AFACT

AFACT

YearBook 2024

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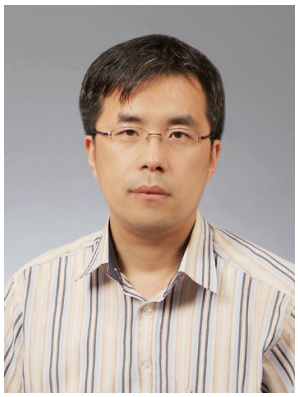
AFACT Chairman: Mr. Yeongcheol Lim



As the 2024 AFACT Chair, I am very proud to present this year's annual report. Since its establishment in 1990, AFACT has undergone many changes and developments. In particular, with the rapid development of the digital environment, international trade and standardization have become increasingly important, and AFACT has been following these changes.

One of AFACT's main roles is to enhance the efficiency and fairness of trade through cooperation among member countries. In particular, today, we are seeing the emergence of cutting-edge technologies such as blockchain and AI, as well as policy issues such as the Digital Product Passport and the UN Transparancy Protocol. These new technologies and international policy requirements require innovation in trade, administration, and logistics. AI technology will increase the accuracy of data processing and analysis, and support complex decisions quickly, enabling better services. I believe that blockchain technology and the Digital Product Passport and the UN Transparancy Protocol based on it can contribute to making trade processes more efficient and transparent.

In addition, following Free Trade Agreements (FTAs), Digital Partnership Agreements have been increasing recently. This Digital Partnership Agreement includes provisions for paperless trade, digital identity, and electronic authentication. In a situation where mutual recognition of trade and digital services between countries is necessary, I believe that AFACT can be a channel for the agreement to be implemented well and can provide much help.

The AFACT meetings held during 2024 were an opportunity to reaffirm the importance of technological progress and cooperation. I hope that we can continue to gather the wisdom and experience of various member countries to achieve even more advanced results in the future.

I hope that this yearbook will be a useful reference for all AFACT member countries and further contribute to the development of international standards and innovative development of business. We will also value your opinions and suggestions on this yearbook and reflect them in future improvements.

Yeongcheol Lim
AFACT Chairman
Republic of Korea

PREFACE: II

Rapporteur for Asia and the Pacific: Mr. Hisanao Sugamata

The focus in the Asia-Pacific region is to ensure that data communication occurs smoothly, cost-effectively and safely between trading partners and related stakeholders, especially given the growth of global supply chains utilizing e-business. There are many challenges in creating and developing the ICT infrastructures and networks that play an important role in governing high-level, transparent, global supply/value chains. The countries and regional bodies in the Asia-Pacific region continue their efforts to realize the potential of e-business and trade facilitation for regional development.

We believe that the activities of AFAC can contribute to maintaining a sustainable supply chain and to promoting a digital transformation in Asia-Pacific region in corporation with UN/CEFACT contributing to the UN Sustainable Development Goals and Global Standards through its semantics, recommendations and technical specifications that are focused on digitalization and sustainability.

Hisanao Sugamata
Rapporteur for Asia and the Pacific
Japan

PREFACE: III

AFACT General Secretary Ms. Vivian Huang

First and foremost, as the General Secretary, I would like to express my gratitude to Japan's JASTPRO, Taiwan's III, and Korea's KISA for successfully hosting the AFACT meetings in 2023 and 2024.

The 2023 41st AFACT Mid-term Meeting, chaired by Dr. Shinichi Ishii, was held in July in Kyoto, Japan, in a hybrid format. The plenary meeting took place in December in Taipei, Taiwan, where the E-Asia Awards ceremony was also held. Earlier in March, the AFACT International Forum 2023: Empower Digital Cities Network with Cross-Border Data for Greener Living was held in Kaohsiung, Taiwan, focusing on fostering cross-border data sharing and promoting sustainable living.

In 2024, the meetings were hosted by Korea, with Lim Yeong-Cheol serving as the chair. The mid-term meeting was conducted online in August, followed by a hybrid annual meeting in November. During the meeting, the nomination of Lim Yeong-Cheol as the UN/CEFACT Rapporteur candidate, proposed by Sugamata Hisanao, was officially approved.

At the UN/CEFACT meeting in Geneva, member countries presented initiatives related to data standards and exchange frameworks. Korea's Head of Delegation (HoD), Dr. Kerri Ahn, delivered a report titled "Parcel Goods Traceability in Last-Mile Delivery" at the 2024 UN/CEFACT. This project leverages UN/CEFACT standards and data frameworks, integrating IoT, drones, and AI to enable seamless data transmission and tracking during the final mile of goods transportation.

Moreover, Japan's Sugamata Hisanao proposed an initiative to enhance data interoperability for importers and exporters across the domains of finance, commerce, and transportation. By adopting UN/CEFACT standards and data frameworks, banks can expedite the verification of trade and transportation documents, significantly improving the efficiency of fund disbursements.

Taiwan, leveraging its technological edge in the semiconductor supply chain, has been addressing the growing global demand for ESG transparency and sustainability. Taiwan is actively establishing a cross-border carbon emissions data platform to ensure tangible outcomes in supply chain decarbonization efforts.

The AFACT expert, Mr. Thaseen from India, also shared insights into India's experience in developing mutual recognition mechanisms. Since 2015, India has implemented an electronic signature system based on the AADHAAR framework. This system utilizes one-time passwords (OTP) or biometric authentication, leveraging KYC data maintained by the Indian government to generate legally binding dynamic one-time signatures. At present, the system is being integrated with various OpenAPIs to enable broader applications across multiple sectors.

Lastly, I would like to extend my heartfelt thanks to other participating member countries, including Thailand, Singapore, Malaysia, Bangladesh, and Iran, for their active contributions.

I look forward to fostering even greater collaboration in 2025!

Vivian Huang
General Secretary of AFACT

About AFACT

AFACT stands for the Asia Pacific Council for Trade Facilitation and Electronic Business. It's a non-profit, non-governmental organization that is open to participations from the representatives of member economies and experts from private sectors within the Asia-Pacific region.

The forerunner of AFACT was ASEB (Asia EDIFACT Board) established in 1990 in response to disseminate EDIFACT (Electronic Data Interchange for Administration, Commerce and Transport) policies and activities in the Asia-Pacific region. After 8 years' contribution to facilitate international transaction within the region, through the simplification and harmonization of procedures and information flows, the need for re-engineering was raised in the 16th ASEB meeting to conform to the rapidly changing trend of EDI and EC, and to respond to the successful restructure of UN/CEFACT. As a result of re-engineering, AFACT marked down the era of ASEB in 1998. In 1999, the epoch of AFACT was officially commenced.

AFACT aims to promote the commitment and development of trade facilitation, electronic business policies and activities in the Asia Pacific region, mainly focusing on those promoted by UN/CEFACT (United Nations Center for Trade Facilitation and Electronic Business), to guide, stimulate, improve and promote the ability of business, trade and administrative organizations from members, as well as to exchange products and relevant services effectively within AFACT community.

Currently, there are 20 members from Afghanistan, Australia, Bangladesh, Cambodia, China, Chinese Taipei, India, Indonesia, Iran, Japan, Korea, Malaysia, Mongolia, Pakistan, Philippines, Saudi Arabia, Singapore, Sri Lanka, Thailand, and Vietnam. Each of which is represented by a local organization dedicated in promoting the application of standards and recommendations, e.g. UN/EDIFACT, developed by UN/CEFACT. PAA (Pan-Asian eCommerce Alliance) is the associate members of AFACT, which is dedicated to promote cooperation in implementing trade facilitation and eCommerce in this region.

There are two working Committees acting under AFACT, which have their own missions and programs of work. The committees are, Business Domain Committee (BDC) and Technology and Methodology Committee (TMC)

The common missions of those working committees are:

Developing methods to facilitate trade transactions, fit to the member economies and in conformity with the standards and the recommendation developed by UN/CEFACT;

Promoting both the use of these methods, and associated best practices, through channels such as government, industry and service associations;

Coordinating its work with UN/CEFACT and other relevant international, regional and non-governmental organizations; and

Enhancing the cooperation among the AFACT members and promoting the objectives of the mission statement in the Asia Pacific region.

AFACT Bylaws-Revised on 15th December 2022 at the 39th AFACT Plenary

Article 1: Name

The name of this organization shall be the Asia Pacific Council for Trade Facilitation and Electronic Business (hereinafter referred to as “AFACT”).

Article 2: Mission Statement

AFACT aims to support in the Asia Pacific region and its adjacent countries and economies (hereinafter collectively referred to as “Region”) policies and activities, especially those promoted by United Nations Center for Trade Facilitation and Electronic Business (hereinafter referred to as “UN/CEFACT”), dedicates to stimulate, improve and promote the ability of business, trade and administrative organizations, to exchange products and relevant services effectively through the simplification and harmonization of processes, procedures and information flows in a non-political environment. Its principal focus is to facilitate international transactions, through the simplification and harmonization of procedures and information flows, and so contribute to the growth of global commerce.

Article 3: Terms of Reference

The principles of the mission statement are to be achieved by:

(a) Disseminating the standards and the recommendations published by UN/CEFACT;

(b) Analyzing and understanding the key elements of international transactions and working for the elimination of constraints;

(c) Developing methods in conformity with those developed by UN/CEFACT to facilitate transactions, including the relevant use of information and communication technologies (ICT) such as but not limited to UN/EDIFACT and ebXML, securing coherence in the development of standards and recommendations by cooperating with other interested parties, including international, intergovernmental and non-governmental organizations;

(d) Promoting both the use of these methods, and associated best practices, through channels such as government, industry and service associations;

(e) Coordinating its work with UN/CEFACT and other relevant international, regional and non-governmental organizations; and

(f) Enhancing the cooperation among the AFACT members and promoting the objectives of

the mission statement in the Region.

Article 4: Structure

AFACT shall be a non-profit, non-political, non-government, voluntary and independent organization.

Article 5: Membership

Membership shall be divided into three categories and the qualifications for membership in each category are provided hereunder. The members of each category are shown in Appendix 1 hereto:

Member

The countries and economies in the Region represented by a public or private corporation, boards, commissions, organizations, associations and other bodies (whether governmental, public or private, and whether incorporated or unincorporated) involved in promotion and development of Trade Facilitation and Electronic Business, hereinafter collectively referred to as “Body”, provided that Body is eligible to establish a focal point as provided by the Article 10 hereunder. Agencies of the United Nations can also be members.

Liaison member

Any Intergovernmental Body committed to similar objectives as AFACT. The Steering Committee shall report their consideration and apply for the approval of inviting and admitting the relevant organization as Liaison member, to the Plenary for ratification.

Associate member

Any other Body from the Region or relevant international organization located in the Region, committed to similar objectives as AFACT. Any Body in a country, economy or organization wishing to join AFACT must submit an application for membership in writing to the AFACT Secretariat who shall circulate it to the Steering Committee members for consideration and acceptance, as well as to all members and associate members for consultation. If approved, the Steering Committee shall report to the Plenary on the approval of the application for ratification.

The Chairperson of the AFACT may also invite non-member countries, economies and experts as observers or special invitees.

Article 6: Plenary

The Plenary shall include members represented by their Heads of Delegations, associate members, liaison members and observers. At least five members represented by their Head of Delegations are required for a quorum including participants through online. The Plenary Meeting shall be a forum to exchange views on any areas of common interest including the latest developments in each member, or associate member and liaison member under the ambit of the Mission Statement. The Plenary shall be the highest decision making body of AFACT and shall have the responsibility of ratifying all major decisions and monitoring the execution of the adopted resolutions. The preferred way of reaching decisions shall be by consensus. However, the Chairperson shall have the authority to call for a vote if, in his view, consensus cannot be reached on a particular issue. In such cases, a simple majority of all voting members constitutes a decision. In case of a tie, the Chairperson shall cast the deciding vote. Only members are eligible to vote. The vote shall be cast by the Heads of Delegations or their designated representative in writing. Notwithstanding of the foregoing, for dissolution of AFACT, the adoption of the Bylaws or amendment thereof, a two-third majority of all voting members is required. Absent members can have the option to vote by email or other means, or by proxy entrusted to the Chairperson or a fellow AFACT member. The Plenary shall meet at least once a year. This can be either in form of a physical meeting or online meeting.

Article 7: Officers, Hosting Member and Secretariats

7.1 Officers of AFACT

The Officers of AFACT shall be the Chairperson, two Vice-Chairpersons and the head of AFACT Secretariat (herein after referred to as “AFACT Secretary”.) The term of office for the Chairperson and two Vice Chairpersons shall be one year. The term of office for AFACT Secretariat shall be provided as per the Appendix 3 to the Bylaws.

7.2 Hosting Member

Annually AFACT shall identify a member (herein after referred to as “Hosting Member”) to host the meetings. The Hosting Member shall nominate the Chairperson, with one Vice-Chairperson being nominated by the next hosting member (herein after referred to as “Chairperson Elect”) and the immediate former Chairperson acting as the other. At the start of each Plenary, the identification of next Hosting Member and the Chairperson Elect shall be approved. The Hosting Member shall nominate a person who shall be the focal point for hosting AFACT meetings (hereinafter referred to as “the Hosting Secretary”). Their term shall start immediately after the previous Plenary is adjourned. In order to ensure a smooth hand- over between the two Hosting Secretaries, a Joint Hosting Secretariat shall exist for an agreed period, after the previous Plenary.

7.3 AFACT Secretariat

The Secretariat office of AFACT will operate in accordance with its own Bylaws. Its duties include such as but not limited to administration of financial affairs of the AFACT, budgetary issues, accounting and audit, fund raising, Yearbook editing and publishing, supporting the annual Hosting Member in organizing the mid-term Steering Committee meeting, and annual Plenary and other meetings, and other Secretariat related tasks. The terms of reference of AFACT Permanent Secretariat is shown in the Appendix 3. The AFACT Secretariat shall be nominated by the Steering Committee and ratified by the Plenary as permanent entity based on the Terms of Reference described in the Appendix 3 to this Bylaws. When AFACT Secretariat finds an exceptional difficulty of a Hosting Member in performing its duties to host, AFACT Secretariat should call a Steering Committee meeting to decide an alternative member to host the organization according to the provisions provided by the Article 8 herein.

Article 8: Steering Committee

The Steering Committee is responsible for the management and coordination of AFACT between the Plenary of consecutive years. The Steering Committee also supervises the progress status of the decision made by the Plenary. The composition of the Steering Committee shall be as follows:

• Chairperson (of AFACT)

• Two Vice-Chairpersons (of AFACT)

• UN/CEFACT Rapporteur for Asia and the Pacific (as an Advisor),

• Any other officer of UN/CEFACT (as an Advisor) from the Region

• Representative of United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)

• Chairpersons of the Executive Committees provided by the Article 9 herein

• Two Heads of Delegation appointed by the Plenary who will hold office as members of the Steering Committee for a term of two years.

• Head of AFACT Secretariat

In case the net total number of the Steering Committee members becomes less than eleven (11) owing to overlapping of the role of the Steering Committee members, Plenary may elect additional member from other AFACT member countries/economies
The Steering Committee is chaired by the Chairperson of AFACT

The Hosting Secretary shall be present in all Steering Committee meetings.

The agenda for the Steering Committee meeting shall be circulated to all Heads of Delegations and Chairpersons of Executive Committees for comments before a meeting. The AFACT Secretariat and the Hosting Secretariat shall jointly maintain the minutes of the Steering Committee meetings to be adopted by the succeeding meetings. The AFACT Secretariat shall publish the minutes on the AFACT website.

The Chairperson may invite Conveners of Working Groups for specific meetings, as appropriate and all Heads of Delegation shall be entitled to attend meetings of the Steering Committee.

Where required, the Steering Committee shall be empowered to take decisions on behalf of AFACT between Plenary meetings except the agenda to dissolve AFACT or to revise the Bylaws. In such cases, every effort shall be made to consult with the Heads of Delegations. All inter-sessional decisions of StC will call for endorsement of plenary either in its meeting or through inter-sessional approval process.

Steering Committee decisions shall be made by consensus.

The Steering Committee shall meet at least twice a year. This can be either in the form of a physical meetings or online meetings.

Article 9: Executive Committes and Working Groups

9.1 Executive Committees (hereinafter referred to as “EC”)

AFACT shall have Business Domain Committee (hereinafter referred to as “BDC”), Technology & Methodology Committee (hereinafter referred to as “TMC) and Community Support Committee (hereinafter referred to as “CSC”) as EC. Each EC must have a mandate, terms of reference, and work program. Each EC member shall recommend its Chairperson to the Steering Committee for the ratification by the Plenary. Each EC may appoint a Vice Chairperson and EC Secretary whenever necessary. The term of office for the Chairperson and the EC Secretary shall be for a period of two years.

9.2 Working Groups (hereinafter referred to as “WG”)

To establish or to reform a WG under a specific EC, the interested parties shall submit the Chairperson of EC an expression of interest endorsed by at least three HoDs, a terms of reference, and an initial work program (hereinafter collectively referred to as “Submission”). Each EC shall evaluate the Submission. When the Submission is acceptable for EC, the Chairperson of EC shall propose a new WG or a reformed WG to the Steering Committee

for ratification by the Plenary Each WG member shall elect its Convener to be approved by the Steering Committee, and ratified by the Plenary. Each WG may appoint a WG Secretary whenever necessary. The term of office for the Convener and the WG Secretary if it is appointed, shall be for a period of two years. The WG shall meet at least twice a year. This can be either in the form of physical meetings or online meetings. The Chairperson of each EC shall report its activities, including those of WGs under the EC, to the Plenary. The Convener of WG, if needed, reports to the Plenary in details its progress of Program of Work.

9.3 Termination of EC and WG

Any EC or its WG shall be terminated by the resolution of the Plenary on the recommendation of StC, if it has not passed its Program of works and/or its activities to the Plenary for three years.

9.4 Task Force Team

As need arises, the Steering Committee may organize a Task Force Team (hereinafter referred to "TFT") to carry out a specific mission and/or function across the ECs delegated by the Steering Committee. The AFACT Chairperson shall recommend the TFT Chairperson to the Steering Committee for approval. TFT shall have terms of reference and a work program. TFT shall report the Steering Committee its activities at least once a year.

Article 10: Focal Point

Each AFACT member is required to have a single focal point (hereinafter referred to as "FP"), dedicated to the promotion, dissemination and implementation of AFACT objectives.

The FP shall identify the Head of Delegation and a contact person who shall be responsible for communication with the AFACT Secretariat the Hosting Secretary and all related parties. The FP shall provide the AFACT Secretariat updated information for communication, such as telephone number, fax number and e-mail address.

Article 11: EDICOM

EDICOM is the annual conference and exhibition of AFACT. It features the latest technology and information on Trade Facilitation, Electronic Business, UN/CEFACT and other related activities.

EDICOM shall be organized by the Hosting Member subject to availability of their resources, adjacent to the Plenary, in consultation with the Steering Committee.

Article 12: Relationship between AFACT and UN/CEFACT, and between AFACT and UNESCAP

As set out in its Mission Statement, AFACT seeks, amongst other objectives, to promote the aims, objectives and activities of UN/CEFACT within the Region. To this end, the delegations of the Region to UN/CEFACT provide a strong link between AFACT and UN/CEFACT.

The UN/CEFACT Rapporteur for Asia provides another significant linkage. The Rapporteur shall be appointed by the Plenary of UN/CEFACT preferably on the recommendation of the AFACT Plenary. (The Mandate of the UN/CEFACT Rapporteur for Asia is attached as Appendix 2).

AFACT is also strongly encouraged to identify and nominate potential members to the UN/CEFACT for its various positions whenever such vacancies arise and nominations are sought. These nominations shall be sent by AFACT Secretariat to the UN/CEFACT Secretariat after full consultation with AFACT HoDs.

Close coordination between AFACT ECs (including their WGs) and relevant UN/CEFACT working groups and/or teams is strongly encouraged and both bodies shall use their best endeavors to ensure this coordination. This is most effectively achieved when there is a formal relationship between the respective groups and/or teams.

As the objectives and geographic scope of AFACT is aligned with that of the trade facilitation programme of the UN regional commission for Asia and the Pacific, AFACT also seeks to share expertise and experience with UNESCAP with regard to their Trade Facilitation implementation and capacity building approach within Asia and the Pacific region.

Article 13: Expenses

The Hosting Member shall cover expenses required in organizing the Mid Term Steering Committee meeting, Plenary Meeting, the Steering Committee Meeting, EDICOM, and the meetings for EC and WG held before the Plenary Meeting, excluding food and beverage services which should be at host's discretion.

The Hosting Member is entitled to charge a participation fee for each delegate if it is extremely necessary to host the event. The amount to be charged shall be decided in advance in consultation with the Steering Committee.

The AFACT Secretariat shall cover all the costs incurred in performing the responsibilities as the secretariat and maintaining the AFACT Website.

Article 14: Intellectual Property Rights Policy

AFACT shall own the copyright in all draft and published deliverables developed under or pursuant to its procedures including, without limitation, Specifications, Rules, Guidelines, Minutes, Presentation materials, Models and Libraries which are published under the name or general auspices of AFACT regarding all its official procedures, subject to the underlying copyright of the contributing parties and all other legitimate copyright owners. AFACT will not charge royalties or any similar fees in connection with the implementation or use the deliverables by those applying the AFACT deliverables in accordance with the applicable procedures of AFACT. AFACT disclaims all warranties, express or implied, including specifically but not limited to, any warranty that the use of the information in the deliverables will not infringe any rights or any implied warranties of merchantability or fitness for a particular purpose.

Article 15: Working Language

The working language of AFACT shall be English.

Article 16: Effectiveness

These Bylaws enter into effect on 9th November, 2016, upon ratification by the AFACT Plenary.

