Digital Economy Steering Group 2024 Report on the implementation of the APEC Internet and Digital Economy Roadmap

Purpose: Consideration
Submitted by: DESG

Concluding Senior Officials' Meeting
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DESG 2024 Report
to APEC Senior Officials' Meeting on the Implementation
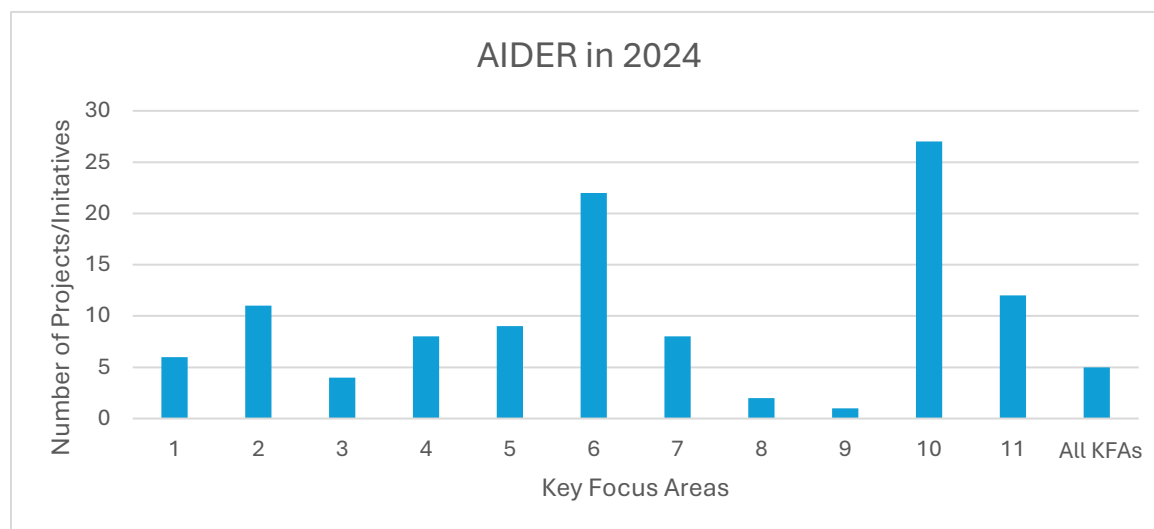# of the **APEC Internet and Digital Economy Roadmap (AIDER)**

November 2024

Background

In 2017, APEC Leaders pledged to work together to realise the potential of the internet and digital economy and welcomed the adoption of the APEC Internet and Digital Economy Roadmap (AIDER). It lays out 11 Key Focus Areas (KFA)[i] on which APEC economies are encouraged to concentrate their work. Implementation of the AIDER strongly supports the APEC Putrajaya Vision 2040, which identifies "Innovation and Digitalisation" as one of the three economic drivers to achieve the Vision. Expanding on the objectives of the Putrajaya Vision, the Aotearoa Plan of Action instructs member economies to accelerate APEC work and capacity building on the digital economy, including by prompt and effective implementation of APEC's Internet and Digital Economy Roadmap. In 2024, Ministers Responsible for Trade reaffirmed the call to accelerate the implementation of AIDER.

2   Each year, the Digital Economy Steering Group reports to Senior Officials on the progress of the AIDER. This report provides a snapshot of current projects, reports and other related initiatives implemented in 2024 across all APEC fora and the APEC Secretariat (including PSU). These inputs are consolidated in the attached table (see Annex) against each of the AIDER KFAs, organised according to the Priority Areas of the DESG Work Program for the Implementation of the AIDER.

Highlights

3   The internet and digital economy are crucial for APEC in driving innovation, economic growth, and social inclusion across the Asia-Pacific region. By prioritising digital transformation, APEC can enhance connectivity, reduce barriers to trade, and create new opportunities for businesses and individuals. Many challenges across the region can be supported by cooperation via AIDER's KFAs.

This is evident in the high number of APEC groups with relevant initiatives in 2024: **115 initiatives across 23 APEC fora**.

4   Bridging digital divides can mean opening opportunities in global markets, promoting financial inclusion, and improving access to education and healthcare. This year, we saw **a rise in initiatives on inclusiveness**, including projects to upskill and encourage greater digital participation for women, elderly people and underrepresented members of society, as such people living in rural and remote areas, people with disabilities and Indigenous People. The strong prioritisation of this KFA also reflects Peru's host year priorities of *trade and investment for inclusive and interconnected growth*, along with *innovation and digitalisation to promote transition to the formal and global economy*. Examples of initiatives include: a report on 'Challenges, Opportunities and Trends of Digitalisation in Education in the Asia-Pacific Region' (HRDWG); and workshops on digital financial education (FMP) and case studies on Indigenous digital inclusion (TELWG). In 2024, there were 27 initiatives with a focus on inclusivity (KFA 10).

5   In 2024, APEC saw a **small increase in e-commerce and digital trade initiatives** (KFA 11) with 12 initiatives. Workshops such as the one on building the capacity of digital trade negotiators emphasised equipping negotiators and policymakers with the skills needed for future digital trade negotiations (CTI) while the workshop on best practices, digital skills development and strategies to promote e-commerce in MSMEs focused on supporting the transition to digital trade (SMEWG). Reports such as those on supply chain connectivity with cloud-based manufacturing solutions (PPSTI) and digital trade facilitation (PSU) highlighted the critical role of digitisation and advanced analytics in overcoming supply chain vulnerabilities and streamlining trade processes. Additionally, there were efforts to share best trade policy practices and address competition and public policy issues in digital markets (DESG, CPLG) underscoring the importance of innovation, consumer protection, and collaboration among stakeholders. Overall, the trends indicate a strong push towards digital transformation, capacity building, and resilience in trade and supply chains.

6   We saw a higher number of initiatives with a **focus on sustainability and green technology**. While sustainability is not explicitly mentioned in the AIDER, the digital economy can support sustainable development by enabling more efficient use of resources and enabling green technologies. Projects on sustainability often linked with KFA 6 (Promoting innovation and adoption of enabling technologies and services) under the DESG AIDER Priority Area to 'facilitate the application of digital technologies to achieve the Sustainable Development Goals'. Examples of initiatives include using AI in atmospheric corrosion assessment (PPSTI); promoting green and low-carbon transition through digital technologies for inclusive and sustainable growth in Asia-Pacific (SCE); and promoting APEC cooperation for scaling up best practices on digital rural community models toward sustainable and inclusive rural transformation (PPFS). In 2024, there were nine initiatives with a focus on sustainability (within KFA 6).

7   The Key Focus Area with the **least number of initiatives was KFA 9** on the improvement of baseline digital economy measurements, with only one project (Measuring the Economic Relationship between Digitalisation and Digital Trade, DESG). This is not an anomaly and had the least number of projects in 2023. DESG dedicated an agenda item to this KFA during the SOM3

plenary in order to share insights about economies' individual actions on measuring and monitoring developments in the Internet and Digital economy. This will hopefully be a growing area of cooperation which can help enable economies to effectively plan, prioritise, and allocate resources. It could also facilitate the coordination of frameworks at the regional level and help measure the digital divide across the region; therefore, supporting other KFAs.

8   While there were **not many projects under KFA 8** (Facilitating the free flow of information and data for the development of the Internet and Digital Economy, while respecting applicable domestic laws and regulations), the Data Privacy Sub Group remains active under DESG as a place to share best practice and find ways for further cooperation on privacy and personal data protection, including on the APEC Cross Border Privacy Rules (CBPR). Supporting and ensuring online trust are key issues on the agendas of both the DESG and TELWG plenaries.

Recommendation

9   It is recommended that this report be endorsed by Senior Officials at the Concluding Senior Officials' Meeting (CSOM).

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[i] AIDER Key Focus Areas (KFAs)

1. Development of digital infrastructure
2. Promotion of Interoperability
3. Achievement of universal broadband access
4. Development of holistic government policy frameworks for the Internet and Digital Economy
5. Promoting coherence and cooperation of regulatory approaches affecting the Internet and Digital Economy
6. Promoting innovation and adoption of enabling technologies and services
7. Enhancing trust and security in the use of ICTs
8. Facilitating the free flow of information and data for the development of the Internet and Digital Economy, while respecting applicable domestic laws and regulations
9. Improvement of baseline Internet and Digital Economy measurements
10. Enhancing inclusiveness of Internet and Digital Economy
11. Facilitation of E-commerce and Advancing Cooperation on Digital Trade

Annex: DESG Work Program for the Implementation of the AIDER - 2024
Initiatives and Projects to Address AIDER Key Focus Areas

In view of the task that has been delegated to DESG, the 11 Key Focus Areas (KFAs) of the AIDER have been translated into "Priority Areas" that need to be addressed in order to achieve each KFA. The column entitled "Initiatives/Projects & Their Lead Fora to Accomplish Priority Areas" is for the relevant APEC fora and sub-fora identifies initiatives (or projects) *implemented* in 2024 to address the "Priority Areas" and when completed will achieve the attainment of the relevant KFA.

