor also echoed the importance of KPIs specific to the individual project.

7. TEL63 Chair's Report

The meeting noted the TEL63 Chair's Report (2022/SOM2/TEL64/PLEN/002) which was endorsed on 11 November 2021 intersessionally.

8. Progress and Implementation of the TEL Strategic Action Plan 2021-2025

The Chair presented the updated planning and prioritization table (2022/SOM2/TEL64/PLEN/005). He explained that the member economies are invited to provide further comments or any updates by 28 May 2022, and if there are no comments it would be deemed endorsed by TELWG.

9. Presentations of Policy and Regulatory Updates by Economies

A total of eleven economies, Australia, China, Indonesia, Japan, Korea, Malaysia, Mexico, Papua New Guinea, Chinese Taipei, Thailand, and the United States presented updates on their regulatory and policy developments (2022/SOM2/TEL64/PLEN/006-016).

Australia provided updates on communications services and market changes as well as several initiatives, to harness the benefits of digital economy and address the challenges of new technologies, such as the 5G Innovation Initiative. The regulators in Australia continuously support citizens to get access to new technologies, which includes allocation of spectrum bands and deployment of non-geostationary satellite services. Regarding online safety, Australia established the office of the E-safety Commissioner to address online safety and enacted the Online Safety Act in 2021.

China briefed on the development of ICT infrastructure and services focusing on 5G, and a series of development plans under the China's 14^{th} Five-Year Plan. China also introduced policy measures to promote the applications of 5G, namely, the 'SAIL' Project and the '5G + Industrial

Internet' Project. Besides, China informed of its continued efforts to advance the development of 'digital village' for rural digital economy.

Indonesia informed us on the plan to implement the first stage of Analogue Switch Off in accordance to the Indonesia's Job Creation Law No. 11/2020 and the Government Regulations No.46/2021 on Postal, Telecommunication, and Broadcasting.

Japan briefed on the Bill to amend Telecommunications Business Law, which imposes the measures to ensure smooth provision of telecom services and to protect users' interests as follows; 1) Ensure ICT infrastructure, 2) Ensure safe, secure, and reliable telecom services/networks, and 3) Establish a fair competitive environment in telecom market.

Republic of Korea updated the implementation progress and future plans of the $5G^+$ Strategy. Korea highlighted that the government continues to provide stable support the expansion of 5G convergence services, the use local 5G as a catalyst for expanding convergence services, the promotion of the $5G^+$ convergence ecosystem, and 5G global expansion and collaboration.

Malaysia shared the progress of digital connectivity and digital inclusion initiatives to promote access and adoption. Malaysia introduced the National Digital Network (Jendela) which was implemented in September 2020 to provide quality broadband services and facilitate the roll out of 5G network services and updated the recent developments of the project. For digital adoption, Malaysia introduced various initiatives including the PEDi (Pusat Ekonomi Digital Keluarga Malaysia), Peranti Siswa Keluarga Malaysia for narrowing the digital divide and equipping citizens with digital literacy and skills.

Mexico updated on the spectrum auction obligations of 5G in 2021, and shared the recently conducted study about OTT services by IFT (Federal Telecommunications Institute). Furthermore, Mexico shared the updated version of the telecommunications users' letter of rights in order for users to have up-to-date information about telecommunications services, and shared the Annual Digital Literacy Program (PAD) and the Proradio 2022 program.

Papua New Guinea shared latest development for affordable Internet Infrastructure. Among others, Digitalization policy is in placed in 2021 and the Digitalization Act passed by parliament in April 2022. The Act mandates the government digital transformation agenda. The 'Universal Access Services Strategic Plan 2022-2025' is currently being reviewed to accommodate the policy goals on accessibility, affordability, and digitalization with four pillars; universal access to mobile broadband services, public community broadband, support for utilization and demand, and expansion of broadcasting network coverage.

Chinese Taipei updated on the current development of 5G network and briefed on the administrative regulations for experimental 5G network which came into effect in 2020 and the plans to accept applications of telecom operators for low earth orbit satellite services. Lastly, Chinese Taipei informed us that the Ministry of Digital Affairs will be established in the second half of 2022.

Thailand highlighted the recent ICT development focusing on the establishment of Government data center and cloud service, 5G, and updated the current status of the Smart City Thailand and the Thailand Digital Valley as well as legal and policy framework changes for securing cybersecurity, personal data protection, fighting against fake news and enhancing capacity building.

The United States highlighted initiatives for broadband deployment such as the Infrastructure Investment and Jobs Act (IIJA) which provides funding for the Broadband Equity, Access and Development (BEAD) Program, and the grants to expand broadband access to native communities of the National Telecommunications and Information Administration (NTIA). The U.S. also pointed out recent Federal Communications Commission (FCC) developments for facilitating 5G development and deployment, closing the homework gap and connectivity divide, combatting digital discrimination, and fighting robocalls and scooping.

10. Cross-fora Collaboration and Implementation of TEL Priorities

The Chair noted the importance of cross-fora collaboration for implementing TEL priorities, including AIDER. He invited comments from member economies to explore more effective and constructive measures to foster collaboration, with a view to preparing for the third Joint Meeting and Public-Private Dialogue with DESG (Digital Economy Steering Group).

Russia suggested pondering upon the agenda and roles from the perspective of TELWG for the next Public-Private Dialogue (PPD) as well as Joint Meeting with DESG, and mentioned the measurement issue, one of the 11 Key Focus Areas of AIDER, as an example to be considered.