Appendix 1 List of Members, Associate Members and Liaison Members as of November, 2016

Members:

Afghanistan , Australia , Bangladesh, China , Chinese Taipei , Cambodia , India , Indonesia , Iran , Japan, Malaysia , Mongolia , Pakistan , Philippines , Korea , Saudi Arabia , Singapore , Sri Lanka , Thailand , Vietnam

Associate Members:

Pan Asian e-Commerce Alliance (PAA)

Liaison Member of AFACT:

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)

Appendix 2 Mandate UN/CEFACT Rapporteur for Asia

The mandate of the UN/CEFACT Rapporteur for Asia (herein after referred to as “Rapporteur”) shall be carried out, where appropriate, in liaison with heads of delegation to UN/CEFACT from the Region, as well as with the secretariat of the United Nations Economic

Commission for Europe (UNECE) and other regional commissions and the UN/CEFACT Bureau. Within Region, the Rapporteur shall:

(a) Promote and represent UN/CEFACT's interests and activities to Governments, intergovernmental organizations, relevant trade associations and business and trade facilitation organizations;

(b) Encourage the participation of experts in UN/CEFACT's work program and stimulate the implementation of UN/CEFACT's standards, recommendations and other deliverables;

(c) Coordinate UN/CEFACT's activities in the Region.

The Rapporteur shall present a report at each UN/CEFACT Plenary. The Rapporteur may raise issues directly with the UN/CEFACT Bureau and have an open invitation to attend the Bureau meetings in a consultative capacity.

The appointment as Rapporteur is for two years, renewable.

Appendix 3: AFACT Secretariat Terms of Reference

1. Background

The 39th AFACT Plenary resolved that AFACT should have a permanent secretariat and to assign Chinese Taipei as the permanent secretariat. It was the sense of the 39th Plenary that successive and earnest contribution extended by Iran as ex secretariat should be commended and commemorated.

2. Terms of Reference

The purpose of AFACT Secretariat is to explore, review and identify the most practical approach for managing and operating AFACT tasks on Trade Facilitation and Electronic Business in Asia Pacific region.

The AFACT Secretariat should coordinate with UN/CEFACT Rapporteur for Asia to achieve the mission of the AFACT Secretariat.

Taking account of existing AFACT Terms of Reference, these shall include;

a) To document all AFACT related activities and publish them on the AFACT web site,

b) To maintain the AFACT Website including contact information of members as well as the permitted information of respective Focal Points,

c) To support the hosting secretary for organizing AFACT Plenary meeting and its Executive Committee meetings, AFACT Steering Committee meeting and EDICOM,

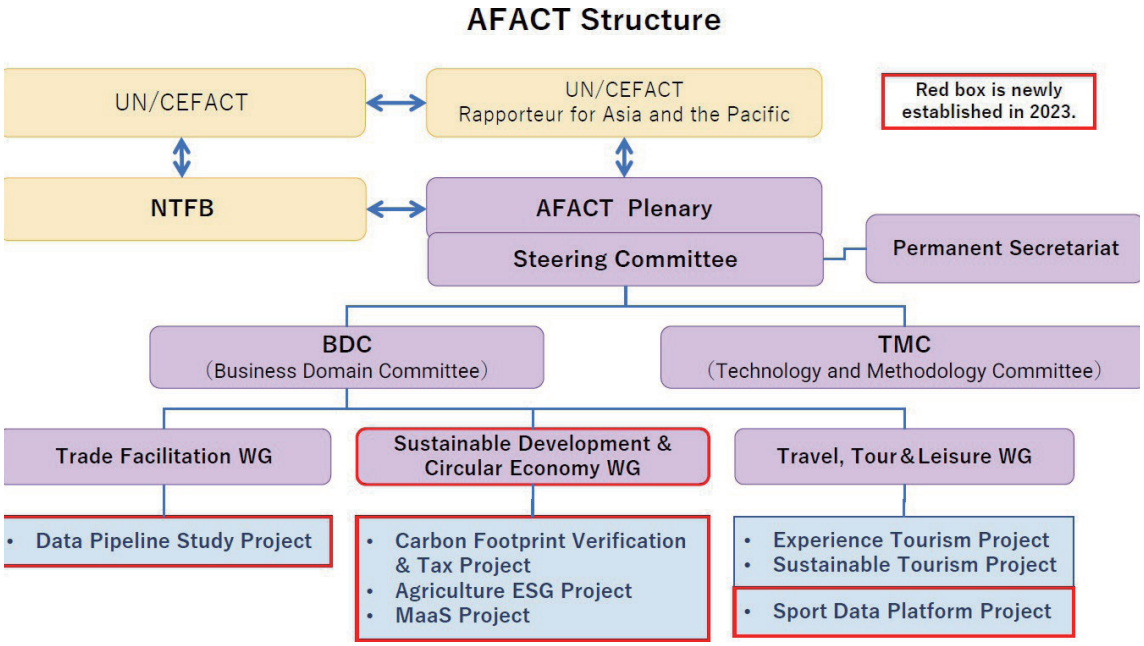
d) To facilitate the affairs in relation to new membership application,

e) To attend AFACT related meetings to support the hosting secretary,

f) To attend UN/CEFACT Plenary meeting, if possible, to follow up its decision and discussion made during the meeting and feedback them to AFACT community, and

g) Any other business.

Structure



Members

Afghanistan	Australia	Bangladesh	Cambodia	China
Chinese Taipei	India	Indonesia	Iran	Japan
Korea	Malaysia	Mongolia	Pakistan	Philippines
Saudi Arabia	Singapore	Sri Lanka	Thailand	Vietnam.

Liaison Member of AFACT

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)

AFACT Secretariat Briefing

December 2024

AFACT
Asia Pacific Counsil for Trade Facilitation & Electronic Business

Secretariat 常設秘書處

Review National Contact Points (1)

AFACT Secretariat 常設秘書處
Asia Pacific Counsil for Trade Facilitation & Electronic Business

Afghanistan		Afghanistan Customs Department
Australia		Applied Electronic Commerce *to be confirmed
Bangladesh		Agni Systems Limited *to be confirmed
Cambodia		IIC University of Technology (IIC)
China		China National Institute of Standardization (CNIS)

Review National Contact Points (2)

AFACT Secretariat 常設秘書處
Asia Pacific Counsil for Trade Facilitation & Electronic Business

Chinese Taipei		Institute for Information Industry (III)
India		National Informatics Centre (NIC)
Indonesia		PT Electronic Data Interchange (EDI) *to be confirmed
Iran		Iran Centre for eCommerce Development (ICeCD)
Japan		Japan Association for Simplification of International Trade Procedures

Review National Contact Points (3)

AFACT Secretariat 常設秘書處
Asia Pacific Counsil for Trade Facilitation & Electronic Business

Korea	KISA Korea Internet & Security Agency	Korea Internet and Security Agency (KISA)
Malaysia	PIKOM	Persatuan Industri Komputer Dan Multimedia Malaysia (PIKOM)
Mongolia		Mongolian National Chamber of Commerce and Industry, MNCCI
Pakistan	NTTFC National Trade & Transport Facilitation Committee	National Trade and Transport Facilitation. Committee (NTTFC)
Philippines	dti PHILIPPINES	Bureau of Export Trade Promotion (BETP) Department of Trade & Industry

Review National Contact Points (4)

AFACT Secretariat 常設秘書處
Asia Pacific Counsil for Trade Facilitation & Electronic Business

Saudi Arabia	SAUDI EDI powered by CrimsonLogic	SaudiEDI/Tabadul *to be confirmed
Singapore	SEC Singapore EDI Committee	Singapore EDI Committee (SEC) *to be confirmed
Sri Lanka	ICTA ideas actioned Information and Communication Technology Agency of Sri Lanka	Information and Communication Technology Agency (ICTA)
Thailand	FTI	Federation of Thai Industries(FTI)
Vietnam	VECITA	Vietnam E-commerce And Digital Economy Agency

2024
AFACT Country Report
Chinese Taipei

Table of Content

I. General Condition Update

In 2024, Taiwan remains ranked 9th in the IMD World Digital Competitiveness Ranking, excelling in R&D, IT, and corporate agility. Furthermore, Taiwan's semiconductor and electronics supply chain holds a crucial strategic position in AI hardware manufacturing due to the global surge in the AI era. According to reports, more than 60% of the world's semiconductors are produced by Taiwan's supply chain, with over 90% of advanced semiconductors manufactured in Taiwan, driving an increase in Taiwan's forecasted economic growth rate to 3.96% in 2024.

In 2025, Taiwan's National Development Council (NDC) will focus on the vision of "Innovative Economy," "Balanced Development," and "Inclusive Growth.". The council also anticipates that Taiwan will face challenges such as "Accelerating digital and net-zero dual transformation to enhance national competitiveness," "Diversifying supply chain layouts to improve economic resilience," "Deepening international cooperation to address geopolitical and climate change challenges," and "Enhancing the cultivation of domestic talent and recruitment of foreign professionals for key industries."

1.1 Achievement & Competiveness

As depicted in Figure 1 and 2, Taiwan has been ranked as ninth-most competitive digital economy in the world by IMD – International Institute for Management Development. According to the IMD World Competitiveness Booklet 2024, " Taiwan, however, improves in infrastructure (12th to 10th). …the other sub-factors improve with institutional framework showing the largest increase (10th to 6th).". Taiwan excels in five key indicators: "Total R&D personnel per capita," "IT & media stock market capitalization," "Mobile broadband subscribers," "Agility of companies," and "Use of big data and analytics." Additionally,

Taiwan ranks 3rd in "Higher education achievement" and "Total expenditure on R&D (%)," showcasing its strength in R&D, IT, internet access, education, and corporate adaptability.

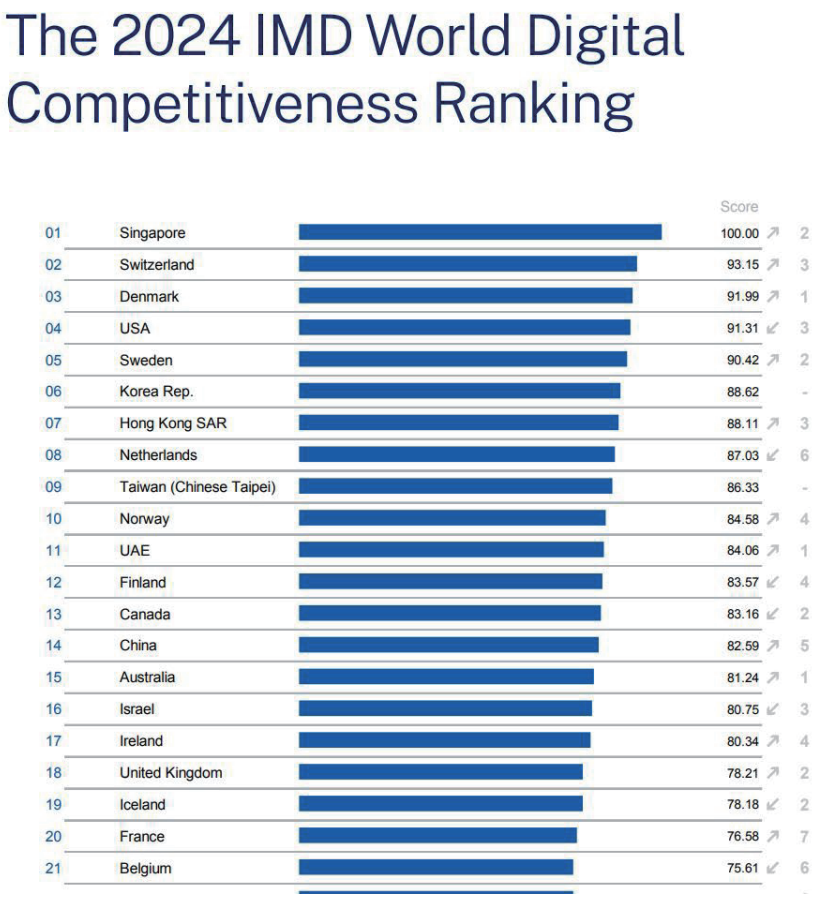


Figure 1: IMD World Digital Competitiveness Ranking

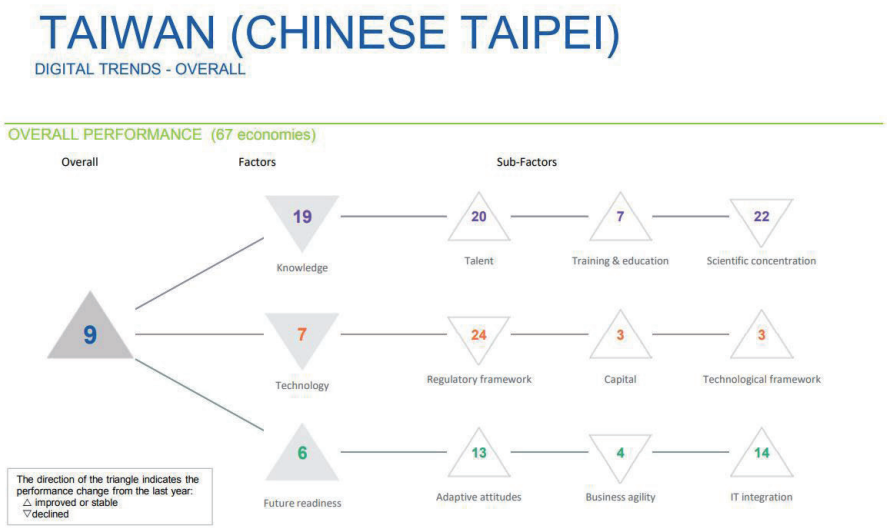


Figure 2: Breakdown of IMD World Digital Competitiveness Ranking

IMD’s assessment divides digital competitiveness into three main dimensions: Knowledge, Technology, and Future Readiness. Taiwan ranks 19th in Knowledge, emphasizing R&D and digital skills, and 7rd in Technology, driven by 5G and broadband improvements. In Future Readiness, Taiwan ranks 6th, reflecting the agility of SMEs and increased adoption of digital tools. With these competiveness, Taiwan strength its digital economy, cybersecurity, and public-private partnerships, aiming to boost Taiwan's digital resilience and global competitiveness.

1.2 Taiwan Is Leading in ESG Transparency

With Taiwan boasting an advanced semiconductor industry and strong financial institutions under export-led strategy, Taiwan government is now shifting its focus to improving the transparency of its ESG and climate data. Since 2022, the country has implemented "Pathway to Net-Zero Emissions by 2050," initiatives, emphasizing climate legislation, ESG transparency, and carbon pricing to align with international sustainability goals.

Particularly, Taiwan’s semiconductor industry, backed by robust government policies, including financial incentives and investments in R&D, is a cornerstone of our economy and global supply chains. Taiwan’s semiconductor supply chain maintains a technological edge while meeting growing international demands for ESG transparency and sustainability. Through resource-efficient production and innovative processes, these companies enhance their competitiveness and reinforce Taiwan’s reputation as a trusted, sustainable partner in the high-tech ecosystem.

According to ISS ESG Country Rating, Taiwanese semiconductor companies are recognized as global ESG leaders. Compared to the rest of the world, They boast

some of the highest performers in ESG ratings and transparency levels, showcase ESG performance and readiness for evolving regulations.

As shown in Figure 3 and 4, Taiwanese companies achieving 'Very High' transparency scores in the global Semiconductors and Commercial Banks & Capital Markets industries.

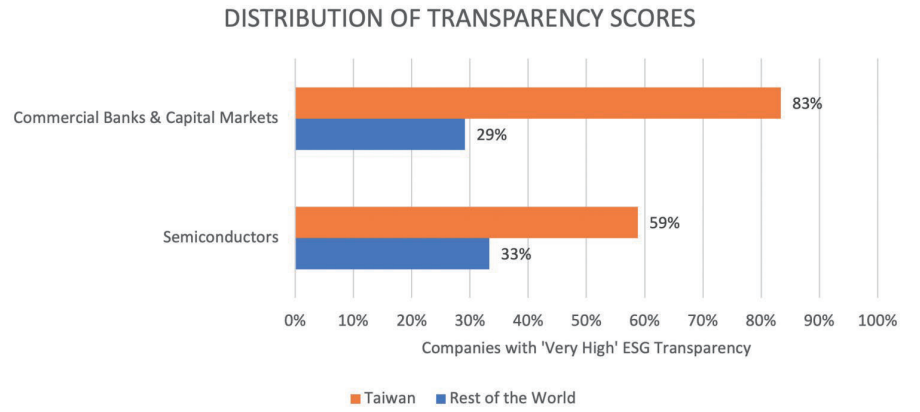


Figure 3: Percentages of Companies Rated with 'Very High' Transparency, in Taiwan and the Rest of the World

Source: ISS ESG

Figure 4: Jurisdictions Mapped According to ESG Performance and Transparency Level Rankings in the Financial Sectors

Source: ISS ESG

1.3 The Establishment of TCX & Cross-border Carbon Data

The Taiwan Carbon Solution Exchange (TCX), established on August 7, 2023, in Kaohsiung, is a pivotal step in Taiwan's efforts to enhance ESG and meet global carbon reduction targets. This initiative comes at a crucial time, particularly in light of the EU's Carbon Border Adjustment Mechanism (CBAM), a major component of the EU's Green Deal. The CBAM imposes taxes on imports based on their carbon footprint, affecting industries such as metal, manufacturing and semiconductors. This policy puts pressure on Taiwan's export-driven economy, particularly our leading semiconductor and manufacturing sectors, to meet the environmental standards set by international partners across the global supply chain.

As a global leader in the semiconductor industry, Taiwan's position in the global supply chain makes it increasingly accountable to international trade partners. Taiwan's companies are facing pressure from cross-border supply chains to demonstrate greater ESG transparency and sustainable practices in line with global regulations. TCX is a response to this growing demand for sustainability and transparency, providing a platform for carbon trading that helps Taiwanese industries align with international carbon reduction targets. TCX enables companies to buy and sell carbon credits, offering an efficient mechanism to offset emissions while remaining competitive in global markets.

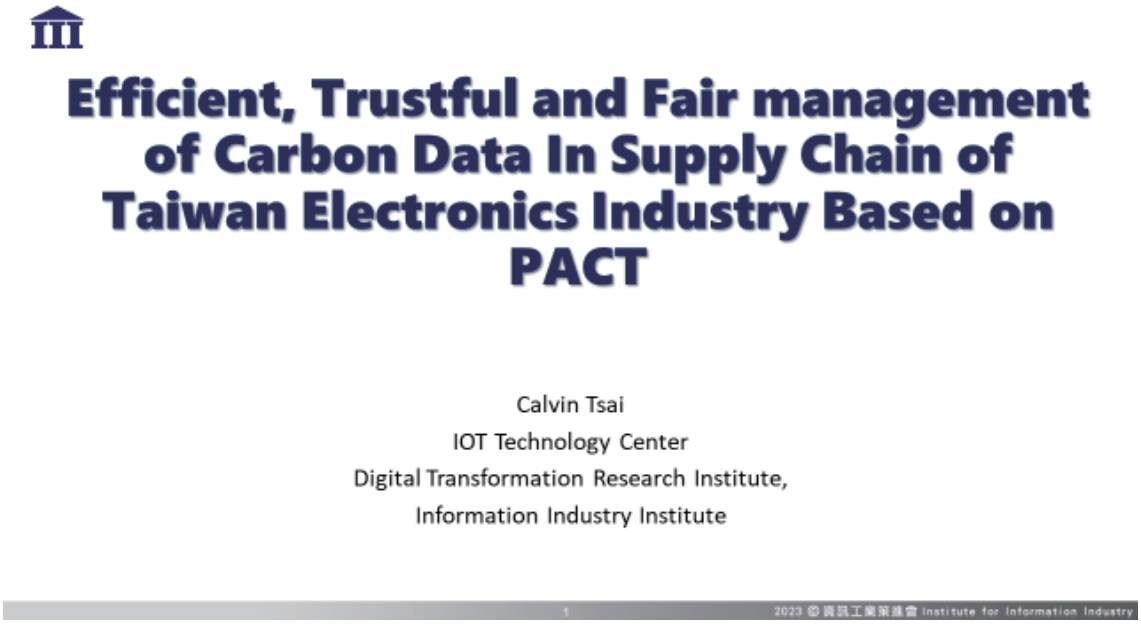
However, Integrating carbon footprint and credit of electronic products in cross-border supply chain becomes complex while dealing with hundreds of suppliers. First of all, Comparable and consistent carbon emission calculation methodology is not well-established. Secondly, Data transparency and credibility will be too expensive for SMEs, and the lower the efficiency of carbon emission data exchange, the poorer the decarbonization results will be. Consequently, Taiwan

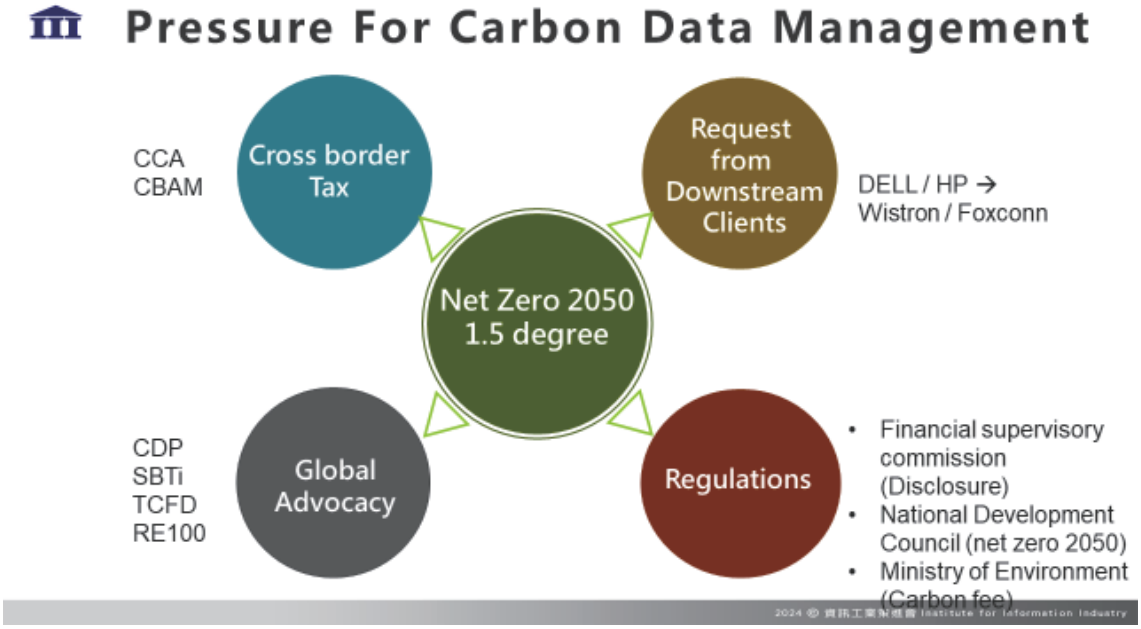
urgently needs a cross-border carbon emissions data platform to ensure that supply chain decarbonization efforts can achieve tangible results. To help Taiwan's industries remain competitive and aligned with international environmental standards, especially as they navigate the pressures of cross-border supply chains.

