Distr.: General
5 July 2022

English only

Economic and Social Commission for Asia and the Pacific
Committee on Information and Communications Technology,
Science, Technology and Innovation

Fourth session
Bangkok and online, 30 August–1 September 2022
Item 3 of the provisional agenda*
Action plan for implementing the Asia-Pacific Information Superhighway initiative, 2022–2026

Action plan for implementing the Asia-Pacific Information Superhighway initiative, 2022–2026**

Summary

The Committee on Information and Communications Technology, Science, Technology, and Innovation at its third session on 19 and 20 August 2020 recommended that the Economic and Social Commission for Asia and the Pacific (ESCAP) secretariat set up a drafting group as part of the Asia-Pacific Information Superhighway Steering Committee to develop an action plan for the next phase of implementation of the Master Plan for the Asia-Pacific Information Superhighway, for 2022–2026, to be considered and adopted by the Committee at its fourth session in 2022.

The secretariat set up a drafting group under the chairmanship of the Maldives with Tonga and Mongolia as Vice-Chairs. Two drafting group meetings were held in May and September 2021 with the participation of 31 ESCAP members and associate members.

The present information document contains the draft action plan for implementing the Asia-Pacific Information Superhighway initiative, 2022–2026, along with the following five annexes: annex I: list of participants of the first drafting group (25 May 2021) and second drafting group (29 September 2021); annex II: list of participants of the fifth session of the Asia-Pacific Information Superhighway Steering Committee, virtual meeting, 25 November 2022; annex III: matrix of actions; annex IV: terms of reference of the Asia-Pacific Information Superhighway Steering Committee; annex V: key deliverables of the Master Plan for the Asia-Pacific Information Superhighway, 2019–2022.

The draft action plan was adopted by the Asia-Pacific Information Superhighway Steering Committee at its fifth session on 25 November 2021. The Steering Committee agreed to submit the draft action plan to the Committee on Information and Communications Technology, Science, Technology and Innovation at its fourth session in 2022 for its consideration and adoption.

* ESCAP/CICTSTI/2022/L.1.

** The present document is being issued without formal editing.

I. Executive summary

1. The present information document contains the draft action plan for implementing the Asia-Pacific Information Superhighway initiative, 2022–2026, prepared by the drafting group (see annex I for the list of participants) and adopted by the Asia-Pacific Information Superhighway Steering Committee (see annex II for list of participants).

2. The Asia-Pacific Information Superhighway is a region-wide intergovernmental platform that aims to bridge the digital divide and accelerate digital transformation through regionally coordinated actions promoting digital technology and applications, digital connectivity, and the use of digital data.

3. The draft action plan for implementing the Asia-Pacific Information Superhighway initiative, 2022–2026, will serve as a blueprint to facilitate cooperative actions among member States for transformation to digital economies and sustainable development in the region. Four key principles to guide implementation of the action plan were considered in developing the draft as follows: (a) an action-focused plan for the future; (b) ownership by member and associate members; (c) implementation through partnerships and regional cooperation; and (d) implementation in support of the Sustainable Development Goals and the World Summit on the Information Society Action Lines.

4. Based on these principles, the draft action plan consists of three pillars with a number of actions under each of the three pillars (as contained in annex III: matrix of actions, and three working groups that will guide implementation of the actions. In addition to its linkage with the Sustainable Development Goals and World Summit on the Information Society Action Lines, the draft action plan aligns with relevant global agendas such as the United Nations Secretary-General's Initiative on "Our Common Agenda" in particular, its seventh commitment on "Improving digital cooperation". This commitment emphasizes the need to connect all people to the Internet, avoid Internet fragmentation, protect data, and digital commons. The action plan also contributes to promoting regional implementation of the action lines of the World Summit on the Information Society.[1] Furthermore, the action plan contributes to the implementation of resolution 78/1 of the Economic and Social Commission for Asia and the Pacific (ESCAP).[2] In this resolution, members and associate members committed to strengthen digital cooperation with the intention of cooperating at all levels including ministerial level in closing digital connectivity divide, ensuring digital skills training, strengthening digital connectivity, addressing digital trust and security and promoting inclusive digital economy and society. In this regard, members and associate members recognized that the Asia-Pacific Information Superhighway could provide one of the useful regional platforms to promote digital cooperation. The action plan also contributes to other regional agendas including the Association of Southeast Asian Nations Digital Master Plan 2025, the Trans-Eurasian Information Superhighway, and the Council of Regional Organizations of the Pacific's Information and Communications Technology Working Group.

[1] United Nations, United Nations Secretary-General's Report 'Our Common Agenda'. Available at https://www.un.org/en/content/common-agenda-report/#download.

[2] ESCAP/RES/78/1.

II. Introduction

A. Background and Evolution of the Asia-Pacific Information Superhighway

5. The Asia-Pacific Information Superhighway supports the implementation of United Nations General Assembly resolutions 69/204 adopted in 2014 and 70/125[3] adopted in 2016, which expressed concerns regarding the digital divide in access to information and communications technologies and broadband connectivity among countries at different levels of development. The Asia-Pacific Information Superhighway is also aligned with the need to harness the potential of information and communications technologies as accelerators in the achievement of the Sustainable Development Goals. In particular, ESCAP members and associate members through resolution 78/1[4] committed to strengthen digital cooperation with the intention of cooperating at all levels including ministerial level in closing digital connectivity divide, ensuring digital skills training, strengthening digital connectivity, addressing digital trust and security and promoting inclusive digital economy and society. In this regard, it was recognized that the Asia-Pacific Information Superhighway could provide one of the useful regional platforms to promote digital cooperation.

6. Furthermore, the Asia-Pacific Information Superhighway supports the implementation of ESCAP resolutions 71/10[5] and 75/7[6] adopted in 2015 and 2019, respectively. Aligned to the General Assembly resolutions, the ESCAP resolution 71/10 expressed concern about the digital divide and requested the ESCAP secretariat to promote the sharing of experiences, good practices and lessons learned in information and communications technologies. The ESCAP resolution 75/7 requested the ESCAP secretariat to continue supporting the ongoing activities of the Asia-Pacific Information Superhighway; support member countries with policy advice, technical studies, and capacity building; and encourage the participation of various stakeholders.

7. Recognizing the need for continued regional cooperation to bridge the digital divide beyond 2020, the Committee on Information, and Communications, Technology, Science, Technology and Innovation at its third session in August 2020 recommended that the ESCAP secretariat set up a Drafting Group as part of the Asia Pacific Information Superhighway Steering Committee to develop an action plan for the next phase of implementation of the Asia-Pacific Information Superhighway Master Plan for the period 2022–2026, for consideration and adoption by the Committee on Information and Communications Technology, Science, Technology, and Innovation at its fourth session in 2022.[7]

[3] A/RES/70/125. Available at https://undocs.org/en/A/RES/70/125.

[4] ESCAP/RES/78/1.

[5] E/ESCAP/RES/71/10. Available at http://undocs.org/en/E/ESCAP/RES/71/10.

[6] ESCAP/RES/75/7. Available at https://www.unescap.org/sites/default/d8files/event-documents/E75_Res7E.pdf.

[7] ESCAP/CICTSTI/2020/7. Available at https://www.unescap.org/sites/default/d8files/eventdocuments/Final%20report%20CICTSTI3%2C%20English.pdf.

B. Vision and Objective

1. Vision and Objective for 2019–2022

8. In the Master Plan for the Asia-Pacific Information Superhighway, the vision for the Asia-Pacific Information Superhighway is articulated as follows: "As a pillar of regional connectivity, the Asia-Pacific Information Superhighway initiative will serve as a catalyst to develop seamless regional broadband networks which improve affordability, reliance, resilience and coverage and thereby address the causes of digital divides, develop the Internet ecosystem to support the implementation of the Sustainable Development Goals, and stimulate the digital economy in Asia and the Pacific".[8]

9. The objective of the Asia-Pacific Information Superhighway is: "To improve regional broadband connectivity through a dense web of open access cross-border infrastructure that will be integrated into a cohesive land- and sea-based fibre network with the ultimate aims of increasing international bandwidth for developing countries in the region, lowering broadband Internet prices and bridging the digital divide in the region".[9]

10. Over its first phase of implementation, the Asia-Pacific Information Superhighway evolved into a region-wide intergovernmental platform for policy cooperation aimed at bringing seamless digital broadband connectivity[10] across the Asia-Pacific region. It also supported accelerated implementation of digital transformation for the achievement of the Sustainable Development Goals and the World Summit on the Information Society Action Lines.

2. Vision and Objective for 2022–2026

11. The rapid uptake of information and communications technologies is transforming economic and social activities around the world. These transformations have enabled delivery of information and services at unprecedented speed and scale, boosted productivity, spurred innovations, and brought about many benefits. Yet, information and communications technologies also pose many challenges and as digital became default during the pandemic, the digital divide showed how it risks perpetuating and even deepening existing socio-economic inequalities. The coronavirus disease (COVID-19) pandemic has thus clearly demonstrated the link between digitalization and development by showing the potential of digital technologies and exposing the negative socioeconomic impacts and development gaps that the digital divide perpetuates.

12. In light of these challenges, needs and changing policy priorities for digital transformation, the Asia-Pacific Information Superhighway draft action plan 2022-2026 encompasses a new vision and objective to build back better and leave no one behind.

---

[8] E/ESCAP/CICTSTI(1)/2. Available at https://undocs.org/E/ESCAP/CICTSTI(1)/2.

[9] Ibid.

[10] There are no universally accepted definitions for broadband connectivity and digital connectivity. In the draft action plan, broadband connectivity is defined as high-speed Internet connection with wide bandwidth data transmission rate. Digital connectivity means that the physical world such as robots and industrial equipment, and the cyberworld such as an Internet virtual space, are connected in one network to analyse and utilize aggregated data with automated control of things that goes beyond the high-speed Internet connection.

13. The vision for the Asia-Pacific Information Superhighway (2022–2026) is: "Connecting everything for everyone to accelerate the achievements of the 2030 Agenda for Sustainable Development". The vision embodies the ever-evolving nature of digital technologies that provide both opportunities and challenges for improving the wellbeing of connected people.

14. In support of this vision, the objective of the Asia-Pacific Information Superhighway (2022–2026) is: "To bridge the digital divide and accelerate digital transformation by promoting digital connectivity, digital technology and applications, and the use and management of digital data".

15. A summary is presented in Table 1.

Table 1
Summary of current and new vision and objective

	Master Plan (2019–2022)	*Next phase (2022–2026)*
Vision	As a pillar of regional connectivity, the Asia-Pacific Information Superhighway initiative will be a catalyst to develop seamless regional broadband networks which improve affordability, reliance, resilience, and coverage and thereby address the causes of digital divides, develop the Internet ecosystem to support the implementation of the Sustainable Development Goals, and stimulate the digital economy in Asia and the Pacific.	Connecting everything for everyone to accelerate the achievements of the 2030 Agenda for Sustainable Development.
Objective	To improve regional broadband connectivity through a dense web of open access cross-border infrastructure that will be integrated into a cohesive land- and sea-based fibre network with the ultimate aims of increasing international bandwidth for developing countries in the region, lowering broadband Internet prices and bridging the digital divide in the region.	To bridge the digital divide and accelerate digital transformation by promoting digital connectivity, digital technology and applications, and the use and management of digital data.

III. Master Plan of the Asia-Pacific Information Superhighway, 2019–2022

A. Four Pillars

16. To achieve its objective, the Master Plan for the Asia-Pacific Information Superhighway, 2019–2022, adopted four pillars with specific activities developed for each pillar. The four pillars are:

(a) Connectivity;

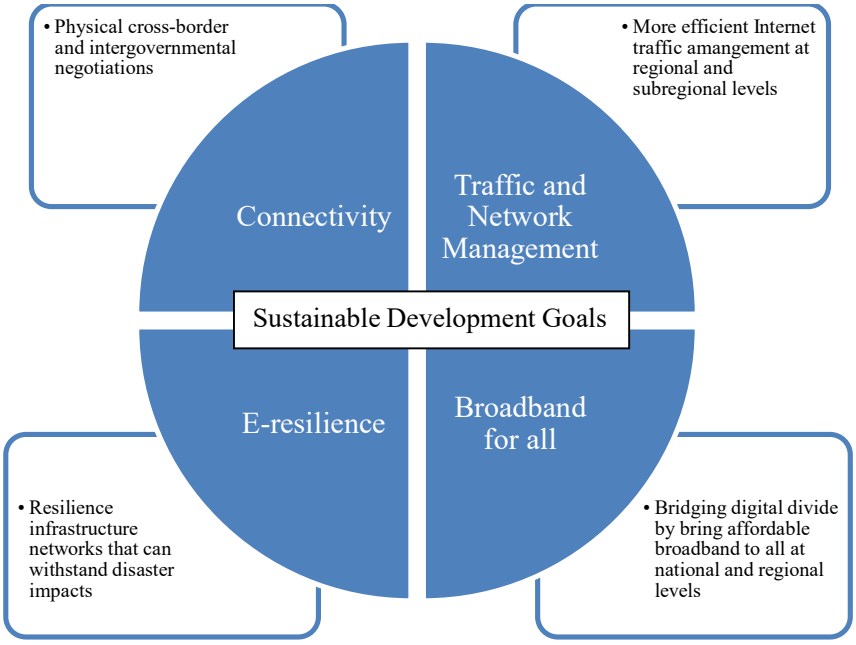
(b) Internet Traffic and Network Management;

(c) E-resilience;

(d) Broadband for All.