1. Development of digital infrastructure

Possible cross fora collaboration: SCE, TELWG

Priority Areas	Initiatives/Projects & Their Lead Fora to Accomplish Priority Areas
a) Identify digital, including non-telecoms, infrastructure gaps	**Improving the digitalization of international trade: the relevance of the use of an electronic Bill of Lading** (SCCP_203_2023A) Digitalization remained a key aspect of trade facilitation, with digitalizing the Bill of Lading significantly impacting customs procedures. This project conducted a workshop in August 2024 (SOM3) to discuss the benefits and challenges of implementing an electronic Bill of Lading in APEC economies, gathering input from customs, stakeholders, ports, public entities, and ocean carriers. *Also addresses KFA 4, 5, 8, 11.* **Workshop: Innovation in Information Systems in APEC Economies, for Traceability and Ensuring the Legal Origin of Timber** (EGILAT_01_2024S) The main topic to be addressed is the use of public information systems within APEC economies for implementing timber traceability mechanisms and accreditation of legal origin. The project focuses on a one-day workshop, aiming at presenting the principal information systems and computer platforms being implemented in Peru and other APEC economies. This project also aims at promoting legal trade of timber, both domestically and internationally. The workshop will provide a suitable environment for presentations, the exchange of experiences and sharing technologies. Workshop held in August 2024 (SOM3). *Also addresses KFA 8, 11.* **A path to paperless trade: Analysing the legal gaps and economic benefit of adopting or maintaining a legal framework that takes into account the UNCITRAL Model Law on Electronic Transferable Records** (CTI_02_2024S) Building on the findings of the Report from 2023, a workshop was held in August 2024 (SOM3). The project scoped and identified legal gaps between existing domestic regulations among APEC economies and the necessary legal foundation to adopt or maintain a framework considering the UNCITRAL

	MLETR. It also examined options or live use cases for APEC economies to meet the model law's high standards. *Also addresses KFA 8, 11*. **Promoting and Addressing Challenges of Cross-Sector Resource Integration in Rural Public Transportation.** (TPTWG_01_2024S) This project aims to foster comprehensive dialogue among stakeholders from the public and private sectors, so as to explore the issues and challenges encountered by rural public transportation and to share experiences of various economies in terms of implementing new and emerging technologies and cross-sector resource integration policies in this regard. A conference was held in 26-27 August 2024, from where Chinese Taipei drew recommendation that APEC policymakers should strengthen the development of public transportation in rural areas, emphasizing transportation as a livelihood and social equity issue. Also, best practices should be shared to promote the integration of technology and humanistic care to meet the needs of vulnerable groups. Additionally, collaboration among government, industry, academia, and communities should be encouraged to ensure balanced allocation of social resources and achieve comprehensive public transportation solutions. *Addresses KFAs 2 and 6*
b) Enable initiatives that would facilitate investment to advance digital infrastructure	
c) Explore the development of ICT infrastructure to facilitate the digitalization of economies	**Symposium on Sustainable Cities Development to Promote Inclusive and Sustainable Growth in Asia-Pacific** (SCE 02 2023S) This project aims to strengthen APEC cooperation on development of sustainable cities, including through utilization of digital technologies. A virtual Symposium on Sustainable Cities Development was held in September 2024 to discuss how to support inclusive and sustainable growth in Asia-Pacific, contributing to enhance shared knowledge on topics such as urban planning for inclusive and sustainable cities, shedding light on paths forward for urban development and management, and infrastructure upgrading, among others, to enhance cities' resilience and response to public health emergencies, while also promoting balanced, sustainable and inclusive economic growth. *Also addresses KFA 4, 10*. **Fostering Rural Development Empowered by Digital Technologies for Inclusive Growth** (DESG 01 2023S) The project aims to promote the exchanges and sharing among APEC economies to foster digital village development and narrow the urban-rural digital divide for inclusive growth, and propose policy recommendations for future development and cooperation. A workshop is scheduled to be held in December 2024. *Also addresses KFA 3a, 6b, 10b, and 10e*.

2. Promotion of Interoperability

Possible cross fora collaboration: EPWG, HWG, PPSTI, SCSC, TELWG, TPTWG

Priority Areas	Initiatives/Projects & Their Lead Fora to Accomplish Priority Areas
a) Discuss systems or solutions that would enable cross-sectoral digital collaborations (e.g. platform independent e-payment)	**FTAAP Work Program: Digital identity system for entities** (CTI_204_2023A) As the digital economy thrives, some APEC members have considered digital identity to advance trade and investment facilitation. Recent RTA/FTAs concluded by some APEC members have already covered the topic of digital identity for individual or corporate. Incorporating digital identity into the FTAAP discussions will enrich the FTAAP work program and strengthen APEC economic integration in the region. A two-day hybrid workshop was held in October 2024, followed by a report and study building capacity on digital identity systems. *Also addresses KFA 4, 5, 7.* **APEC Publication: Enhancing MSME Data Interoperability in the APEC Region (Issues Paper No. 14), 2024** (PSU) This issues paper highlights the importance of interoperable MSME data for informed policymaking, based on a survey of APEC economies. It examines MSME data sources, definitions, and their alignment with SMEWG priorities, providing the latest economy-level data, exploring data cooperation opportunities, and offering recommendations for achieving data interoperability in the APEC region. *Also addresses KFA 7, 10.*
b) Study on system or design interoperability for emerging tech (e.g. IoT, 5G)	**Enhancing Technology and Innovation Management (TIM) Practices in APEC Economies: a focus on public policies and Programs to promote academia-industry technology transfer** (PPSTI_202_2023A) The project aimed to understand mechanisms used by other economies to foster technology commercialization and address obstacles in technology transfer between public and private sectors. It proposed a comparative diagnosis across at least five APEC economies, including an action plan for case studies, an international workshop to discuss TIM cases, and an outcome research report with indicators and policy recommendations to enhance technology management and policymaking in the APEC region. Workshop held in August 2024 (SOM3). *Also addresses KFA 6.* **Workshop on Exploring Opportunities towards Public-Private Partnership (PPP) on Artificial Intelligence in APEC Economies** (DESG_02_2024S) In order to gain more insights of the collaboration between public and private sector, the workshop aimed to promote innovation and economic growth through AI and PPP. Workshop held in August 2024 (SOM3). *Also addresses KFA 4, 11.* **Intelligent Transport Systems** (TEL 03 2024S) Intelligent Transportation Systems (ITS) were developed to use roadside infrastructure for vehicle communication, helping to prevent traffic accidents and blockages by operating within specific radio spectrum bands and technical parameters. This workshop analysed the operation of ITS, their main applications, and technologies, aiming to propose a common understanding for

	future regulations within the APEC region, considering different regulatory experiences. Workshop held in September 2024. *Also addresses KFA 5, 6.* **Workshop to sharing experiences and best practices on how APEC economies' Qualifications Frameworks are coping with the disruptive impact of emerging AI technologies (HRDWG_204_2023A)** This project examined how APEC economies' Qualifications Frameworks (QF) can adapt to new technologies like AI, updating educational and training offers so professionals had the necessary qualifications to respond to changes. Workshop was held in August 2024 (SOM3). *Also addresses KFA 6.* **Implementing the Principles for the Interoperability of Electronic Invoicing Systems in the APEC Region** (CTI_06_2024S) Building on from the 2023 '*Principles for the Interoperability of Electronic Invoicing Systems in the APEC Region*' ("the Principles") this project is exploring a pathway towards the implementation of the Principles. This will be done through the development of a research report to build confidence in and understanding of e-invoicing policies, infrastructure and processes in the APEC region, and what is needed for greater interoperability such as identifying potential barriers, best practice examples and potential areas for further technical assistance and capacity building for more effective and efficient implementation of the Principles in APEC economies. The report will also explore the benefits of e-invoicing to business, particularly SMEs. *Also addresses KFA 1, 5, 6, 11.* TELWG hosted a series of roundtable discussions on the sidelines of plenary meetings bringing together APEC economies, academia and businesses: • **Industry Roundtable on 5G in APEC Economies** - May 2024 (SOM2) • **ICT Roundtable on Connectivity and Emerging Technologies** - September 2024 • **Regulatory Roundtable on Regulatory Sandboxes as Alternative and Innovative Policy and Regulatory Mechanisms in the Digital Age** - September 2024.