That's why we prompted to established Sustainable Development & Circular Economy Working Group in AFACT, and try to introduce ***cross-border data exchange solutions for carbon emissions***, such as Digital sustainable cloud (DSC) developed by III, Agriculture ESG platform developed by Linkjoin, and more. We welcome more and more partners to join Sustainable Development & Circular Economy WG, to develop interoperable standard and application for cross-border carbon emissions data exchange. Reinforcing Taiwan's commitment to global climate goals and supporting innovation technologies in sustainability. Taiwan can contribute to the global community by developing applications for transparency and trustworthy in trade facilitation, particularly in relation to product data such as carbon footprint and ESG data. Taiwan will comply with evolving regulations and share the experience of our industry data exchange with the global community.

II. Cross-Border Data Project and Case Studies

2.1 Digital Sustainability Cloud by Institute for Information Industry





- **Taiwan Current Status on Carbon Net-Zero Goal in Electronics Industry**

Taiwan Electronics Industry Carbon Emission

MFG emissions in 2019

1. Petrochemical industry 24% (About 35.8 million tons)
2. Electronics industry 22% (About 31.9 million tons)
3. Steel industry 20% (About 30.3 million tons)
4. Cement Industry 7% (About 10.2 million tons)
5. Textile Industry 6% (About 9.5 million tons)
6. Paper Industry 3% (About 4.4 million tons)
7. Other industries 17% (About 25.7 million tons)

Total 147.8 million tons
National 287.5 million tons
51 %

Source:
- 2022 National Greenhouse Gas Emissions Inventory Rep... the
- Compiled from the 2019 EPA greenhouse gas emission reporting s
- Monthly statistics of electricity consumption by industry by Taipower Company over the years

Emission structure

Direct Emissions

- Fuel emissions 5% (1.23 million tons)
  Use natural gas to destroy and remove fluorinated gases and organic waste gases (VOCs)
- Process emissions 18% (3.72 million tons)
  Mainly fluorinated greenhouse gases (FCs) and N_2O

Indirect emissions

- Electricity emissions 77% (16.24 million tons)

Proportion of major power consumption

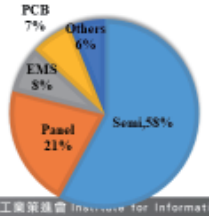
System Name	Semicon Industry	Panel Industry
Process equipment	50.5%	41.3%
Air conditioning	26.5%	23.6%
Vacuum air pressure	6.8%	19.7%
Lighting, other	16.2%	15.4%

Top Emission

1. TSMC 36% (About 7.6 million tons)
2. Innolux Corporation 14% (About 3.0 million tons)
3. AU Optronics 11% (About 2.3 million tons)
4. United Microelectronics Corporation 7% (About 1.5 million tons)
5. Others total 32% (About 6.8 million tons)

Total 21.2 million tons

Electronics Share



7

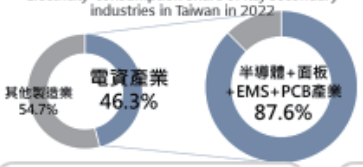
Carbon reduction strategies and practices

(Unit : million tons)

3 major aspects	11 measures	Carbon reduction solutions	Estimated carbon reduction		instruction
			2025	2030	
Process Improvement	Equipment upgrades / Smart energy management	Energy saving of public facilities	0.94	2.71	Air conditioning, air compression, motors, power systems, lighting (approximately 1% reduction annually)
	Fluorinated gas reduction	Fluorinated gas reduction	0.42	1.36	Install greenhouse gas reduction equipment, develop gas alternatives (approx. 2% reduction annually
	Equipment upgrades / Smart energy management	Other technologies	0.86	2.34	Introducing smart energy-saving modes into the process, purchasing new energy-saving equipment, etc. (approximately 1% reduction per year)
Energy conversion	Use green electricity	Use green electricity	1.63	14.7	Self-built green electricity, purchase of green electricity, etc.
other	Power factor decreases	Power factor decreases	5.55	7.30	The power coefficient is 0.388/0.352 $kgCO_2e$/ degree estimation
		Total	9.40	28.43	

Taiwan Electronics Industry Carbon Emission, Net-Zero Approach and Pain Point

Electricity consumption share of key secondary industries in Taiwan in 2022

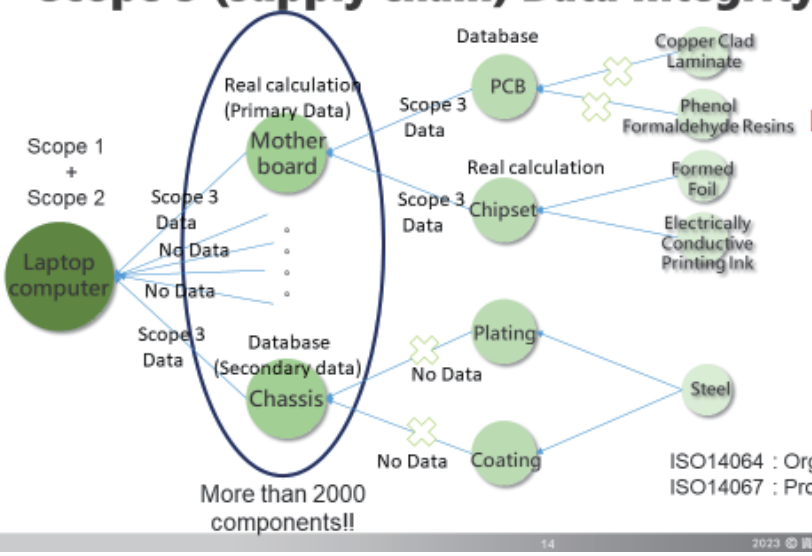


2030 carbon reduction targets for key secondary industries

	Greenhouse gas inventory	Internal Reduction (S1 & S2)	Supply Chain Management and Collaboration (S3)
Current Stauts	Due to requirements from customers, international carbon fees and carbon taxes, and domestic regulations, carbon inventory has been started for most of Taiwan electronis industry.	Based on the carbon invetory, enterprise start mid-term carbon reduction plan from organizing its own energy conservation and green energy. Aslo, innovative carbon reduction technologies like green fuel and CCU will be a long term approach	Most of the upstream data (S3) can' t be acquired. Instead, emmision factors from global database are used instead.
pain point	Comparable calculation rule is not estabioished. Carbon emission data is lack of fairness, transparency and accuricy.	Different carbon reduction solutions provide various ROI considering reduction quantity vs investment, carbon fee/tax and carbon credits..etc.	complex product carbon footprint calculation needs to deal with multiple suppliers , data transparency / credibility and low exchange efficiency

12

Supply Chains Are Complex, Dynamic and Global Scope 3 (supply chain) Data Integrity Is a Big Issue

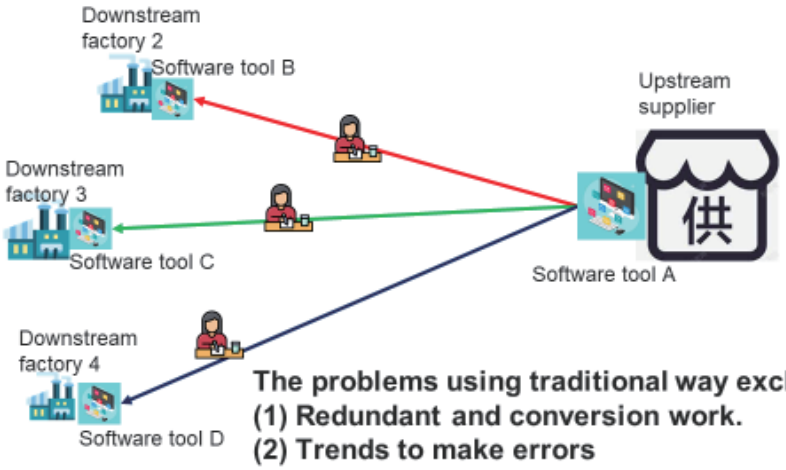


PCF calculation issues

- Data quality
- Huge quantity of components
- Emission factor lookup
- Calculation methodology

ISO14064 : Organization Carbon Emission
ISO14067 : Product Carbon Footprint

Digital Tool Is Deployed, But Data Exchange Is Still Handled in a Traditional Way



The problems using traditional way exchanging data :
(1) Redundant and conversion work.
(2) Trends to make errors
(3) non-secure data exchange

3 More Challenges for Carbon Data Exchange

To Build a Carbon Data Exchange Framework Within Supply Chain, 3 major topics needs to be addressed

Credibility & Integrity
- How is data generated?
- Who audit the data?

Compatibility
- What kind of data to be exchanged?
- What is the data format?

Security
- Who can access the data?
- How is the data protected?

16

- **A Unified Approach To Achieve Efficient, Trustful and Fair Carbon Data Management**

How We Solve Data Exchange Problems? PACT (Partnership for Carbon Transparency)

- The Partnership for Carbon Transparency (PACT), hosted by the World Business Council for Sustainable Development (WBCSD), is committed to enhance the transparency and accessibility of carbon emissions data across various industries and value chains. GHG Protocol Guideline Initiator.
- Dedicated to achieve an open and globally interoperable data exchange network to enable the safe, peer-to-peer exchange of accurate, primary, and verified product emissions data across all industries and value chains.
- On 26th January, 2023, the 'Pathfinder Framework (Version 2.0)' was released, which provides guidance for various industries on calculating product carbon footprints and data exchange practices.

➢ **PACT defines the data model and Restful API to facilitate the exchange of product carbon footprint data across heterogeneous software tools.**

Network!

Two Major Parts :

➢ Data Model
- Product Information
- Product Carbon footprint, PCF
- Extended Data

➢ API (software communication protocol)
- Identity Authentication
- PCF data request / retrieval
- Event Notification

Snapshot of PACT Data Model

Data attributes	Data format	Description	
ID	String	Unique identifier of the PCF.	Yes
Technical specifications version	String	Identifier to define the version of the Pathfinder Framework used (e.g., "2.0.0").	Yes
Time created	String	The UTC timestamp indicating when the PCF was created.	Yes
Time updated	String	The UTC timestamp indicating when the PCF was updated, if at all.	No
Company name	String	The name of the data provider of the PCF.	Yes
Company IDs	Array	The set of company identifiers (encoded as URNs) identifying the company sending the PCF, depending on the context and the two parties exchanging the data.	Yes
Product description	String	A free-form description of the product and any related information, such as production technologies.	Yes
Product IDs	Array	The set of product identifiers (encoded as URNs) identifying the product, depending on the context and the two parties exchanging the data.	Yes
Product category UN Central Product Classification	String	The category of the product based on UN Product Classification codes.	Yes
Product name	String	The trade name of the product as given by the selling company.	Yes
Digital record signature	-	Digital signature covering the full PCF. The technical specifications specify details on company identification and digital signature verification.	No
Comment	String	Any comments related to the product that facilitate the interpretation or verification of the PCF.	Yes
PCF (excl. biogenic emissions and removals)	Object	The product carbon footprint of the product, excluding biogenic emissions, in kg CO2e per declared unit.	Yes
PCF (incl. biogenic emissions and removals)	Object	The product carbon footprint of the product, including fossil and biogenic emissions (dLUC, land management, other biogenic emissions, and biogenic CO2 withdrawal), in kg CO2e per declared unit.	Yes, from 2025 onwards
Declared unit	String	The unit in which the PCF was calculated: liter, kilogram, cubic meter, kilowatt hour.	Yes

1. Product information

① Company name of the data provider
② Product name (UN Central Product Classification should be included)
③ Declaration unit

2. Product carbon footprint information

① Data valid period or data update frequency
② Geographic scope
③ Product carbon footprint
④ Biogenic carbon content
⑤ IPCC version of Global Warming Potential (GWP)
⑥ Life cycle assessment boundary (Scope)
⑦ Standards or regulations for carbon footprint calculation

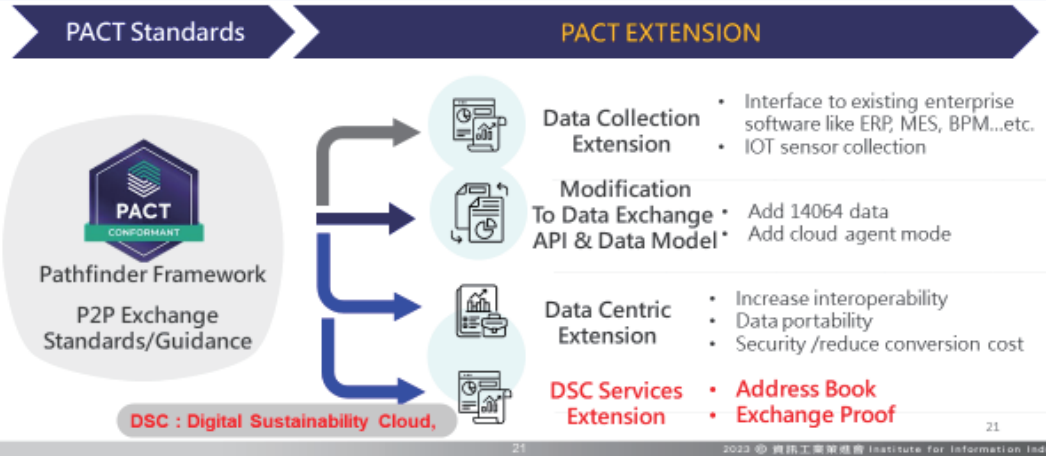
3. Data trust

① Primary data share (PDS)
② Data quality indicators (DQI)

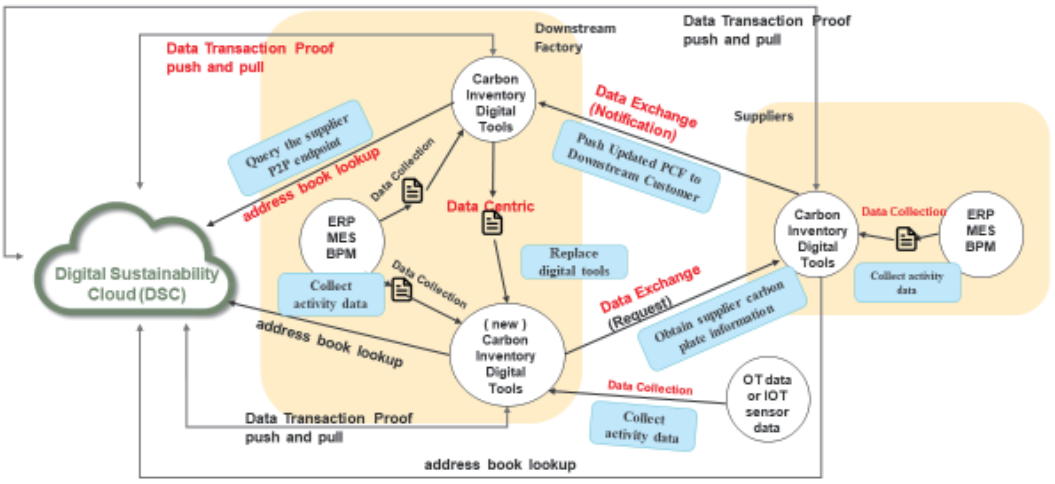
4. Certification information

PACT Extension, To Resolve Missing Parts in PACT In Response to Demands from Industries

- PACT EXTENSION is proposed according to the POC with Taiwan's electronics and IT industry as well as PACT standards
- Solve the industry's problems: Lower the cost in the secure, correct and efficient fashion



Existing PACT API With 3 Extension
--Data Collection, DSC & Data Centric



4 White Papers: Industrial Carbon Data Calculation Rule (Industrial PCR)

1. Working with industrial association to reach consensus and make sure calculation rule is feasible

Collaborate with industry associations (TEEMA, TCA, TPSA and TSIA) to develop carbon footprint verification guidelines: set up a consultant team with scholars and consultants to finalize the mechanism draft

2. 4 Sectors: EMS, PCB, Panel and Semiconductor

Strengthen the foundation for supply chain data integration by defining the direction and scope of upstream and downstream data, and provide support for the initial development of industry carbon emissions data exchange

- Critical terms for calculating carbon content in the semiconductor industry
- Calculation rules and descriptions of semiconductor products
- Suggested methods for quantifying carbon content
- Recommendations for allocation rules and units
- Recommendations for quality requirements of carbon content data : accuracy, completeness, representativeness, and consistency
- Example of carbon content calculation in semiconductor industry

Compliance Guidelines for Carbon Management Digital Tools

- Digital tools is an inevitable trend to enhance the accuracy and efficiency of carbon data management
- Currently no established unified standard for certifying digital tools on the market.
- "Compliance Guidelines for Digital Tools In Carbon Management" is cooperating with SGS for the following topics and will be reviewed by TUV/BSI

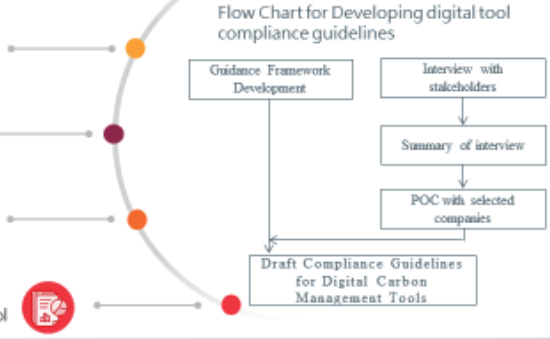
Data Collection
Verification of data interface from legacy software and OT/IOT sensor

Calculation
Based on Industrial PCR

Data Centric
Data import and outport
Data manipulation agent

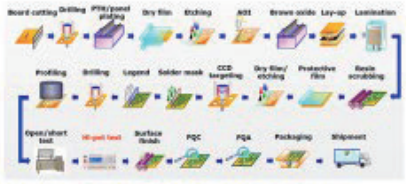
Data Exchange
PACT and PACT data exchange extension API and data model verification.

Reporting
Carbon emission digital tool reports , such as version control changes, report format specifications, etc.



Product Model Defining

Pilot Products



Generic PBC production stages

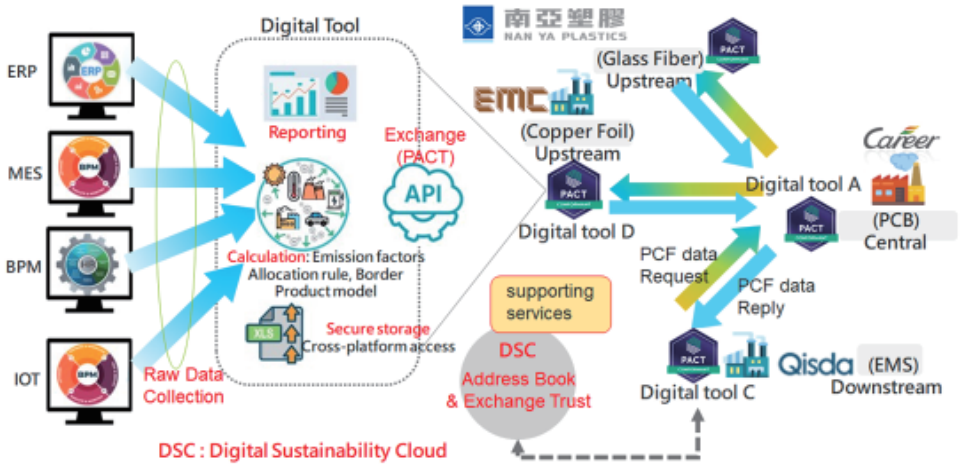
Modeling by Building blocks and drag & drop

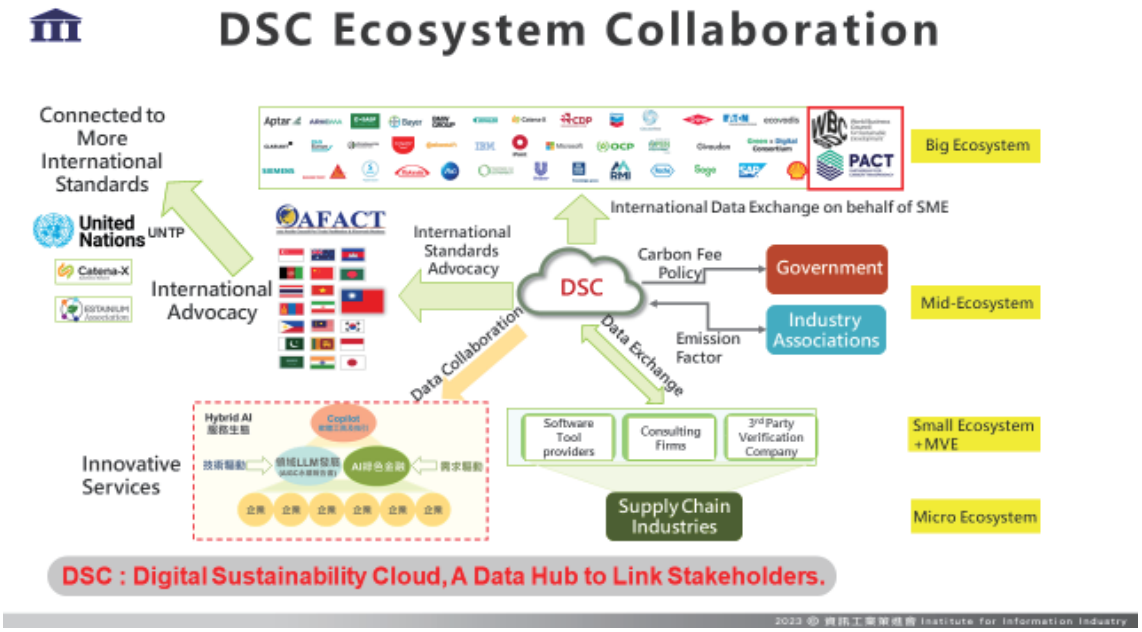
New Product PCF evaluation and calculation

After models set up, future calculation can be efficient

• Our POC of Carbon Data Management

PACT POC in Taiwan Electronics Industry





WHAT'S NEXT?