17. Pillar 1 (Connectivity) focuses on enhancing seamless regional broadband fibre-optic backbone connectivity. Pillar 2 (Internet Traffic and Network Management) promotes efficient Internet traffic and network. Pillar 3 (E-resilience) aims to enhance the resilience of existing and planned information and communications technology infrastructure during and after natural disasters. Pillar 4 (Broadband for All) supports an environment for inclusive and affordable Internet access for all.

Figure I
Four pillars of the Master Plan for the Asia-Pacific Information Superhighway, 2019–2022



B. Key Deliverables

18. Based on the strategic initiatives outlined in the Master Plan for the Asia-Pacific Information Superhighway, 2019–2022,[11] and subsequent status reports[12] by the ESCAP secretariat, the Asia-Pacific Information Superhighway has been promoting regional cooperation among Asia-Pacific countries to strengthen seamless regional broadband networks, and improve their affordability, reliance, resilience and coverage. Key activities and outcomes implemented by the ESCAP secretariat are detailed in annex IV.

IV. Action plan for implementing the Asia-Pacific Information Superhighway initiative, 2022–2026

A. Rationale for Scale Up

19. Innovative digital technologies along with improvement in digital infrastructure and digital data have driven digital transformation in many Asia-Pacific countries. A new development paradigm is emerging which

[11] ESCAP/CICTSTI/2018/INF/1. Available at https://www.unescap.org/sites/default/files/ESCAP_CICTSTI_2018_INF1.pdf.

[12] ESCAP/CICTSTI/2020/2, ESCAP/CICTSTI/2018/2, and E/ESCAP/CICTSTI(1)/1.

includes changes in the whole ecosystem of value creation and management, production and consumption patterns.

20. The COVID-19 pandemic has further accelerated the advancement and adoption of digital technologies and their exponentially evolving applications – posing both opportunities and challenges. Digital connectivity can advance sustainable development solutions but also simultaneously cast unprecedented challenges. From a sustainable development perspective, the consequences of the digital divide, both within and between countries, is a key challenge. In the context of promoting sustainable and resilient recovery from the COVID-19 pandemic and the achievement of the Sustainable Development Goals, universal access to affordable and reliable broadband Internet has assumed an urgency not experienced before. Consequently, most, if not all members and associate members have elevated digital development to the top of their policy-setting agendas as they seek to turn the digital divide into a digital dividend.

21. Building on the achievements of the first phase of implementation, the Asia-Pacific Information Superhighway as a region-wide intergovernmental cooperation mechanism is well positioned to boost cooperative actions among member States that accelerate global and regional digital transformation to achieve the Sustainable Development Goals and World Summit on the Information Society Action Lines. The Asia-Pacific Information Superhighway is also well-positioned to contribute to global digital agendas such as the United Nations Secretary-General's Initiative on "Our Common Agenda" in particular, its seventh commitment on "Improving digital cooperation"., and to subregional digital cooperation initiatives such as the Association of Southeast Asian Nations Digital Master Plan 2025, the Trans-Eurasian Information Superhighway and the Information and Communications Technology Working Group of the Council of Regional Organisations of the Pacific, among others.

22. Against this backdrop, the action plan for implementation of the Asia-Pacific Information Superhighway (2022–2026) aims to promote essential cooperative actions for digital development among member States, which include digital connectivity through improvement in the broadband information and communications technology infrastructure, digital technology, and applications, as well as the use and management of digital data.[13]

B. Principles

23. The following four principles guide the development and implementation of the action plan for implementation of the Asia-Pacific Information Superhighway (2022–2026) are as follows:

(a) **Action-focused plan** – The new action plan will be the regional blueprint for coordinated and practical policy actions, that enable ESCAP members and associate members to bridge the digital divide and accelerate digital transformation. Considering the rapidly changing digital environments, the action plan addresses emerging needs, and enables members and associate

[13] Digital data refers to the information created and stored in a computer mediated environment that can potentially be transmitted as discrete information signals over the Internet, and may be subsequently processed and/or stored for a range of known and unforeseen purposes.

members to plan for anticipated changes and shape a more inclusive and sustainable digital future.

(b) **Ownership by members and associate members** – A key guiding principle is a needs-driven approach based on members' **and** associate members' cooperation in the development of the action plan, and in the collaborative implementation of activities for a common achievement of targets and outcomes towards digital transformation and sustainable development.

(c) **Implementation through partnerships and regional cooperation** – Due to the trans-boundary and interlinked nature of digitalization, successful digital transformation requires multi-stakeholder partnerships with United Nations agencies, regional organizations, business sectors, civil society, and other relevant stakeholders, as well as cross-border cooperation among members and associate members. The new action plan will promote the continuous engagement of various stakeholders such as United Nations entities and specialized agencies, regional and subregional organizations, and international financial institutions and partners, as well as the private sector, civil society, research institutes and think tanks, as appropriate, including the Association of Southeast Asian Nations Secretariat, Asia-Pacific Telecommunity, International Telecommunication Union, United Nations Office of Information and Communications Technology, United Nations Special Programme for the Economies of Central Asia platform, Asia Pacific Economic Cooperation, the Organization for Economic Cooperation and Development, and other relevant stakeholders to support member States' effective implementation. Policy coordination, cooperation and partnerships across members and associate members and various sectors will be central for setting common policy agendas, addressing mutual challenges, finding collective solutions, mobilizing necessary resources more efficiently, and ensuring shared accountability and commitment to the action plan. The fruitful partnerships and productive collaborations in developing online maps of backhaul networks among member States, between ESCAP and the International Telecommunications Union provide an example of a good cooperative model.

(d) **Implementation in support of global and regional agendas (Sustainable Development Goals** and **World Summit on the Information Society Action Lines)** – The action plan is aligned with current global and regional digital and development agendas such as the Sustainable Development Goals, World Summit on the Information Society Action Lines, the United Nations Secretary-General's Initiative on "Our Common Agenda" in particular, its seventh commitment on "Improving digital cooperation"., and various regional digital connectivity agendas.

C. Three Pillars

24. The action plan is built around three pillars that scale up the scope of the Asia-Pacific Information Superhighway, with the objective of bridging the digital divide and accelerating digital transformation in light of rapidly changing policy environments, including the recovery efforts from the COVID-19 pandemic as follows:

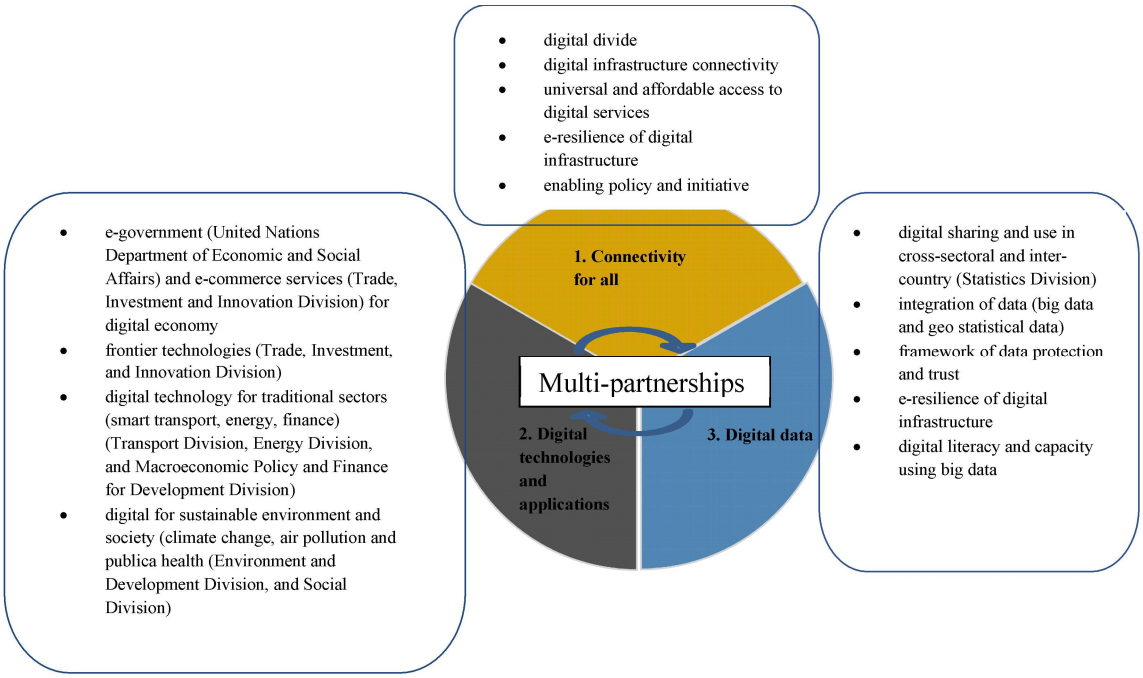
(a) Connectivity for All;

(b) Digital Technologies and Applications;

(c) Digital Data.

25. Under each pillar, the new thematic areas are illustrated in Figure II. Multi-stakeholder partnerships and cooperation cut across all three pillars.

Figure II
Three pillars of the action plan for implementation of the Asia-Pacific Information Superhighway (2022–2026)



1. Pillar 1: Connectivity for all

26. Pillar 1 on "Connectivity for All" in the Asia-Pacific Information Superhighway action plan (2022–2026) focuses mainly on enhancing the regional broadband backbone networks and infrastructure for the promotion of universal access to affordable and reliable Internet. This is an essential precondition for the use of emerging technologies such as artificial intelligence and the Internet of things that accelerate digital transformation and cooperation. The vision of the Asia-Pacific Information Superhighway can be realized by first connecting people, organizations, and things reliably, affordably, anywhere and all the time.

27. The key themes under this pillar include bridging the digital divide, broadband information and communications technology infrastructure, universal, reliable, and affordable access to broadband Internet, e-resilience of information and communications technology infrastructure, and enabling policy and regional cooperation.

2. Pillar 2: Digital technologies and applications

28. Pillar 2 on "Digital Technologies and Applications" focuses on the development of digital technologies, systems, applications, platforms, and processes, as well as capacities and skills of ESCAP member States. Building on increased access and affordability of digital infrastructure in Pillar 1, this pillar promotes the creation of innovative products, services, and values by leveraging new digital technologies and digital data across all sectors. It is anticipated that digital transformation will be a paradigm shift in all sectors,

including government, education, health care, transport, energy, agriculture, and urban development.

29. This pillar covers: digital government and e-commerce services for building the digital economy; the application of frontier technologies, including artificial intelligence, robotics, and biotechnology; digital technology and applications in traditional sectors such as smart transport, smart grid, and digital financial services; and digital technology applications for sustainable environment and society such as smart climate action and e-health. The trust that users need to have in these applications cannot be sustained unless serious attention is paid to digital security.

30. Coordinated actions to identify and remove barriers to digital transformation and create enabling environments for innovation using regulatory sandboxes can be covered in this pillar. Other actions include developing digital skills and competencies, enabling innovation and technology transfer, and ensuring integration and interoperation of existing systems and platforms. In summary, this pillar covers:

(a) Digital government and digital economy (e-commerce, smart transport, energy and digital finance);

(b) Digital for environment and society (climate change, air pollution and public health);

(c) Digital transformation for small- and medium-sized enterprises and traditional sectors.

31. Frontier technology development

3. Pillar 3: Digital data

32. Underlying pillars 1 and 2, is pillar 3 on “Digital Data”. Pillar 3 focuses on strengthening digital data[14] creation, transition to open format, storing, maintaining, use, and integration with other data sources such as satellite-geospatial data, real-time Internet of things and statistical data.