3. Achievement of universal broadband access

Possible cross fora collaboration: TELWG

Priority Areas	Initiatives/Projects & Their Lead Fora to Accomplish Priority Areas
a) Promote affordable, accessible and high-quality digital connectivity, including in rural areas	**Expanding Broadband Access through Low-Earth Orbit (LEO) Satellite Communication Systems: Toolkit and Workshop (**TELWG_101_2024A**)** Building on the 2023 project, this project provided member economies the opportunity to dive deeper into the legal and regulatory environments regarding LEO services. It built an understanding of the stakeholders and issues involved in the approval and implementation of LEO satellite

	services for expanding broadband access to regions and communities with low connectivity across the APEC region. Workshop was held in September on the sidelines of TEL69. *Also addresses KFA 10.* **Workshop on Meaningful and Universal Connectivity in APEC Economies** (TELWG_01_2024S) To address this challenge, the workshop promoted an open dialogue to identify and share effective practices and innovative interventions from a multistakeholder approach. Workshop was held in May 2024 (SOM2). *Also addresses KFA 10.* TELWG hosted a series of roundtable events, bringing together APEC economies, academia and businesses: • **ICT Roundtable on Connectivity and Emergency Technology** - May 2024 (SOM2) • **Roundtable on Emergency Telecommunications and Critical Infrastructure Resilience** - September 2024.

4. Development of holistic government policy frameworks for the Internet and Digital Economy

Possible cross fora collaboration: ATCWG, CPLG, CTI, EC, IEG, SCE, SCSC, SMEWG, TELWG

Priority Areas	Initiatives/Projects & Their Lead Fora to Accomplish Priority Areas
a) Digital initiatives or strategies that involve Whole-of-Government, the multi-stakeholders, and/or by government agencies that do not typically work with each other (e.g. Finance and eGov)	**Advancing Health Technology Assessment for Sustainable Universal Health Coverage (HWG_201_2023A)** To achieve universal health coverage, it is essential for governments to ensure all individuals have access to necessary services and care without facing financial difficulties. However, with the rising costs of new health technologies and medicines, striking a balance between treatment effectiveness and cost control has become a crucial challenge for governments. To address this challenge, Health Technology Assessment has been conducted to assist governments in making informed decisions and determining reimbursement processes for new medicines, innovative healthcare services, and policies as well as enhancing the overall efficiency and sustainability of healthcare systems. Workshop held in September 2024. *Also addresses KFA 6, 10.* **Adopting Agile Regulatory Governance to Foster Innovation** (EC_201_2023A) The rapid pace of technological change and global competition increased the need for innovative products and services across all sectors. Traditional regulatory frameworks struggled to keep up, creating barriers that hindered growth. In response, agile regulatory governance approaches were explored to foster innovation and promote economic growth. Regulators worked closely with industry stakeholders to design and implement adaptive regulatory frameworks. Outputs included a baseline review assessing policies and practices at the interface between regulatory policy and agile governance, and the creation of a toolkit to support agile regulation implementation. *Also addresses KFA 10.*

		Using Digital Technology to Augment the Incorporation of Multi-Stakeholder Insights and Engagement in Policy Design: A Public-Private Capacity Building Workshop and Toolkit (EC_106_2024A) Effective structural reform policymaking required understanding citizens' lived experiences, traditionally through government-organized consultations. Emerging digital tools powered by AI complemented these methods, offering deeper insights. Often used by the private sector and civil society, these tools helped augment policy development. A capacity-building workshop during SOM3 2024 demonstrated how emerging technology gathered real-lived experiences, complemented traditional consultations, and built trust in government institutions. The workshop aligned with the Enhanced APEC Agenda for Structural Reform (EAASR) goal of harnessing innovation and skills development. *Also addresses KFA 10*. **Economic aspects of spectrum management** (TEL 05 2024S) This project was dedicated to sharing of best practices on strategies of setting up or maintaining the spectrum management systems, in order to spark a further discussion and lead to a greater degree of cooperation on the issue. Workshop held in September 2024. *Also addresses KFA 5*.
b)	Sharing of initiatives that will aid society to better access technology and be an active player in the digital economy	
c)	Developing and sharing policies, information, best practices and recommendation on inclusive policy framework for the internet and digital economy for all include Micro, Small and Medium-sized Enterprises (MSMEs), women, children, people with disabilities and underrepresented member of society	
d)	Developing government policy framework or recommendation and sharing of information,	APEC Publication: **Reducing Food Loss and Waste by Strengthening Resilience of APEC Food System and Enhancing Digitalization and Innovative Technologies	APEC** (ACTWG) This report summarizes a two-day workshop on reducing food loss and waste (FLW) using digital solutions. Day One covered innovative technologies and shared experiences from APEC economies, while Day Two focused on strategies and APEC's

	policies, experiences and best practice on internet and digital economy in various areas such as agriculture, fisheries, manufacturing, competition, manpower, and so on, taking into account inclusivity to leave no one behind	role in capacity-building and policy collaboration. A pre-workshop survey addressed FLW post-COVID-19, digital technologies, food system resilience, and FLW targets in GHG reduction goals. APEC Publication: **Review of Traceability Systems Applied to the Value Chain of Fisheries and Aquaculture in APEC Economies | APEC** (OFWG) This analysis examines the role of fisheries traceability systems in APEC economies, highlighting their impact on sustainability and combating illegal fishing. It notes the digital divide in technological adoption and the need for enhanced traceability in both large and small-scale fisheries. The study proposes developing IT infrastructure, public awareness campaigns, and adopting the Global Data Synchronization Network (GDSN) to standardize data, emphasizing APEC's role in fostering collaboration and bridging technological gaps. *Also addresses KFA 1, 5, 8, 11.* **Under the main focus "Intersection of Digital Health Technologies and One Health", the DHSWG will host the Digital Health Policy Dialogue in Taipei from November 7 to 8, 2024.** The event will invite economies to share their governance strategies for cross-sectoral One Health integration, as well as their experiences in leveraging digital health technologies for policy implementation. For example, discussions may include the establishment of cross-sectoral health committees comprising representatives from human health, livestock, forestry, and fisheries sectors, and the use of digital monitoring networks to connect data and support decision-making and actions.
e)	Foster a free, open, fair, non-discriminatory, transparent and predictable trade and investment environment	
f)	As we emerge from the COVID-19 crisis, identify opportunities to lock in the progress made and accelerate the digitization of industries by: - Supporting businesses to go digital and reducing red tape for businesses to operate. - Strengthening collaboration with key partners (including	APEC Publication: **APEC Public-Private Dialogue on Challenges, Opportunities, and Digitally-enabled Recovery in the Post-COVID Era | APEC** (PPSTI) The report, an output of the APEC Project of the same name, summarizes 17 best cases discussed at two seminars. It provides five policy recommendations to foster closer public-private partnerships and enhance digital connectivity within APEC economies. The report aims to share these best cases and recommendations with a wider audience, offering policymakers useful references for digital economy policies and regional cooperation.

industry, academia, across APEC community) to accelerate progress. - Ensuring resilience of businesses, including against cyber risks, as well as for our broader digital economy	

5. Promoting coherence and cooperation of regulatory approaches affecting the Internet and Digital Economy

Possible cross fora collaboration: EC, CPLG, GOS, SCSC, TELWG

Priority Areas	Initiatives/Projects & Their Lead Fora to Accomplish Priority Areas
a) Promote discussions on interoperability of technology initiatives, including new and emerging ones, so as to support businesses' digitalization	**New and Emerging Digital Technologies to Promote a Secure and Trusted ICT Environment (**TEL 05 2023S**)** The project aimed to share experiences on how new digital technologies can improve network security and boost APEC member economies' confidence in using them. Technologies like 5G, AI, and DLT have been widely adopted in both the digital economy and security fields. Workshop was held in May 2024 (SOM2). **Conformity Assessment Framework of Telecommunications Equipment: Balancing Regulations and Trade Facilitation** (TEL 04 2024S) The project aimed to foster knowledge exchange and enhance project participants' understanding and proficiency in regulatory policy regarding the operating models and conformity assessment framework established by APEC member economies, with emphasis on best practices, policy-making decisions, and regulatory mechanisms. Workshop was held in September 2024. *Also addresses KFA 2, 8.* **Mutual Recognition Agreements for the Conformity Assessment of Telecommunications Equipment (TEL MRAs): Best Practices for Implementation** (TEL 02 2024S) This workshop aimed to enhance the acceptance of conformity assessment results by leveraging the efforts of the TEL ICT Conformity Assessment and Interoperability Steering Group (CISG) and to ensure the continued successful implementation of the APEC TEL MRA. Additionally, it will facilitate the exchange of information and best practices on the regulatory, technical, and administrative requirements of conformity assessment schemes among APEC Member Economies. Workshop was held in September 2024. *Also addresses KFA 2, 8.* **Emerging Technologies for Digitization/Digitalization and International Regulatory Cooperation** (SCSC_108_2024A) This project focused on building capacity through a workshop on using emerging