To Explore The Potential Cooperation With W-BCSD In Trusted Carbon Data Exchange

2.2 TTL WG by Dr. Anthony Chien

Introduction

The TT&L WG (Travel, Tourism and Leisure Working Group) has been active since 2010, and the following report was given as each category on the current status of activities. Management team of TT&L WG was organized by Dr. Anthony Chien, Dr. Mikio Tanaka and Mr. Tunghua Tai as the Chair, Vice Chair and Secretary. Their term of office is from 2024 to 2027.

Figure 5 Cohort of Framework of TT&L WG

Activities conducted by the Tourism, Travel & Leisure Working Group (TT&L WG)

The AFACT travel and tourism projects (sustainable tourism, experience programs) in the TT&L WG are being revitalized and there are two projects in 2024.

Travel Agency and DMC&DMO Package Tour Project
Leader: Tunghua Tai (Chinese Taipei)
Sub-Leader: Mr. Tadashi Ishihara (Japan) and Wanchun Hsiung (Chinese Taipei)
Editors: Anthony Chien (Chinese Taipei), Matt Jiang (Chinese Taipei), Jui-Ling Chiang (Chinese Taipei)

Project status: Launch: 2023-May-08; Draft Development Completion: 2024-12-30; Publication (Plenary) 2025-5-30

1. The project enables replacing the current emails and spreadsheets used to exchange tour package data between Travel Agencies (mostly SME's) and Destination Managing Company (DMC) and Destination Managing Organization (DMO) with harmonized data and comments. (Ref red arrows in the diagram below). This will deliver additional semantic data definition into the CCL, RDM establishing the ability to write standardized APIs.
2. White Paper on the technical applications of Business Standards for Sustainable Tourism.

API Transformation of EPs Technical Artefacts with Sustainability Claims
Leader: Mr. Sachin Mehta (India)
Sub-Leader: Mr. Kazuyoshi Itagaki (Japan)

Project status: (Launch: 2023-05-08; Completion 2024-12-30; Publication (Plenary) 2025-5-30

1. Experience Programs Technical Artefacts Project (P1082) was completed in October in 2022, and some members in the tourism industry expect to have the artefacts transformed into API formats based on the newly constructed technical specifications of UNCEFACT to trade Experience Programs (EPs) much

lighter and easier for the use of smart phones. Therefore, this project is proposed to make API applicable to the use of the trade of EPs, which will support the facilitation of their trade.

2. Next Steps:
   (1) Begin by working based on UN/CEFACT developing procedures.
   (2) Reviewing existing BRS
   (3) Work step by step to Complete the API Transformation.

Monthly online TT&L WG meeting was held from January to November 2024 and some European experts, such as Mr. Daniele Tumietto from Italy, participated in the discussion as well. Participants and the economies they belong to are shown below.

TT&L WG Participants		
Name (Abbr.)	**Economy/Org.**	**Projects**
Sachin Mehta (SM)	India	Coordinator, UN/CEFACT Travel and Tourism and Project Lead
Anthony Chien (AC)	Chinese Taipei	Chair, TT&L WG, AFACT and ST Project Editor
Tunghua Tai (TT)	Chinese Taipei	Project Leader
Matt Jiang (MJ)	Chinese Taipei	Project Editor
Wanchun Hsiung (WH)	Chinese Taipei	Project Sub-Lead
Gary Lin (GL)	Chinese Taipei	
Raye Chiang(RC)	Chinese Taipei	
Mikio Tanaka (MT)	Japan	Vice Chair, TT&L WG, AFACT
Akio Suzuki (AS)	Japan	Project Editor
Tadashi Ishihara(TI)	Japan	Project Sub-Lead
Kazuo Hotta (KH)	Japan	
Shoji Nakagome (SN)	Japan	Project Sub-Lead
Kazuyoshi Itagaki (KI)	Japan	Project Editor
Gil-jun Ko (GK)	Korea	

Md. Abul Kalam Azad (Milan) (AA)	Bangladesh	
Jahidul Hasan (JH)	Bangladesh	
Meetham Naranong (MN)	Thailand	
Ian Watt	Australia	Former Vice Chair, UN/CEFACT
Gerhard Heemskerk	Netherland	
Daniele Tumietto (DT)	Italy	

Table 1: TT&L WG Meeting Participants of 2024

Travel & Tourism, Leisure Progress Report

Dr. Anthony Chien
Deputy Director of CIDS,
Commerce Development Research Institute
anthonychien@cdri.org.tw
Travel & Tourism, Leisure WG, AFACT

November 26, 2024

42nd AFACT Plenary Meeting
AFACT
Asia Pacific Counsil for Trade Facilitation & Electronic Business

1

Management Team of TT&L WG

- The AFACT Steering Committee Meeting nominated Dr. **Anthony Chien** as TT&L WG Chair.
- The AFACT Steering Committee Meeting nominated Dr. **Mikio Tanaka** as TT&L WG Vice Chair.
- The AFACT Steering Committee Meeting nominated Mr. **Tunghua Tai** as TT&L WG Secretary.

2

AFACT TT&L WG Participants (9 members)

■ TT&L WG monthly online meeting from Jan. to Nov. 2024

UNECE UN / CEFACT

TT&L WG Participants		
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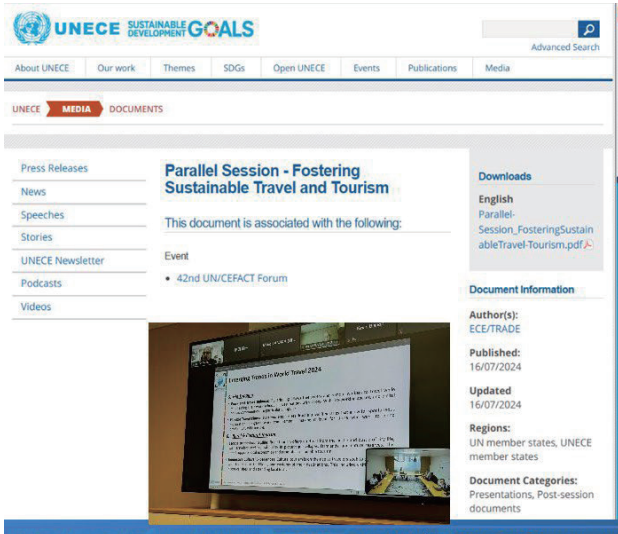


***The presentations have been published on the 42nd UN/CEFACT Event page: https://unece.org/trade/events/uncefact-42nd-Forum - under Parallel Session - Fostering Sustainable Travel and Tourism.**

***PPT: https://unece.org/sites/default/files/2024-07/Parallel-Session_FosteringSustainableTravel-Tourism.pdf**

4


8-12 July 2024
Palais des Nations
Geneva
Sustainable and Digital
Trade Facilitation Week
UNECE
UN/CEFACT
8-12 July 2024
Palais des Nations
Geneva
Sustainable and Digital
Trade Facilitation Week
UNECE
UN/CEFACT
Mr. Sachin Mehta
Domain Coordinator, Travel and Tourism
MD Stuti Tourism Pvt Ltd
Mr. Tain-Tsair Hsu
Chairman
Commerce Development Research Institute
Mr. Tunghua Tai
Leader, Project of CEFACT
General Manager, Siboam Travel Agency
Mr. Kazuyoshi Itagaki
Sub Leader, Project of CEFACT
AFACT expert
Mr. Anthony Chien
Deputy of Director, CIDS,
Commerce Development Research Institute
Deputy Secretary General, AFACT
Mr. Tadashi Ishihara
Sub Leader, Project of CEFACT
Executive Supervisor of JTREC
Fostering Sustainable Travel and Tourism
through e-business Standards
This session will delve into the transformation of Application Programming Interfaces (APIs) pertaining to Electronic Press (EP) technical components that incorporate sustainability claims.
It will explore the dynamics of package tours offered by both the Travel Agency and Destination Management Company & Destination Management Organization (DMC&DMO) within the travel industry, considering their alignment with the United Nations Sustainable Development Goals (SDGs).


42nd AFACT Plenary Meeting
UNECE
UN / CEFACT
6

42nd AFACT Plenary Meeting

7

Travel & Tourism Domain

- **PROJECT:** Travel Agency and DMC&DMO Package Tour Project
- **Supporting VC's:** (T&T) @Nancy Norris
- **Domain Coordinator:** (T&T) @Sachin Mehta
- **Project Lead:** @Tunghua TAI
- **Project Purpose:**

  The project enables replacing the current emails and spreadsheets used to exchange tour package data between Travel Agencies (mostly SME's) and Destination Managing Company (DMC) and Destination Managing Organization (DMO) with harmonized data and comments. (Ref red arrows in the diagram below). This will deliver additional semantic data definition into the CCL, RDM establishing the ability to write standardized APIs.

- **Project status: Launch: 2023-May-08; Completion 2024-Dec-30; Publication (Plenary) 2024-May-30**

- **The project deliverables are:**

1. A Reference Data Models (RDM) of and APIs specifications to cover the travel agency, Destination Managing Company (DMC) and Destination Managing Organization (DMO).

2. The other related Reference Data Models (RDM) and API specifications developed and information involved.

8

Travel & Tourism Domain

UNECE
UN / CEFACT

PROJECT: API Transformation of EPs Technical Artefacts with Sustainability Claims

Supporting VC's: (T&T) @Nancy Norris

Domain Coordinator: (T&T) @Sachin Mehta

Project Lead: @Sachin Mehta

Project Purpose:

Experience Programs Technical Artefacts Project (P1082) was completed in October in 2022, and some members in the tourism industry expect to have the artefacts transformed into API formats based on the newly constructed technical specifications of UNCEFACT to trade Experience Programs (EPs) much lighter and easier for the use of smart phones. Therefore, this project is proposed to make API applicable to the use of the trade of EPs, which will support the facilitation of their trade.

Project status: (Launch: 2023-05-08; Completion 2024-04-30; Publication (Plenary) 2024-05-31

Next Steps:

1: Begin by working based on UN/CEFACT developing procedures.
2: Reviewing existing BRS
3: Work step by step to Complete the API Transformation.

9

43rd UN/CEFACT FORUM | 10-12 December 2024 | Rome, Italy

43th UN/CEFACT Forum

Day 2 Session Proposal – please try to link with the Program of Work

DECEMBER 2024 I ROOM (APPROX. CAPACITY 15 PEOPLE)

Domain:	Travel and Tourism
PoW:	
Title:	Fostering Sustainable Travel and Tourism through API Standards
Date:	11 December
Time:	09:30 – 11:00

BACKGROUND:

This session will delve into the transformation of Application Programming Interfaces (APIs) pertaining to Electronic Press (EP) technical components that incorporate sustainability claims.

It will explore the dynamics of package tours offered by both the Travel Agency and Destination Management Company & Destination Management Organization (DMC&DMO) within the travel industry, considering their alignment with the United Nations Sustainable Development Goals (SDGs).

43rd UN/CEFACT FORUM | 10-12 December 2024 | Rome, Italy

KEYNOTE SPEAKERS:

1. Immersive Digital Walking Tour Platform: Increasing the Feasibility of Sustainable Tourism, Bringing Sustainability Closer to Tourists / *Ms. Chih-Chen Kuo*
2. The Business Requirement Specification (BRS) and Reference Data Model Project for Sustainabile Tourism Industry / *Mr. Tunghua Tai, Dr. Anthony Chien, Dr. Wanchun Hsiung and Mr. Tadashi Ishihara*
3. The API Transformation of EPs Technical Artefacts with Sustainability Claims / *Mr. Sachin Mehta Domain Coordinator, Travel and Tourism, Mr. Kazuyoshi Itagaki and Dr. Mikio Tanaka*

MODERATORS: Dr. Anthony Chien, Deputy of Director, CIDS, Commerce Development Research Institute and Deputy Secretary General, AFACT

PANELISTS:

1. Mr. Sachin Mehta, Domain Coordina-tor, Travel and Tourism
2. Mr. Tunghua Tai, Leader, Project of CEFACT, General Manager, Siloam Travel Agency
3. Dr. Ms. Wanchun Hsiung,Sub Leader, Project of CEFACT, Associate Professor in Tourism and Leisure, Ling-Tung University
4. Mr. Tadashi Ishihara, Sub Leader, Project of CEFACT and Executive Supervisor of JTREC
5. Mr. Kazuyoshi Itagaki, Sub Leader, Project of CEFACT and AFACT expert
6. Mr. Matt Jiang, General Manager, Riversoft Information Inc.
7. Dr. Raye Jiang, Research Fellow, Commerce Development Research Institute and AFACT expert

10


42nd AFACT Plenary Meeting
UNECE
UN / CEFACT
Thank you for your attention!
Anthony Chien / Deputy Director of CIDS,
Commerce Development Research Institute
anthonychien@cdri.org.tw
Travel & Tourism, Leisure WG
11

2.3 Agriculture ESG by Link Join Agriculture

凌 聚農業
Link Join Agriculture
智慧農業好夥伴

凝聚人與自然最真誠的情感
用心與資訊科技，傾注十餘載

Agricultural Carbon Management: Implementing Carbon Reduction and Carbon Sequestration

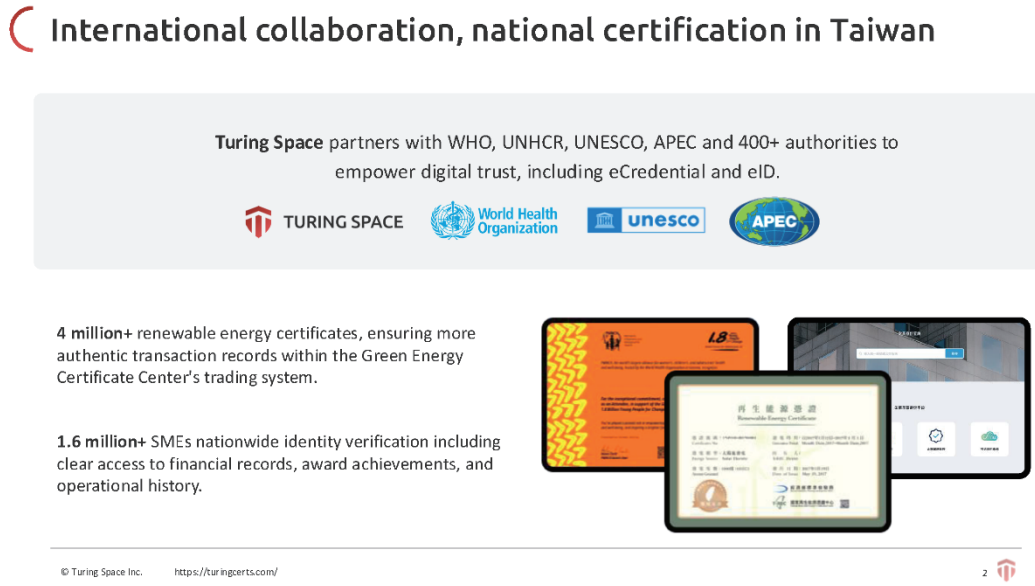
Application of Agricultural GRI Standards: Strengthening ESG Performance Indicator Disclosure

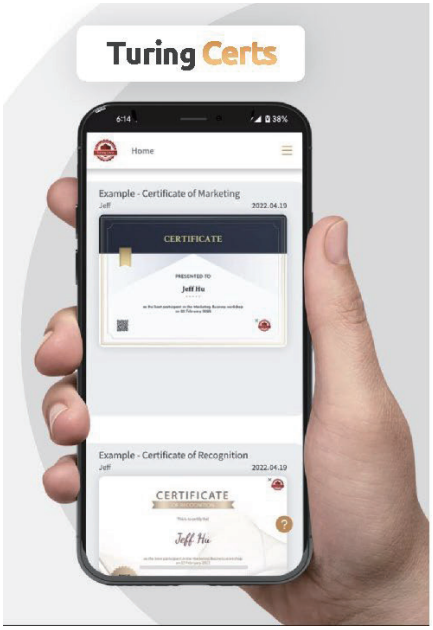
page 08

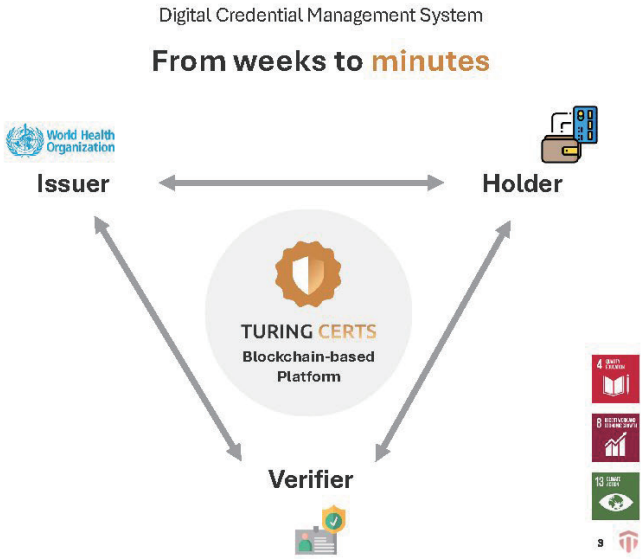
Cross-domain Integration and Complementarity: Co-creating Agri-Sustainable Value

page 09

2.4 Verifiable Credentials by Turing Space





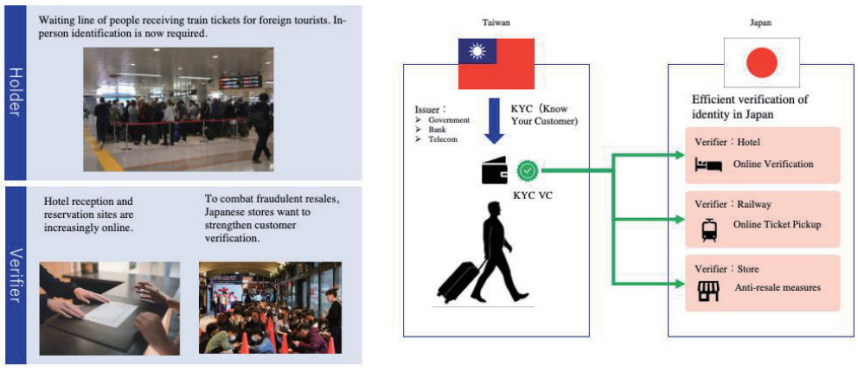


10 Countries and Regions

Travel verification - Taiwan x Japan

Digital identity ecosystems

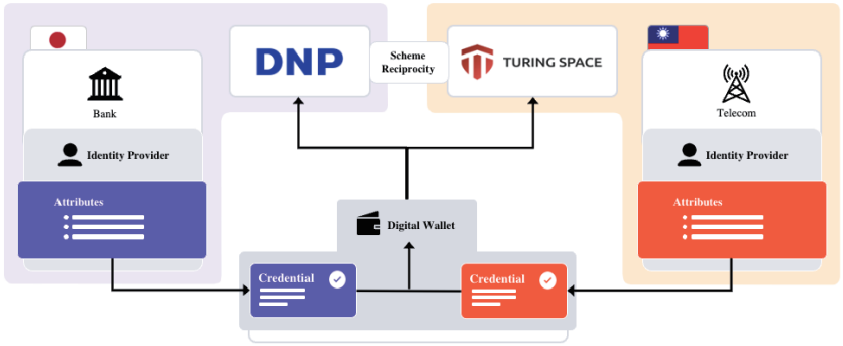
Re-use of Taiwan's digital identity for user convenience and lower verification costs for Japanese service providers.