The Chair encouraged member economies to continue discussion for the meetings in the second half of the year.

11. Steering Group Meeting Reports

The Chair invited the Convenors of DSG, SPSG, and LSG to summarize their respective meeting results.

11.1 Security and Prosperity Steering Group (SPSG)

The Security and Prosperity Steering Group (SPSG) meeting was held on 13th May 2022. SPSG Convenor, Ms. Weiwei from China and the first Deputy Convenor, Ms. Chia-Yi Wang from Chinese Taipei convened the meeting. A total of 10 economies were in attendance including Australia, Brunei Darussalam, People's Republic of China, Indonesia, Japan, Republic of Korea, Papua New Guinea, Peru, Chinese Taipei, and Thailand. International Chamber of Commerce (ICC) was also present as a guest.

The meeting was convened by the welcome statement by the SPSG Convenor. She gave a brief introduction about the hybrid meeting, and thanked the host economy Thailand and the Program Director from the APEC Secretariat for the arrangement, extended warm welcome and heartiest greetings to all speakers, delegates and guests present, and invited everyone present to give a brief self-introduction, hoped this meeting would be a fruitful and efficient one. In addition, the meeting reviewed each agenda item. And since there was no objection in the meeting, the SPSG meeting agenda was adopted.

• OVERVIEW: TEL63 SPSG REPORT

The 63rd SPSG meeting was held online on 14th August 2021. A total of 14 economies were in attendance. Three current projects as "Cybersecurity exercise to improve the capabilities of APEC economies, strengthen their coordination and address challenges and opportunities of Artificial Intelligence in the area" (Chile), "APEC K12 Cyber Security Education Workshop" (Indonesia), and "Cybersecurity Awareness Day" (the United States) provided updates accordingly. The project from Chile was withdrawn last meeting. Five economies (Chile, Indonesia, Mexico, Chinese Taipei, and Thailand) delivered their economy reports respectively. Besides, the meeting discussed the TEL Mandate and the TELWG ToR documents, and the SPSG Convenorship in that the position of the second deputy convenor of SPSG is still vacant.

• CURRENT PROJECT UPDATES

APEC K12 Cyber Security Education Workshop (Indonesia)

Indonesia introduced the progress of the project "APEC K12 Cyber Security Education Workshop". At present, the project has conducted basic research, designed questionnaires, and developed the workshop Terms of Reference. Next, the project will circulate questionnaire and workshop Invitation before TEL65, conduct online forum during TEL65, and present final report on research tools and guideline in TEL66. Industry Roundtable: Enhancing Trust and Security for APEC Digital Economy Prosperity (Thailand)

Thailand organized a hybrid APEC TEL64 Industry Roundtable entitled "Enhancing Trust and Security for APEC Digital Economy Prosperity" on 10th May 2022. The aim is to provide space for governments, industry players and users to exchange views concerning: a) key digital challenges when promoting cross-border trade, b) how emerging technologies impact society and people, and c) what APEC economies can do to foster trust, ensure security and protect online consumers. The panels of experts offered insightful observations and interesting thought-provoking takeaways, including: (1) government and industry must collaborate to build trust and security while also driving innovation, (2) user-centric digital transformation is essential, unavoidable and probably irreversible, (3) future digital economies will include decentralized digital assets where users may face new security challenges, (4) a consumer protection plan of action in the ASEAN region is being implemented and can be a model for other regions to follow, (5) end users remain a group that is vulnerable to online threats and scams and need support from authorities and business sectors to help build competency and assure trust and confidence, and (6) online consumers also have digital rights that are identical to rights established in the physical world.

Cybersecurity Awareness Day (the United States)

The United States was absent from the SPSG meeting, and the Program Director from the APEC Secretariat made comments on the project "Cybersecurity Awareness Day". This project has been held every October to raise public awareness of cybersecurity. However, according to recent reports about this project, it was only carried out within the United States. Therefore, the Program Director suggested that the United States and other APEC members pay more attention to collaboration and cooperation in this project.

• DISCUSSION AND APPROVAL OF NEW PROJECT PROPOSALS

Workshop on New Information and Communications Technologies (ICTs) and Applications Security (China)

China proposed "Workshop on New Information and Communications Technologies (ICTs) and Applications Security" as a self-funded project. This project will focus on improving sustainable cybersecurity industry development. The main objective of the project is to promote successful security practices, experiences and cases by sharing effective new technology and application security solutions, and enhance the security capability and confidence of APEC member economies in using new technologies. This project will be delivered through a self-funded one-day online workshop, which would include experience sharing and discussion on (i) Security governance experience sharing of New ICTs and Applications, (ii) New ICTs and Applications empowering better future, which mainly about sharing experience in the application of ICTs to security. There were no objections to the project in the meeting. The project leader called for participants and co-sponsors. The project will be subject to further review in accordance with secretariat procedures.

Research on Sustainable Cybersecurity Industry Development and Best Practices (China)

China proposed "Research on Sustainable Cybersecurity Industry Development and Best Practices" project for seeking APEC fund under TELWG, and will submit the concept note by 20th June 2022. This project focuses on improving sustainable cybersecurity industry development. It will provide a half-day workshop to bring together APEC economies to share experiences in sustainable development. The goal of the project is building a collaboration platform for APEC economics to promote both technology advancement and sustainable cybersecurity in current digital world, and enhancing cooperation through exchanging and discussing. There were no objections to the project in the meeting. The project leader called for participants and co-sponsors. The project will be subject to further review in accordance with secretariat procedures.