33. Digital data is a foundational resource and enabler of digital connectivity and digital transformation. Digital data enhances the effectiveness of evidence-based policy making with more targeted policy interventions for affordable and universal Internet connectivity. In addition, the rapid development of digital technologies relies on the availability of integrated digital data. Data-platform-integrated activities, such as data analytics, need integrated digital data for value creation across all segments of society, resulting in innovative and sustainable data-based solutions.

34. Digital data creation, collection, integration, management and use of different data sets, including big data, is an essential component for evidence-based policy making. As a result, a better integrated digital data framework would support Governments in the region on delivering more effective policy interventions and public services. Data sharing must either be reciprocal; or the same for everyone in order to offer a level playing field. If pushing for greater data sharing, member States should not be able to use local/national laws to trump an initiative where data sharing is one of the main pillars, especially among member states sponsoring the initiative. In this regard, coordination within and between national and international frameworks for data sharing and

[14] Digital data is data that represents other forms of data using specific machine language systems that can be interpreted by various technologies.

use across sectors and countries are vital. In addition, strengthening digital literacy would not only increase digital connectivity adoption for bridging the digital divide, but also increases usage of publicly available digital data sources for improving socio-economic welfare of citizens. Digital data also needs to be accessible while also recognizing the need for privacy and data protection.

4. Multi-Stakeholder Cooperation: Integrating the Three Pillars

35. Actions under the three pillars are intertwined. The benefits of data (Pillar 3) cannot be realized without digital connectivity (connectivity for all) (Pillar 1) and digital technologies and applications (Pillar 2). Broadband information and communications technology infrastructure (Pillar 1) cannot benefit without data (Pillar 3) and digital technologies and applications (Pillar 2). Therefore, seemingly articulated actions under different pillars should be achieved through integrated approaches via multi-stakeholder partnerships and cooperation.

D. Operational Structure

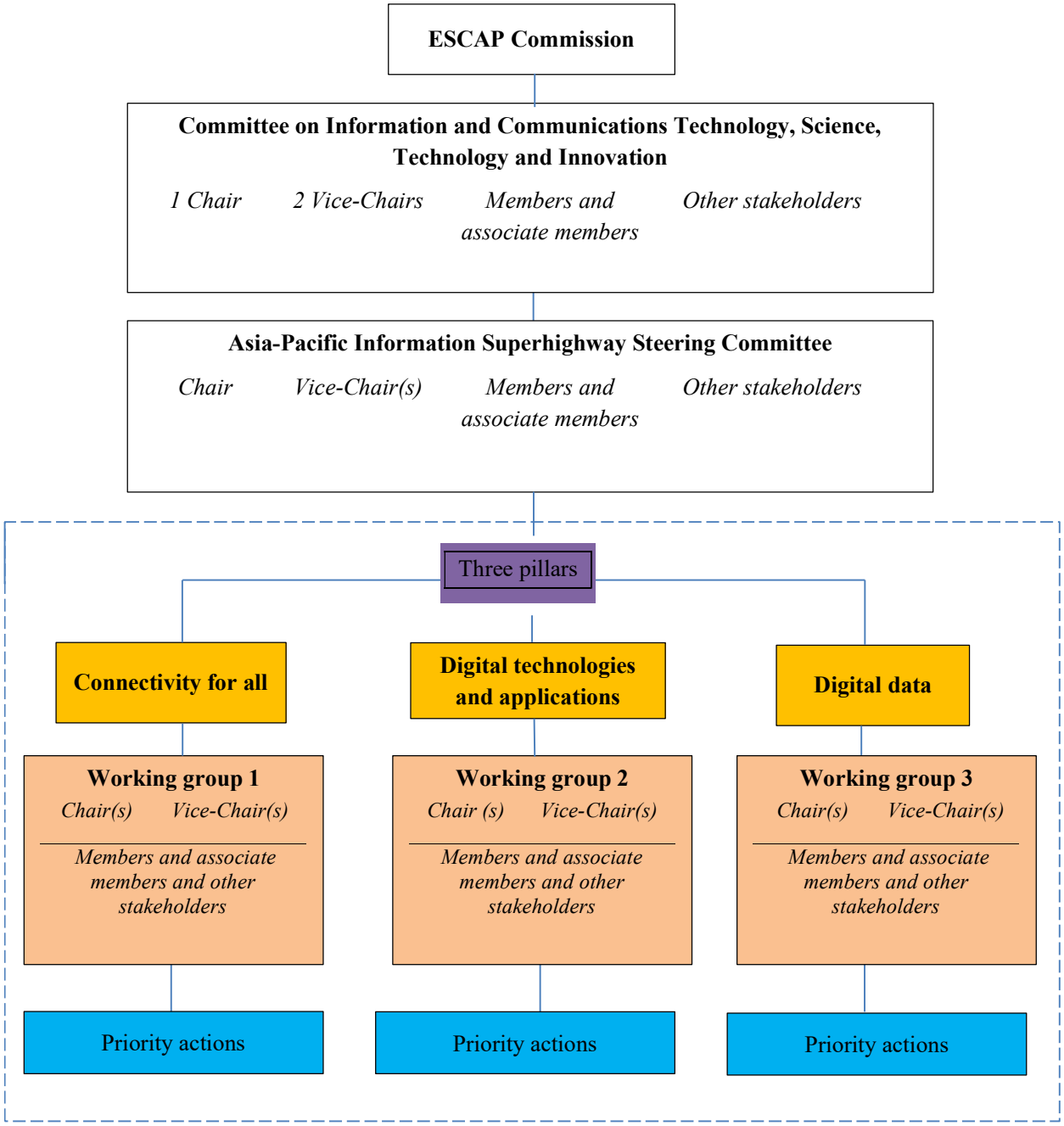
36. In line with the three pillars, the Asia-Pacific Information Superhighway has an operational structure that supports member States' implementation of the action plan as follows:

37. A working group is established under each pillar, consisting of one chair, one vice-chair led by members and associate members expressing interest in the work under each pillar. The working group identifies potential thematic areas of interest for collaboration (as guided by the actions for each pillar). Through the leadership of the chair, each working group identifies priority actions for 2022-2026, which are based on national, subregional, and regional digital-related priorities to be updated as necessary by the respective working groups. The working groups periodically report on the status, progress and achievements of national/pillar implementation and its future plan/programmes to the Asia-Pacific Information Superhighway Steering Committee. The Steering Committee reports to the Committee on Information and Communications Technology, Science, Technology, and Innovation, and the Committee on Information and Communications Technology, Science, Technology, and Innovation reports to the Commission.

38. In the spirit of openness, a multi-stakeholder approach, and aligned with ESCAP resolution 78/1, each Working Group is open to various stakeholders, such as United Nations bodies and specialized agencies, regional and subregional organizations, and international financial institutions and partners. Each Working Group is also open to the private sector, civil society, research institutes and think tanks, as nominated by their respective governments up to 30 per cent of the composition of each national delegation.

39. The operational structure of the Asia-Pacific Information Superhighway under the action plan is illustrated in Figure III. The terms of reference for the Asia-Pacific Information Superhighway Steering Committee and Working Groups, respectively, is attached as annex IV.

Figure III
Operational structure



V. Actions by Pillar

40. The actions under each of the three pillars are listed in annex III of the present document. The draft matrix of actions is prepared based on three criteria: (a) desirability; (b) achievability; and (c) continuity (of previously implemented actions) for 2022–2026.

VI. Means of implementation

41. An integrated set of means of implementation are identified as follows:

A. Promoting Intergovernmental Dialogues and Regional Practices

42. As the region-wide intergovernmental cooperation platform, the Asia-Pacific Information Superhighway will support member States by organizing intergovernmental meetings and promoting the sharing of good policies, technologies, and practices, as part of international cooperation. The promotion of intergovernmental dialogues and regional practices provides member States with opportunities to share experiences and transfer knowledge and skills for effective, efficient, and successful implementation of the action plan.

B. Conducting Solution-focused Analytical Research, Knowledge Sharing and Capacity Building

43. The action plan produces solutions for addressing digital transformation and connectivity challenges, based on analytical research and capacity building of member States. This includes the continuation by the ESCAP secretariat and other relevant stakeholders on conducting analytical research for innovative digital solutions to address emerging challenges on digital transformation and digital economy. Also, to leverage existing analytical research and capacity building training workshops of various stakeholders, including the United Nations Asian and Pacific Training Centre for Information and Communication Technology for Development, to provide targeted capacity training modules on specific issues of importance to member States, with special attention to Small Island Developing States and countries with special needs.

44. For example, the Women Information and Communications Technology Frontier Initiative flagship programme aims to promote women's entrepreneurship in Asia and the Pacific through enhancing capabilities of women entrepreneurs in information and communications technology and entrepreneurship so that they and their enterprises can become more productive, and hopefully grow and be sustainable so that they can actively contribute to community development, as well as to the local and national economy. This initiative could be further accelerated for training of trainers at the subregional level in order to accelerate in-depth knowledge of government officials in this area. In addition, better coordination through the use of a virtual research community network to share research findings and solutions among regional stakeholders will support member States in assessing the current status, identifying common challenges and causes, and implementing appropriate measures in a more effective and cooperative way.

C. Building Subregional Service Nodes

45. In order to support member States in implementing the adopted actions, the action plan establishes and activates three subregional service nodes that are affiliated to the Asia-Pacific Information Superhighway platform. The key objective of the service node is to provide practical digital support to policymakers of the Asia-Pacific Information Superhighway members and associate members to address emerging challenges and find solutions on an international cooperation basis.

D. Securing Financing and Resources

46. Financial resources are key to achieving the adopted actions. Translating the planned actions into outcomes requires adequate financial and other resources together with appropriate capacity building, political will, and multilateral cooperation. The means of securing financial and technical resources is expanding. For successful implementation of the action plan under each Working Group, members of each Working Group are to work together with the secretariat, United Nations agencies, international organizations, development banks, regional organization and business sectors to secure resources for implementing the planned actions ,the participation and partnership of the multistakeholder community including digital technology companies, in addition to traditional sources of funding for development, through public-private partnerships is expected to help augment financial and technical resources.

E. Regular Monitoring and Evaluation

47. Regular monitoring and evaluation, including peer reviews and external evaluations, are crucial means to ensure the quality of implementation. It includes the collection of baseline data, comparative analyses of progress and outcomes across the actions, and assessment and documentation of successful policies and approaches, development of clear key performance indicators for the action plan and matrix, as well as problems and challenges. Regularly conducted monitoring and assessment provides good information and guide to member States for revisiting planning, implementation, and modification of action courses.

48. In order to provide useful insights and lessons learnt from the implementation of the Asia-Pacific Information Superhighway Master Plan 2019-2022, an assessment by the secretariat of the progress on implementation of the Asia-Pacific Information Superhighway Master Plan 2019-2022 is underway and will be presented by the secretariat to the Sixth Session of the Asia-Pacific Information Superhighway Steering Committee in 2022. The provisional deliverables are attached in Annex V.

F. Enhancing Interoperability Among Member States with Differing Laws

49. In order to take advantage of the full potential offered by digital transformation, the draft action plan seeks to enhance interoperability whenever possible by supporting members and associate members in improving their national policy, legal and regulatory frameworks to foster enabling environments, create new digital technologies and innovative ventures, and promote digital connectivity and digital data use.