Work records digitization - Taiwan x Japan

Digital identity ecosystems

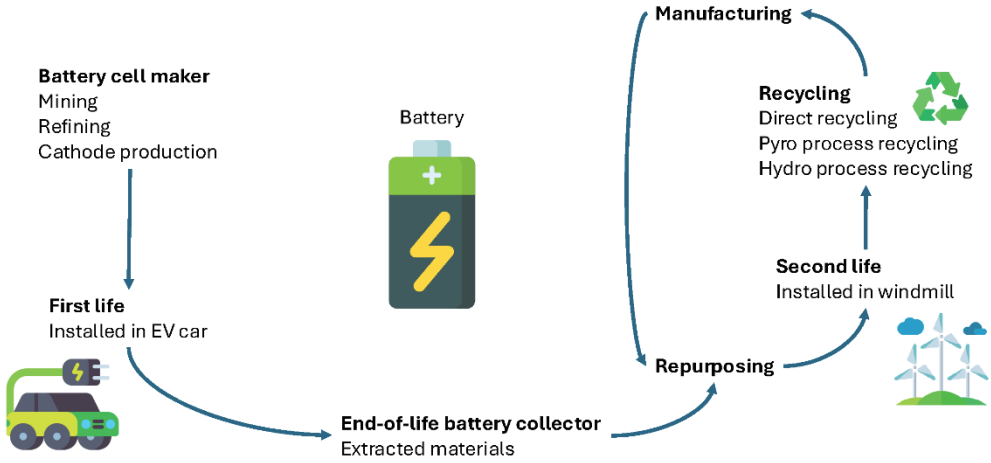
Japan and Taiwan are strongly connected economically, and further economic benefits are expected from interoperating digitalidentities. By interoperating on a common scheme, DNP and Turing Space can interconnect the digital identity ecosystems of Japan and Taiwan.



Credentializing the Lifecycle of Digital Product

Digital Product Passport's Traceability and Transparency by Verifiable Credential

The Cycle of Physical Product

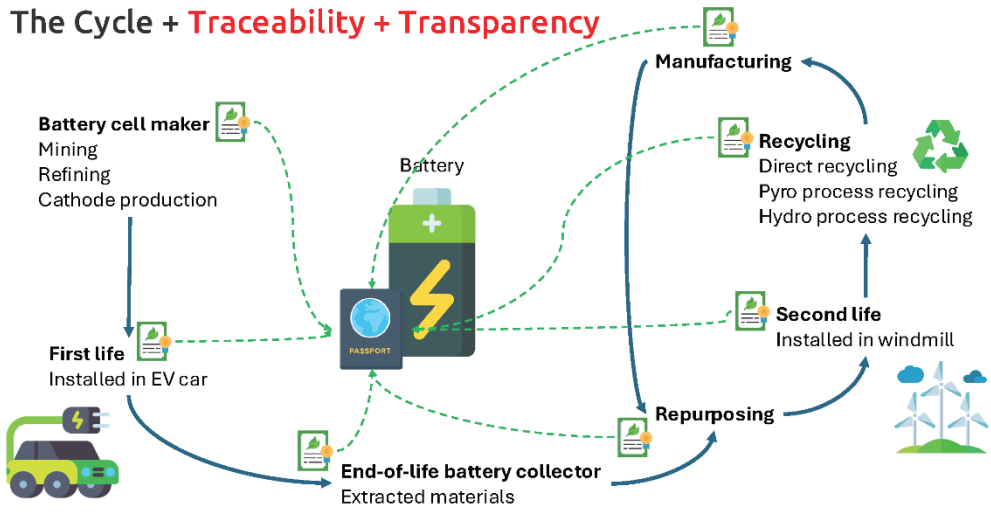


 https://turingcerts.com/

Note: The battery use case shown here is only an example of how our digital product passport can be applied. Our solution can be tailored for a wide range of industries and products.

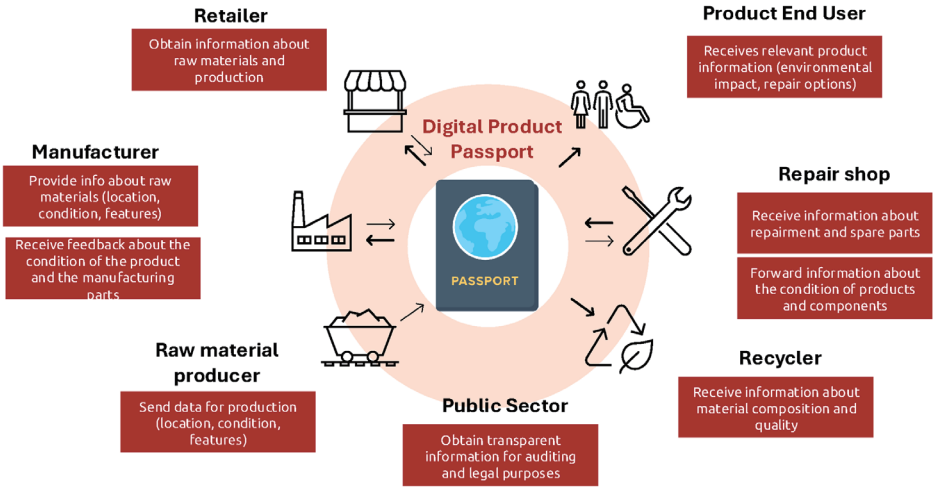
8

The Cycle + Traceability + Transparency



Note: The battery use case shown here is only an example of how our digital product passport can be applied. Our solution can be tailored for a wide range of industries and products.

Stakeholders in Digital Product Passport



Mobile Access to Easy Data Review

For each verifiable credential

Authentication (AuthN)
ID/Entity Verification

Authorization (AuthZ)
eIDAS, Digital Signature, RBAC

Interoperability
W3C DID/VC, OpenID4VC

Integrity
SHA256 Hash Comparison,
IOTA blockchain

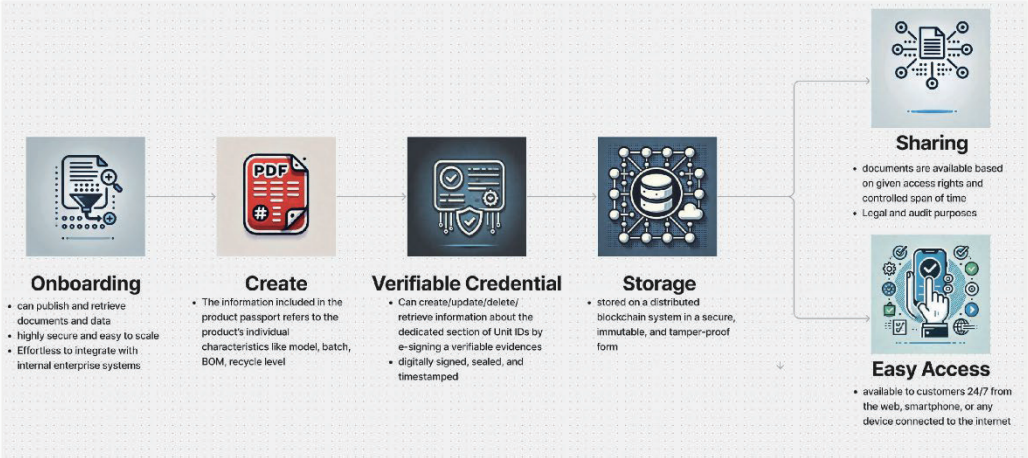
Confidentiality
AES256 Encryption

Compliance
GDPR, ISO27001, ISO27701

Summary
Each unit has a unique identifier that collects verifiable credentials from authorized entity through the lifecycle. Each verifiable credential has its own access control list of allowance.

 https://turingcerts.com/ 12

Data flow in DPP



Benefits to stakeholders

Reduced Cost and Efficiency Boosted

Fast multiparty document and data sharing capabilities with full audit trail and transparency based on a blockchain system allow stakeholders to increase confidence in supply chain processes

Developing Customer Loyalty and Brand Trust

Providing a digital passport fosters transparency, eliminates the risk of data manipulation, and guarantees the provenance and authenticity of data, therefore builds trust with customers by giving them visibility into the vehicle's lifecycle

Compliant to regulatory standards and Sustainable Callout

A digital product passport simplifies the process of complying with increasingly strict environmental, safety, and traceability regulations

Case study - Digimarc (2023)

Verifiable Credentials

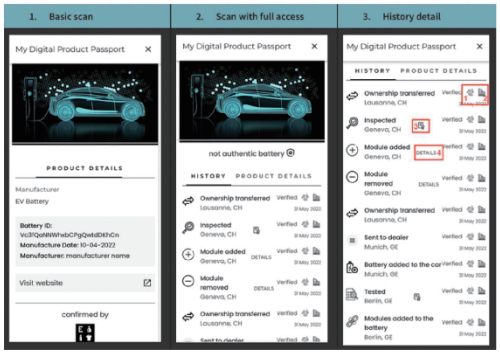
VCs verify the identity and authorization of each participant in the product lifecycle

Blockchain Anchoring for Security

IOTA's DLT anchors lifecycle events securely, preventing tampering while enhancing transparency

Compliance Transparency

The platform integrates the Electronic Product Code Information Services (EPCIS) standard to enable secure tracking and query capabilities across a product's lifecycle

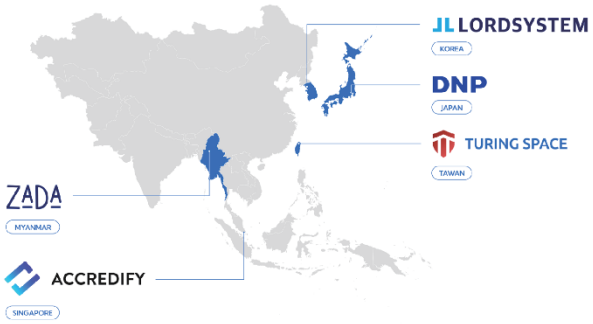


Source: https://www.digimarc.com/blog/decentralized-blueprint-digital-product-passports

APDI

Trust, Bridge, and Inclusion

- The Asia-Pacific Digital Identity (APDI) consortium



APDI Consortium – Trust, Bridge, Inclusion

Trust

We are here to propose a digital identity solutions and foster digital trust in the Asia-Pacific region.

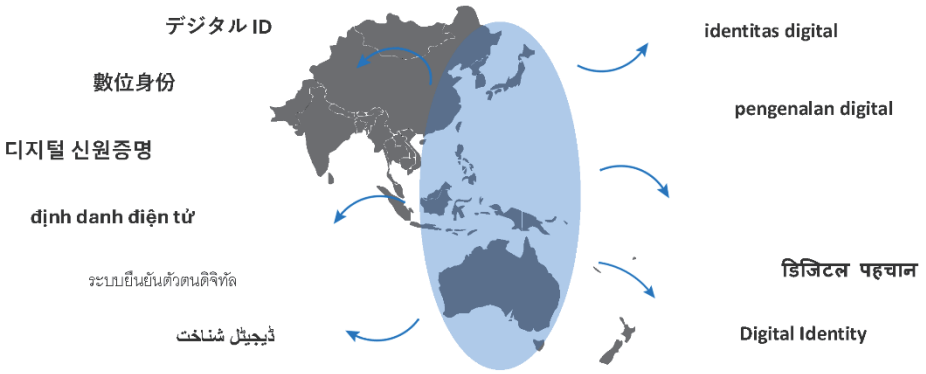
Bridge

Being a bridge in the world, between Asia-Pacific and Western or other regions.

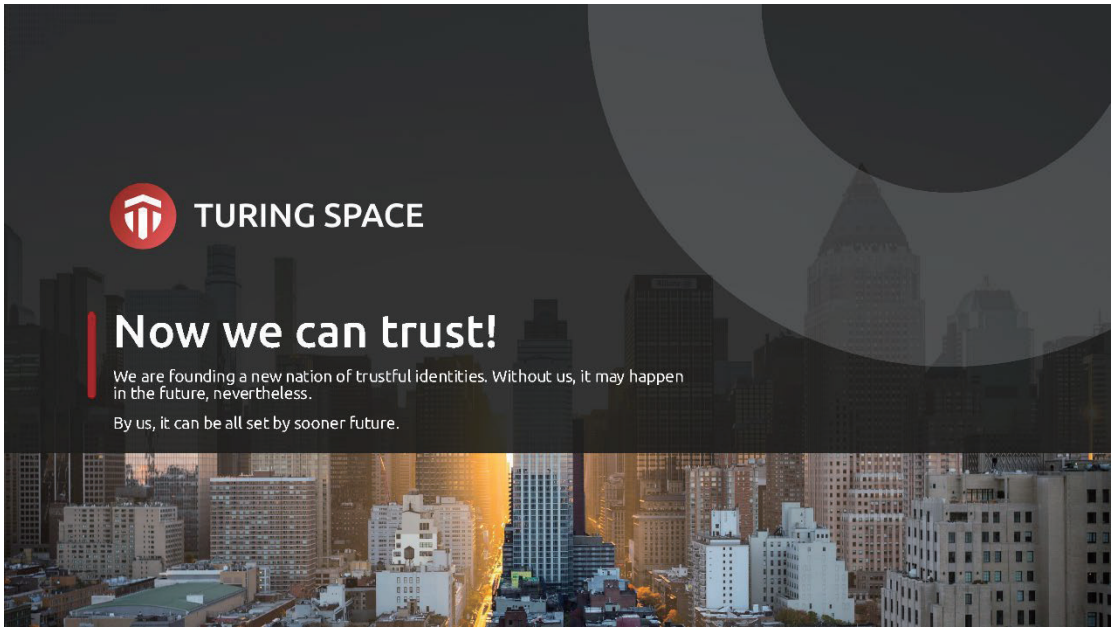
Inclusion

Ensuring that everyone, regardless of socio-economic status, has access to digital services is crucial for social and economic development.

The Asia-Pacific region is diverse in culture, religion, and language
While referring to the EU's efforts,
we will also try to take a unique Asia-Pacific approach.



Thanks for your attention
Any Questions?



Tractions

12+ Healthcare Institutes

40+ Governments

5M+ E-credentials

50+ Universities

400+ Certificate Body

13 industries

Government
Digital Identity

Green Energy/ Carbon Credits

Healthcare
Digital Health Screening
Certificate of Diagnosis Medical Staff Certificate
Training Certificate
Birth/Death Certificate
Remote Prescription

Real Estate
Project Portfolio
Investment Contract

Luxury Goods

Education
Digital Diploma
Lifelong Learning Resume
Certificate of Employment

Funeral
Permanent Family Memorial

Art
Ownership Certificate
Evidence of Creation
Donation Proof

International Organization
Volunteer Certificate
Forum Participation Certificate

Agriculture
Product Origin Traceability
Processing Quality Record
CSR Resume
top-shelf liquor
Anti-counterfeiting Certification

Car
Digital Vehicle Identification Number
Specialized Training Certificate
Vehicle Maintenance Record

Pets
Pedigree papers
Trainer License
Pet Store License
Cat/Dog Award Certificate

Sports
Marathon Achievement Proof
Professional Talent Certificate
Giant Fan Certificate

Representative Clients

World Health Organization
WHO PMNCH

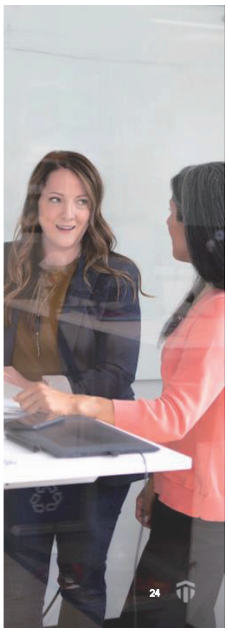
APEC
Asia-Pacific Economic Cooperation

dun & bradstreet
Dun & Bradstreet

Audi Taiwan

GIANT GROUP
Giant Group

Berkeley Law
Berkeley Law Executive Education



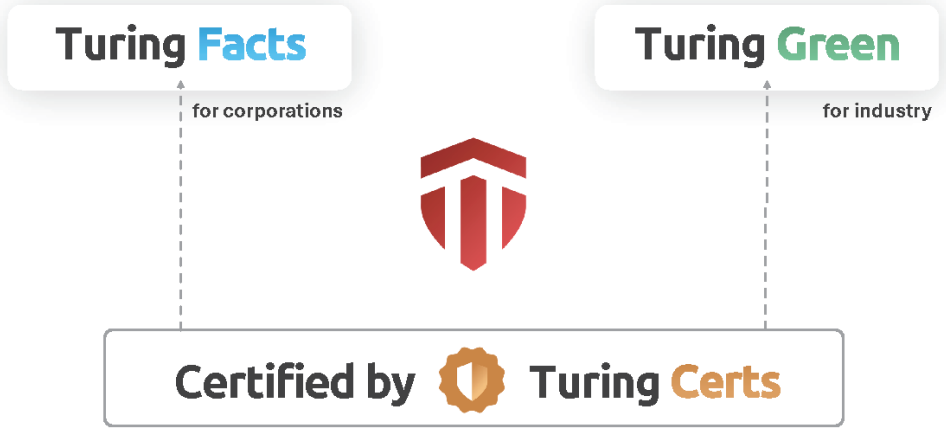
Governmental

Overseas Community Affairs Council, Taiwan

Education Bureau of Hsinchu County Government, Taiwan

Administration for Digital Industries, Taiwan

Trustable Ecosystem



COUNTRY REPORT- JAPAN

1 Introduction: Action Plan for the Digitalisation of Trade Procedures

In Japan, many information communications within trade procedures are processed via paper, telephone or attachments in emails. During COVID-19 pandemic, such practices have led to struggles in sending and receiving trade documents between business partners, and exposed the vulnerability of supply chain.[1]

Under such difficulty, it could be observed that the utilisation of trade platforms is becoming a trend around the world. Trade platforms contribute to facilitation of various digitalisation in trade, such as that of trade documents and transactions, and data sharing among multiple stakeholders in business. In addition, the use of trade platforms brings efficiency to the companies, saving cost on tasks like searching for required documents and mailing them to business partners.

To push trade procedure digitalisation as a whole, the Ministry of Economy, Trade and Industry (METI) of Japan established a "Study group on promoting the use of trade platform" in November 2023. Its goal does not only include what was mentioned in the name of the study group, but comprehensively involves the facilitation of other aspects in trade procedures. Management of manufacturing companies representing various industries participated the group meetings, updating latest information on trade digitalisation and examples of implementing trade platform into operations. Through the meetings, Japanese government was able to communicate with private sectors, gaining a better understanding on the current situation and challenges, as well as the needs of stakeholders from both public and private sectors.

In the latest meeting of the study group, held on June 25th, 2024, METI published the "Action Plan for the Digitalisation of Trade Procedures", which was made with reference to a mid-term report concluding the aforementioned elements discussed in the group meetings. The action plan, divided into 12 measures, aims to achieve 10% of all trade transactions digitalised via data usage through trade platforms on or before 2028. The measures and the ministry in charge are listed out as follows.

[1] 経済産業省(2024).「貿易プラットフォームの利活用推進に向けた検討会　中間報告書」.経済産業省.
https://www.meti.go.jp/shingikai/external_economy/digital_trade_platform/pdf/20240329_1.pdf

1. Establishment of legal framework of electronic bills of lading (eBL)	Ministry of Justice (MOJ)
2. Digitalisation of Port Procedures	Ministry of Land, Infrastructure, Transport and Tourism (MLIT)
3. Promotion of Digitalisation of Certificates of Origin	METI
4. Promotion of Digitalisation of Non-digitalised Trade Documents and Procedures	METI and related ministries
5. Support and Promotion of the Introduction of Trade Platform	METI and Ministry of Internal Affairs and Communications (MIC)
6. Evaluation of Incentive Plans for Encouraging Trade Platform Utilisation	METI and related ministries
7. Facilitation of the Connection between Trade Platform and Trade-related administrative systems	METI and related ministries
8. Publicization of NACCS Functions, including New Function from 7th Amendment of NACCS Specification	Ministry of Finance (MOF) and related ministries
9. Scenarios Creation on Data Linkages with Trading partners through Trade Platforms	METI
10. Support and promotion of the Participation of Forwarders in Trade Platform	METI & MLIT
11. International Standards Compliant Trade Data Linkage	METI
12. Evaluation on Security Measures	METI

Several key items among the twelve are selected to be covered in detail in this country report, including point 2-6, 9 and 11. Except for those specified in footage, all the contents are cited from the "Action Plan for the Digitalisation of Trade Procedures"[2] and its supplementary materials.[3]

2 Digitalisation of Port Procedures

The digitalisation of port procedures consists of two aspects, respectively documents used in port procedures, and Cyber Port, a platform for digital port procedures operated by MLIT.

There are documents in port procedures that are yet to be digitalised, including "Gate In Container List" which is mainly exchanged in paper form, and "Dangerous Goods Application Form" suggested by shippers. MLIT shall partner with Japan Port Transportation Industrial Safety & Health

[2] 経済産業省(2024).「貿易プラットフォームの利活用推進に向けたアクションプラン工程表」.経済産業省.
https://www.meti.go.jp/shingikai/external_economy/digital_trade_platform/pdf/20240625_1.pdf
[3] 経済産業省(2024).「貿易プラットフォームの利活用推進に向けたアクションプラン　補足資料」.経済産業省.
https://www.meti.go.jp/shingikai/external_economy/digital_trade_platform/pdf/20240625_2.pdf

Association to digitalise the documents. At the same time, research on port procedure documents which are only effective in paper form shall be conducted. Based on the result, those documents shall also be digitalised, and their digitalisation shall be promoted to public for broader adoption.

On the other hand, Cyber Port, as mentioned before, is a platform built by MLIT providing digital solutions for port procedures. When documents and data necessary for port procedures are imported into Cyber Port, other stakeholders that connect to Cyber Port will be able to view and utilise the information. These stakeholders include NACCS (platform for single window services) and CONPAS (system for facilitating container logistics), together with other private trade platforms, shipping and forwarder companies.[4]

MLIT aims to increase utilisation of Cyber Port. Firstly, it will continue the facilitation of linking Cyber Port to other platforms in commercial distribution and trade finance, trade platforms, web services and package software.