• Updating TEL Project Table

The TEL Project table was updated as follows:

The status of project "APEC K12 Cyber Security Education Workshop" (Indonesia) was unchanged.

The status of project "The Cybersecurity Awareness Day" (the United States) was unchanged.

The status of project "Industry Roundtable: Enhancing Trust and Security for APEC Digital Economy Prosperity" (Thailand) was changed into "Held at TEL64".

The new project "Workshop on New Information and Communications Technologies (ICTs) and Applications Security" (China) was added into the table, due to no objection in SPSG meeting, the status was "Proposed at TEL64".

The new project "Research on Sustainable Cybersecurity Industry Development and Best Practices" (China) was added into the table, due to no objection in SPSG meeting, the status was "Proposed at TEL64".

• TELWG ONGOING WORK DISSCUSIONS

The Convenor provided the meeting with an overview of TELWG ongoing work which included: TEL Strategic Action Plan 2021-2025 Planning and Prioritization table and the nomination for TEL leadership.

• TEL Strategic Action Plan 2021-2025 Planning and Prioritization table and related projects

According to the meeting discussion, there are three projects added into the TEL Strategic Action Plan 2021-2025 Planning and Prioritization table.

The first project is the Industry Roundtable held in TEL64, "Enhancing Trust and Security for APEC Digital Economy Prosperity" (Thailand), which is related with Objective 3, Action 3.3.

The second project is a new project application, "Workshop on New Information and Communications Technologies (ICTs) and Applications Security" (China), which is related with Objective 1, Action 1.1, Objective 2, Action 2.2 and Objective 3, Action 3.3.

The third project is a new project application, "Research on Sustainable Cybersecurity Industry Development and Best Practices" (China), which is related with Objective 2, Action 2.2. Objective 3, Action 3.3 and 3.4.

• Nomination for TEL Leadership

Nomination for TEL New Leadership

The meeting discussed the proposal for TEL convenorship nominations from TEL Chair. Most economies expressed that with regard to the re-election of the new leadership, more time is needed before providing the formal comments. Some economies indicated that nominating the Convenor and Deputy Convenor at the same time is acceptable, and the procedure of re-election, recommendation criteria of Convenor/Deputy Convenor, and possible competition for the position need to be further clarified. The re-election procedures should be consistent in each steering group.

Nomination for SPSG Convenorship

The current position of SPSG 2nd Deputy Convenor is vacant. Because no nomination has been received for this position, the Convenor invited the member economies to make nominations intersessionally. And reminded that according to the new TEL Terms of Reference, the term of the SPSG Deputy Convenor position nomination might be limited to TEL65.

• ECONOMY REPORTS

Three economies (Australia, China, and Thailand) gave their economy reports:

Australia

Australia indicated that its telecommunications industry is relatively open for competition, most segments of the mobile and fixed-line markets are dominated by a few large companies. Since 2000, Australia has seen telecommunication prices fall significantly relative to the consumer price index. Similarly, there has been a downward trend in revenues with total revenues declining almost 19% from 2015 to 2021. Besides, unprecedented natural disasters in recent years have had significant impacts on Australia's telecommunications sector, resulting in major service disruptions and preventing impacted communities from communicating during the response and recovery phases. This is in addition to increased instances of cybercrime, online scams, ransomware and other cyber security incidents. These challenges have shown the critical importance of reliable and secure telecommunications, including the need to protect telecommunications assets and other critical infrastructure. Given these trends it is important to achieve balance between enhancing security and resilience efforts while ensuring effective support and prosperity of the telecommunications sector. In recognition that these challenges are not unique to Australia's domestic economy, Australia has also increased efforts toward international engagement in relation to cyber security, including with APEC member economies.

China

China shared the latest status of domestic cybersecurity development from three aspects: legal policy, standard formulation, and industrial promotion. In terms of legal policies, China passed several policies such as the "Regulations on Security Protection of Critical Information Infrastructure", to strengthen protection and improve the legal system for data security. In terms of standard formulation, China has released cybersecurity standard systems around emerging fields such as the Industrial Internet, and improved the standards system construction of data security. In terms of industrial development, China has been constantly improving the cybersecurity industry policy system, and conducting pilot and demonstration on the application of cybersecurity technologies. In addition, China has also held activities such as "China Cybersecurity Week", to raise cybersecurity awareness.

Thailand

Thailand updated the establishment of the Office of National Committee on Cybersecurity (NCSA) under Cybersecurity Act B.E. 2562 (2019)

("Cybersecurity Act"), which is entered into force since 27th May 2019, endeavoring to enforce legal safeguards to ensure the security of cyberspace, and in particular, sets out a cybersecurity risk assessment plan to prevent and mitigate against cybersecurity threats that may affect the Critical Information Infrastructure (CII). The NCSA also serves as the focal point in supporting and strengthening cybersecurity at all levels. The Cybersecurity Code of Practice and Standard Framework was established to maintain Cybersecurity for the Government agencies and CII organizations as well as established a National Computer Emergency Response Team (N-CERT) in August 2021, which was transformed from Thai-CERT (Thailand Computer Emergency Response Team) to monitor, analyse, evaluate and notify in order to respond and mitigate the cyber threats. In addition, the NCSA aims to roll out 40 subordinate regulations of the Cybersecurity Act this year to strengthen the systems. Furthermore, Thailand introduced the Cybersecurity Development Program which aimed to enhance cybersecurity skills among workforces and improve the level of cyber protection to CII organizations.