		technologies, specifically artificial intelligence, blockchain, and cloud computing, for digitization and digitalization processes and their applicability to Good Regulatory Practices (GRP), particularly international regulatory cooperation. The workshop connected regulators, government officials, and private sector stakeholders to highlight how government regulators could use technologies to convert paper documents, such as technical regulations, standards, or testing and conformity assessment-related documents, into a digital format and streamline processes for information access and sharing through document inventories. Workshop held in August 2024 (SOM3). *Also addresses KFA 2, 6.* TELWG hosted a **Regulatory Roundtable on Regulatory Innovation and Improvement in Telecommunications**, bringing together APEC economies, academia and businesses. May 2024 (SOM2).
b)	Identify and promote the use of globally relevant standards that could be adopted to assure businesses of continuity and reliability when conducting business	APEC Publication: **APEC Workshop on Facilitating Digital Transformation for SMEs in Logistics and Transport Industries in the Post COVID-19 Pandemic** (DESG) A summary from published following the workshop which aimed to build capacity for APEC member economies, particularly developing ones, by focusing on government policies to address challenges faced by SMEs in logistics and transport during digital transformation. These SMEs, heavily impacted by pandemic lockdowns and disruptions, are crucial for economic resilience and recovery post-pandemic. *Also addresses KFA 11.* **2024 APEC Forum on Regulatory Innovation for SMEs** (SME 02 2023A) The Forum held in Korea in June 2024 featured experts from APEC economies discussing how regulatory reform overcame barriers and promoted SME developments in digitalization, mobility, and clean energy.
c)	Promote international regulatory coherence for new business models	**Regulatory and Competition Challenges in Digital Markets** (CPLG 01 2023A) This project included a two-day workshop in Lima, Peru, where member economies, regulators, and competition authorities discussed digital markets. The main topics were: a) Should digital markets be regulated ex ante? b) Cooperation between sector regulators and competition authorities, including inter-agency and international cooperation for regulatory coherence; and c) Regulatory measures to prevent anti-competitive conduct in digital markets. Workshop was held in February 2024 (SOM1). *Also addresses KFA 11.* APEC Publication: **Services Domestic Regulation: Envisioning Next Generation Technical Standards Principles | APEC** (GOS) Qualification and licensing in services have been extensively analysed, but technical standards remain underexplored. As services digitize, standards can adapt more quickly to technological and market changes than formal regulations, becoming crucial for international markets. This study examines next-generation services standards, their development, and industry perspectives, with case studies on Building Information Modelling, sound recording, and artificial intelligence.
d)	Promote stronger cross-border cooperation and sharing of best practices	

efforts on online consumer protection	

6. Promoting innovation and adoption of enabling technologies and services

Possible cross fora collaboration: CPLG, HRDWG, HWG, OFWG, PPSTI, SCSC, SCE, SMEWG, TELWG, TPTWG

Priority Areas	Initiatives/Projects & Their Lead Fora to Accomplish Priority Areas
a) Share information, policies and initiatives to promote greater adoption of emerging technologies by businesses, individuals, governments and society to embrace digital transformation	**Distribution System Operator as a facilitator for energy transition (**EWG_207_2023A**)** Given factors like the massive adoption of distributed generation, electrification of heat, and the expected introduction of batteries and electric vehicles, the regulation of electricity distribution networks was rethought. This project organized a two-day seminar in Chile in October 2024, focusing on introducing the Distributed System Operator (DSO) in economies where it was not present. The seminar highlighted its benefits and disadvantages and identified barriers to its implementation. Experts presented and engaged in panel discussions over four 3-hour sessions. A report with recommendations and main takeaways from the workshop will be prepared. *Also addresses KFA 6.* **APEC Forum on Women and Youth Empowerment: Advancing Innovative Education and Enhancing Workforce Skills for a Sustainable and Inclusive Future** (HRDWG_201_2023A) This project aims to enhance workforce skills and promote innovative education for women and young entrepreneurs, helping them become key talents in the current and future job market. A three-day event will be held in November 13-15, 2024, featuring discussions on entrepreneurship education, sustainable business, women's empowerment, and interdisciplinary learning. The event includes a forum with key stakeholders and an innovative field trip on the final day to explore real-world applications. This project aligns with the APEC Human Resources Development Working Group and supports the La Serena Roadmap for Women and Inclusive Growth 2019-2030. *Addresses KFAs 6 and 10.* **Promoting the development of information and communications technology enabled smart hospitals. (**PPSTI 07 2023A**)** This project aims to propose smart hospitals which leverage information and communications technology (ICT) innovations to medical services to strengthen health systems within the APEC region. An in-person seminar was held on October 2-3, 2024, to enhance the understanding of smart healthcare models. ICT can assist medical care in several different aspects, including effectively handling large-scale repetitive work with a physiology monitoring system, and improving diagnostic precision through medical image aided AI analysis, and more. It mitigates the shortage of medical personnel in APEC economies and enables inclusive healthcare for all.

	Building Precision Fishery Model Cases in the APEC Region with Smart Technology. (PPSTI 08 2023A) This project aims to address the issue of marine fishery resources depletion as well as shortage of fishermen. The "blue granary" that uses smart technology for providential production has become the focus of pelagic fisheries. Technologies including unmanned aerial vehicle (UAV) deployment systems, AI and AR, etc. which can support intelligent functions like automatic cruise, route optimization and fish stock analysis are expected to be shared for reducing environmental damage while improving the efficiency of fish exploration. A two-day in-person seminar was held in Taipei in October 16-17, including a field visit to help participants better understand the latest research and application achievements in smart technology and practical application of smart technology in the fishery field
b) Hold discussions on policies to encourage and facilitate innovation through digital means and adoption of emerging technologies, including in MSMEs and non-traditionally digital businesses	**APEC Workshop on Enhancing SMEs' Participation in GVCs in the Manufacturing Sector through Digital Technology** (SMEWG_201_2023A) Enhancing the growth and internationalization of small and medium businesses (SMEs), especially in manufacturing, was critical. Global value chains (GVCs) drove internationalization, making them an effective solution for SMEs to expand. In the globalized era and due to the COVID-19 pandemic, digital technology became essential for SMEs to integrate into GVCs. A 2-day workshop in August 2024 was held on enhancing SMEs' participation in GVCs in the manufacturing sector through digital technology. The workshop aimed to share information and experiences and provide recommendations for SMEs and governments to facilitate SME participation in GVCs through digital technology. *Also addresses KFA 10, 11.*

Enabling MSMEs to Grow in the Global Economy by Operating Seamlessly Across the Omni-Channel Environment (DESG_101_2024A) To succeed, MSMEs needed to meet customers in their chosen channels, whether physical stores or digital marketplaces. Thus, MSMEs increasingly become "omni-channel," integrating operations across physical and digital realms. This project aimed to strengthen policymakers' ability to: 1) facilitate integrative policies for MSMEs in physical and digital channels; 2) develop balanced policies that did not favour one channel over another; and 3) collect purpose-driven data from physical or digital platforms to inform policy decisions. Workshop held in August 2024 and a report based on the workshop and survey findings will be published in 2025. *Also addresses KFA 11.*

Human Skills Development in the Cloud Environment (TEL 02 2022S). Following two workshops in 2023 on Smart Cloud for Government and Business, this project builds awareness and knowledge for APEC member economies on the benefits of cloud computing for both businesses and government, taking into consideration the economic, security, environmental, and human capital needs to leverage cloud technologies in support of their digital transformation goals. Workshop was held in May 2024 (SOM2). *Also addresses KFA 4.*

Accelerating and Promoting Digitalisation and Innovation among Micro, Small and Medium Enterprises (MSMEs) in APEC Economies (SME 04 2023A) This project contributed to the APEC Putrajaya Vision 2040 by accelerating digitalization and innovation among MSMEs through a customized competency development |

		seminar, an Innovation Challenge to assess readiness and audit digital projects, and the development of an MSME Digital Compass and Innovation Report with expert and participant engagement. Workshop held in July/August 2024. *Also addresses KFA 11.*
		2024 APEC Sports Policy Network Meetings. ([HRDWG_02_2024S](#)) This project is designed in line with the vision of the HRDWG, to commit to "Develop 21st-century knowledge and skills for all" and "Integrate human resources development into the global economy". The project is based on the perspective of economic recovery in the post-pandemic era, considering the goals of inclusion and sustainability among all segments of society as reflected in the "HRDWG Detroit Non-Binding Principles and Recommendations for Equality and Inclusion in Education, Training, and Employment. "Through the ASPN platform, the project held a meeting on February 27 in Taipei and invited member economies to share the best practices of sports innovation and talent cultivation.
c)	Identify new technological trends, e.g. AI, 5G, blockchain and their applications in relation to the AIDER	
d)	Share information and policies that enable traditional businesses to utilize digital platforms as part of their business resilience or continuity plan	
e)	Developing an ecosystem that supports MSMEs, including those in the creative industry, to take advantage of the digital economy, including through discussion on policies and initiatives	APEC Publication: **[APEC Creative Industries in The Post-COVID-19 Pandemic: General Situations and Policy Responses	APEC](#)** (DESG) The global creative industry contributes USD 2.2 trillion annually, accounting for 3% of the world's GDP. COVID-19 prompted innovations like online concerts, but disparities in digital infrastructure hindered some economies. This paper advocates for digital transformation to drive economic recovery in the creative industry, emphasizing market access, financing, and creative hubs. APEC Publication: **[Reframing an Unfolding Canvas: Policy Approaches to Facilitate APEC's Creative Economy amid Evolving Digital Technologies	APEC](#)** (PSU) The creative economy offers significant opportunities for economic progress, especially with evolving digital technologies like AI and extended realities. These technologies can inspire creativity, enhance production, and expand participation in creative experiences. To build a mature creative economy, APEC policymakers should leverage these technologies' strengths while addressing challenges like the digital divide and intellectual property issues, with approaches such as holistic education, clear IP frameworks, and supportive ecosystems.