Case Study 1: Connection between Cyber Port and NACCS

Cyber Port and NACCS established linkage via API since March 2023.[5] Users who have their company system connected to Cyber Port via API do not need to create another connection to NACCS, instead they can carry out NACCS operations within Cyber Port, including procedures for logistic and customs declarations. This function can cut data entries by 80% at the maximum, greatly increasing the convenience for system users.

The target users for such API connection are shippers, international forwarders, custom brokers and more, especially operators who would undergo procedures or make enquiries on NACCS via netNACCS (a package software for using NACCS system). [6]

Secondly, as there was feedback from shippers expressing the need for improvements on logistics functions, MLIT shall work on visualising overseas cargo transportation information within Cyber Port, along with any other function improvements requested by users.

Finally, MLIT shall promote Cyber Port by spreading related information through seminars and workshops, supporting the implementation of Cyber Port with trials, demonstrations, and workflow analysis. Meanwhile, MLIT plans to form a model on a port-by-port basis for Cyber Port utilisation

[4] *About Cyber Port | Cyber Port ・ CONPAS Portal site*. (n.d.). About Cyber Port | Cyber Port ・ CONPAS Portal Site. https://www.cyber-port.net/en/about#link02

[5] 国土交通省 (2023).「自社システムから NACCS への申告等が可能になります ～CyberPort による NACCS 連携 API を公開～」. 国土交通省. https://www.mlit.go.jp/report/press/port05_hh_000276.html

[6] Cyber Port (2023).「NACCS 連携機能について」. Cyber Port. https://www.cyber-port.net/document/ja/NACCS%E9%80%A3%E6%90%BA%E6%A9%9F%E8%83%BD%E3%81%AB%E3%81%A4%E3%81%84%E3%81%A6.pdf

that involves multiple stakeholders in port procedures, and apply this model across the whole country.

3 Promotion of Digitalisation of Certificates of Origin

This action is divided into two parts, the Preferential Certificate of Origin and Non-Preferential Certificate of Origin (Non-Pref. CO).

Japan is currently issuing the Preferential Certificate of Origin in PDF format based on 8 agreements with Asia-pacific countries. On top of that, Japan has started data exchange of Preferential Certificate of Origin (electronic Preferential Certificate of Origin), with Indonesia, in accordance with the Japan-Indonesia Economic Partnership Agreement (EPA). The two countries shall work together to solidify the exchange by 2025.

On the other hand, Japan plans to introduce electronic Preferential Certificate of Origin on other economic partnerships. A hearing from the related industries will be held, together with an examination on benefits of linking Preferential Certificate of Origin to data of other trade documents, for example those of an invoice.

Moreover, in 2024, the system for issuing "EPA Preferential Certificate of Origin" operated by the Japan Chamber of Commerce and Industry (JCCI) has officially connected to JAFTAS, an EPA utilisation support system for automobile industry.[7] This system linkage was realised with the support of "Grants for Utilisation of Trade Platforms" (refer to Chapter 5), enabling JAFTAS users to apply for "EPA Preferential Certificate of Origin" within JAFTAS, instead of switching to JCCI's system. In that sense, users would not be required to submit the same data and documents twice to different system, greatly reducing costs and human error.[8]

For Non-Pref. CO, a similar approach will be adopted. At the beginning, a fact-finding investigation regarding the digitalisation of Non-Pref. CO and a hearing from industries will be held. The country will then examine the expansion of digital issuance of Non-Pref. CO, and discuss with exporting countries about the handling of such digital Non-Pref. COs.

4 Promotion of Digitalisation of Non-digitalised Trade Documents and Procedures

Despite the items mentioned above, there are documents or procedures that are only processed in paper form existing on law systems or business practices in Japan and trading partners. METI has

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[7] JAFTAS. (2024, February 29). *経済連携協定(EPA)活用の貿易プラットフォーム国内初の官民連携によるシステム間接続を実現～EPA活用プラットフォーム「JAFTAS®」、経産省/日本商工会議所の原産地証明書発給システムとの接続実現により、スマートEPA時代へ前進～*. 東京共同トレード・コンプライアンス. https://jaftas.jp/wp/press/12818/

[8] 経済産業省(2024).「日商発給システム―JAFTAS 連携」.経済産業省.
https://www.meti.go.jp/shingikai/external_economy/digital_trade_platform/pdf/003_03_00.pdf

invited a consulting company to conduct a fact-finding investigation on trade documents yet to be digitalised. The investigation will be finished in 2024.

Further actions in reference to the investigation will be established from 2025. For domestic non-digitalised documents, Japan will proceed to evaluate the approaches for digitalising them. For those in ASEAN countries, Japanese government will bring into view the legal system and development of trade platforms of every country, then suggest measures on trade procedure digitalisation via Economic Research Institute for ASEAN and East Asia (ERIA), so as to facilitate the trade digitalisation among ASEAN.

Lastly, Japanese government is planning to advocate for trade procedure digitalisation on the international stages, like international forums such as the G20 and APEC, and international frameworks like Regional Comprehensive Economic Partnership (RCEP), Indo-Pacific Economic Framework for Prosperity (IPEF) and WTO.

5 The Support and Promotion of Trade Platforms Introduction

Shippers which participated in the study group have expressed their demand for trade platforms to link to one another, as numerous of trade platform services are being established on both domestic and international scale. The government has taken, and plans to take, specific strategies to support the connections between trade platforms, as well as the utilisation of these platforms by shippers and forwarders.

First of all, the government has commenced the "Grants for Utilisation of Trade Platforms" since 2023, a grant for both trade platform service providers and users, to encourage the utilisation of trade platforms. At the time of writing, JASTPRO is the grant administrating organisation, responsible for procedures from application processing to follow-ups upon grant remittance.[9]

Case Study 2: Grants for Utilisation of Trade Platforms[10]

The grant aims to facilitate more widespread adoption of trade platform. In 2024, the targets of this grant are divided into three categories. Category 1 and Category 2 refer to any Japanese corporations that seeks to use domestic and international trade platform services provided by private sector, while Category 1 would connect its own system to the said trade platforms, Category 2 would contribute in evaluating how trade platforms could digitalise trade procedures and reduce costs. These users may include trading companies, manufacturers, logistics companies, and financial

[9] JASTPRO (n.d.). 「貿易プラットフォーム活用補助金（貿易プラットフォーム活用による貿易手続きデジタル化推進事業費補助金）」. https://www.pf-hojo-jastpro.org/.

[10] 貿易プラットフォーム活用補助金事務局(2024). 「貿易デジタル化：貿易プラットフォーム活用に向けた取組み ―貿易プラットフォーム活用補助金事業の成果と課題―」 『月刊 JASTPRO』 540 号, pp.12-14. https://www.jastpro.org/files/libs/2144/20240509172303370.pdf

institutions etc. Category 3 refers to any Japanese corporations that provide trade platform services, and aim to improve the convenience of trade platforms by connecting to other trade platforms.[11]

Within this grant project, trade platform is defined as digital solution that enables data sharing under a secured environment, so that efficiency and transparency in trade-related procedures can be enhanced, while cost be lowered.

To receive the grant, all applicants would be carefully evaluated and rated by a committee consisting of trade professionals and scholars. In 2024, 33 applicants were deemed to be eligible for the grant.

The website for the grant (Japanese only) is as follows. https://www.pf-hojo-jastpro.org/

Secondly, METI and MIC shall cooperate with Ouranos Ecosystem to support the connections between trade platforms and platforms that manage order data. Ouranos Ecosystem is an initiative founded for tackling social issues such as labour shortages, intensification of natural disasters, and decarbonisation. In order to do so, it attempts to build a framework for data sharing and system connection across borders, focusing on the designs, development and experiments, implementation and dissemination of such architecture of mechanisms.[12] All altogether, they shall support the linkage of trade data and business activities data as a kind of supply chain digitalisation facilitation.

6 Creating Scenarios of Data Linkages with Trading Partners through Trade Platforms

Japanese government recognises the significance of creating real-life scenario, or case study, of paperless trade that is solely communicated through data exchange with another country. The partner of such scenario is primarily set as ASEAN member states such as Indonesia and Thailand. After that, Japan plans to invite more countries located in Southwest Asia, Africa, and Latin America, and eventually the rest of the world for trade data linkage.

7 International Standards Compliant Trade Data Linkage

Shippers from the study group have asked for actions related to data standardisation that allows interoperability among trade platforms. As response, the government continues to work with UN/CEFACT to include data items that are used by Japanese companies in daily operations to international standards. For example, the ongoing trade finance project in UN/CEFACT is supported by the Japanese government.

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[11] JASTPRO (n.d.). 「貿易プラットフォーム活用補助金：事業スキームと補助対象事業」. 貿易プラットフォーム活用補助金（貿易プラットフォーム活用による貿易手続きデジタル化推進事業費補助金）https://www.pf-hojo-jastpro.org/%E4%BB%A4%E5%92%8C%E5%B9%B4%E5%BA%A6-1/.

[12] METI. (2023, April 29). *Japan's initiatives for interoperable data infrastructures officially named "Ouranos Ecosystem."* https://www.meti.go.jp/english/press/2023/0429_001.html.

This trade finance project, named “Buy Ship Pay Data Exchange Structures for Trade Finance Facilitation”, aims to standardise and to harmonise the several trade documents, such as Bill of lading, Documentary credit and Insurance policy, so that the information in the processes of trade, transport and payment can be connected.[13] Among the five teams developed within this project, Japan takes the lead in the Finance team and Insurance team. Hisanao Sugamata from Supply Chain Information Platform Study Group (SIPS) serves as the key editor of the Finance team, providing suggestions on Business Requirement Specification (BRS) in relation to Document Credit process. Meanwhile, Tetsunosuke Tom Shinya from Tokio Marine & Nichido Fire Insurance Co., Ltd. is the key editor of the Insurance team, proposing BRS draft for cargo insurance process.[14] Japan also actively participate in Supply Chain Management (SCM) team and Multi Modal Transport (MMT) team to offer advice on corresponding scopes.

Furthermore, Japanese government shall collaborate with Ouranos Ecosystem to develop a guideline for Japanese companies to implement international standards, and to provide actual support in the implementations.

Lastly, keeping in mind that there may be requests for new kind of data regarding greenhouse gas and human rights within the supply chain, the government shall consider different arrangements for smooth integration of such data.

8 Conclusion

To cope with the fast-changing environment in trade industry, Japan government has been paying much effort in promoting and facilitating trade digitalisation and the international standards conformity required for such kind of digitalisation since 2023. For example, a “Study group on promoting the use of trade platform” was set up, providing a channel for private sectors to voice out their opinions and requests on trade digitalisation measures. Other approaches include trade and port procedures digitalisation, establishment of grants for trade platforms and their users, and active participation on the international stage regarding trade facilitation, such as UN/CEFACT and partnering with other countries for trade data exchange.

Altogether, they give a sign that Japan government is determined to improve the trade environment domestically and internationally, not only to increase efficiency of trade, but also to raise competitiveness of Japanese companies. It is highly expected that this will start a new wave in many industries that motivates companies to join digitalisation, and lead the whole Japanese society to enter into a new era.

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[13] Buy Ship Pay Data Exchange Structures for Trade Finance Facilitation. (n.d.). UN/CEFACT Collaboration Environment. https://uncefact.unece.org/display/uncefactpublic/Buy+Ship+Pay+Data+Exchange+Structures+for+Trade+Finance+Facilitation

[14] 菅又久直(2024).「第 42 回 国連 CEFACT フォーラム会議報告ー貿易手続デジタル化と新たな潮流ー」『月刊 JASTPRO』 543 号, pp.15-25. https://www.jastpro.org/files/libs/2226/20240809145449523 1.pdf

Country Report – Korea

Parcel goods traceability in last-mile delivery

26 November 2024

Kerri Ahn

CONTENTS

1. Status of Korea

Activities in Korea

- EU PEPPOL
  - Korean Government is interested to join EU PEPPOlL
  - Beginning stage of studying PEPPOL standard: UBL, e-signature
- e-Certificate
- How to ensure a reliable electronic business
- Research project for exchanging e-C/O with AMS and Korea
- Digitalization and resilience for small ports of ESCAP Member States
- Standardisation project for parcel goods logistics: Urban logistics, Robots, etc.
- ISO TC154
  - 43rd plenary meeting: October 2024 Korea
- ISO TC344: Innovative logistics
  - 1st plenary meeting: May 2024 China
  - 2nd plenary meeting: 26th November virtual meeting
  - SC1: Retail Logistics – unmanned store, last-mile delivery

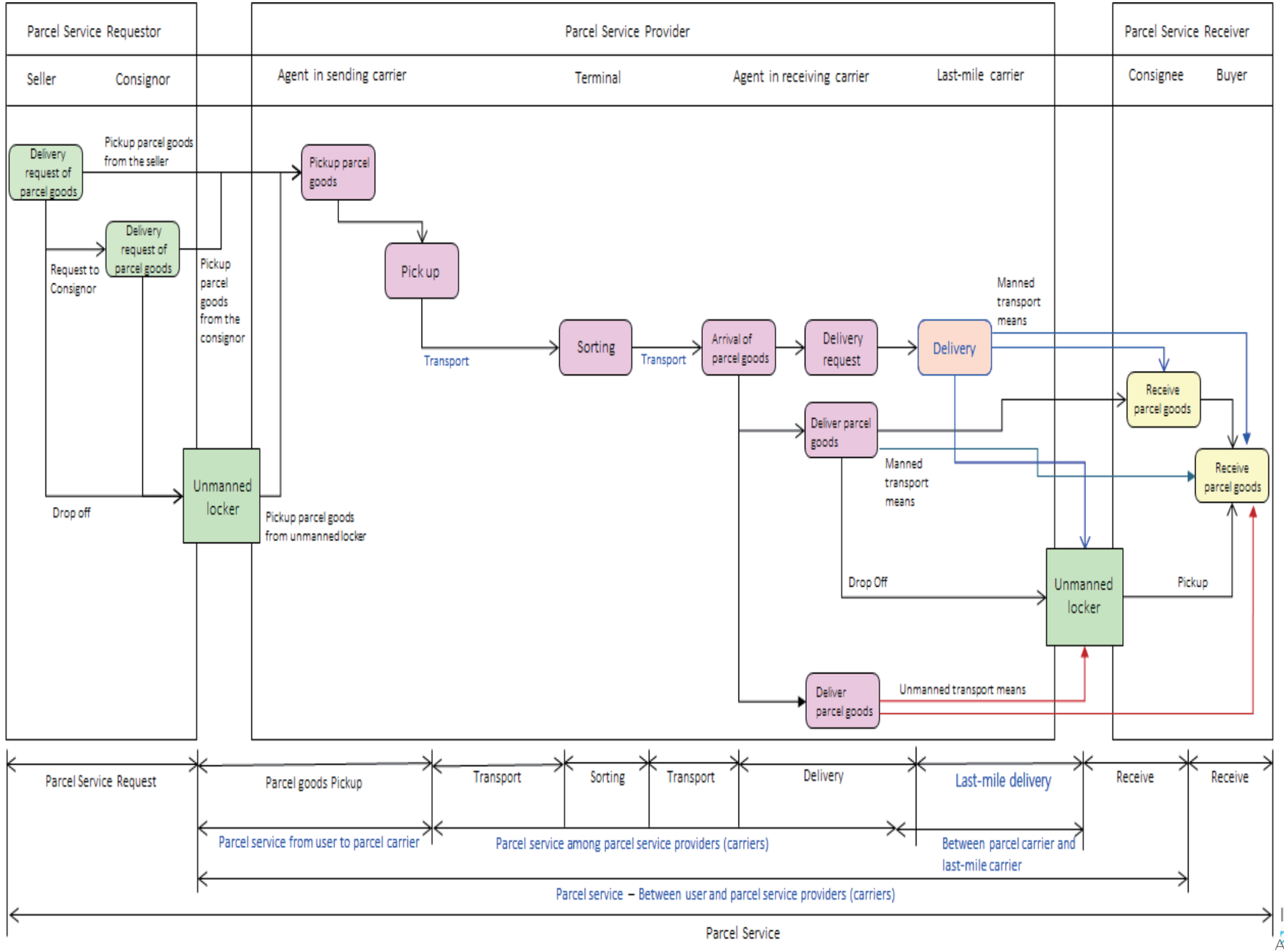
2. Status

Status of Deliverables

- **BRS and eBusiness Standard for Parcel Goods waybill**
  - Draft: ~ 12th November 2024
  - Report status of deliverable 1: December 2024 (43rd UN/CEFACT Forum)
  - Circulation among the participated experts: January 2025
- **Whitepaper on Parcel Goods Traceability in last-mile delivery**
  - Contents table: ~ November 2024
  - Draft: ~ January 2025
  - Circulation among the participated experts: March 2025

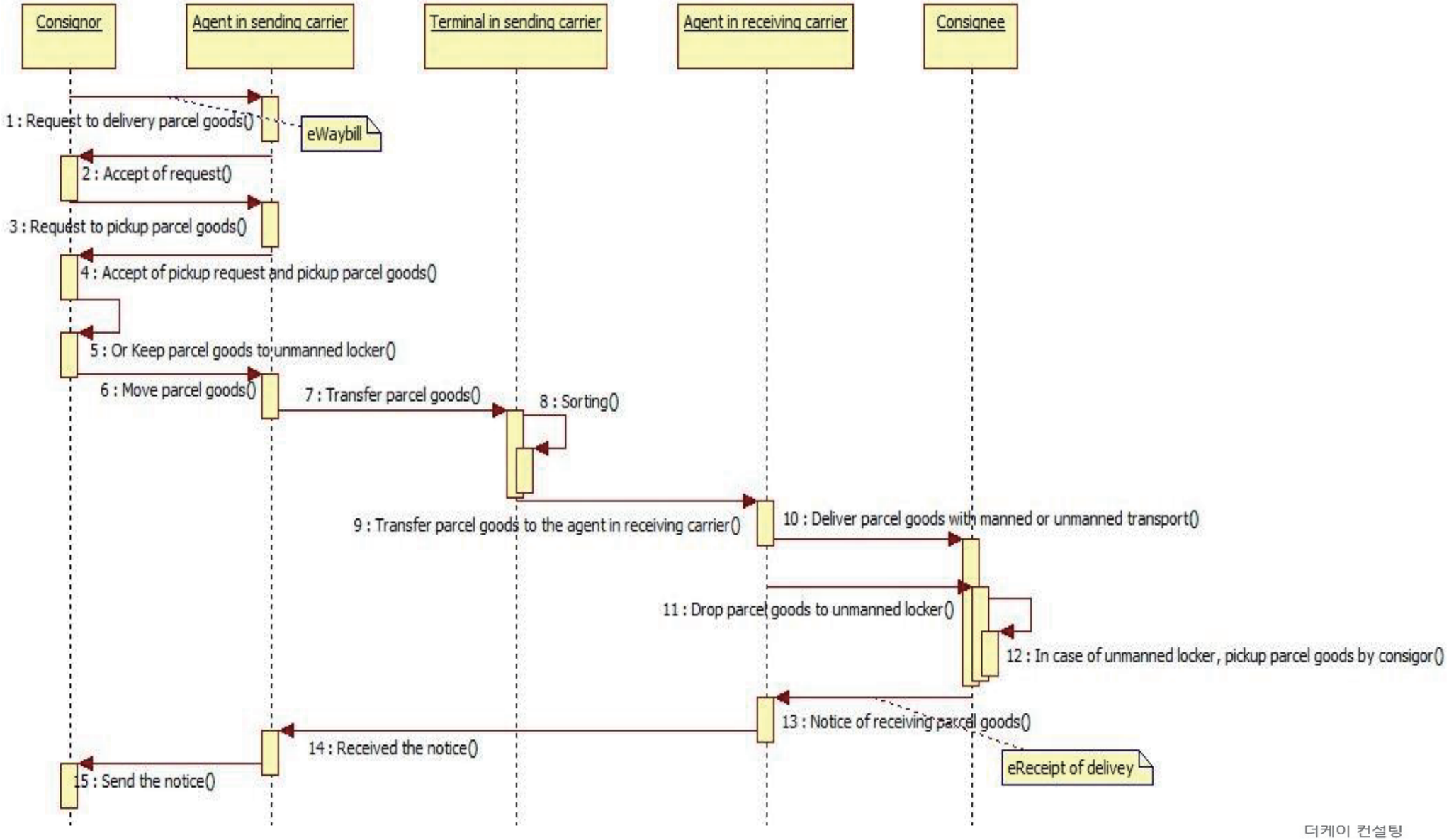
3. Deliverable 1 - BRS

Generals



3. Deliverable 1 - BRS

Sequence diagram of parcel goods delivery service



Business requirement

A.1	• The consignor can either request a parcel delivery service from a parcel service provider or drop off the goods at the designated location for delivery.	Submit a request for Parcel Delivery Service
A.2	• If the parcel service provider is available, they will accept the delivery request. If not, they reject of request. In the rejected case, the consignor selects another parcel service provider and repeats step A.1.	Response for Parcel Delivery Service Parcel Waybill
A.3	• The parcel service provider (carrier) requests the pickup agent to collect the parcel goods.	Request for Pickup
A.4	• The pickup agent stops at the consignor's (or sender's) location or a designated place to collect the parcel goods, then transports them to the parcel service provider's office at the departure point.	
A.5	• Parcel goods picked up are transported from the parcel service provider's office at the departure point to the parcel terminal through a transportation process.	Transport of Parcel goods
A.6	• After arriving at the parcel terminal, the parcel goods are unloaded and sorted.	Sorting
A. 7	• After the sorting tasks are completed at the parcel terminal, the parcel service provider requests the transport agent (carrier) to transport the parcel goods (work instructions) to their office at the destination points.	Transport Order
A.8	• The transport agent loads the classified goods onto transport means and transports them to another parcel terminal or their office at the destination point.	Transport of Parcel goods
A.9	• The parcel service provider requests delivery to a delivery agent, who provides delivery service including last-mile delivery. The delivery agent accepts the parcel delivery request.	Delivery request for Parcel Goods
A.10	• The delivery agent checks the list of parcels to be delivered and loads them onto the delivery means, whether manned or unmanned.	Loading
A.11	• The delivery agent delivers parcel goods to the location designated by the recipient (consignee or receiver) of the delivery service. • When the final destination is a designated place, the delivery agent drops off the parcel goods at that location and notifies the recipient (consignee or receiver) that the parcel has arrived. • When the recipient (consignee or receiver) receives the parcel goods at the designated place, they should inform the parcel service provider that they have completed the receipt.	Send the notice of a parcel goods delivered (Delivery Order)
A.12	• The delivery agent informs the parcel service provider that the parcel has been delivered. Then, the parcel service provider informs it to the consignor or sender.	Receipt of notice of delivered