• OTHER BUSINESS

Introduction of the TEL Mandate and ToR (Terms of Reference)

The Convenor introduced the main modifications of TEL Mandate and ToR related to SPSG, as the name will change from SPSG to Security and Trust Steering Group (STSG) from 2023. The roles, goals, and objectives of APEC TEL have been linked with the implementation of the APEC Internet and Digital Economy Roadmap (AIDER), and the Key focus areas (KFAs) related to SPSG is KFA 7 "Enhancing trust and security in the use of ICTs".

11.2 ICT Development Steering Group (DSG)

The ICT Development Steering Group (DSG) meeting was held on 13 May 2022 and was chaired by DSG Convenor, Mr. Brian Mattys from the United States, who was assisted by the First Deputy Convenor, Mr. Yao Xiaotian from China and the Second Deputy Convenor, Ms. Syahniza Md. Shah from Malaysia. Delegates from the following economies participated in the DSG Meeting: Australia, People's Republic of China, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, Papua New Guinea, Philippines, Russia, Singapore, Chinese Taipei, Thailand, and the United States.

• Information Sharing

Economy Updates

The People's Republic of China briefed other members on its ongoing 5G infrastructure deployment and 5G-dependent technologies under development. Disease/pandemic control, technologies to support small- and

medium-size enterprises, and health services for the elderly were mentioned.

Stakeholder Updates

The Asia Pacific Network Information Center (APNIC) gave an update on the deployment and adoption of IPv6 among its members. IPv6 has made strong inroads among APNIC members, with India by far leading in adoption, with APEC members China and the United States following.

• Projects, Workshops, and Roundtables

Completed Project Outcomes: 'Report on Open Data for Digital Economy Growth' Project of Thailand

Thailand summarized its report on Open Data for Digital Economy Growth. The report includes experiences from several economies seeking to make data publicly available and structured in a way that enables the data to be fully discoverable and usable by end-users. Experiences included perspectives from a robust number of economies, including Thailand, Republic of Korea, Vietnam, and Chinese Taipei. Thailand is eager to promote further data inclusion and secure use of open data, as helpful elements to close the digital divide, and said they were interested in collaborating further with other economies on open data related projects.

Current Projects Under Implementation

Current Project Updates: 'Telemedicine in the Asia Pacific Region: Network Architecture, Capacity, and Feasibility' Project of China

China is preparing to finalize its report on assessments for telemedicine growth in the Asia Pacific region. Telemedicine has the potential to provide essential health services to underserved communities in the Asia Pacific region. Project goals are aimed at supporting member economies by assessing its needs and opportunities for telemedicine, understanding implementation models and technology requirements, and considering the benefits, costs, and risks of implementation, taking into account limited resources in developing economies.

Current Project Updates: 'Extension of the Network of APEC Digital Government Research Center' Project of Japan

Japan continues to implement this self-funded project, which began in May 2013, and is set to conclude by December 2023. This long-running project includes collaboration with Chinese Taipei, Thailand, Philippines, Indonesia, Singapore, China, and the United States. The program is a long-term examination of digital government solutions, which examines the

effectiveness of solutions and their applications in different APEC economies. The Center has engaged in several recent cross-fora conferences, lectures, and publications. Japan has established project indicators and will begin presenting results when the project concludes next year. Thailand has expressed strong support for the project. The Secretariat noted that Japan should make sure to offer invitations to all APEC members to participate in various Research Center sponsored activities, and that any reports or other APEC-sponsored information must be endorsed by all members.

Current Project Updates: 'Smart Silver Innovation Project' of Japan

Japan also continues to implement its Smart Silver Innovation project, which began in June 2019 and is set to conclude phase one in June 2023. Project core members include participants from Singapore, Indonesia, China, and Thailand. The project aims to find digital solutions to solve issues relating to an aging society, including through ICT applications, emerging technologies, and capacity building. In 2021-2022 the project has sponsored additional lectures, workshops, and reports on aging societies, whose conclusions will be included in the final product of this project. Thailand has expressed strong support for the project. The Secretariat again noted that Japan should make efforts to include all APEC members in related activities in order to have full support and sponsorship of APEC.

Current Project Updates: 'ICT Roundtable - "Towards the NEXT Normal, the Future of Digital Manpower"' of Thailand

Thailand hosted this roundtable to discuss necessary skills that will be in demand as economies adapt emerging technologies like AI, cloud computing, and blockchain. Participants heard from a range of government and private sector representatives, including PRC, Korea, Chinese Taipei, Amazon Web Services, Salesforce, Microsoft, and Huawei. Government speakers highlighted efforts their economies are undertaking to meet some of the digital skills gap. The private sector remarked that the public sector must do more and implement faster in order to meet the growing demands of the private sector. Neither primary nor college education are teaching the right skills, and they are not adapting quickly enough to changing circumstances as emerging tech trends accelerate. Companies stressed that education systems need to work closely with business to design education programs that deliver graduates with the skills that businesses need.

New Project Proposals

1. China: Accelerating the Development of 5G Applications, and Promoting the Upgrading of the Digital Economy in APEC

China introduced a new workshop intended to study the potential for the development of 5G applications and their ability to achieve inclusive

economic growth, while meeting sustainability goals. The project will be a self-funded one-day workshop

2. Papua New Guinea: ICT Skills Framework: Implementation Guide

Papua New Guinea will build on its ICT skills framework project from last year that created guidelines for defining ICT skills across borders, with an implementation guide project that will support an economy in implementing the framework domestically. PNG also plans to hold one or more workshops to support the development and use of the guide.