f)	Global collaboration of MSMEs through digital platforms	
g)	Promote the use of digital technologies to prevent and control global pandemics	APEC Publication: **Conference Report - Managing Infectious Disease on Cross-Border Cruise Ships in the Post-COVID-19 Era: Application of Digital Technology** (HWG). This conference report is an output of an APEC project of the same name, held in August 2023. APEC Publication: **Data Standardization within APEC: Focusing on Health Data** (DESG) This report highlights the importance of data standardization in the digital economy, especially in healthcare data post-COVID-19. It examines policies and use cases from APEC economies and international standards organizations like ISO, HL7, and DICOM. The report offers policy insights on expanding data utilization through standardization within APEC.
h)	Promote policies that facilitate research and development as well as investment in innovative digital technologies	
i)	Exchange best practice approaches to regulatory cooperation which supports the Digital Economy, including regulatory sandboxes	
j)	Promote socioeconomic inclusion & expansion of economic opportunities through better digital connectivity and access to technology for all	
k)	Facilitate application of digital technologies to achieve SDG objectives and to improve digitalization efficiencies in trade	**Conversion of coal-fired power plants using Energy Storage System: experiences, challenges, and opportunities** (EWG_206_2023A) The project took targeted measures to enhance climate change mitigation and resilience. The energy transition to renewable energy sources and Energy Storage Systems (ESS) aligned with this priority. ESS provided security, stability, and flexibility to renewable energy systems, reducing greenhouse gas emissions and slowing climate change. The project included a two-day seminar in Santiago, Chile,

activities of APEC economies	addressing experiences, challenges, and opportunities related to converting coal-fired power plants in APEC economies through ESS. Seminar held in August 2024. *Also addresses KFA 4.*
	Workshop on AI in Atmospheric Corrosion Assessment to Address Climate Change Impact (PPSTI_201_2023A) This project hosted a two-day onsite workshop in Thailand in July 2024 to showcase the application of artificial intelligence (AI) on atmospheric corrosion data. Relevant topics, from corrosion monitoring techniques to AI modelling, were shared. Participants initiated AI approaches and had opportunities to exchange knowledge with experts.
	Workshop on Strengthening capacities to use spectral signatures of remote sensing applied in environment control processes for the identification of environmental impacts in the mining sector (DESG_204_2023A) This project aimed to strengthen capabilities and increased knowledge to improve environmental control using geo technologies, focusing on the spectral signatures of critical mining components to zone areas of negative environmental impact. Geo technologies with spectral signatures automated spatial analysis and identified environmental impacts related to mining. A workshop on using spectral signatures was held, benefiting governmental and private organizations in APEC economies, with local communities and NGOs as secondary beneficiaries. Workshop was held in August 2024 (SOM3).
	Promoting APEC cooperation for scaling up best practices on digital rural community (DRC) models toward sustainable and inclusive rural transformation (PPFS_201_2023A) The project focused on capacity building for APEC economies on digitalization in agriculture and rural economy while sharing knowledge on best practices and enabling ecosystem on DRC to translate technological innovations into accessible, adapted, and affordable digital services benefiting MSMEs, rural women and rural communities. Workshop held in August 2024.
	APEC Publication: **APEC Digital Innovation to Facilitate SMEs' Green Transformation Feature Report** (SCE, SMEWG) This report analyses three best practice cases from Singapore, Chinese Taipei, and Thailand. Each case starts with a business's green transition challenge or opportunity, then details the digital solutions implemented for optimizing green supply chain management. Key suggestions include promoting innovation through public-private partnerships, deepening collaboration between large and small enterprises, and providing SMEs with financial and technological assistance (SMEWG 104 2024)
	APEC Publication: **World-Class Circular Economy Industrial Parks: Best Practices, Challenges, Opportunities, Training and Collaboration** (PPSTI) The 2023 APEC Conference on "World-Class Circular Economy Industrial Parks," held virtually in Malaysia, focused on capacity building and sharing best practices. It highlighted Circular Economy (CE) principles, emphasizing waste reduction and nature regeneration, and

	explored the benefits and challenges of CEIPs. The report advocates for integrating CE principles using the Business Model Canvas and securing financial and political support for growth.
	APEC Digital Innovation to Implement SMEs' Low-Carbon Transformation Initiative - Developing Digital Solution of Low-Carbon Business Models (SME 05 2023A) This project held a workshop in June 2024 on innovative digital solutions for SMEs to achieve carbon reduction goals, build capacity, and promote low-carbon business models in the APEC region, enabling sustainable and inclusive growth while maintaining supply chain participation. *Also addresses KFA10*
	Promoting Digital Solar Resource Maps and Management Technologies in Advancing Renewables Growth in APEC (EWG 01 2023A) The project included a one-day workshop in July 2024 to foster digital innovation in renewable energy and strengthen cooperation in sustainable energy transition. Invited speakers shared their experiences to promote digital technology and reduce greenhouse gas emissions.
	Promoting Green and Low-Carbon Transition through Digital Technologies for Inclusive and Sustainable Growth in Asia-Pacific (SCE 01 2023S) The project proposed a green, low-carbon, and sustainable transition through digital technologies for APEC's post-pandemic recovery and environmental challenges. It enabled discussions on using emerging technologies like 5G, cloud computing, big data, and AI to enhance economies' capacity for sustainable growth and environmental protection. Workshop held in June 2024. *Also addresses KFA 2.*

7. Enhancing trust and security in the use of ICTs

Possible cross fora collaboration: TELWG

Priority Areas	Initiatives/Projects & Their Lead Fora to Accomplish Priority Areas
a) Enable a seamless digital market through regulatory cooperation and collective efforts to build trust in existing and emerging digital technologies	APEC Publication: **Policy Recommendations: Stakeholder Engagement to Promote Digitalization of Licensing and Permitting Measures in APEC Economies** (DESG) This report offers recommendations for governments to engage stakeholders in designing and promoting digital government services. It builds on insights from the APEC DESG workshop held in August 2023 in Seattle.
b) Cybersecurity considerations in non-traditionally digital	

	businesses – including those leveraging Internet platform	
c)	Exchange of updates and encourage adherence to cybersecurity norms	APEC Publication: **APEC Women Empowerment through Cybercrime-Free Workshop for Secure Online Trading in the 4th Industrial Revolution** (PPWE). Following the workshop hosted in 2023, this report explores cyber-crime awareness among women, such as financial fraud, phishing, e-commerce fraud, and love scams regularly target women. The report shares best practice experience on securing online trading and covered topics such as cybercrime and threats, cyber laws, online attack demonstration, preventive measures, incident and emotion handling. **Workshop on sharing cybersecurity practices in the digital economy** (TELWG 06 2023S) The main objective of this project was to host a workshop on cybersecurity risk prevention, digital industry development, and talent cultivation that relates to cybersecurity development in ICT and promotes understanding between APEC economies through policies and practices. Workshop was held in March 2024.
d)	Progress update on existing digital security guidance, including the Framework for Securing the Digital Economy	
e)	Share practices, regulations and standards on ICT security and promote stronger cooperation and collaboration on cybersecurity through exchange of best practices	**Standards and Conformity Assessment for Electric Road Passenger Vehicle Supply Equipment (EVSE) – Sharing Experience and Best Practice** (SCSC 10 2023S) A survey on electric vehicle charging equipment regulations and standards was conducted among APEC economies in Q4 2023. In addition, a webinar was held on April 24-25, 2024, to share the survey results and exchange views among cross-fora representatives throughout APEC region, including international standardizing organizations, regulatory authorities, and the private-sector bodies. Up to 145 participants from 14 economies participated. Key takeaways included the recognition of the importance of standards in informing regulation and creating harmonized regulatory systems and standards across economies to expand markets, better enable the cross-border movement of EVs across the APEC region and enable greater market access with less cumbersome compliance costs. Economies agreed on the importance of private sector and industry in driving development in this market, and the cross-fora collaboration is crucial for promoting EVs by using each group's unique strengths.
f)	Promote consumer protection in digital trade/e-commerce	**Best practices to prevent misleading pricing and discounts and similar practices at online shopping platforms and other types of online sales of goods and services** (CTI_202_2023T) The project aimed to enhance APEC economies' experiences in supervising online advertising practices and resolving unfair competition cases involving deceptive acts. The objective was to improve competition and consumer protection policies, leading to better commercial pricing and discount practices on online shopping platforms and