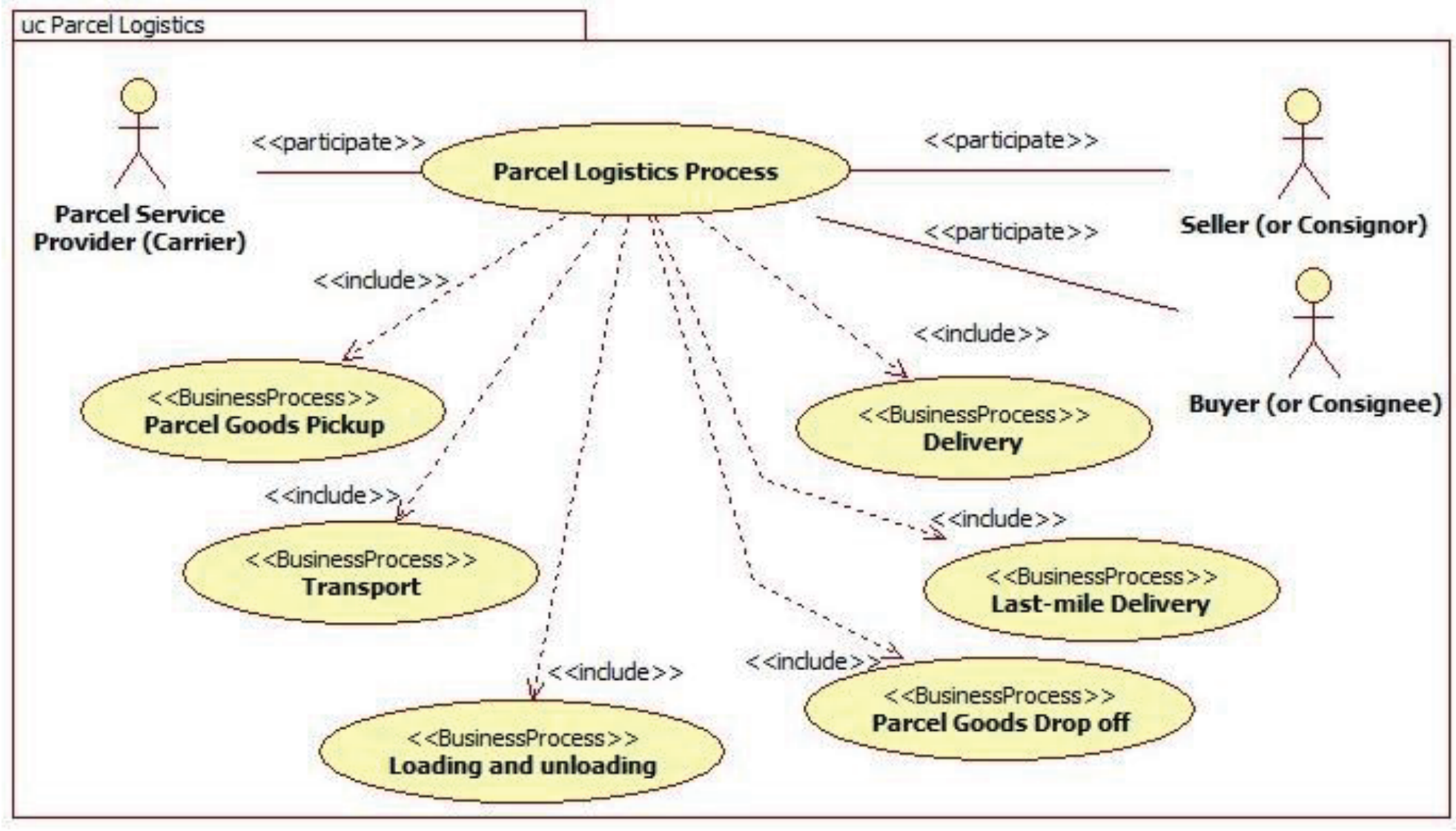
3. Deliverable 1 - BRS

Data requirement

Number	Data Requirement Statement
B1	A Parcel Waybill may specify one or more items for Parcel Goods
B2	A Line shall identify only one Good
B3	A Waybill Number shall identify a Parcel Waybill
B4	A Parcel Good may contain one or more Packages
B5	A Package may contain one or more Products
B6	Parcel Goods shall be delivered to the Address (consignee, unmanned locker, etc.)
B7	An Address may specify a ZIP code
B8	Parcel Goods shall be delivered by manned or unmanned transport means in last-mile delivery

3. Deliverable 1 - BRS

Business Domain Use Case Diagram



4. Deliverable 2 – White paper

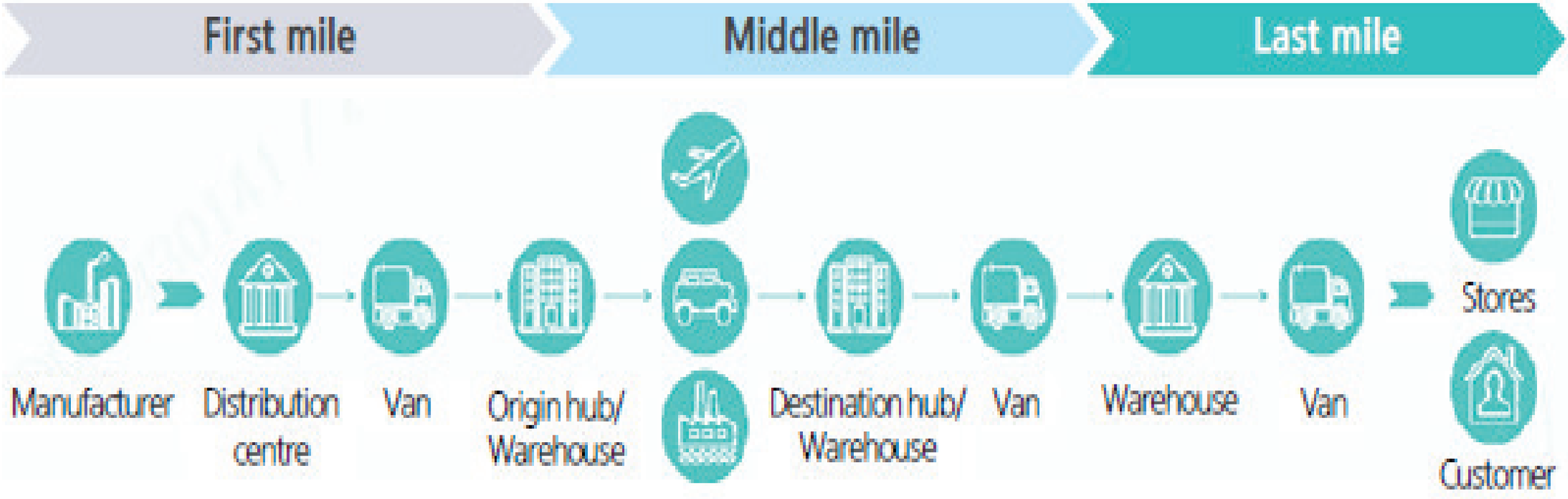
Contents

- **Last-mile delivery**
  - What means last-mile delivery?
  - Actors: Who is participating in last-mile delivery
  - Infrastructure: what kind of facility, equipment, and transport means are required
- **Standard components for last-mile delivery**
  - Identifier: business entities, consignment (goods) including packaging, unmanned locker, manned and unmanned transport means, IoT sensors, etc.
  - Message: XML and JSON, e-message for traceability, e-Waybill, receipt of goods
  - Interface: WEB Service, RESTful
  - Architecture framework

4. Deliverable 2 – White paper

Contents

- Last-mile delivery



Source: Wipro, Google, and Samsung

4. Deliverable 2 – White paper

Contents

- **Functionality**
  - When and how to capture the required information for traceability?
  - How to retrieve information
    - Push method
    - Get method: Push eWaybill ID -> Call API using APP, WEB -> Get tracking Infor.
  - How to notify the receipt of parcel goods
    - By delivery agent using an App.
    - By customer using facility or App
  - How to give feedback to the service provider or consignor (sender) after completion of parcel goods delivery
- **Others**
  - Cybersecurity and conformance

5. Future

Tentative schedule

- **BRS and eBusiness Standard for Parcel Goods waybill**
  - Circulation among the participated experts: January 2025
  - Request reviewing the draft of BRS: 60 days
- **Whitepaper on Parcel Goods Traceability in last-mile delivery**
  - Draft: ~ January 2025
  - Circulation among the participated experts: March 2025
  - Request reviewing the draft of BRS: 60 days(before 44th UN/CEFACT Forum)

Thank you

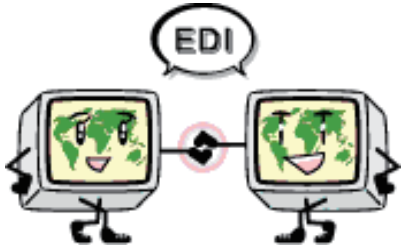
***Contact*: Dr. Ahn, Kerri**

- The K Consulting -

Email address: ahn.kyeongrim@gmail.com

DECADE OF ACTION

BDC Trade Facilitation WG

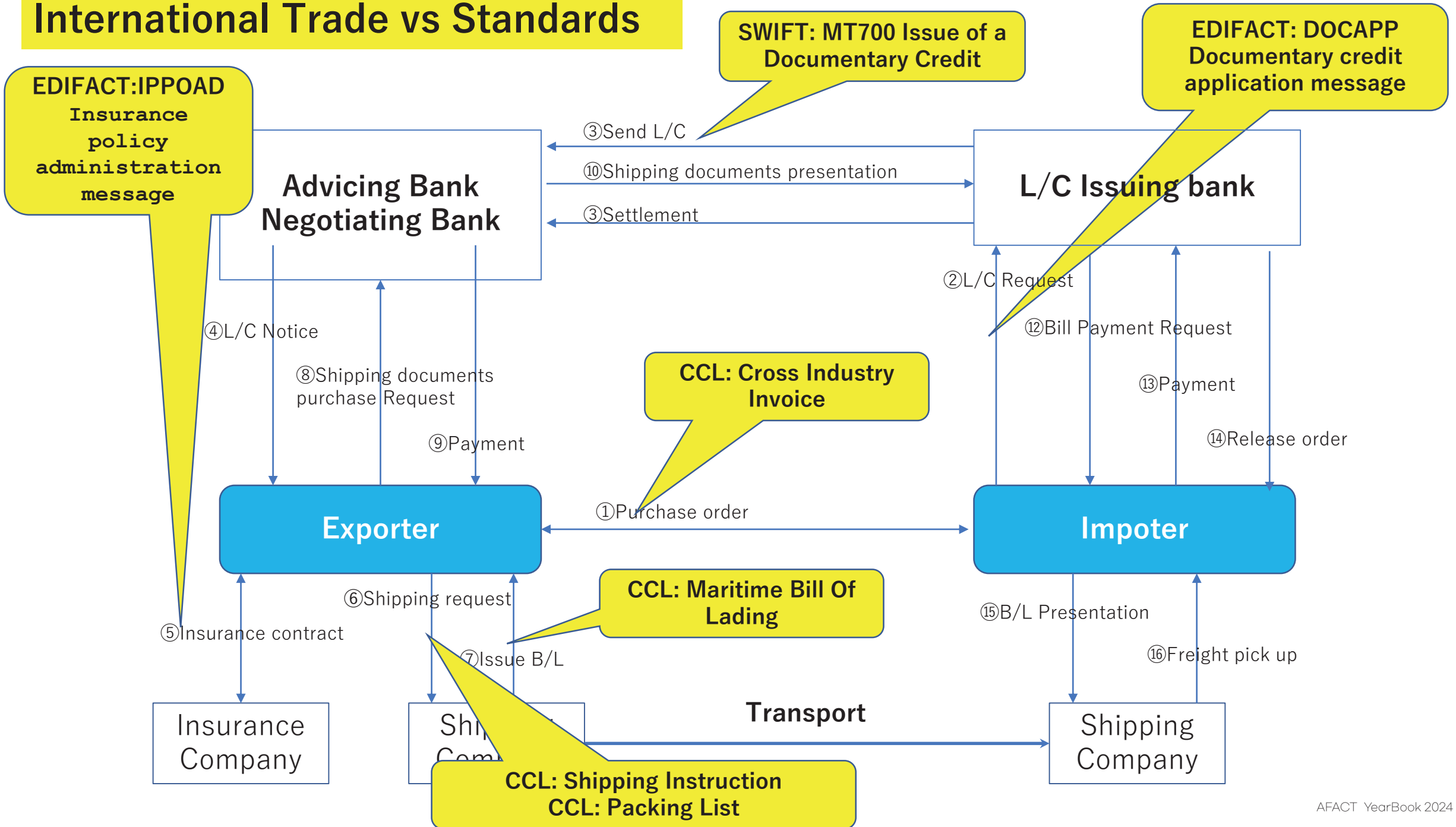


Trade Finance Project

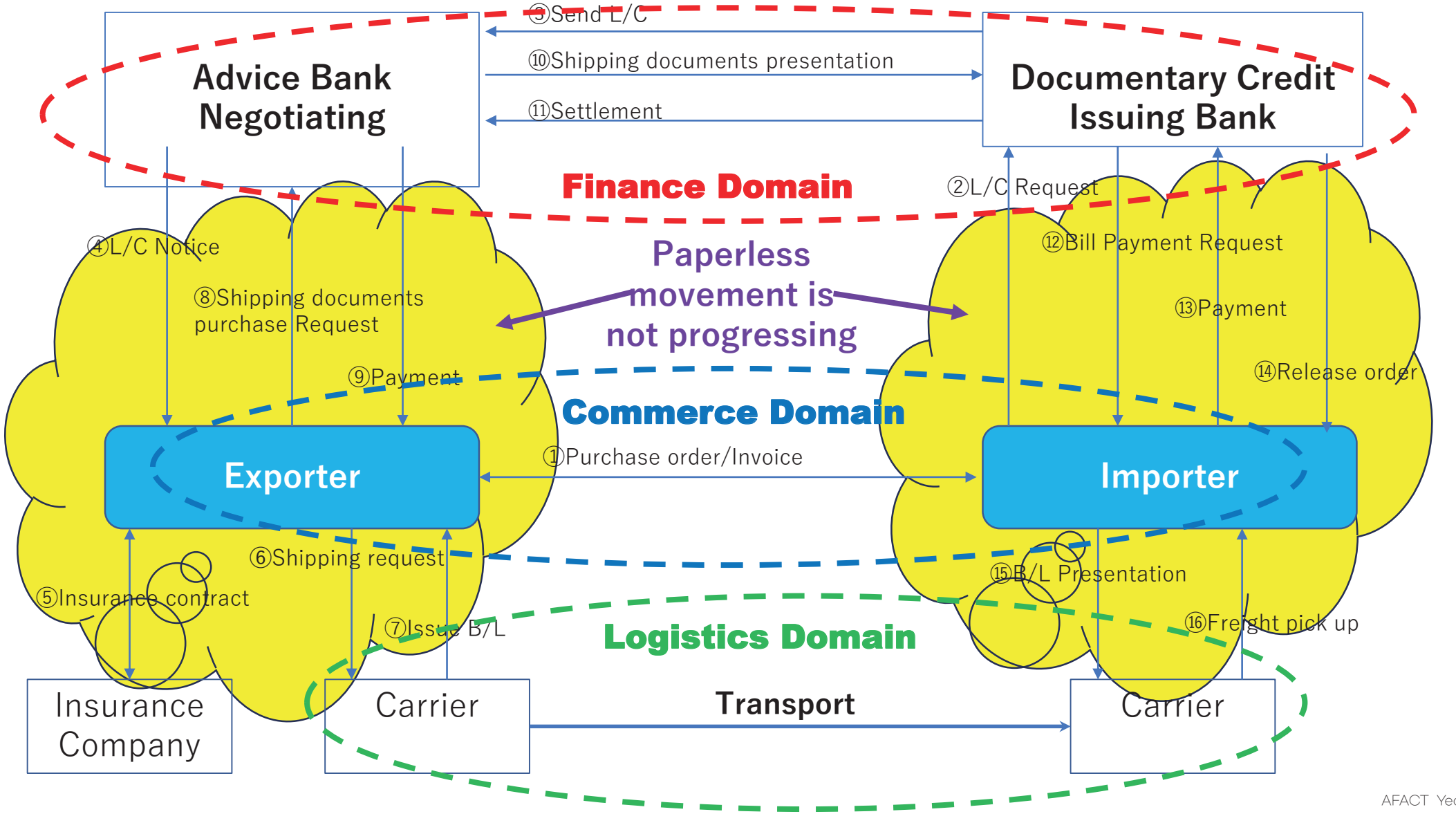
2024-11-26
42 AFACT Plenary

Hisanao Sugamata

International Trade vs Standards



Lack of interoperability in financial, commercial and logistics sectors



Buy/Ship/Pay Data Exchange Structures for Trade Finance Facilitation

Project submitted: 8 February 2023
By Sue Probert and Hanane BECHA

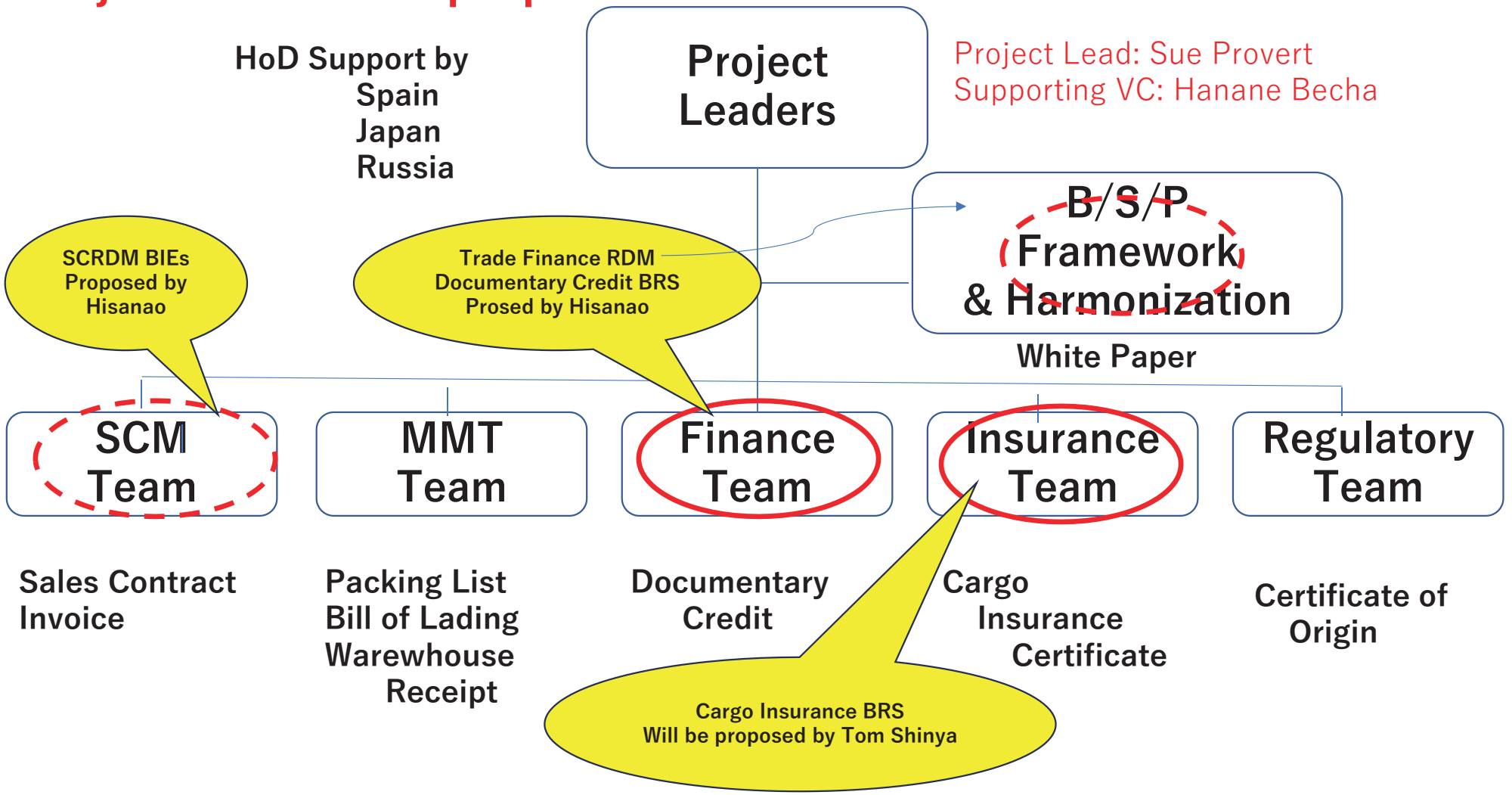
Project Purpose

In order to support the implementation of MLETR for title transfer, this project will develop data exchange structures as subsets of the Buy/Ship/Pay Reference Data Model (BSP RDM) to support key trade finance data exchanges as part of the UNECE “digital and green transformations for sustainable development in the ECE region” strategy.