• Discussion on TELWG Restructuring and Merger of DSG and LSG

TEL Leadership

DSG participants further discussed ways to implement the full refreshment of the TELWG leadership. The TEL Chair provided several scenarios for consideration, including a staged process of selecting a new Chair, Convenors/Vice-chairs, and First Deputy Convenors, followed later by Second Deputy Convenors after initial selections. The Chair has developed a work plan where consultations will begin on new leadership beginning in June, 2022. Russia suggested leadership could be selected based on previous experience or leadership in APEC or similar multilateral organizations. Malaysia suggested that the next Chair should be active in advancing TEL's goals. No definitive decisions were made and DSG looks forward to beginning the consultative period.

• Next Meeting Date

DSG participants briefly discussed dates for TEL65 with the Secretariat. It was noted that the International Telecommunication Union (ITU) Plenipotentiary will go until mid-October, and that APEC's Leaders' Week will begin mid-November. Participants generally agreed that, given current workloads connected with ITU, APEC should seek to hold TEL65 toward the end of October or beginning of November.

• Other Business

Terms of Reference Deliverable Report to SCE

DSG members discussed developing a potential blueprint for the new Terms of Reference (ToR) deliverable under section 5.2. The United States suggested that any report to the SCE on TEL's best practices should include an analysis and feedback from members on those projects that have had the most impact on policy or regulations. Malaysia and Russia were favorable toward this approach and noted the merits of developing a project with statistical or analytical data that supports report conclusions. The Secretariat outlined the procedures to request help from APEC's Policy Support Unit (PSU) in designing relevant metrics that would support the project. It was agreed that DSG should draft a 1-page blueprint or concept paper for consideration by all TEL members. Russia has tentatively agreed to take drafting responsibility, in coordination with the DSG Convenor.

11.3 Liberalization Steering Group (LSG)

The LSG meeting was held on 13 May 2022 and was chaired by the Convenor, Mr. Zorikto Gomboin (Russia) with support from the first Deputy Convenor Ms. Ena Dekanic (United States), and the second Deputy Convenor Mr. Keith Wu (Chinese Taipei) who participated remotely. Ten member economies (Australia, Brunei Darussalam, China, Indonesia, Japan, Papua New Guinea, Russia, Chinese Taipei, Thailand, and the United States) attended the meeting either in-person or remotely.

• CA AND MRA TASK FORCE MEETING REPORT

The Chair of the Conformity Assessment and Mutual Recognition Arrangement Task Force (CA & MRA TF), Ms. Ramona Saar (United States), provided a brief of the CA & MRA TF meeting, held on 11 May 2022. Delegates from 14 economies participated in the meeting. Key topics of discussion included the upcoming elevation of the TF to the Conformity Assessment and Interoperability Steering Group (CISG) at TEL 66, MRA and regulatory updates, device cybersecurity requirements, market surveillance, international accreditation policy issues, upcoming MRA-related events, and a new MRA Participant Chart. (For additional details, please refer to the CA & MRA TF report.)

Following the presentation of the report, one economy spoke favorably of the inclusion of interoperability in the forthcoming CISG.

Another economy noted that the new MRA Participant Chart should not include MRAs that have since expired. The CA & MRA TF Chair clarified that the CA & MRA TF meeting did in fact agree not to include expired arrangements in the main chart, but that Economies could choose to include them as supplementary information.

• WORKSHOP OUTCOMES AND PROJECT UPDATES

The Convenor invited project overseers to provide brief updates on the projects implemented under LSG purview:

ICT Roundtable: Regulations of the Future (Mexico).

The Convenor provided a general update on behalf of Mexico (who could not attend the meeting). For details, please refer to the relevant report.

Going Digital to Build Resilience and Sustainable Growth in Response to COVID-19 (China).

China provided a debrief of the virtual workshop held on 14 April 2022, which included more than 50 participants from 10 economies. The workshop included three sessions: (1) digital technologies contribute to the prevention of COVID-19 spread and medical treatments (4 speakers), (2) digital solutions contribute to facilitating business (4 speakers), and (3) application data and privacy protection (5 speakers).

China shared that they are currently drafting the summary report of the workshop/project and will submit it for TEL's consideration after this meeting. China also plans to circulate a survey to investigate the effectiveness of this project.

Driving the Digital Transformation and Capacity Building for APEC Indigenous Peoples through i-Tribe Free Outdoor WiFi (Chinese Taipei).

Chinese Taipei noted that the virtual workshop was held on 19 January 2022, with over 50 participants from 14 economies. The final report was endorsed in April 2022, and so the project has been completed.

TEL Regulatory Roundtable: "Sharing the Emerging Telecommunication Technology Experiences to Unlock the Future of Digital Society" (Thailand).

The National Broadcasting and Telecommunications Commission of Thailand (NBTC) organized the regulatory roundtable during TEL64 on 10 May 2022, with delegates from 10 economies attending. The roundtable included the following three sessions, each with speakers from NBTC: (1) Spectrum Outlook and Future Roadmap, (2) Sharing 5G Case Studies, Challenges and Opportunities, and (3) 5G and Cyber Risks. (For additional details, please refer to the relevant report.)