Annex I

List of participants of the first drafting group (25 May 2021) and second drafting group (29 September 2021)

A. First Drafting Working Group Meeting for Developing the Action Plan 2022–2026 of the Asia-Pacific Information Superhighway, 25 May 2021

Afghanistan

H. E. Mr. Ahmad Masood Latif-Rai, Deputy Minister of Policy and Program, Ministry of Communications and Information Technology

Mr. Mirwais Naikmal, Director of Plan and Policy, Ministry of Communications and Information Technology

Armenia

Mr. Hyak Aslanyan, Advisor to the Minister, Ministry of High-Tech Industry of the Republic of Armenia

Mr. Vahan Hovsepyan, Member of the Internet Governance Council of the Republic of Armenia, Ministry of High-Tech Industry of the Republic of Armenia

Azerbaijan

Mr. Emil Ahmadov, Leading Advisor, Department of International Cooperation, Ministry of Transport, Communications and High Technologies

Bangladesh

Mr. Syed Rashedul Hossen, Economic Counsellor and Alternative Permanent Representative to ESCAP, Embassy of the People's Republic of Bangladesh in Bangkok

Ms. Venasa Rodrigues, Deputy Director, Department of ICT, ICT Division, Ministry of Post, Telecommunication and Information Technology

Bhutan

Mr. Sonam Phuntsho, Chief ICT Officer, Department of Information Technology and Telecom, Ministry of Information and Communications

Cambodia

H.E. Mr. Meas Po, Under Secretary of State, Ministry of Posts and Telecommunications of Cambodia

China

Ms. Ming Xu, Deputy Director, Ministry of Industry and Information Technology of the People's Republic of China

Mr. Hui Chen, Head, China Academy of Information and Communication Technology, Ministry of Industry and Information Technology

Mr. Yi Lun, Assistant Director, Ministry of Industry and Information Technology of the People's Republic of China

Mr. Yongwang Liu, Engineer, China Academy of Information and Communications Technology

Mr. Sichen Fan, Staff, China Academy of Information and Communication Technology, Ministry of Industry and Information Technology

Georgia

Mr. Giorgi Dapkviashvili, Head of Electronic Communications and Information Technologies Development Division, Communications, Information and Modern Technologies Department, Ministry of Economy and Sustainable Development

Ms. Eka Kubusidze, Head, Communications, Information and Modern Technologies Department, Ministry of Economy and Sustainable Development

Fiji

Mr. Shivendra Deo, Director, Digital Government Transformation Office

Mr. Vijendra Singh, Director, Digital Government Transformation Office

Mr. Vivek Anand, Senior Engineer, Department of Communications, Ministry of Communications

France

Mr. Alexandre FAIDY, Desk Officer Digital Economy, Economic diplomacy department, Strategic sectors unit, Ministry for Europe and Foreign Affairs

Mr. Guillaume DENIS, Regulation office, Digital economy department, Directorate-general for enterprise, Desk Officer, Ministry for the Economy and Finance

India

Dr. Ajai Kumar Garg, Director, Ministry of Electronics & Information Technology (MeitY), Government of India

Indonesia

Mr. Lessy Sutiyono Aji, Policy Analyst, Directorate of Broadband Development, Ministry of Communications and Informatics of Indonesia

Iran (Islamic Republic of)

Mr. Alireza Shalehi-Zadeh, International Traffic and Marketing Deputy, Telecommunication Infrastructure Company, Ministry of ICT

Mr. Hadi Maleki-Parast, Director General for Service Development at National Network, Ministry of ICT

Ms. Faegheh Majidzadeh, Director of Monitoring and Strategic Analysis, Telecommunication Infrastructure Company, Ministry of ICT

Kazakhstan

Mr. Amirbek Islamuly, Head of Division, Department of Multilateral Cooperation, Ministry of Foreign Affairs

Mr. Meirbek Mukatov, Deputy Director of the Department of International Cooperation of Minister of Digital Development, Innovations and Aerospace Industry of the Republic of Kazakhstan (MDDIAI)

Mr. Nurbolat Alimbayev, Counsellor, Deputy Permanent Representative, Political Affairs, Embassy of Kazakhstan

Lao People's Democratic Republic

Mr. Thavisak Manodham, Director General, E-Government Center, Ministry of Post and Telecommunications

Maldives

H.E. Mr. Mohamed Shareef, Minister of State, Ministry of Environment, Climate Change and Technology

Mongolia

Ms. Uranchimeg Andrai, Deputy Director, Strategic Policy and Planning Department, Communications and Information Technology Authority

Mr. Davaadash Sambuu, Counsellor and Deputy Permanent Representative to ESCAP, Embassy of Mongolia

Pakistan

Mr. Inam Ul Haque, Director Telecom, Telecom Wing, Ministry of Information Tehnology and Telecommunications

Mr. Bilal Zaka, Head of Information Technology Services, COMSATS University, Ministry of Science and Technology

Philippines

Mr. Antonio Edward Padre, Director, Government Digital Transformation Bureau, Department of Information and Communications Technology

Mr. George Tardio, OIC Director III, National Planning and Corporate Management Bureau, Department of Information and Communications Technology

Mr. Alberto Salvador Planning Officer Policy Formulation and Development Division Department of Information and Communications Technology

Ms. Gemma Baysic, Planning Officer V, National ICT Planning Development Division, Department of Information and Communications Technology

Republic of Korea

Mr. Sungjoon Choi, Director, Multilateral Cooperation Division, Ministry of Science and ICT

Mr. Soohyeon Kang, Deputy Director, Multilateral Cooperation Division, Ministry of Science and ICT

Mr. Yongnam Koh, Acting Deputy Director, Multilateral Cooperation Division, Ministry of Science and ICT

Mr. Sangyirl Nam, Senior Research Fellow, Dept. of International & Cooperation Research, KISDI (Korea Information Society Development Institute)

Mr. Kim Byungwoo, Research Associate, Dept. of International & Cooperation Research, KISDI (Korea Information Society Development Institute)

Russian Federation

Mr. Zorikto Gomboin, Leading Specialist, EMC Analysis Centre, Radio Research and Development Institute, Russian Federation

Mr. Arseny Plossky, Deputy Head of Laboratory, International Department, Radio Research and Development Institute, Russian Federation

Solomon Islands

Mr. Alwin Danitofea, Director, Communication Department, Ministry of Communication and Aviation

Sri Lanka

Mr. Mahinda Herath, Chief Executive Officer, Information and Communication Technology of Sri Lanka, Sri Lanka

H.E. Chaminda Colonne, Ambassador and Permanent Representative, Embassy and the Permanent Mission of Sri Lanka

Mr. Saritha Ranatunga, First Secretary, Deputy Permanent Representative, Embassy of Sri Lanka

Tajikistan

Mr. Bakhtiyour Nodirov, Technical specialist of the Communication service under the Government of the Republic of Tajikistan

Ms. Saodat Nazarova, Third Secretary, Economic Affairs, Embassy of Tajikistan in Malaysia

Thailand

Ms. Piyanuch Wuttisorn, Inspector General, Ministry of Digital Economy and Society

Ms. Ishariyaporn Smiprem, Director of Regional Cooperation Group, Foreign Affairs Division, Ministry of Digital Economy and Society

Mr. Jackrakrit Srisun, Foreign Relations Officer, International Affairs Division, Ministry of Digital Economy and Society

Ms. Jitsupa Tungkasiri, Foreign Relations Officer, Practitioner Level, International Affairs Division, Ministry of Digital Economy and Society

Ms. Tip-arpa Thiralitkamhang, Foreign Relations Officer, Professional Level International Affairs Division, Ministry of Digital Economy and Society

Mr. Sira Akavipat, Strategist/Engineer, Organization Strategy, National Telecom Public Company Limited

Ms. Waleeporn Kumching, Plan and Policy Analyst, Professional, Strategy and Planning Division, Ministry of Digital Economy and Society

Ms. Kamonwan Kerdnaimongkol, Plan and Policy Analyst Practitioner Level, Digital Economy and Society Development Driven Center, Ministry of Digital Economy and Society

Mr. Jittapat Bunnag, Assistant Vice President, Corporate Strategy Planning and Development Department 1, National Telecom

Ms. Areewan Boonglam, General Administrator, Corporate Strategy Planning and Development Department 1, National Telecom Public Company Limited under the Ministry of Digital Economy and Society

Mr. Kitti Sriboonyakorn, Computer Technical Officer, Senior Professional Level, Department of Telecommunication, Office of the Permanent Secretary, Ministry of Digital Economy and Society

Mr. Taran Osiri, Plan and Policy Analyst, Plan and Policy Department, Department of Telecommunication, Ministry of Digital Economy and Society

Mr. Thalerngsak Vanischakorn, Manager, Strategic Department, National telecom public company limited, Office of the National Digital Economy and Society Commission, Ministry of Digital Economy and Society

Mr. Pranatthapong Kabkrathok, Plan and Policy Analyst, Practitioner Level, Department of Telecommunication, Ministry of Digital Economy and Society

Timor-Leste

Mr. Fernando Carvalho da Cruz, Senior Professional and the Chief of Cabinet for the Minister of Transport and Communications of Timor-Leste

Mr. Natalino do Rosario, National Director for Land Transports of the Ministry of Transports and Communications of Timor-Leste

Tonga

Mr. Andrew Toimoana, Director for Information and Technology of the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications, Government of Tonga

Turkmenistan

Ms. Pena Suhanberdiyev, Head, Digital Economy Development Department, “Turkmenaragatnashyk” agency of Turkmenistan

United Kingdom of Great Britain and Northern Ireland

Ms. Joanna Benn, Deputy Permanent Representative, British Embassy in Thailand

Uzbekistan

Mr. Nuriddin Mamatkulov, Deputy Permanent Representative of Uzbekistan to ESCAP, Consulate General of Uzbekistan in Bangkok

Viet Nam

Mr. Phú Tiến Nguyễn, Deputy Director General, Authority of Information Technology Application, Ministry of Information and Communications, Head of Delegation

Ms. Tran Thi Quoc Hien, Deputy Director General, Authority of Information Technology Appliance, Ministry of Information and Communications

Mr. Nguyễn Thành Nam, Chief of Office, Authority of Information Technology Application, Ministry of Information and Communications

Mr. Thanh Nam Nguyen, Official, Authority of Information Technology Appliance, Ministry of Information and Communications

Ms. Thi Hang Nguyen, Official, International Cooperation Department, Ministry of Information and Communications

Ms. Ngo Minh Sung, Official, Authority of Information security, Ministry of Information and Communications

Mr. Hung Do, Official, Infrastructure and Interconnection Division, Viet Nam Telecommunications Authority

B. Second Drafting Working Group Meeting for Developing the Action Plan 2022-2026 of the Asia-Pacific Information Superhighway 29 September 2021

Armenia

Mr. Hayk Aslanyan, Adviser to the Minister, Ministry of High-Tech Industry of the Republic of Armenia

Mr. Vahan Hovsepyan, Member of the Internet Governance Council of the Republic of Armenia, Ministry of High-Tech Industry of the Republic of Armenia

Bhutan

Mr. Sonam Phuntsho, Chief ICT Officer , Division of Telecom and Space Department, Information Technology and Telecom, Ministry of Information and Communications

Cambodia

H.E. Mr. Meas Po, Undersecretary of State, Ministry of Post and Telecommunications

China

Mr. Chen Hui, Deputy Director, Industry and Planning Research Institute of CAICT, Ministry of Industry and Information Technology

Mr. Yongwang Liu, Senior Engineer, Industry and Planning Research Institute, China Academy of Information and Communications Technology

Mr. Sichen Fan, Engineer, International Cooperation Department, Ministry of Industry and Information Technology

Georgia

Ms. Eka Kubusidze, Head, Telecommunications, Information and Modern Technologies Department, Ministry of Economy and Sustainable Development

Mr. Giorgi Dapkviashvili, Head, Electronic Communications and Information Technologies Development Division, Ministry of Economy and Sustainable Development

Fiji

Mr. Vivek Anand, Senior Engineer, Department of Communications, Ministry of Communications

India

Mr. Abhishek Singh, President & CEO, National e-Governance Division, Ministry of Electronics and Information Technology

Iran (Islamic Republic of)

Mr. Alireza Shalchizadeh, Deputy General Director of Commercial Affairs, Telecommunication Infrastructure Company, Ministry of ICT

Mr. Somayeh Kazemy Gooranabad, Head of Market Research Office, Commercial and Marketing, Telecommunication Infrastructure Company, Ministry of ICT

Mr. Faegheh Majidzadeh, Strategic Monitoring and Analysis, Strategic Management, Telecommunication Infrastructure Company, Ministry of ICT

Kazakhstan

H.E. Ms. Raushan Yesbulatova, Ambassador of the Republic of Kazakhstan to the Kingdom of Thailand and Permanent Representative to UN ESCAP

Mr. Nurbolat Alimbayev, Deputy Permanent Representative to ESCAP, Embassy of Kazakhstan in Thailand

Lao People's Democratic Republic

Mr. Thavisak Manodham, Director General, e-Government Center, Ministry of Technology and Communications

Maldives

H.E. Mr. Mohamed Shareef, State Minister, Department of Technology, Ministry of Environment, Climate Change and Technology

Mongolia

Ms. Andrai Uranchimeg, Deputy Director, Strategic Policy and Planning Department, Communications and Information Technology Authority, Government of Mongolia

Mr. Dawadash Sambuu, Counsellor, Embassy, Mongolia

Pakistan

Mr. Inam Ul Haque, Director Telecom, Telecom Wing, Ministry of IT and Telecommunications