		facilitating a fair digital ecosystem for the digital economy. Workshop held in August 2024 (SOM3). *Also addresses KFA 11.*
		Guidebook on digital enforcement to improve fight trademark counterfeiting (**IPEG_201_2023A**) Confinement due to the COVID-19 pandemic led to an exponential increase in e-commerce, resulting in competitive prices but also a greater online supply of counterfeit goods, directly affecting IP right holders. Considering the challenges IP law enforcement faces in regulating e-commerce, a guidebook was developed based on research, data collection, and a workshop. It aimed to provide voluntary recommendations to APEC economies to combat trademark counterfeiting in the digital environment, including successful experiences to better understand its scope and benefits. Workshop was held in August 2024 (SOM3). *Also addresses KFA 11.*
		Public-Private Dialogue (PPD) on Policies and Good Practices related to Influencers Advertising in order to prevent Harm to Consumers and Improve Competition (CTI 208 2023A). Social media influencer advertising attracted the attention of policymakers and specialists in competition, advertising, and consumer protection. The PPD addressed challenges such as misleading information, lack of disclosure of sponsored content, and harmful advertising to children, proposing best practices for influencer advertising standards to benefit consumer protection and competition policies. Workshop was held in August 2024. *Also addresses KFA 11.*
g)	Establish environment for safe use of personal data for participation in the digital economy	APEC Publication: **Study on the Use of Telemedicine to Promote Health Equity in APEC Region after COVID-19** (HWG) This study analyses best practices in telemedicine to promote health equity and understand digital health governance. Key findings include the recognition of telemedicine's role during COVID-19, its use to reduce health disparities, and the prioritization of digital health technologies. Most economies have guidelines for health data use. Recommendations include promoting telehealth, continuing digital health discussions, and enhancing regional health data standards.

8. Facilitating the free flow of information and data for the development of the Internet and Digital Economy, while respecting applicable domestic laws and regulations

Possible cross fora collaboration: CTI

Priority Areas	Initiatives/Projects & Their Lead Fora to Accomplish Priority Areas
a) Encourage discussion towards wider implementation and adoption of APEC CBPR by interested economies and companies	

b)	Explore international collaborations and promote interoperability, including between APEC CBPR and other regional mechanisms	
c)	Raising business' awareness on the protection of personal data, and enhancing privacy protections	
d)	Securing privacy and promoting the flow and utilization of data	APEC Publication: **Workshop on Public-Private Collaboration in Supporting of Containing Measures During and Beyond Pandemic** (SCE, HWG). The September 2023 workshop brought together participants from APEC member economies to exchange insights and share successful experiences in innovative care and digital health apps that used in response to COVID-19 pandemic. The principles of health data collection, utilization, and data security were also explored, alongside case sharing on public-private collaboration in healthcare. APEC Publication: **Webinar on Standards of Product Circularity Data Exchange among APEC Economies | APEC** (SMEWG) Enhancing product circularity is crucial for transitioning to a circular economy (CE). Standardization and digitalization are key, but data inconsistencies across APEC economies hinder progress. This report, following a workshop, outlines challenges like SME engagement and data collection, and suggests measures such as policy encouragement, economic benefits, AI tools, and refining standards.

9. Improvement of baseline Internet and Digital Economy measurements

Possible cross fora collaboration: EC, PPSTI, TELWG

Priority Areas	Initiatives/Projects & Their Lead Fora to Accomplish Priority Areas
a) Further discussion on approaches to measure the impact and success of digital economy, including considerations for a measurement system that would be interoperable globally or regionally	**Measuring the Economic Relationship between Digitalisation and Digital Trade** (DESG_01_2024S) This study sought to contribute to the body of research by taking a novel approach to estimating both digitalisation and digital trade, and subsequently examining the relationship between the two to draw out material policy considerations that will be important to further help drive the growth of digital trade. Virtual workshop held in September. *Also addresses KFA 11.*

b) Promote the update of statistical systems in response to a rapidly evolving digital era and encourage comparability, considering the availability of metrics in all APEC economies	
c) Promote a comprehensive, high-quality data infrastructure and collection tools for measuring the use and impacts of digital technologies	
d) Harness the potential of big data for developing indicators to measure digital economy	
e) Set priorities for internationally comparable measurement through greater global cooperation	
f) Monitor the development of APEC region's digital economy through developing APEC-wide indicator	
g) Identify and share initiatives and best practices to improve measurement of the digital economy to develop a stronger evidence base for policy analysis and making	

10. Enhancing inclusiveness of Internet and Digital Economy

Possible cross fora collaboration: FMP, HRDWG, HWG, IPEG, PPWE, SCE, SMEWG, TELWG

Priority Areas	Initiatives/Projects & Their Lead Fora to Accomplish Priority Areas
a) Development of human resource and digital skills to support the growth of the digital economy, digital transformation and digital entrepreneurship	**APEC Data Master Class Series to Advance Gender Equality and Women's Economic Empowerment (**PPWE 01 2023S) APEC economies recognized the importance of data in supporting women's economic empowerment. The La Serena Roadmap for Women and Inclusive Growth highlighted key actions, including advancing women's economic empowerment through data collection and analysis. The 2020 APEC Economic Policy Report noted a lack of technical knowledge within government agencies on data production, collection, availability, and use. This project aimed to address this gap through targeted capacity building for government officials across APEC to better collect, analyse, and utilize data for policy development. It raised awareness and exchanged information to help participants explore their government's data holdings when developing an economy profile and action plan. Workshop 1 held in January, followed by Workshop 2 in February and ended with the Virtual roundtable in March 2024. **Digital Innovation for Women's Advancement (DIWA) in the Asia-Pacific Region** (TEL 01 2023A) DIWA focused on empowering policymakers in APEC economies to develop strategies that address these issues. It involves facilitating policy-level dialogues to create strategies enhancing women's capacities in ICT, promoting their pursuit of ICT careers, and their significant contribution to economic growth. Workshop held in Manila in September 2024. **Workshop on Digital Financial Education** (FMP 06 2024S) The project recognized the crucial role of financial innovations in financial inclusion and the need for digital financial education in APEC economies. The workshop held in May 2024 explored the digital financial landscape, emphasizing financial education policies, consumer protection regulations, behavioural finance applications, and shared experiences from the public and private sectors. **Best Practices for Inclusive Innovation, Digital Sustainability and Cross-Regional Talent Development** (HRD 05 2023A) This project promoted a market-driven and enabling inter-ministerial talent cultivation system. A physical workshop held in Chinese Taipei in August 2024 gathered education policymakers and stakeholders from APEC economies, showcasing best practices for the industry-academia cooperative model to expand inclusive and innovative talent training aligned with newly emerged industries and ongoing economic challenges. *Also addresses KFA 4, 6.*

APEC Publication: **Digital and Inclusive Talents Cultivation and Technology (AI)-Enabled Collaboration: TVET's Integrative Models of Skills and Trainings** (SCE, SMEWG)**.** The Project Summary Report serves as part of Chinese Taipei's project "Digital and Inclusive Talents Cultivation and Technology (AI)-Enabled Collaboration: TVET's Integrative Models of Skills and Trainings" (HRD 04 2022A) project outputs. The Report contains key takeaways from the recent "APEC Industry-Academia Collaboration Workshop on Inclusive Digital Talent Development and AI-enabled Sustainability" held from August 31 to September 1, 2023 in Chinese Taipei.

APEC Publication: **A Toolkit for Developing Digital Upskilling Training Program in New Media from the Gender Lens** (SCE, HRDWG). This Toolkit outlines creating a gender-sensitive training program for women's digital upskilling and fostering an inclusive digital talent pool. It covers identifying essential skills, designing a comprehensive training package, integrating gender considerations, and addressing challenges. The goal is to enhance APEC economies' understanding of gender mainstreaming in human resource development and training programs.

APEC Publication: **Fostering Digital Competency, Building Re-employment Capacity, and Enhancing Well-being for Younger Older Adults in the Digital Economy - Background Paper | APEC** (HRDWG) The research found from this project that most APEC economies are facing challenges with large ageing populations and that older adults face a digital divide in re-entering the job market. The reports findings found that women in the older adult population is slightly higher, but they have a lower employment rate than men. Furthermore that older adults have re-employment potential, but face a digital divide, despite strong demand for digital talents in most APEC economies.