• INFORMATION EXCHANGE

Two economies, Russia and Thailand, provided presentations on recent telecommunications/ICT regulatory developments:

Russia presented its recent digital economy achievements, as well as plans for the future. Russia noted that it works extensively on universal service due to its vast territory, various population density, different climate conditions, and urban vs. rural distribution. In 2020, Russia added personal mobile radio services to the list of universal services, and added 1,200 settlements receiving access to mobile broadband (LTE+). In 2021, Russia also worked on improving mobile broadband to settlements with different population ranges. In 2022, Russia plans to expand universal service by testing quality of service through a federally-funded system, switch from an infrastructure sharing incentive to a mandatory infrastructure sharing requirement, and continue to develop incentives for operators providing service in remote and small settlements.

Russia is also working towards 100% of schools connected to the Internet, with a goal of 100 Mbps for urban schools and 50 Mbps for rural areas.

Russia also described its e-government portal (100 million registered users achieved this year), which provides services such as social support, online university admission, PCR test results and COVID certificates, electronic employment record, electronic residency registration, etc. Future services include e-signature for sale and lease contracts, automatic pre-filling of necessary applications with auto spelling, and transition of all personal documents to electronic format.

Additionally, Russia's presentation also extensively described efforts, initiatives, and incentives to support industry, with 6,000 Russian IT companies receiving benefits in 2021.

Thailand shared information regarding 5G ecosystem development. The NBTC is supporting various projects on 5G use cases, such as telemedicine initiatives at Chiang Mai University and others. There are also 12 "smart" pilot projects underway through the National 5G Committee. In terms of 5G roll-outs, Thailand is using the 2,600 MHz band for 5G pilot use cases in healthcare.

Thailand also provided an update on telecommunication cooperation and the NBTC's efforts in collaborating with other sectors. For example, NBTC has worked with mobile operators and Bangkok Bank to launch a Mobile ID platform, which will be further developed through 2022.

Finally, Thailand provided an update on its Covid-19 recovery efforts, as well as an update on recent regulatory notifications.

• TEL WORK PLAN AND TEL STRATEGIC ACTION PLAN

TEL mandate discussions

The Convenor provided a recap of the LSG-DSG joint session held on 12 May 2022. There were no further comments or discussion within LSG at this time.

• TEL Strategic Action Plan 2021 – 2025 and TEL work plan 2022

Prioritization of TEL Strategic Action Plan 2021-2025

The meeting agreed that the convenorship team would undertake the administrative action of updating the prioritization table and submitting it to the TEL Plenary for consideration.

TEL Initiative on Global Challenges and Cooperation Utilizing ICT - COVID-19 pandemic and beyond

The Convenor recalled that at the last TEL, two LSG projects had already been reflected as part of this initiative (namely, the projects in 4.2 and 4.3 above), and there is no need to provide further LSG updates at the present meeting.

• Cross-Collaboration with other Fora

The Convenor invited all economies to consider whether future project ideas could be undertaken within the framework of joint TEL-DESG work.

• NEXT MEETING AND FUTURE WORK

Convenorship of LSG

The Convenor recapped the TEL Chair's proposed timeline for the nomination of new leadership.

The meeting considered the discussion points proposed by the TEL Chair and arrived at an LSG opinion as follows:

Regarding the scope of nomination, the meeting found support for the idea of prioritizing nominations for the TEL Chair, Vice-Chairs/Steering Group Convenors, and first Deputy Convenors (i.e., the seven positions comprising the core leadership team) in a first round/first call for nominations, before considering nominations for second Deputy Convenors (three positions) in a second round/second call for nominations. Unsuccessful candidates from the first round, if any, would also be automatically considered in the second round.

Regarding nomination by steering group or by position, the meeting preferred the former option, to nominate by steering group rather than for a particular position.

Regarding selection criteria, the meeting noted that APEC works on the basis of consensus, so mutual consultation will inevitably be required; at the same time, however, candidacies should be based on competency and telecommunications/ICT experience, preferably TEL experience.

It was suggested that it could be useful for TEL 65 and future meetings to include on the agenda a second HoD & Excomm meeting before the second TEL Plenary, which would allow an additional forum to discuss sensitive issues like leadership without taking up too much time at the Plenary.

• Next Industry/Regulatory Roundtable

The APEC Secretariat informed the meeting that no economies have yet offered to host TEL 65, in which case the Secretariat would host in a virtual format. The APEC Secretariat welcomed Economies' proposals for roundtables, and noted that if there are no such proposals, only core TEL 65 meetings will be scheduled (no roundtables).

• New project proposals

Papua New Guinea informed the meeting that they are working on forthcoming concept notes for both self-funded and APEC-funded project proposals and will provide further details in due course.

There were no other new project proposals at this time. The Convenor emphasized the importance of projects and encouraged Economies to submit project proposals.

• Updating TEL Project Table

The meeting agreed that the LSG convenorship team would undertake the administrative action of updating the TEL Project Table and submitting it to the TEL Plenary for consideration.

• Cross-Collaboration with other Fora or External Parties

The Convenor invited economies to consider projects with cross collaboration efforts with other APEC fora or external parties.

12. Discussion and Approval of New Project Proposals

The Chair presented the table of TELWG Project 2022 that is updated by the Steering Group Convenors and member economies (2022/SOM2/TEL64/PLEN/020).

The Chair explained that we have twenty projects this year, and four of them are already completed. Eleven projects are under implementation, and three roundtables will take place in TEL 64 by the host economy, Thailand, with two new projects proposed.