Mr. Bilal Zaka, Head IT Services, COMSATS University, Ministry of Science and Technology of Pakistan

Philippines

Mr. Antonio Edward Padre, Director, Government Digital Transformation Bureau, Department of Information and Communications Technology

Mr. Alberto Salvador, Planning Officer, Policy Formulation and Development Division, Department of Information and Communications Technology

Ms. Gemma Baysic, Planning Officer V, ICT Planning and Standards Development Division, Department of Information and Communications Technology

Republic of Korea

Mr. Sangyirl Nam, Senior Research Fellow, Dept. of International & Cooperation Research, Korea Information Society Development Institute

Mr. Kim Byungwoo, Research Associate, Dept. of International & Cooperation Research, Korea Information Society Development Institute

Russian Federation

Mr. Arseny Plossky, Deputy Head of Laboratory, EMC Analysis Center, Radio Research and Development Institute

Mr. Zorikto Gomboin, Leading Specialist, EMC Analysis Centre, Radio Research and Development Institute

Mr. Andrey Stanislavov, Attaché, Permanent Mission of the Russian Federation to ESCAP

Solomon Islands

Mr. Alwyn Danitofea, Director Communication, Communication Department, Ministry of Communication and Aviation

Sri Lanka

Mr. Mahinda Herath, Chief Executive Officer, Corporate, ICT Agency of Sri Lanka

Tajikistan

Ms. Saodat Nazarova, Third Secretary, Economic Affairs, Embassy of Tajikistan to Malaysia

Mr. Bakhtiyor Nodirov, Technical Specialist, Technical Department, Communication service under the government of the Republic of Tajikistan

Thailand

Ms. Piyanuch Wuttisorn, Inspector General, Ministry of Digital Economy and Society

Ms. Kalaya Chinativorn, Executive Director, Foreign Affairs Division, Ministry of Digital Economy and Society

Ms. Ishariyaporn Smiprem, Director of Regional Cooperation Group, International Affairs Division, Office of the Permanent Secretary, Ministry of Digital Economy and Society

Mr. Jackrakrit Srisun, Foreign Relations Officer, International Affairs Division, Office of the Permanent Secretary, Ministry of Digital Economy and Society

Mr. Jittapat Bunnag, Assistant Vice President, Corporate Strategy Planning and Development, National Telecommunication Plc, Ministry of Digital Economy and Society

Mr. Thalerngsak Vanischakorn, Manager, Public Policy and Strategy Division 1, Corporate Strategic Planning Department 1, National Telecommunication Plc, Ministry of Digital Economy and Society

Ms. Areewan Boonglam, General Administrator, Corporate Strategic Planning Department 1, National Telecommunication Plc, Ministry of Digital Economy and Society

Mr. Natthapong Liamcharoen, Engineer, Corporate Strategic Planning Department 2, National Telecommunication Plc, Ministry of Digital Economy and Society

Mr. Kitti Sriboonyakorn, Computer Technical Officer, Senior Professional Level, Department of Telecommunication, Office of the Permanent Secretary, Ministry of Digital Economy and Society

Ms. Waleeporn Kumching, Plan and Policy Analyst, Office of the Permanent Secretary, Ministry of Digital Economy and Society

Mr. Sira Akavipat, Strategist/Engineer, Organization Strategy Planning, National Telecommunication Plc, Ministry of Digital Economy and Society

Ms. Saowannee Rerkanun, Computer Technical Officer, Digital Technology Infrastructure Division, Office of the National Digital Economy and Society Commission (ONDE) Ministry of Digital Economy and Society

Ms. Warisara Phetnil, Plan and Policy Analyst, Practitioner Level, Digital Economy and Society Development Driven Center

Ms. Jitsupa Tungkasiri, Foreign Relations Officer, Practitioner Level

Mr. Pranatthapong Kabkrathok, Plan and Policy Analyst, Practitioner Level, Department of Telecommunication, Office of the Permanent Secretary, Ministry of Digital Economy and Society

Timor-Leste

Mr. Gaspar Araujo, Director General, Directory General, Ministry of Transport and Communications, Timor-Leste

Tonga

Mr. Andrew Toimoana, Director for Information and Technology of the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications, Government of Tonga

Turkmenistan

Mr. Rovshen Garataev, Head, Center for Internet Technologies, Telecommunication Company of Turkmentelecom

Viet Nam

Mr. Hang Nguyen, Official, International Cooperation Department, Ministry of Information and Communications

Annex II

List of participants of the fifth session of the Asia-Pacific Information Superhighway Steering Committee, virtual meeting, 25 November 2022

Armenia

Mr. Hayk Aslanyan, Adviser to the Minister, Ministry of High-Tech Industry

Mr. Vahan Hovsepyan, Member of the Internet Governance Council of the Republic of Armenia, act as Vice-Chair of "Digital Technologies and Applications" and "Digital Data" Working Groups, Ministry of High-Tech Industry of the Republic of Armenia

Mr. Arshak Kerobyan, Head of Digitization Department, Ministry of High-Tech Industry of the Republic of Armenia

Mr. Arevhat Poghosyan, Head of Road Policy Division, Road Area Policy Department, Ministry of Territorial Administration and Infrastructure, Armenia

Mr. Harutyun Sedrakyan, Head of Division, Road Policy Department, Ministry of Territorial Administration and Infrastructure

Ms. Mariam Torosyan, Chief Specialist, Digitalization Department, Ministry of High-Tech Industry

Mr. Erik Hovsepyan, Chief Specialist of International Cooperation, International Cooperation Department, Ministry of High-Tech Industry of the Republic of Armenia

Ms. Sona Juharyan, Engineer, Transportation Department, Ministry of Territorial Administration and Infrastructure, Armenia

Ms. Nushik Petrosyan, Digitalization Department, Ministry of High-Tech Industry

Mr. Anahit Harutyunyan, Contract Management Coordinator/Road Safety Expert, Contract Management, Ministry of Territorial Administration and Infrastructure - Road Department Fund

Ms. Mane Fahradyan, International Relations Department, Ministry of High-Tech Industry

Mr. Movses Chapanyan, Digitalization Department, Ministry of High-Tech Industry

Bangladesh

Mr. Tarique M Barkatullah, Director, Bangladesh Computer Council

Mr. Syed Rashedul Hossen, Economic Counsellor &Alternate permanent, Representative to ESCAP, Embassy of the People's Republic of Bangladesh

Dr. Vanesa Rodrigues, Deputy Secretary, Director, Department of ICT, Information and Communication Technology Division

Md. Nobir Uddin, Senior System Analyst, Information and Communication Technology Division

Bhutan

Mr. Jigme Tenzing, Director, Department of Information Technology and Telecom, Ministry of Information and Communications

Ms. Thaye Choden, Senior ICT Officer, Department of Information Technology and Telecom DITT, Ministry of Information and Communications

Cambodia

H.E. Mr. Po Meas, Under Secretary of State, Ministry of Posts & Telecommunications

China

Mr. Yongwang Liu, Engineer, China Academy of Information Communications Technology, Ministry of Industry and Information Technology

Mr. Sichen Fan, Engineer, China Academy of Information Communications Technology, Ministry of Industry and Information Technology

Fiji

Mr. Ambrose Smith, Chief Statistician, Fiji Bureau of Statistics, Ministry of Economy

Georgia

Ms. Sophie Tvalavadze, Head of Division, Communications, Information and Modern Technologies Department, Ministry of Economy and Sustainable Development of Georgia

Ms. Gulnaz Bokuchava, Main Specialist, Department of Communications, Information and Modern Technologies, Ministry of Economy and Sustainable Development of Georgia

India

Mr. Abhishek Singh, President & CEO, National e-Governance Division (NeGD), Ministry of Electronics and IT

Mr. Bramhanand Jha, Senior Consultant- Programme Management, National e-Governance Division

Iran (Islamic Republic of)

Mr. Alireza Shalchizadeh, Deputy General Manager/commercial Affairs, International, Telecommunication Infrastructure Company of the Islamic Republic of Iran, Ministry of Information and Communications Technology

Mr. Somayeh Kazemy, Head of Market Research Office, Commercial Department, Telecommunication Infrastructure Company of Islamic Republic of Iran

Mr. Gaegheh Majidzadeh, Strategic Monitoring and Analysis Manager, Telecommunication Infrastructure Company of Islamic Republic of Iran, Ministry of Information and Communications Technology

Japan

Mr. Toru Terai, First Secretary and Alternate Permanent Representative of Japan to ESCAP, Embassy of Japan in Thailand

Kazakhstan

Mr. Altynbek Aitymbekov, Director of Department of International Cooperation, Ministry of Digital Development, Innovations and Aerospace Industry of the Republic of Kazakhstan

Mr. Nurbolat Alimbayev, Deputy Permanent Representative to ESCAP, Embassy of Kazakhstan in Thailand

Mr. Askar Tazhiyev, Expert on digital transformation

Lao People's Democratic Republic

Mr. Thavisak Manodham, Director General, e-Government Center, Ministry of Technology and Communications

Mr. Bounmy Thongpaseuth, Officer of Policy, planning and Cooperation Division, E-Government Center, Ministry of Technology and Communications

Maldives

H.E. Mr. Mohamed Shareef, Minister of State Technology, Ministry of Environment, Climate Change and Technology

Nepal

Mr. Surendra Lal Hada, Director, Infrastructure Division, Nepal Telecommunications Authority

Pakistan

Mr. Inam Ul Haque, Director Telecom, Telecom Wing, Ministry of IT and Telecommunications

Prof. Muhammad Akram Shaikh, Director General, Pakistan Scientific & Technological Information Center, Ministry of Science & Technology

Mr. Syed Waqas, Head ITU/UN, Ministry of Information Technology and Telecom, Pakistan

Philippines

Mr. Alvin Navarro, Assistant Secretary for Digital Capability and Transformation, Department of Information and Communications Technology

Mr. Ivan Harris Tanyag, Researcher, Research and Special Studies Division, National Defense College of the Philippines

Republic of Korea

Ms. Ji Hyun Eum, Director, Multilateral Cooperation Division, Ministry of Science and ICT

Ms. Soohyeon Kang, Deputy Director, Multilateral Cooperation Division, Ministry of Science and ICT

Mr. Sungeun Kim, Assistant Director, Multilateral Cooperation Division, Ministry of Science and ICT

Mr. Sang-yirl Nam, Senior Research Fellow, International Cooperation, Korea Information Society Development Institute, Korea Information Society Development Institute

Mr. Byungwoo Kim, Research Associate, Dept. of International & Cooperation Research, Korea Information Society Development Institute

Russian Federation

Mr. Zorikto Gomboin, Leading Specialist, EMC Analysis Center, Radio Research and Development Institute

Mr. Kirill Kablukov, Chief Expert, Development of Mass Media and International Cooperation, Ministry of Digital Development, Communication and Mass Media

Mr. Andrey Stanislavov, Attaché, Permanent mission of the Russian Federation to ESCAP

Samoa

Mr. Fualau Talatalaga Mata'u, Chief Executive Officer, Samoa Ministry of Communications and Information Technology

Ms. Suetena Loia, ACEO ICT, ICT Division, Ministry of Communications and Information Technology

Sri Lanka

Mr. Mahinda Herath, CEO, ICT Agency of Sri Lanka, Ministry of Technology

Major General Sudantha Ranasinghe, Director General, Disaster Management Centre, State Ministry of National Security and Disaster Management

Ms. Anoja Seneriratne, Director, Disaster Management Centre, State Ministry of Internal Security and Disaster Management

Tajikistan

Mr. Bakhtiyor Nodirov, Engineer Technician, Communication service under the government of the Republic of Tajikistan

Timor-Leste

Mr. Joao Freitas, President/CEO, Timor-Leste National Communication Authority

Ms. Lusitania Lopes, Legal Adviser, Legal, Gender and Project Planning, Government/Ministry of Transport and Communication

Mr. Fernando Carvalho Cruz, Chief of Policy and Cooperation, Policy and Cooperation Office, Government/Ministry of Transport and Communication

Mr. Gaspar De Araujo, Director General for Transport and Communication, Directorate General for Transport and Communication office

Thailand

Ministry of Digital Economy and Society

Ms. Kalaya Chinatiworn, Executive Director of International Affairs Division, International Affairs Division, Office of the Permanent Secretary, Ministry of Digital Economy and Society

Ms. Ishariyaporn Smiprem, Director of Regional Cooperation Group, International Affairs Division, Ministry of Digital Economy and Society