APEC Publication: **Challenges, Opportunities and Trends of Digitalization in Education in the Asia-Pacific Region | APEC** (HRDWG) The report analyses digital education governance in APEC members, highlighting innovative platforms, government initiatives, and improved access to devices and connectivity. It reviews laws, strategies, and policies implemented to advance digital education, focusing on enabling conditions, financing, innovation, and partnerships. Policy recommendations are summarized as the "SEA+ 5C" approach: Structure, Enablers, Accountability, Commitment, Connection, Content, Coordination, and Capacity.

Women in STEM: Study and Exchange on Rewards, Incentives and Policies to Promote Innovation Development in the APEC Region (PPSTI 04 2023A) Building on previous APEC women in STEM outcomes, this project provided information on women in STEM, shared best practices of role models and financial program applications, and focused on equipping women with capital, training, and networking opportunities, as well as leveraging initiatives for business gains and innovation development. The event was held in May 2024. *Also addresses KFA 6.*

	Artificial Intelligence (AI)-Driven Green Jobs and Transitions in the Asia-Pacific Region (HRDWG_09_2024S) This project hosted an international forum on September 2-3, 2024 to share the practices of economies in advancing net-zero transitions, as well as engage in discussions on key human resource development issues such as the talent demand in the AI industry and the enhancement of women's digital skills. Through forward-looking discussions, the project seeks to promote cooperation and innovation in the fields of artificial intelligence and green transitions in the Asia-Pacific region, while exploring future directions for human resource development.
b) Facilitate and encourage innovations in the field of Digital Literacy to empower individuals and businesses to find, create and share information, while enjoying greater online wellbeing and e-safety	APEC Publication: **Set of Voluntary Recommendations on Using Digital Technologies to Provide Services for Older Adults in Poverty Condition in APEC Economies** (CTI, DESG) This report focuses on gathering difficulties and best practices for the digital inclusion of older adults in poverty among APEC economies. Recommendations included affordable digital devices and services, network approaches, older adults' participation in technology design, and strengthening digital literacy. **Smart Silver Innovation Project (Phase 2)** (TEL 07 2023S) This project aimed to help identify appropriate digital solutions to address the issues of an ageing society by ICT and to focus on the "Smart Silver Innovation" including ICT applications, emerging technologies and capacity building. This project hosted five virtual workshops and one face to face meeting during 2024. **The APEC Workshop on Best Practices Sharing on the Role of Standardisation in Promoting Sustainable Development of Safe Digital Products and Services for Children** (SCSC 09 2023S) Promoting children's development and protecting them from digital harm while enabling a supportive digital economy was urgent. This project leveraged standardization for technical support, quality improvement, and collaboration, strengthening dialogue among APEC economies and stakeholders. It aimed to help enterprises improve capabilities, balance economic interests with CSR, ensure safety, achieve sustainable digital economic development, and narrow the digital divide for children. Workshop will be held in November 2024. **APEC School Leadership Program (ASLP): School Leadership Development for Materialising Education Innovation in the APEC Region, Focusing on Interconnected and Inclusive Education Leadership** (HRD 01 2023A) The project urges school leaders' global preparedness, digital literacy, and capacity-building to narrow learners' educational opportunity gap within APEC economies. The program spanned from October to November, with the training workshop held in October 2024, and the Online Post-Training to happen from late October to early November. *Also addresses KFA 6.* **Policy Dialogue on Advancing Financial Inclusion for MSMEs: Understanding the Important Role of Digital Financial Literacy** (SMEWG_02_2024S) Policymakers, experts, academicians, and private companies in the digital financial services industry within APEC and beyond participated in the policy dialogue to share best

		practices and insights on digital financial literacy for MSMEs. This dialogue aimed to empower MSMEs with digital technology to access finance, promoting economic growth and job opportunities. Workshop held in April 2024 in Bali, Indonesia.
c)	Encourage the growth of women-owned MSMEs by developing tools on business management, soft-skill development, marketing strategies, also production and marketing guidelines through digital media	**Capacity Building for the Reduction of the Digital Gender Inequality: An approach to an inclusive digital future for women business owners and entrepreneurs** (PPWE_102_2024A) The fourth industrial revolution transformed the world, facilitating access to information and promoting collaboration, connections, and sustainable development. However, inequalities in access to digital technologies affected APEC economies' ability to promote structural change with a gender equality perspective. Reducing digital gender inequality could create new jobs for women through transformation and diversification, as outlined in APEC's Putrajaya Vision 2040 and The La Serena Roadmap. A two-day training program for women business owners and entrepreneurs was organized in Mexico City in October 2024, focusing on capacity building, digital skills, policy recommendations, and encouraging innovation. **Working Breakfast on Informal to International: Women-led SMEs Embracing Digital Technologies** (PPWE_03_2024S) This project aimed to address the critical role of digital transformation in empowering women-led SMEs across APEC economies. It fostered dialogue and promoted policy interventions to create an enabling environment for digital innovation and cross-border trade, featuring discussions on transitioning from the informal to the formal sector. The Breakfast was hosted in August 2024 (SOM3).
d)	Encourage greater participation in the digital economy by women, MSMEs, and underrepresented members of society, including people living in rural areas and people with disabilities	**Case Studies on Indigenous Digital Inclusion** (TELWG_202_2023A) This project seeks to learn about and share the initiatives and policies being developed and implemented to close the Indigenous digital divide across APEC economies. Sustained benefits are likely to be achieved if APEC economies are able to adapt and implement project recommendations domestically, and to support this, the project will include a review of implementation. Workshop held in September 2024. **Survey and Workshop on Interconnecting Family Farmers with Consumers through Innovative and Inclusive digital platforms** (ATCWG_201_2023A) A workshop was held in August 2024 (SOM3) to share tools and platforms promoting digital trade for small farmers, aiming to generate knowledge and encourage APEC economies to develop ICT adoption policies and programs. Policy and decision makers, researchers, and experts participated. A report summarizing the survey and workshop results was prepared. **Study and Workshop to Generate Digital Tools for the Transition to Formal Economy of Tourism Businesses in the Asia-Pacific Region** (TWG 02 2023A) This project will develop a study that includes collects information from a sample of voluntary businesses in the tourism sector in APEC economies; a literature and documentary review on public policies and the main digital tools available that would support the formalization of businesses in the tourism sector; the development of a workshop for the discussion and debate of new tools identified, and

the preparation of a summary report based on the results of the study and the workshop. Workshop held in August 2024 (SOM3).

Increasing Access to the Benefits of Trade for Indigenous Businesses and Entrepreneurs (CTI 06 2023S) delivered a workshop in August 2024 (SOM3) exploring explore examples of public policies, Indigenous-led programmes, and business practices that increase access to trade benefits for Indigenous businesses and entrepreneurs. The project identified that some key challenges observed for Indigenous businesses in engaging in international trade include access to networks, information, finance, infrastructure and internet connectivity; digital skills; and intellectual property, traditional knowledge and cultural rights protection.

APEC Publication: **Workshop Summary Report – APEC Workshop on Promoting Digital Transformation in Agriculture** (DESG) The "APEC Workshop on Promoting Digital Transformation in Agriculture" aimed to build capacity for APEC economies, especially developing ones, by sharing information and practices to promote sustainable and inclusive digital agriculture. Digital agriculture offers both opportunities and challenges for smallholder farmers. Recommendations include promoting R&D, establishing agri-tech centres, engaging young labourers, and encouraging precision farming. *Also addresses KFA 4.*

APEC Publication: **APEC Workshop on Promoting Women Economic Empowerment through Enhancing Opportunities for Women in Remote Areas across Agri-food Chains | APEC** (PPWE) The "APEC Workshop on Promoting Women Economic Empowerment" aims to build capacity for APEC economies by sharing best practices in empowering women in agri-food chains, focusing on resource access and e-commerce. It aligns with the La Serena Roadmap to increase women's business competencies and participation in the digital economy. The workshop also promotes networking, mentoring, and digital skills-building to enhance women's market participation. *Also addresses KFA 4.*

Promote Gender Equality and Inclusion in Digital Health Technology for Caregivers (PPWE 01 2023) This project conducted interviews to understand companies' development of digital health technologies and caregivers' needs. Based on the results, a seminar and field trip were held to discuss promoting gender equality and inclusion in digital health technologies, ensuring diverse female caregivers benefit from the sector's digital transformation. Event held in September 2024.