Japan asked for an update on the status of final report of the U.S. project 'Report and Workshop on Network Virtualization, Disaggregated Networks and Open Telecommunications Architecture in APEC', noting that the U.S has consultation with member economies for editing the report. The United States responded that the U.S. and China are now reviewing the report and it is expected to be finalized within two weeks. The Chair and Japan suggested to sharing the final report within TELWG soon.

China informed that they proposed three new projects, and the self-funded project 'Development of 5G Applications and the Upgrade of APEC Digital Economy' needs to be added to the list as well as two projects listed.

Mexico informed that they are planning to submit a new project about regulatory sandbox in the Project Session2.

The Chair asked member economies to review the updated table which will be circulated within TELWG and to submit written comments by 28th May. If there are no other comments, the updated table will be deemed endorsed.

13. Discussion of Implementation of the TELWG-ToR (Terms of Reference) 2022-2025

The Chair provided an overview of the proposals to nominate new leadership of the TELWG. He identified some discussion points as follows:

The first point is whether we open nominations for the whole ten positions or open nominations for nine positions except the TEL Chair position and let the current Vice Chair succeed the Chair's position according to TEL tradition.

The second point is whether we open nominations as a group by Steering Group (i.e., by integrating three positions of Convenor, 1st Deputy Convenor, and 2nd Deputy Convenor for each SG, then followed by consultation for assigning nominees to the three positions) or as a separate individual by each position.

The third point is whether we want to set some selection criteria for consultation in case of competition for a specific position or three Steering Group positions as a group.

LSG Convenor explained that the LSG members expressed a preference to have two-round nomination, and have pooled nomination for each steering group followed by mutual consultation for positions considering expertise and experiences.

The Chair requested member economies to discuss further after TEL64.

14. Discussion of Future Meetings

The Program Director notified that the APEC Secretariat was considering hosting TEL65 in late October to early November 2022 if no other economies show their interests to host the next meeting. He encouraged member economies to consider hosting TEL65 intersessionally.

The United States confirmed hosting of TEL66 in 2023 as the host economy of APEC 2023, and expressed the willingness to host TEL67 in a virtual format if no other economies show their interests to host.

Lastly, the Chair asked for volunteers to host TEL's future meetings, including TEL 65, TEL 67, and TELMIN 11. Also, he mentioned taking a closer look at the table of Potential Hosts for the TEL meeting after TEL 64 on the APEC Collaboration System (ACS), which has information on last time hosting, time interval, and frequency of meeting hosted by each APEC economy. The Chair encouraged the member economies to host future TEL meetings and TELMIN meetings and let the APEC secretariat and the Chair's office know their intentions in the near future.

15. Statements by Observers and Guests

The Chair invited APNIC, ICC, SEARCC, and UNESCAP as guests and observers of TEL 64 and expressed his gratitude for participating the meeting.

<u>Asia Pacific Network Information Center (APNIC)</u>

APNIC, as a non-profit organization that allocates and registers IPv4 and IPv6 addresses in the Asia-Pacific region, explained its commitment for the development of the Internet in the region and providing training and technical support around the management, addressing and routing of IP unique number identifiers.

APNIC highlighted that IPv6 capability has been increased in last 5 years from 18% in 2018 to 31% in 2022 worldwide, and it reached 29% in the APEC region. He pointed out that five of 21 APEC economies, including Australia, Japan, Malaysia, Chinese Taipei, and Viet Nam, figure well above the average, with networks having 40% to 60% IPv6 capability. He underlined the importance of international cooperation and public-private partnership as a catalyst towards a more secure, stable and reliable Internet, noting that APNIC and TELWG have shared the objectives of 'promoting greater adoption of IPv6.'

Before concluding, APNIC introduced the study published in 2021 commemorating the 50th anniversary of the Internet, which identifies the Internet's technical success factors (https://www.apnic.net/internetstudy).

International Chamber of Commerce (ICC)

ICC is the organization that has guest status for APEC as a whole and play s a role in the multilateral collaboration between chambers of commerce in each economy, especially based on MSMEs community.

ICC Digital Economy Commission introduced three important initiatives. Firstly, cybersecurity is one of the important agendas for ICC and the report advocating CDG, Cyber Development Goals, was published on the webpage. Secondly, data governance issue is discussed in cooperation with OECD, and the White Paper was published as well. Lastly, connectivity which well aligns with APEC TEL is discussed and the white paper with the following three focuses would be published in June.

- 1. Facilitate investment across the entire digital value chain
- 2. Effectively manage spectrum
- 3. Ground policies in evidence and data
- South-East Asia Regional Computer Confederation (SEARCC)

SEARCC demonstrated severe concerns about the digital skills shortage, especially about sub-sections of ICT skills such as cybersecurity. For example, the demand for people with ICT skills is predicted to increase more than 300,000 by 2026 in Australia, while the ICT graduates are only 7,000 per year. Skills shortage matters in that many of the initiatives for digital economy are dependent on availability of skilled professionals.

SEARCC reported that the APEC ICT Skills Framework Project in cooperation with Papua New Guinea was recently completed and proposed new project 'ICT Skills Framework Implementation' in TELWG, which is expected to be endorsed. New project addresses the problem of ICT and cybersecurity skill shortages throughout the Asia-Pacific region by implementing a common standard for defining ICT skills, and he hoped that he could share the results of the project at the next TEL meeting.