Ms. Saowanee Sothipunchai, Plan and Policy Analyst, Senior Professional Level

Mr. Narongdej Watcharapasorn, Computer Technical Officer, Interim Office of Personal Data Protection Committee, Ministry of Digital Economy and Society

Ms. Jitsupa Tungkasiri, Foreign Relations Officer, Practitioner Level, Office of the Permanent Secretary, Ministry of Digital Economy and Society

Mr. Jackrakrit Srisun, Foreign Relations Officer, International Affairs Division, Ministry of Digital Economy and Society

National Statistical Office

Ms. Hataichanok (Puckcharern) Chinauparwat, Director, Statistical Forecasting Division

Office of the National Digital Economy and Society Commission

Mr. Taran Osiri, Plan and Policy Analyst Professional Level, Strategy and Planning Division, Office of The National Digital Economy and Society Commission Ministry of Digital Economy and Society Commission, Ministry of Digital Economy and Society

Ms. Maneeporn Puripat, Plan and Policy Analyst Professional Level, Strategy and Planning Division, Office of The National Digital Economy and Society Commission Ministry of Digital Economy and Society Commission, Ministry of Digital Economy and Society

Mr. Pranatthapong Kabkrathok, Plan and Policy Analyst, Practitioner Level, Department of Telecommunication, Ministry of Digital Economy and Society

National Telecom Public Company Limited

Mr. Yutthana Rodseesain, Vice President, Network Management Department

Mr. Theerachai Udomkitpanya, Vice President Data Communication Operation Department

Mr. Paramate Boonsook, Senior Director, Internet Gateway and International Data Communication Sector, Network Management Department

Mr. Supachai Ruangsuthinarupap, Senior Director, International Network Sector, Network Management Department

Mr. Thalerngsak Vanischakorn, Manager, Public Policy and Strategy Division, Corporate Strategy Planning and Development Department

Mr. Peeradej Siriporn, Manager, National Telecom Public Company Limited

Mr. Kamphol Boongsri, Manager, Internet Gateway Operation Division, Data Center Operation Department

Mr. Trairat Charoensak, Manager, Data Center Operation Division, Data Center Operation Department

Ms. Areewan Boonglam, General Administrator, Corporate Strategic Planning Department, National Telecommunication Plc, Ministry of Digital Economy and Society

Mr. Sira Akavipat, Strategist/Engineer, Corporate Planning, National Telecom Public Company Limited

Mr. Somsak Yupakdee, Engineer, Data Communication Operation Department

Mr. Passakorn Senaliang, Engineer, Data Communication Operation

Mr. Jakkrit Jantarit, Engineer, National Telecom Public Company Limited

Acting Sub Lt. Jatupol Avakiat, Engineer, Broadband Product Department

Mr. Chalermkiat Sirachairat, Engineer, Data Center Operation Division, Data Center Operation Department

Tonga

Mr. Andrew Toimoana, Director for Information and Technology of the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications, Government of Tonga

Türkiye

Ms. Malike Polat Ortakaya, Information Technologies Expert, Information and Communiation Technologies Authority

Mr. Mehmet Özcan, Information Technologies Expert, Access and Tariffs Department, Information and Communiation Technologies Authority

Tuvalu

Mr. Vaiaoga Lameko, Coordinator - Tuvalu Readiness Project, Climate Change Department, Ministry of Finance

Mr. Alapati Taupo, Assistant Secretary, Headquarters, Ministry of Justice, Communication and Foreign Affairs

Mr. Tenanoia Simona, ICT Programme Manager, Programme Management Unit, Ministry of Justice, Communication and Foreign Affairs

United States of America

Mr. James Cerven, Regional Technology Officer, Science and Technology Advisors Office, Department of State

Uzbekistan

Mr. Olimjon Tuychiev, Director General of the National Office for Innovation Implementation and Technology Transfer under the Ministry of Innovative Development of the Republic of Uzbekistan, Innovation Implementation and Technology Transfer

Mr. Ismoil Rasulov, Head of Department, Department for Department for Coordination of International Cooperation, Uzbekspace Agency

Viet Nam

Ms. Quynh Anh Nguyen, Deputy director, ICT department, National institute of Information and Communications strategy, Ministry of Information and Communications

Mr. Binh Mai, Officer, IT Policy Department, Ministry of Information and Communications

Ms. Hang Nguyen, Official, International Cooperation Department, Ministry of Information and Communications

Mr. Tran Minh Tan, Researcher, National Institute of Information and Communications Strategy, Ministry of Information and Communications

Annex III

Matrix of actions

#	Action Title	Sustainable Development Goals (SDG) Goals and Targets	World Summit on the Information Society Action Lines	Outputs/Deliverables	Success Indicators	Working Group	ESCAP Subregion/Country	Asia-Pacific Information Superhighway Pillar	Activity Type	Relevant International/Regional/ National Initiatives	Deadline
1	Promote digital connectivity by integrating frontier technologies	SDG 4, Target 4.4 SDG 9, Target 9.1, 9.5, 9.c	C2, C4, C6	Strengthened policy for digital connectivity through mapping of frontier technologies related to digital connectivity Enhanced knowledge on frontier technologies through capacity building workshops Promoted Regional Hub/Research Centre on Frontier Technologies in North and Central Asia	At least 10 member States indicate the importance of digital connectivity, digital divide and digital economy in statements and reports At least 1 initiative for the Regional Hub/Research Centre on Frontier Technologies in North and Central Asia implemented	1 - Connectivity for all	Asia-Pacific countries	Connectivity for all	Research and capacity building	Dilijan FabLab,[15] Fab Academy,[16] International Telecommunications Union, GIGA Project[17], United Nations International Children's Emergency Fund	2026
2	Promote innovative and efficient use of universal service fund for Information and Communications Technology infrastructure development	SDG 9, Target 9.1, 9.a, 9.c SDG 17, Target 17.8	C1, C2, C3, C4, C6, C11	Increased research on the gaps and effectiveness of existing universal service fund policies and practices Organized capacity building workshops	At least 1 paper introducing USF system and best practices shared with member States	1 - Connectivity for all	Asia-Pacific countries	Connectivity for all	Research	Useful reference to International Telecommunications Union Development Study Groups 1 and 2 on Question 5/1 (Telecommunications/information and communications technologies for rural and remote areas).	

[15] http://fabacademy.org/2020/labs/dilijan/about_lab.html.

[16] https://fabacademy.org/.

[17] https://giga.global/.

#	Action Title	Sustainable Development Goals (SDG) Goals and Targets	World Summit on the Information Society Action Lines	Outputs/Deliverables	Success Indicators	Working Group	ESCAP Subregion/Country	Asia-Pacific Information Superhighway Pillar	Activity Type	Relevant International/Regional/ National Initiatives	Deadline
3	Strengthen e-resilience to disaster risks through SMART (Scientific Monitoring And Reliable Telecommunications) fibre-optic cable systems	SDG 9, Target 9.1, 9.a, 9.c	C1, C2, C3, C4, C7,C11	Increased policy awareness on e-resilience	Working Paper and research on SMART (Scientific Monitoring And Reliable Telecommunications) fibre-optic cable systems) fibre-optic cables for e-resilience	1 - Connectivity for all	Asia-Pacific countries	Connectivity for all	Research		
4	Promote policies for co-deployment of information and communications technology infrastructure with other infrastructures such as transport and energy for connectivity	SDG 7, 9, 12	C2, C3, C7, C13	Developed guidelines and manuals for promoting policies for co-deployment of information and communications technology with energy and transport infrastructures Developed portals on co-deployment of information and communications technology with energy and transport infrastructures Increased "dig-once" policies to deploy fibre-optic cables along national highways for intelligent transport systems Developed training programme on cross-sector infrastructure sharing for broadband connectivity	Guidelines for promoting co-deployment policies and actions shared with member States Portal on co-deployment of Information and Communications Technology with energy and transport Infrastructures launched Level of understanding on cross-sector infrastructure sharing and open access policy for enhanced connectivity improved	1 - Connectivity for all	Asia-Pacific countries	Connectivity for all		United Nations Asian and Pacific Training Centre for Information and Communication Technology for Development Useful reference to International Telecommunications Union Development Study Groups 1 and 2 on Question 4/1 (Economic policies and methods of determining the costs of services related to national telecommunication/ Information and Communications Technology networks, including next-generation networks).	

#	Action Title	Sustainable Development Goals (SDG) Goals and Targets	World Summit on the Information Society Action Lines	Outputs/Deliverables	Success Indicators	Working Group	ESCAP Subregion/Country	Asia-Pacific Information Superhighway Pillar	Activity Type	Relevant International/Regional/ National Initiatives	Deadline
5	Improve digital connectivity between rural products and urban markets through promotion of smart villages	SDG 1, 12, 13 SDG 11, Target 11.3	C3, C7	Increased policies for improving digital connectivity and platform between rural farms and urban markets[18] Collected good practices on digital connectivity between rural farms and urban markets Developed concept on e-agriculture[1]	Working papers and research papers to strengthen policies on digital connectivity and digital platform shared with member States The concept on e-agriculture shared with member States	1 - Connectivity for all	Asia-Pacific countries	Connectivity for all		United Nations, European Union for Digital, Eurasian Economic Commission, International Telecommunications Union, World Bank Useful reference to ITU-D Study Groups 1 and 2 on Question 5/1 (Telecommunications/information and communications technologies for rural and remote areas).	
6	Promote Internet quality and digital connectivity in the subregions through subregional Internet exchange points	SDG 9, Target 9.c	C2, C11	Endorsed memorandum of understanding on establishing Internet exchange points Developed guidelines for operating subregional Internet exchange points	At least, a guideline for building and operating subregional Internet exchange points	1 - Connectivity for all	Pacific (Pacific island developing countries), South-East Asia (Cambodia, People's Democratic Republic of Lao, Myanmar, Viet Nam and Thailand), and North and Central Asia	Connectivity for all	Intergovernmental	Pacific – Internet Society, Pacific Islands Telecommunications Association, Asia Pacific Network Information Centre, University of the South Pacific South-East Asia – National Information Society of the Republic of Korea, Internet Society, Digital Economy Promotion Agency of Thailand	

[18] Useful reference to ITU-D Study Groups 1 and 2 on Question 5/1 (Telecommunications/information and communications technologies for rural and remote areas). Available at https://www.itu.int/net4/ITU-D/CDS/sg/questions.asp?lg=1&sp=2014.

#	Action Title	Sustainable Development Goals (SDG) Goals and Targets	World Summit on the Information Society Action Lines	Outputs/Deliverables	Success Indicators	Working Group	ESCAP Subregion/Country	Asia-Pacific Information Superhighway Pillar	Activity Type	Relevant International/Regional/ National Initiatives	Deadline
										Réseaux Internet Providers Européens Network Coordination Center, International Telecommunications Union	
7	Strengthen e-resilience of the digital economy and society, with a focus on the infrastructure	SDG 9, Target 9.1, 9.a SDG 11, Target 11.5 SDG 17, Target 17.8	C1, C15	Developed guidelines with indicators to measure status of e-resilience in countries Improved policies and practices on societal e-resilience among member States through digitalization Established e-resilience monitoring group in Asia-Pacific countries[2]	Guidelines with indicators to measure status of e-resilience in countries developed and shared with member States An e-resilience monitoring group in Asia-Pacific countries established	1 - Connectivity for all	Asia-Pacific countries	Connectivity for all			
8	Promote national and regional intelligent data resource management centres as key infrastructure to maximize data use, provide smart services and expedite innovation	SDG 7, Target 7.1, 7.2, 7.3, 7.b SDG 9, Target 9.1 SDG 17	C2, C6, C10, C13	Collected good practices and developed guidelines for intelligent data resource management centres Piloted regional intelligent data resource management centre in North and Central Asia	Good practices working paper and guidelines shared with member States A pilot regional intelligent data resource management centre in North and Central Asia recognized	1 - Connectivity for all	Asia-Pacific countries	Connectivity for all	Intergovernmental and capacity building	Estonia and the Republic of Korea's intelligent data resource management centres	
9	Promote the development and implementation of fibre-optic corridors connecting subregions of the Asia-Pacific	SDG 8, 9, 11, 17	C2, C4, C6, C11	Developed concept and action plans for fibre-optic corridors	At least 2 concepts and action plans on fibre-optic corridors developed	1 - Connectivity for all	Asia-Pacific countries	Connectivity for all	Capacity building and technical assistance	Black Sea Economic Cooperation, International Telecommunications Union, European Union for Digital	2026