Fostering Rural Development Empowered by Digital Technologies for Inclusive Growth (DESG 01 2023S) Breaking down the limitations of time and space, digital technologies such as the Internet have proven effective in addressing geographical barriers in rural and remote areas, helping people in such areas increase their income, improve quality of life, and narrow the urban-rural digital divide. However, economic and social development in rural and remote areas is still restricted by multiple factors, including low broadband coverage,

	insufficient adoption of digital technologies, and insufficient digital literacy and skills of people. Currently, the urban-rural digital divide exists in many APEC economies and there is an urgent need for effective countermeasures and inclusive development approaches. The development of digital village refers to an endogenous agricultural and rural modernization process brought by the application of information technology in the economic and social development of networked agriculture and rural areas, as well as the improvement of farmers' digital skills.
e) Better inclusion of disadvantaged groups to leverage the Internet and Digital Economy to improve their living standards and unleash their potential through effective use of ICTs.	**Study and Workshop to Understand the Role of Digital Connectivity in the Formalisation Process of Informal Businesses in the Asia-Pacific Region** (SME 05 2022) The project aimed to understand and validate the role of digital connectivity in facilitating the formalization of informal businesses. It impacted businesses, governments, and academia by sharing strategies and models for successful formalization in a digitally connected environment. The study contributed to reducing policy failures in transitioning informal businesses to formalization by better understanding new management variables in APEC economies. It aimed to improve capacity building to reduce economic disparities among APEC member economies with large informal sectors. Workshop held in March 2024, alongside launch of study report. **Human Resources Development Expert Dialogue: Inclusion and Empowerment of People with Disabilities using Digital Strategies** (HRDWG_05_2024S) The project aimed to exchange policies and experiences for integrating individuals with disabilities into the labour market using digital strategies. Complementing the objectives of the Friends of the Chair (FotC) on Promoting Disability Policies, it served as the group's inaugural event to enhance coordination and provide expertise to APEC economies. During the Expert Dialogue in May 2024 (SOM2), experts from academia, international organizations, and government addressed challenges facing people with disabilities and explored how the digital ecosystem, enhanced by AI, could facilitate their labour market integration.

11. Facilitation of E-commerce and Advancing Cooperation on Digital Trade

Possible cross fora collaboration: ATCWG, CTI, GOS, MAG, SMEWG, SCSC

Priority Areas	Initiatives/Projects & Their Lead Fora to Accomplish Priority Areas
a) Promote transparency in e-commerce regulations, including those that apply to cross-border business transactions	**Survey on E-Commerce Regulations in APEC.** Updated annually, this survey calls on APEC economies to voluntarily submit your domestic approaches, measures, and polices that are related to E-Commerce. The collated results are published in the APEC Trade Repository (survey document).

b) Strengthen cooperation and share experiences on promoting e-commerce/digital trade and their related services in the region	**Workshop on Building the Capacity of Digital Trade/e-Commerce Agreement Negotiators** (CTI 11 2023S) To continue capacity-building efforts to grow digital trade in the APEC region, this project held an in-person workshop that brought together digital trade negotiators. The workshop focused on better equipping negotiators for future digital trade rule negotiations and on fully realizing the economic benefits of digital trade. Training held in October 2024. **Sharing best trade policy practices to enhance synergies between trade and innovation** (CTI 03 2023T) This project organized a workshop in the APEC region to share trade policy practices that promote synergies between trade and innovation, discuss their impacts, benefits, and challenges, and distribute the results to various stakeholders, including women and MSMEs. A virtual workshop was held in February 2024. *Also addresses KFA 6, 10.* APEC Publication: **Helping Businesses Build and Maintain Open, Secure and Resilient Supply Chains** (PSU) This report presents an analysis of vulnerabilities in global supply chains, explores the impacts of recent disruptions, and outlines strategies for enhancing resilience. Case studies highlight digitization and advanced analytics in enhancing supply chain resilience. APEC Publication: **Capacity Building on Supply Chain Connectivity with Cloud-based Manufacturing Solutions - Final Report** (PPSTI) The report presents survey and forum results on supply chain connectivity, focusing on cloud-based manufacturing solutions. It highlights challenges faced by industries during the pandemic and the use of ICT in production lines, offering insights for strategic decision-making. The forum and workshop facilitated capacity building by sharing best practices and policy recommendations, emphasizing the importance of digital transformation and innovation. APEC Publication: **Digitalising Trade: The Role of Paperless Platforms	APEC** (PSU) Despite ongoing efforts by economies, the trade process remains largely manual and time-consuming, imposing significant costs on businesses and consumers. Digital trade facilitation is one potential solution to tackle these challenges. This Policy Brief examines the current state of digital trade facilitation with a focus on the role of digital trade platforms. It identifies the challenges hindering the wider adoption of such systems and provides recommendations to overcome key barriers. APEC Publication: **Policies and Tools for Improving Digital Economy and Competition in Digital Markets: Current Issues	APEC** (DESG, CPLG) The Report reviews competition and public policy issues, focusing on consumer protection in digital markets, online safety, and collaboration between authorities on data risks.

		Workshop on Implementing the APEC Pathfinder on Building Blocks for Facilitating Digital Trade (CTI 09 2023S) Digital trade remained a key aspect of APEC's efforts to promote innovative, inclusive, and sustainable growth. This workshop allowed economies to deepen their work on the APEC Pathfinder on Building Blocks for Facilitating Digital Trade, examining policies on cross-border data flows, data localization, intellectual property protection, and consumer protection. The workshop was held in February 2024 (SOM1) and the Summary Report can be found here.
		Digital Trade Policy Dialogue 2024 (CTI 03 2024S) Economies pursued digital transformation to foster innovation and competitiveness, with digital trade/e-commerce requiring conducive regulatory environments. Building on CTI's history of policy dialogues, the Policy Dialogue held in August 2024 continued discussions on digital trade/e-commerce, focusing on workforce digital skills, digital literacy, and inclusion, and gathering policymakers and industry representatives to share experiences and recommendations.
c)	Increase the growth and participation of MSMEs to the region by promoting cross-border e-commerce	**E-commerce Status Analysis to Identify Best Practices, Digital Skills Development and Strategies that Promote E-Commerce in MSMEs in APEC Economies** (SME 10 2022A). E-commerce has not benefited all businesses in developing economies to the same extent; with most MSMEs struggling to engage in digital transformation and adopting digital technologies to facilitate their processes in Digital Trade. This project proposes to study on the state of e-commerce in APEC economies, identify best practices and aim to develop digital skills and strategies to promote e-commerce in MSMEs. The workshop was held in February 2024. APEC Publication: **E-commerce Status Analysis to Identify Best Practices, Digital Skills Development and Strategies that Promote E-Commerce in MSMEs in APEC Economies** (SMEWG) Following from the workshop, the study on e-commerce adoption in SMEs across seven economies found varying levels of adoption, with Hong Kong, China, and Chinese Taipei being the most advanced, and Peru and Mexico the least. E-commerce adoption has increased revenue and diversified revenue streams for SMEs, but there's room for improvement in digital management systems. Key areas for action include increasing internet access, promoting e-commerce adoption, and improving digital maturity levels. **2024 APEC SME Digital Finance and FinTech Innovation Forum** (SMEWG 204 2023A). By sharing successful cases of digital financial and fintech technology adoption and fostering collaboration within the APEC region in a one-day forum in November 2024, Korea, the project explores to improve the business environment for SMEs and enhance their vitality, while they navigate through Digital Transformation.
d)	To implement APEC Cross-border e-commerce facilitation Framework	

e) Promote transparency through exchanges of information, initiatives, and best practices that facilitates the development of e-Commerce regulations	
f) Develop an ecosystem that enables MSMEs, including those in the creative industry, to take advantage of e-commerce and the digital economy	

All Key Focus Areas

Priority Areas	Initiatives/Projects & Their Lead Fora to Accomplish Priority Areas

	Digital Week (counted as three events - SOM1, SOM2, SOM3)
	Topics included: Trade digitalization and paperless trade; digital divide and digital skills development; cross-border digital and logistics services for e-commerce; MSMEs digital transformation; artificial intelligence and trade; online consumer protection; digital safety and security and the responsible use of AI.
	
	APEC Publication: **Communicating the APEC Putrajaya Vision 2040: Perception Survey 2023**. In 2023, the APEC Secretariat conducted an online, multilingual survey across APEC member economies to gauge public opinion three years after the pandemic and the establishment of the APEC Putrajaya Vision 2040 (APV2040). This report captures the views of APEC's stakeholders—the region's citizens—across wide demographics of more than 7,000 respondents covering 18 APEC member economies. Key Findings on digital include:
	  - Digital transformation is seen as a driver of growth, improvement and innovation across functions and sectors.
	  - Only a minority view digital transformation negatively, citing concerns around security, false information, and manipulation, as well as job loss.
	  - The public expects intergovernmental organizations to address the digital divide, alongside the basics, such as cultivating the use of digital technology in trade and investments
	
	APEC Publication: **Progress Evaluation and Future Direction: An Analysis of the Cebu Action Plan** (PSU) The Cebu Action Plan (CAP) aims to enhance growth and resilience through financial inclusion, trade facilitation, fiscal reforms, and infrastructure investment. The report notes the COVID-19 pandemic highlighted the importance of digital integration across the region to facilitate broader access to financial services and improve financial security in the long run, as well as the need for preparedness for major disruptions including climate change.