 <u>United Nations Economic and Social Commission for Asia and the Pacific</u> (UNESCAP)

UNESCAP pointed out deepening digital divide in the region, which was accelerated during the COVID19 pandemic. While he expressed concerns over digital divide in the region, he explained that new opportunities are springing up from the challenges as well. Firstly, on the supply side, the region has a critical window of opportunity to scale up investment in digital connectivity infrastructure and digital technologies. Secondly, in terms of the demand side, investments in digital literacy and capacity will have significant net benefits for innovation. Thirdly, there is an opportunity to strengthen global and regional cooperation and partnerships with governments, the business sector and social groups.

In this regard, UNESCAP is working for developing a practical action plan for implementation of the Asia-Pacific Information Superhighway Initiative from 2022 to 2026. The action plan consists of three pillars with 25 actions centered on Connectivity for All, Digital Technologies and Applications, and Digital Data. He expected to collaborate with external partners including APEC and other international organizations to achieve universal digital connectivity and digital transformation towards inclusive digital society.

16. Agreed Follow-up Work Items

The Program Director (PD) from the APEC Secretariat summarized the TEL64 agreed follow-up work items for information.

First of all, members were requested to review TEL63 DSG, LSG, and SPSG meeting report drafts, and to review and consider co-sponsorship for following four new projects proposals by 28 May 2022 for intersessional endorsement.

- Development of 5G Applications and the Upgrade of APEC Digital Economy China (DSG)
- Workshop on New Information and Communications Technologies (ICTs) and Applications Security China (SPSG)
- Research on Sustainable Cybersecurity Industry Development and Best Practices China (SPSG)
- ICT Skills Framework Implementation Papua New Guinea (DSG)

The PD explained about the proposed approach for nominations of TEL leadership (for term of TEL66-69) as follows:

 Submit nominations by 31 August 2022 for TEL Chair, DPSG, STSG, and CISG Convenors and first Deputy Convenors (7 positions) in a first call. Consider nominations for second Deputy Convenors (3 positions) in a second call for nominations. Unsuccessful candidates from the first round, if any, would also be automatically considered in the second round.

Regarding TEL re-structuring and TEL Strategic Action Plan 2021-2025, the PD touched upon some suggestions from the LSG and DSG joint meeting as follows:

- DSG and LSG convenorship teams to coordinate inputs to TELWG SAP report, based on the projects' conclusions, and present the first draft during the next TEL65 meeting.
- Consider leaving the TELWG SAP unchanged until the upcoming midterm review in 2023, where DSG and LSG mandates under the SAP can be combined. Members did not express a preference for reediting the ToR.

- The existing LSG and DSG projects, and three roundtables (Industry, Policy, and Innovation), will be transferred to the DPSG with no change.
- CA & MRA TF Chair will be invited to coordinate inputs to TELWG SAP report in support of the incoming CISG Convenorship team.

The PD briefed on the next meetings including TEL 65, TEL 66 and TEL-DESG Joint Meeting and Public-Private Dialogue, and encouraged member economies to express their intention of hosting TEL 67, TEL 68, TELMIN 11 and future meetings.

Russia suggested member economies to submit information and regulatory updates to the steering group convenors and let the information can be used for the report.

China asked for the explanation about difference between two options suggested for new TEL governance positions – open all the nominations at once vs. two-round nomination-, and asked about whether the existing leadership team can be nominated for the new leadership during TEL66-69. The APEC Secretariat indicated that the two-round nomination was proposed from the LSG meeting, and for the latter question, he mentioned that there are no limitations for consecutive terms according to the Terms of Reference of the TELWG. Malaysia indicated that they do not have any preference over the either of the options, but the deadline for nomination is the only thing they are mindful of. China suggested having two weeks for reviewing the proposals. Japan echoed the comments from Malaysia, and inquired about the need for having two deputy convenors rather than one convenor. The APEC Secretariat explained that the Terms of Reference indicates the number of convenorships of Steering Groups, but it could be discussed depending on member economies' opinion. LSG convenor emphasized the decision made in the LSG meeting, and Russia echoed and expressed its support to the proposal of LSG. The Chair shared that member economies in the SPSG meeting agreed to have more time to discuss internally about the nominations. Malaysia emphasized the consensus-based decision making of APEC. The Chair suggested having two weeks to have internal consultations in order to consider two options discussed in the TEL meeting.

As there was no consensus reached for nominations of TEL governance positions, the Chair and the PD suggested member economies to review the below proposal and submit written comments by 28 May 2022.

 Submit by 31 August 2022 the nominations (for terms of TEL66 – TEL69) for TEL Chair, DPSG, STSG, and CISG Convenors and first Deputy Convenors (7 positions) in the first call for nominations.

- Consider nominations for second Deputy Convenors (3 positions) in the second call for nominations. Unsuccessful candidates from the first round, if any, would also be automatically considered in the second round.
- Finalize the appointments by the concluding Plenary of TEL 65.

17. Document Classification

The Chair invited the Program Director from the APEC Secretariat to present the Meeting Document Classification List.

The Program Director explained that the documents listed are based on the documents submitted to the APEC Collaboration System (ACS), and most of the documents endorsed are public, while some documents including agreed follow-up items, DSG-LSG joint meeting minutes are restricted to the public.

18. Closing Remarks by TELWG Chair

The Chair closed TEL64 Plenary with his short closing remarks. First of all, he expressed his gratitude to all the delegates, observers and guests for their hard work and contributions to TELWG. He highlighted that TELWG is going through organizational changes, which make intersessional cooperation more important than ever before. In that regard, he asked for active participation from members for further discussion. Lastly, he expressed his gratitude to Thailand and the APEC Secretariat for arranging excellent meetings and professional support throughout the TEL64. END -