#	Action Title	Sustainable Development Goals (SDG) Goals and Targets	World Summit on the Information Society Action Lines	Outputs/Deliverables	Success Indicators	Working Group	ESCAP Subregion/Country	Asia-Pacific Information Superhighway Pillar	Activity Type	Relevant International/Regional/ National Initiatives	Deadline
10	Enhance awareness and policymaking capacity for Information and Communications Technology infrastructure resilience	SDG 9, Target 9.1, 9.a SDG 11, Target 11.5	C1, C15	Developed assessment guidelines to measure Information and Communications Technology infrastructure resilience Strengthened capacity to identify and assess risks affecting critical Information and Communications Technology infrastructure resilience and develop enabling policies	At least 5 member States use the assessment guidelines	2 - Digital technologies and applications	Asia-Pacific countries	Digital technologies and applications		International Telecommunications Union, Republic of Korea's Fibre-Optic Cables Renovation Project (second master plan)	
11	Promote awareness and capacity on digital transformation including the development of assessing framework	SDG 8, 9, Target 9.c 11, 17	C2, C4, C6, C7, C11	Developed digital transformation framework through organization of activities such as trainings, workshops, information sessions and hackathons Shared good policies and practices on digital transformation	At least 3 workshops on measurement tools for digital transformation organized Development of framework for understanding digital transformation Tools to assess the status of digital transformation developed	2 - Digital technologies and applications	Asia-Pacific countries	Digital technologies and applications	Capacity building and technical assistance	Asia Pacific Network Information Centre, *Réseaux Internet Providers Européens Network Coordination Center*, Internet Society, Internet Corporation For Assigned Names And Numbers, National Research and Education Networks	2026
12	Promote strategy for digital transformation and diverse digital solution packages for policymakers to address challenges in digital transformation	SDG4, Target 4.4, 4.a SDG5, Target 5.b SDG 9, Target 9.c	C1, C3, C4, C6	Studies developed on subregional/regional strategy for digital transformation Studies developed on subregional/subregional digital solution packages for effective digital transformation	Subregional/Regional studies on strategies for digital transformation drafted Research paper on digital solution packages shared with member States	2 - Digital technologies and applications	Asia-Pacific countries	Digital technologies and applications		Useful reference to International Telecommunications Union Development Study Groups 1 and 2 on Question 1/2 (Creating the smart society: Social and economic development through Information and Communications Technology applications).	

#	Action Title	Sustainable Development Goals (SDG) Goals and Targets	World Summit on the Information Society Action Lines	Outputs/Deliverables	Success Indicators	Working Group	ESCAP Subregion/Country	Asia-Pacific Information Superhighway Pillar	Activity Type	Relevant International/Regional/ National Initiatives	Deadline
13	Promote digital policies, strategies and roadmaps for inclusive and sustainable development	SDG 9, 17	C1, C6	Developed national and subregional studies on digital policies, strategies and roadmaps for inclusive and sustainable development (subject to country demand and availability of budget)	National and subregional studies on digital policies, strategies and roadmaps that integrate inclusive and sustainable development objectives developed	2 - Digital technologies and applications	Asia-Pacific countries	Digital technologies and applications	Policy advice	Technology and Innovation Section, Trade Investment and Innovation Division, ESCAP	
14	Strengthen regulatory policies for digital innovative businesses in the framework of public-private partnerships	SDG 8 SDG 9, Target 9.c	C4, C6	Developed guidelines to strengthen regulatory policies for digital innovative businesses (e.g., policy experimentation/ regulatory sandbox) Enhanced knowledge and capacity of professional groups, including private sector employees, in digital technologies and platforms of digitally-advanced countries, using the public-private partnerships framework	At least 5 member States recognize the guidelines to strengthen regulatory policies for digital innovative businesses At least 2 capacity training activities (workshops, meetings, studies, etc.) organized in support of public-private partnerships for digital innovative businesses in Asia-Pacific countries	2 - Digital technologies and applications	Bangladesh, Maldives and Kazakhstan	Digital technologies and applications	Research	United Nations Department of Economic and Social Affairs, United Nations Country Teams	
15	Promote digital and frontier technologies for sustainable development	SDG 4, Target 4.4 SDG 8 SDG 9, Target 9.1, 9.5, 9.c	C2, C3, C4, C6, C13	Developed national and regional strategy/action plan/roadmap for development of innovative digital and frontier technologies for sustainable development Completed mapping of frontier technologies that contribute to digital connectivity and transformation Developed training module on frontier technologies for sustainable development	National and regional strategy/action plan/roadmap for development of innovative digital and frontier technologies for sustainable development drafted Awareness and knowledge on frontier technologies for sustainable development increased	2 - Digital technologies and applications	Asia-Pacific countries	Digital technologies and applications	Research and capacity building	Asian and Pacific Training Centre for Information and Communication Technology for Development	

#	Action Title	Sustainable Development Goals (SDG) Goals and Targets	World Summit on the Information Society Action Lines	Outputs/Deliverables	Success Indicators	Working Group	ESCAP Subregion/Country	Asia-Pacific Information Superhighway Pillar	Activity Type	Relevant International/Regional/ National Initiatives	Deadline
16	Promote capacity for digital skills and digital financial services, particularly for women entrepreneurship and empowerment, and for vulnerable groups in countries with special needs[3]	SDG4, Target 4.4, 4.a SDG5, Target 5.b SDG9, Target 9.c	C2, C3, C7	Collected good practices on digital financial services and related platforms Developed training module on Information and Communications Technology for vulnerable groups with capacity building activities Engaged women entrepreneurs in digital financial services and digital skills building	Good practices on digital financial services and related platforms shared with member States Level of understanding on Information and Communications Technology-enabled policies and programmes for social inclusion of vulnerable groups improved At least 2 regional/subregional cooperation activities (workshop, meeting, studies, etc.) implemented that promote women entrepreneurship, digital financial inclusion and/or digital skills building	2 - Digital technologies and applications	Asia-Pacific countries with special needs	Digital technologies and applications	Research and capacity building	Asian and Pacific Training Centre for Information and Communication Technology for Development	
17	Strengthen Information and Communications Technology applications for disaster risk management and disaster recovery	SDG 11, Target 11.5, 11b	C3, C6, C7, C10	Strengthened capacity in the use of Information and Communications Technology applications for disaster risk management	At least 10 member States (or # of participants) that attend capacity building activities confirm through post-training surveys that his/her level of understanding of Information and Communications Technology applications for disaster risk management improved	2 - Digital technologies and applications	Asia-Pacific countries	Digital technologies and applications	Capacity building and knowledge sharing	Asian and Pacific Training Centre for Information and Communication Technology for Development	
18	Strengthen the role of digitalization in other sectors such as economy, trade, transport, environment, fishery and agriculture	SDG 4, Target 4.4 SDG 9, Target 9.1, 9.5, 9.c	C2, C4, C6	Completed survey and mapping of digital technologies for cross-sectoral integration and industries	Awareness and understanding on digital policies and technologies in other sectors and businesses enhanced	2 - Digital technologies and applications	Asia-Pacific countries	Digital technologies and applications	Intergovernmental		

#	Action Title	Sustainable Development Goals (SDG) Goals and Targets	World Summit on the Information Society Action Lines	Outputs/Deliverables	Success Indicators	Working Group	ESCAP Subregion/Country	Asia-Pacific Information Superhighway Pillar	Activity Type	Relevant International/Regional/ National Initiatives	Deadline
19	Promote policies and digital platforms for digitalization of small- and medium-sized enterprises (SMEs), particularly in countries with special needs	SDG 9, Target 9.c	C1, C6	Increased research on digital policies and platforms for SMEs in Asia-Pacific countries Strengthened capacity of policymakers to promote digital policies and platforms in cooperation with business sectors	Number of digital policies and platforms for SMEs in countries with special needs increased	2 - Digital technologies and applications		Digital technologies and applications		United Nations Conference on Trade and Development, Internet Society, Alliance for Affordable Internet	
20	Promote integrated management system of public data for e-government services, particularly in countries with special needs	SDG 9, Target 9.2 SDG 11, Target 11.6	C1, C3, C7	Developed guidelines for integrated management system of public data for e-government services	At least 1 guideline for integrated management system of public data for e-government services drafted, and at least 5 member States use the guideline	3 - Digital data	Asia-Pacific countries	Digital data		Republic of Korea's Digital Government Innovation Plan	
21	Promote the sharing of digital and statistical data among public sector organizations	SDG 9, Target 9.b	C3, C7	Developed guidelines for integrated use and management of national digital data, statistical data and geospatial data for analysis and decision-making Strengthened capacity on data integration and use	Regular publication on integrated digital data, statistical data and geospatial data for evidence-based decision-making increased	3 - Digital data	Asia-Pacific countries	Digital data		World Bank's Statistical Innovation and Capacity Building in Pacific Islands, Singapore National Statistics Office	
22	Enhance digital knowledge and skills on access to and use of digital content and services, particularly for women and other vulnerable groups	SGD 5 SDG 9, Target 9.c	C1, C6	Completed analysis with policy recommendations on gaps and limitations on Internet access and use, particularly by women and other vulnerable groups in selected subregion Strengthened capacity of women and other vulnerable groups in access to and use of digital content and services	Internet access and use rate by women and other vulnerable groups increased	3 - Digital data	Asia-Pacific countries	Digital data		International Telecommunications Union, Internet Society, University of the South Pacific, Asia Pacific Network Information Centre, *Réseaux Internet Providers Européens Network Coordination Center*, PITA, Alliance for Affordable Internet	

#	Action Title	Sustainable Development Goals (SDG) Goals and Targets	World Summit on the Information Society Action Lines	Outputs/Deliverables	Success Indicators	Working Group	ESCAP Subregion/Country	Asia-Pacific Information Superhighway Pillar	Activity Type	Relevant International/Regional/ National Initiatives	Deadline
23	Strengthen digital literacy and skills of government officials on improved use of digital data among ministries	SDG 4 SDG 17, Target 17.6, 17.8, 17.9	C4	Developed annual event book of capacity building programmes on digital transformation of all member States Enhanced digital literacy, skills and knowledge on better use of digital data within government Organized digital skills training programmes at the regional level, targeting government officials and staff, along with the set-up of minimum standards for professional development	Information sharing between member States on national capacity building programmes increased At least 10 member States that attend capacity building programmes indicate enhanced skills on better use of digital data within government At least 5 digital skills training programmes implemented	3 - Digital data	Asia-Pacific countries	Digital data			
24	Enhance capacity on data privacy and protection	SDG 9 SDG 16, Target 16.10	C1, C5, C6, C10	Strengthened capacity of member States with training modules on data privacy and protection, information security and privacy, and other relevant modules Increased regional/subregional cooperation programmes on cybersecurity[5]	Level of understanding among policymakers on data trust, privacy and protection improved At least 2 regional/subregional cooperation activities (workshops, meetings, studies, etc.) on cybersecurity implemented	3 - Digital data	Asia-Pacific countries	Digital data	Capacity building and technical assistance	Asian and Pacific Training Centre for Information and Communication Technology for Development	
25	Strengthen digital cooperation between the United Nations, government and business sectors	SDG 17, Target 17.17	C1, C5, C11, C15	Increased regional high-level forums for digital cooperation, digital transformation and digital inclusion Increased multi-stakeholder regional meeting on digital cooperation Established business advisory group on Information and Communications Technology under the Asia-Pacific Information Superhighway Steering Committee Strengthened regional cooperation and partnerships within the framework of the specialized structures of the United	ESCAP resolution created At least, 10 member States attend a multi-stakeholder meeting on digital connectivity cooperation Member States support the establishment of business advisory group on Information and Communications Technology Set-up of a business advisory group for North and Central Asia endorsed	3 - Digital data	Asia-Pacific countries	Digital data			

#	Action Title	Sustainable Development Goals (SDG) Goals and Targets	World Summit on the Information Society Action Lines	Outputs/Deliverables	Success Indicators	Working Group	ESCAP Subregion/Country	Asia-Pacific Information Superhighway Pillar	Activity Type	Relevant International/Regional/ National Initiatives	Deadline
				Nations, regional organizations and national agencies engaged in telecommunications, information and digitalization Piloted a business advisory group for North and Central Asia[6]							

Notes:

1. An online platform and mobile application for accessing agricultural programmes have been developed. Other initiatives include the harmonization of strategies in the Caucasus countries and the exchange of best practices between the Transcaucasian countries.

2. An already-developed guide can help determine the level of use of digital tools in the following critical infrastructure in countries: transport, chemicals, communications, defence and defence production, finance, emergency facilities, government facilities, information technology, trade, manufacturing, energy, food and agriculture, health, nuclear reactors, and waste; and programmes will be developed to promote digitalization in certain areas. This output can be delegated to a United Nations or regional organization, such as International Telecommunications Union.

3. Countries with special needs include least developed countries, landlocked developing countries and small island developing states.

4. Successful initiatives from Asia-Pacific countries, including from China and India, on innovative technologies in various industries that have reduced greenhouse gas emissions will be taken into account.

5. Cybersecurity initiatives can include the support for Computer Emergency Response Teams, development of cyber skills among different segments of society, and raising awareness of possible cyberthreats and how to deal with them.

6. The business advisory group will consider the involvement of industry experts from the United Nations and will organize trainings for public sector employees with business and management experience in selected countries.

Annex IV

Terms of reference of the Asia-Pacific Information Superhighway Steering Committee[19]

I. Membership criteria

1. The membership of the Asia-Pacific Information Superhighway Steering Committee will consist of governments of all interested member States of the United Nations Economic and Social Commission for Asia and the Pacific. Up to a third of the Steering Committee's members can be representatives from academia, policy think tanks and non-profit organizations nominated by their respective governments.

II. Organization

2. The Bureau will be elected by Steering Committee members for a term of three years. The Bureau will consist of one Chair and two Vice-Chairs of the Steering Committee, one Chair (or two Co-Chairs) and up to three Co-Vice Chairs of each Working Group, and the Secretariat. The term of the Bureau may be extended by two years to coincide with completion of implementation of the Plan of Action in 2026.

3. The Steering Committee will meet at least once a year and the Bureau will meet as often as necessary.

4. The Chair and Vice-Chairs of the Steering Committee will be elected by the members of the Steering Committee.

5. The Bureau will represent the Steering Committee at various international and regional venues as necessary and inform the members accordingly.

6. The Steering Committee and the Bureau will be supported in its functions by the Secretariat.

III. Objectives

7. The Steering Committee will monitor the implementation of the Asia-Pacific Information Superhighway, coordinate subregional and regional work, provide policy guidance and, if necessary, set up a technical advisory group.

IV. Working Groups

8. Any ESCAP member State may participate in any of the three Working Groups. However, it is recommended that member States join at least one Working Group,[20] supporting a specific pillar, while keeping themselves engaged with and informed of progress of other pillars.

[19] Source of Terms of Reference in 2020: https://www.unescap.org/sites/default/files/ESCAP_CICTSTI_2020_INF1.pdf.

[20] Any member State may be represented in all three Working Groups, if deemed necessary.

9. Working Groups will be established, with the approval of the Steering Committee, to support achievement of the objectives of the Steering Committee.

10. One Chair (or two Co-Chairs) and up to three Vice-Chairs of each Working Group will be elected by the Steering Committee for a term of three years to lead Working Groups. Member States and representatives from academia, policy think tanks and non-profit organizations nominated by their respective governments up to 30 per cent of the composition of each delegation will be a member of Working Groups for a term of three years.

11. Each Working Group will identify key actions of common interests to be implemented by the Working Group, guide and monitor the implementation of the Asia-Pacific Information Superhighway action plan 2022–2026, and report on its progress and achievements to the members of the Steering Committee.

12. The Chair (or two Co-Chairs) of each Working Group will lead cooperation between members on key actions of common interest and report back on the progress of cooperation to the Steering Committee. The Vice-Chairs will support the operation of the Working Group and act as Chair in case the Chair is unable to perform its duty.

V. Reporting process

13. Chairs of Working Groups will submit key activities, progress, and plans, to the Secretariat two months before the annual Asia-Pacific Information Superhighway Steering Committee meeting.

14. The Secretariat will prepare a consolidated draft report while reflecting the draft inputs from Working Group Chairs, circulate it to member States before the annual Asia-Pacific Information Superhighway Steering Committee, and submit the final draft to the Asia-Pacific Information Superhighway Steering Committee for its endorsement.

15. The Steering Committee will also review issues, recommendations, and necessary actions of the draft report.

16. At the end of the 5-years implementation period of the Asia-Pacific Information Superhighway action plan, the governance structure and terms of reference will be reviewed and assessed at the Steering Committee and based on its findings guide the development of the next phase of the Asia-Pacific Information Superhighway action plan.

17. The Chair of the Asia-Pacific Information Superhighway Steering Committee on behalf of the Committee will submit the adopted report to the Committee on Information and Communication Technology and Science, Technology, and Innovation of ESCAP for its endorsement.

VI. Secretariat

18. The Secretariat of the Steering Committee will be the ESCAP secretariat. The Secretariat will manage the continuing administrative affairs of the Committee, facilitate, and coordinate the Committee’s activities, prepare, and submit reports on activities and plans to the Steering Committee of the Asia-Pacific Information Superhighway.

Annex V

Key deliverables of the Master Plan for the Asia-Pacific Information Superhighway, 2019–2022

Internet Exchange Points

Pacific island developing countries requested the support of the ESCAP secretariat and partners through the Asia-Pacific Information Superhighway initiative to assess the technical feasibility of establishing a Pacific Internet exchange point for improving Internet quality (latency and speed) in 2018. In response, the secretariat in collaboration with regional partners conducted a feasibility study in 2019 and an operational modality study in 2020 to identify the options and requirements for establishing a Pacific Internet exchange point. Subsequently, the secretariat facilitated country consultations on the Pacific Internet exchange point in Fiji, New Zealand, and Samoa in 2020–2021 to establish the subregional Internet exchange point via an intercountry agreement.

In the effort to improve the efficiency of Internet traffic flow in Cambodia, People's Democratic Republic of Lao, Myanmar and Viet Nam, the secretariat and the National Information Society Agency of the Republic of Korea carried out feasibility studies and expert Working Group meetings to guide the establishment of a common Internet exchange point.[21]

Co-deployment of Information and Communications Technology, Transport and Energy Infrastructures

The ESCAP secretariat strengthened the capacity of policymakers of ESCAP member States in three pilot countries – Kazakhstan, Kyrgyzstan, and Mongolia – to develop sustainable and inclusive co-deployment policies and mechanisms for transboundary information and communications technology infrastructure connections with energy and transport infrastructures. It included capacity building, analytical research and sharing of knowledge products under the project on "Addressing the Transboundary Dimensions of the 2030 Agenda through Regional Economic Cooperation and Integration in Asia and the Pacific". The Regional Economic Cooperation and Integration project team of the ESCAP secretariat produced 10 main analytical reports[22] in 2020 on the co-deployment of Information and Communications Technology infrastructure with energy and road transport infrastructures in North and Central Asia. The ESCAP secretariat continues to update the thematic information website, https://drrgateway.net/, to support policymakers and other stakeholders with latest relevant information and events.

E-resilience Dashboard

The ESCAP secretariat offers several online visualization approaches to enhance the e-resilience of infrastructure. For example, it developed an e-resilience monitoring framework and an interactive online e-resilience

[21] ESCAP, "In-Depth Study on the Design and Implementation Plan of Internet Exchange Points in Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam", March 2021. Available at https://www.unescap.org/kp/2021/depth-study-design-and-implementation-plan-internet-exchange.

[22] Knowledge products developed by the Regional Economic Cooperation and Integration project team in 2020 are available at: https://www.unescap.org/kp?f%5B0%5D=kp_programme_of_work_facet%3A284.

dashboard with maps to illustrate the levels of e-resilience readiness. The ability to understand and measure e-resilience is a key component of successful disaster risk management and adaptation in the recovery period. The e-resilience dashboard combines quantitative, indicator-based assessments of e-resilience with relevant information and communications technology- and disaster-related indicators of performance into a single composite. The secretariat grouped information and communications technology indicators under four thematic cross-cutting areas to model the e-resilience framework, namely: (1) information and communications technology policy in different sectors; (2) information and communications technologies' role in setting up new systems and applications; (3) information and communications technologies' role in data management; and (4) information and communications technology infrastructure as a physical foundation for the three areas above.

Research and Policy Advisory Service

The ESCAP secretariat, in collaboration with regional partners, conducted analytical research on various information and communications technology-related issues under the framework of the Master Plan for the Asia-Pacific Information Superhighway, 2019–2022. The research papers produced by the secretariat in 2020 include: three country reports in English and Russian for Kazakhstan and Kyrgyzstan; two reports in English for Mongolia; subregional reports on the co-deployment of information and communications technology infrastructure with energy and transport infrastructures, and on disaster resilient infrastructure; and regional reports on financing infrastructure, and on linking rural transport systems to regional and international transport networks. The secretariat also produced a number of policy briefs on the socioeconomic aspects of information and communications technology and financial inclusion with analysis on who is being left behind. These studies are available at the ESCAP website.[23]

The ESCAP secretariat, in collaboration with its partners, especially the Asian Development Bank, carried out evidence-based research and published several reports on e-commerce policymaking and reform. Furthermore, workshops and meetings were organized since 2018 to train policymakers on e-commerce policy and discuss how governments could collaborate with the private sector in promoting e-commerce development.

[23] ESCAP, "Knowledge Products". Available at https://www.unescap.org/kp?f%5B0%5D=kp_programme_of_work_facet%3A284.

Capacity Building Programmes and Projects

The ESCAP secretariat and partners collaborated in conducting capacity training and workshops with the focus on strengthening the information and communications technology infrastructure, enhancing connectivity, and improving the efficiency of Internet network traffic management in the Asia-Pacific region in 2018,[24] 2019[25] and 2020.[26] In addition, the secretariat and partners conducted a subregional workshop on information and communications technology co-deployment along passive infrastructure in South Asia in June 2019.

Other capacity building activities from the secretariat include the support of member States in building national expertise and capacity in the areas of e-government, information security and privacy, disaster risk management, and women entrepreneurship. The contextualization and integration of these programmes in countries' capacity-building programmes resulted in an average of over 10,000 people trained by partner institutions annually, strengthening the capacity of government officials, students, and youth, as well as women entrepreneurs.[27]

The secretariat also conducted capacity building programmes for policymakers of member States. Their programmes were based on research analyses[28] of leveraging digital technologies and e-commerce for inclusive and sustainable development. While e-commerce development in the region has largely been market driven, policy plays a critical role in gearing e-commerce towards inclusive and sustainable development objectives.

[24] ESCAP, "Event: Subregional workshop on implementation of the Asia-Pacific Information Superhighway for achieving the Sustainable Development Goals in Pacific island countries", 19-23 November 2018. Available at https://www.unescap.org/events/subregional-workshop-implementation-asia-pacific-information-superhighway-achieving.

[25] ESCAP, "Event: Strengthening efficient Internet traffic management through a subregional Internet Exchange Point in Pacific Island Countries", 3-5 December 2019. Available at https://www.unescap.org/events/strengthening-efficient-internet-traffic-management-through-subregional-internet-exchange.

[26] ESCAP, "Event: Second Working Group on Pacific Internet Exchange Point and capacity training workshop on Internet exchange point's operational modalities (Virtual Meeting)", 5 August 2020. Available at https://www.unescap.org/events/second-working-group-pacific-internet-exchange-point-ixp-and-capacity-training-workshop-ixp-s.

[27] The list of the Asian and Pacific Training Centre for Information and Communication Technology for Development activities since 2018 is available at: https://e-learning.unapcict.org/. The list of the Asian and Pacific Training Centre for Information and Communication Technology for Development publications is available at: https://www.unapcict.org/resources/publications.

[28] The list of Trade, Investment and Innovation Division publications is available at: https://www.unescap.org/kp?f%5B0%5D=kp_programme_of_work_facet%3A178.

The secretariat also implemented extra-budgetary projects to enhance the capacity of government officials in various areas of digital connectivity in support of the implementation of the Asia-Pacific Information Superhighway. These projects include the Regional Economic Cooperation and Integration project (2018-2021); the project on "Enhancing Regional Broadband Connectivity through the Implementation of the Asia-Pacific Information Superhighway Initiative in Countries with Special Needs" (2019-2021); the project on "Frontier Technology Policy Experimentation and Regulatory Sandboxes in Asia and the Pacific" (2021 -2023); the project on "Enhancing Digital Connectivity and Transformation for Building Back Better Post-COVID-19" (2021–2023); and the project on "Promoting Inclusive Digital Development in Support of the Implementation of the Asia-Pacific Information Superhighway" (2021–2023).