Project Deliverables

- BRS and eBusiness Standard for Documentary Credit Advice
- BRS and eBusiness Standard for Non-Preferential Certificate of Origin
- BRS and eBusiness Standard for Maritime Cargo Insurance Certificate
- BRS, implementation guideline and CCBDA subset for Warehouse Receipt
- CCBDA Implementation guideline for Trade Finance Subset for Invoice
- CCBDA Implementation guideline for Trade Finance Subset for Packing List
- Trade Finance White Paper

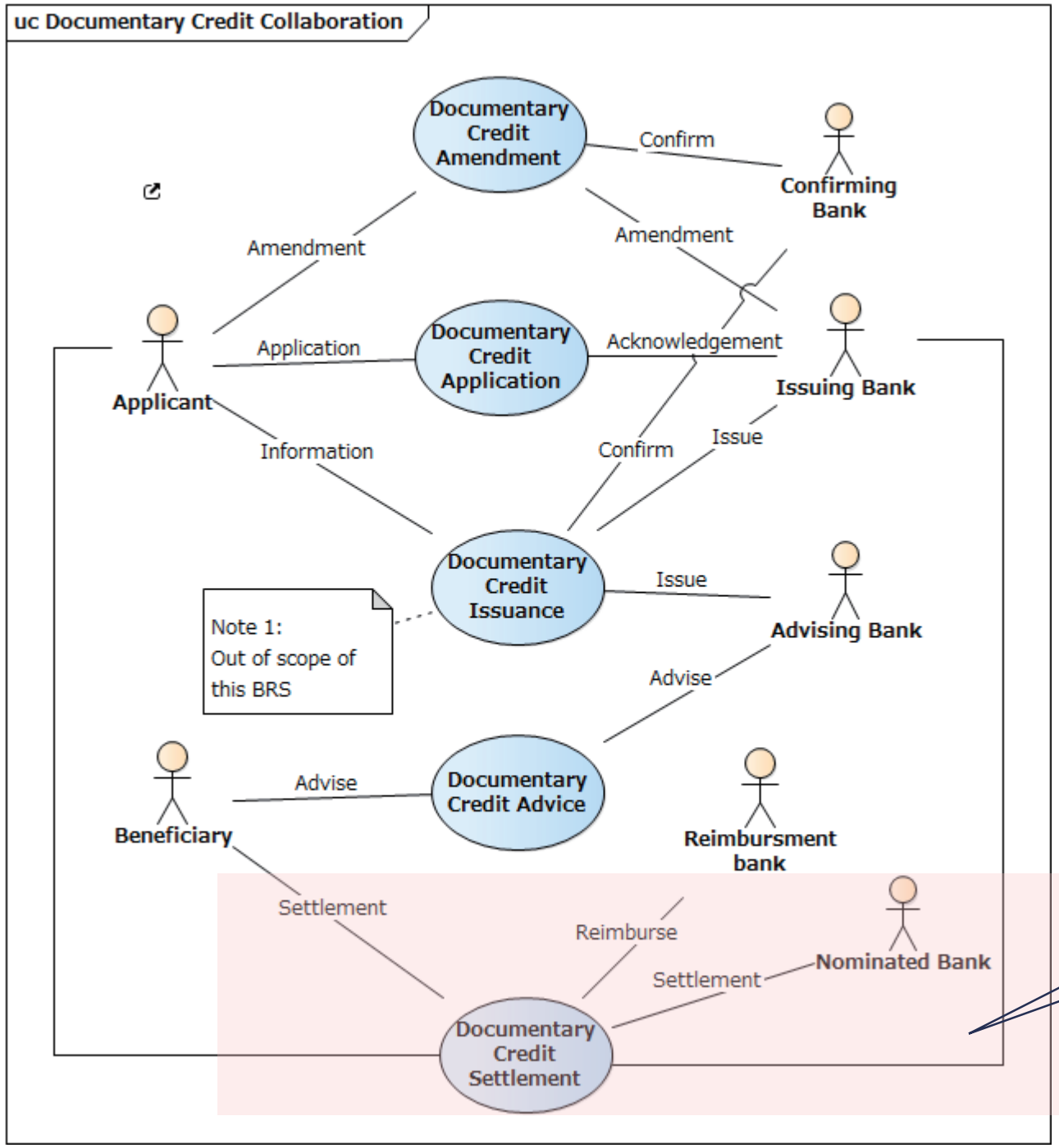
Project Formation proposal



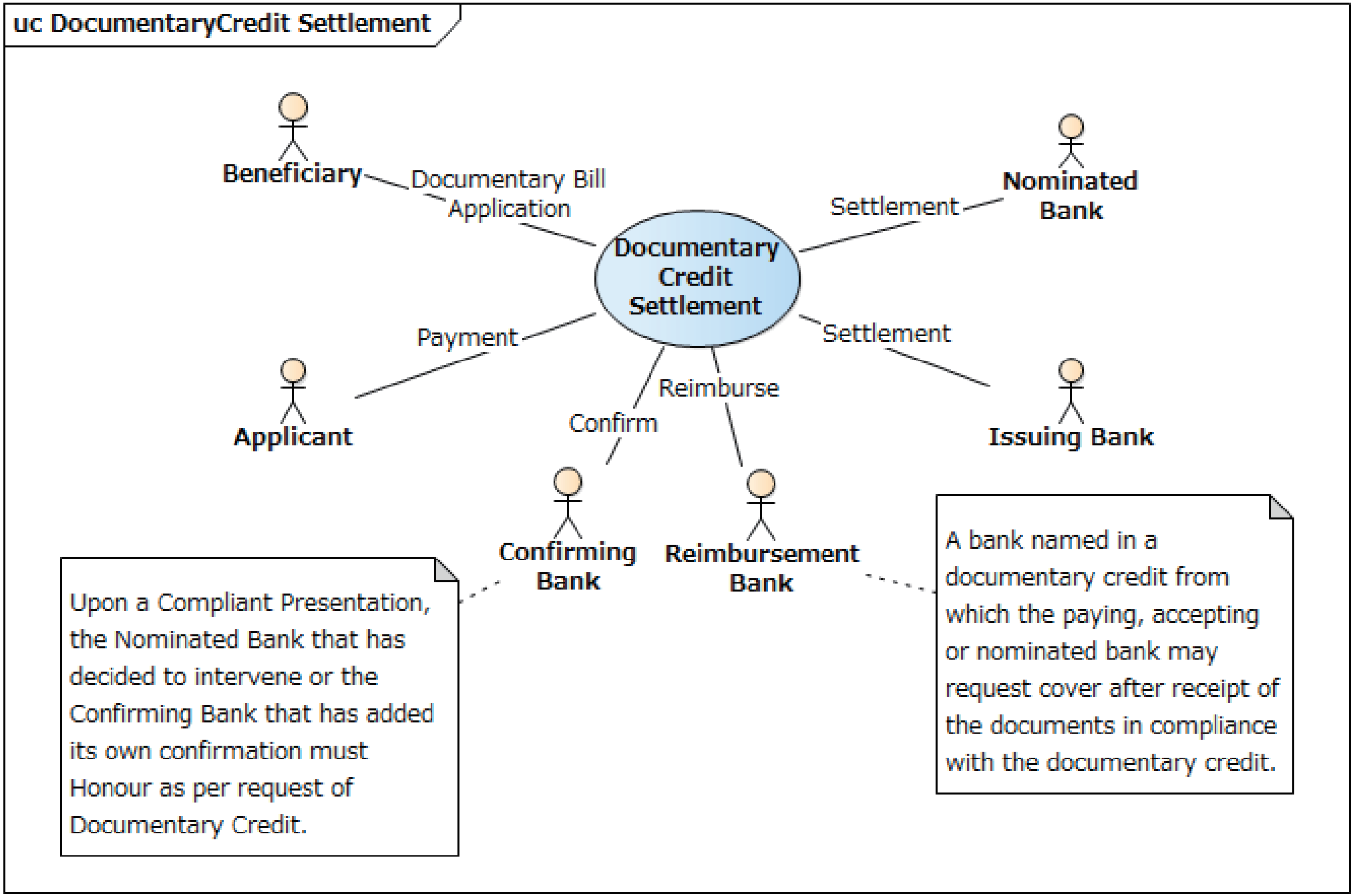
Online Project Meeting: Bi-Weekly

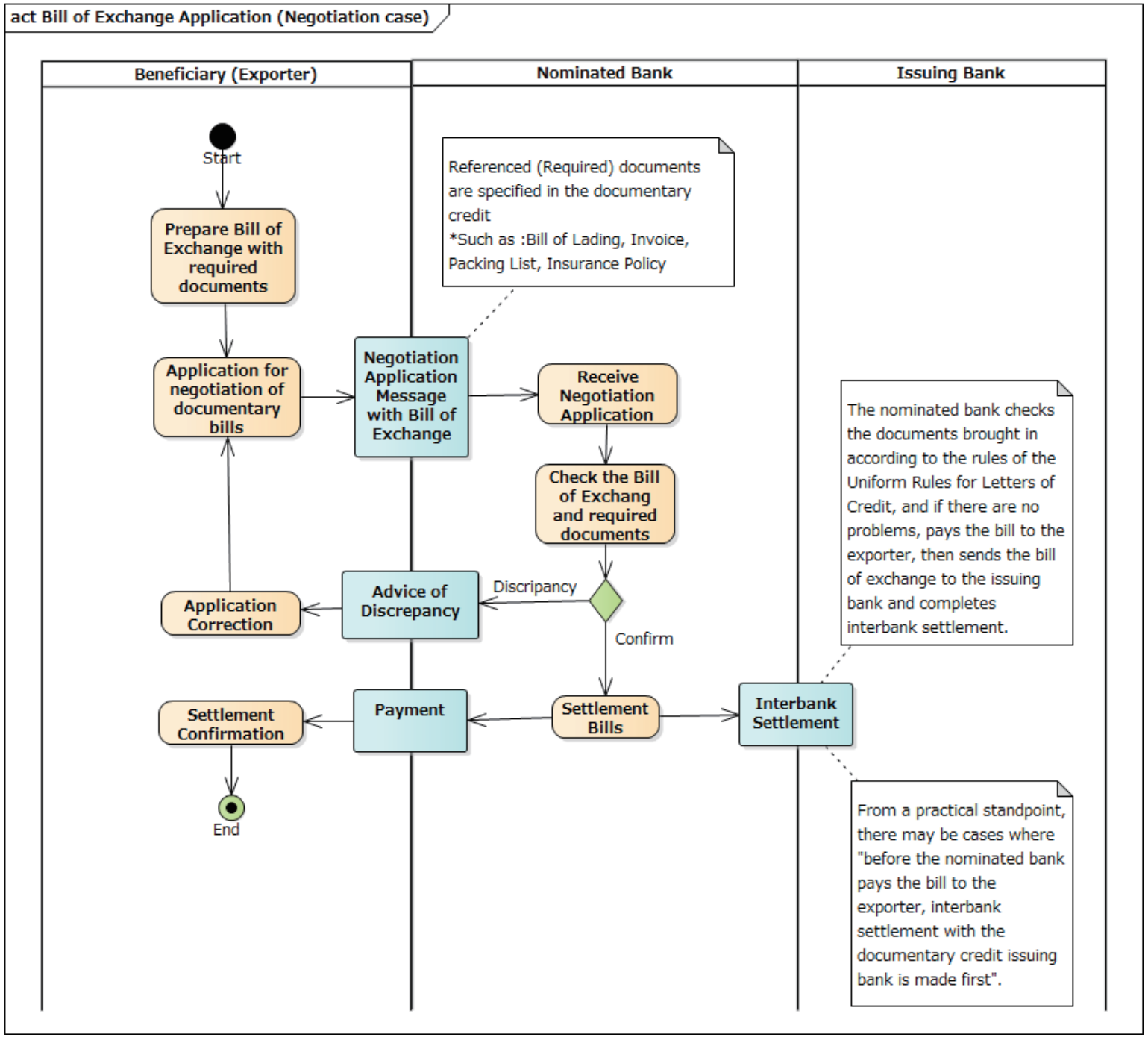
Documentary Credit Settlement（BRS）

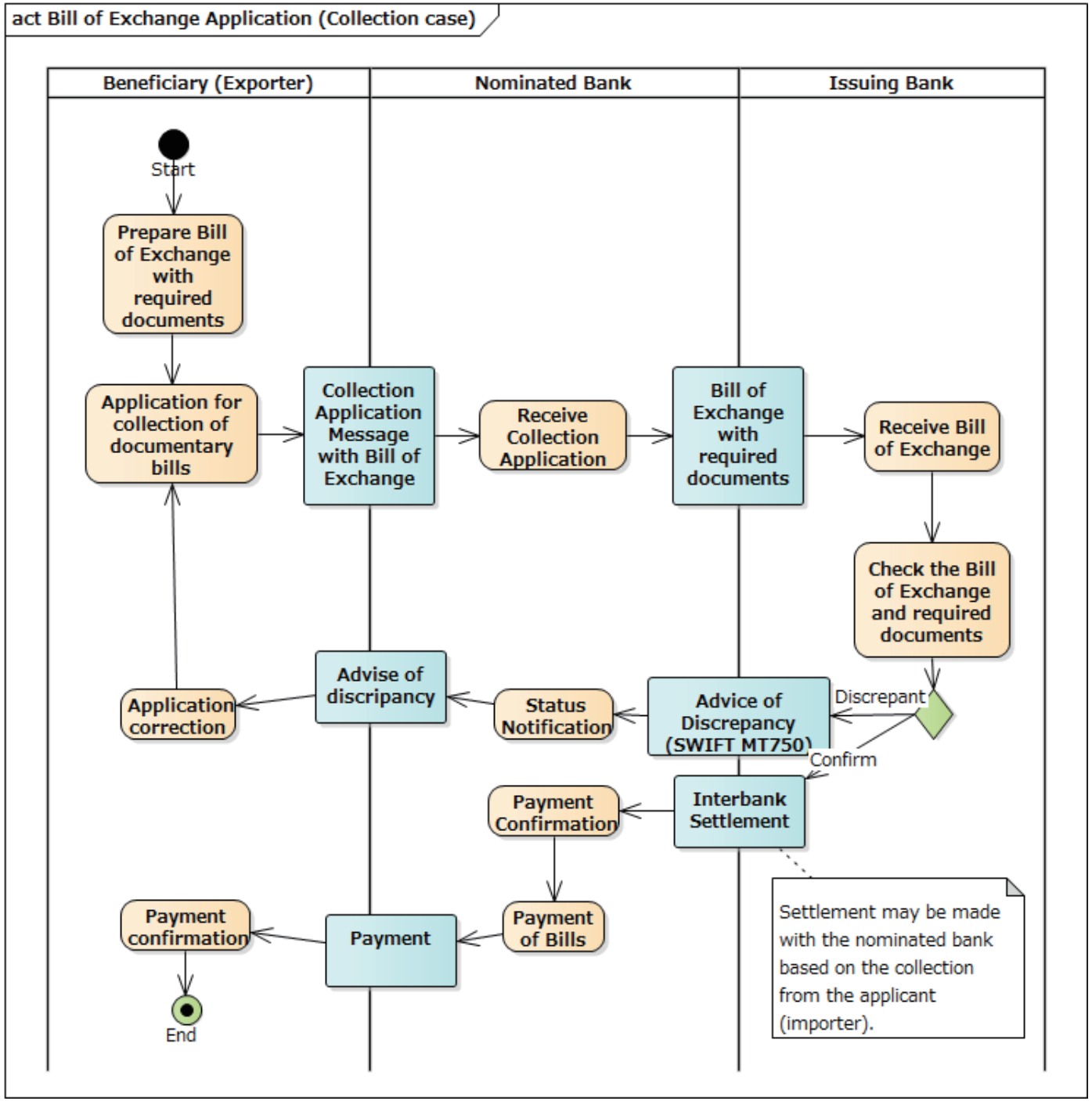
As of November/2024: Under development



Documentary Credit Settlement Process


uc DocumentaryCredit Settlement
Beneficiary
Documentary Bill Application
Nominated Bank
Settlement
Documentary Credit Settlement
Payment
Settlement
Applicant
Reimburse
Confirm
Issuing Bank
Confirming Bank
Reimbursement Bank
Upon a Compliant Presentation, the Nominated Bank that has decided to intervene or the Confirming Bank that has added its own confirmation must Honour as per request of Documentary Credit.
A bank named in a documentary credit from which the paying, accepting or nominated bank may request cover after receipt of the documents in compliance with the documentary credit.

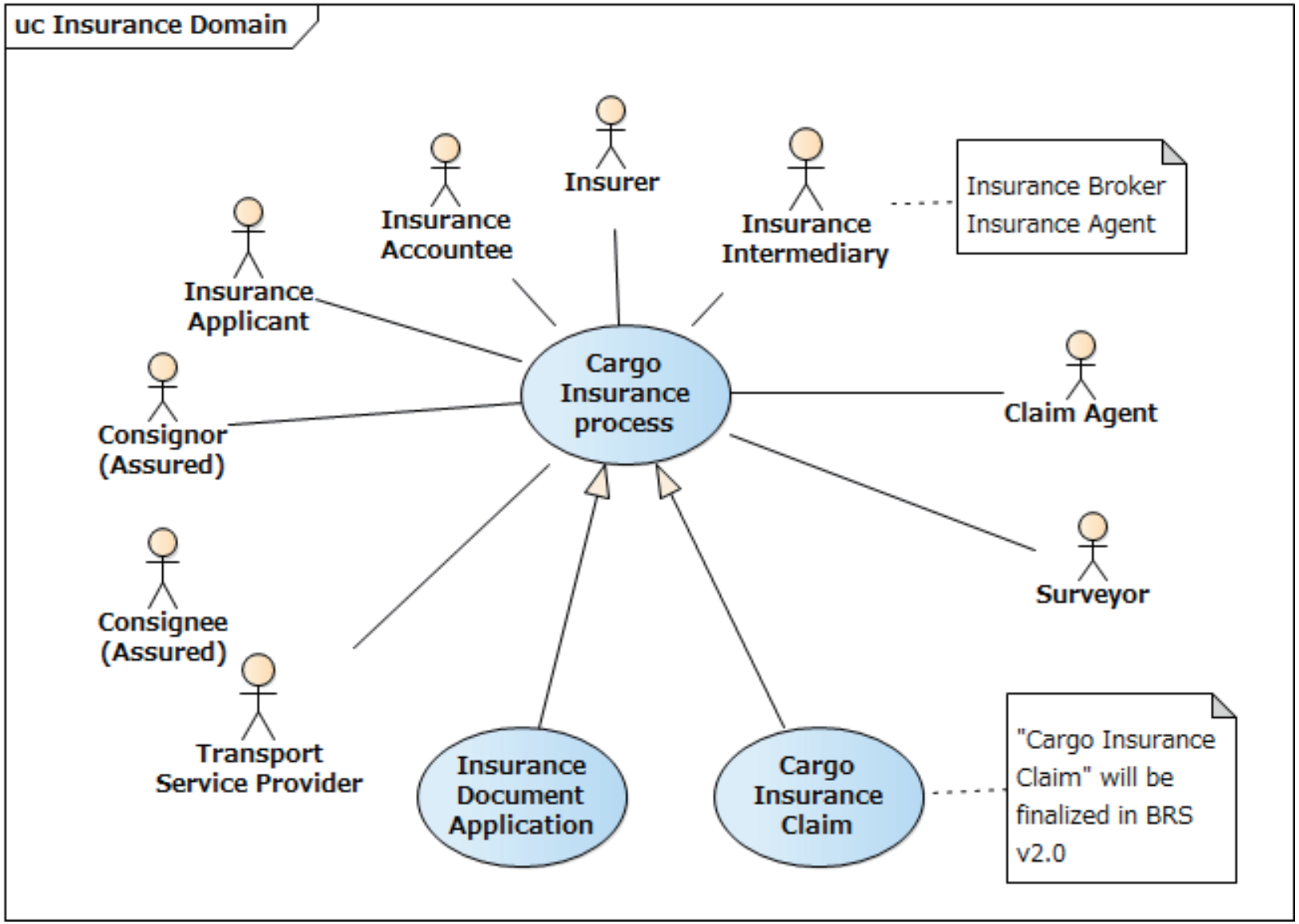

act Bill of Exchange Application (Negotiation case)
Beneficiary (Exporter)
Nominated Bank
Issuing Bank
Start
Prepare Bill of Exchange with required documents
Application for negotiation of documentary bills
Application Correction
Negotiation Application Message with Bill of Exchange
Advice of Discrepancy
Discrepancy
Receive Negotiation Application
Check the Bill of Exchang and required documents
Confirm
Settlement Confirmation
Payment
Settlement Bills
Interbank Settlement
End
Referenced (Required) documents are specified in the documentary credit
*Such as :Bill of Lading, Invoice, Packing List, Insurance Policy
The nominated bank checks the documents brought in according to the rules of the Uniform Rules for Letters of Credit, and if there are no problems, pays the bill to the exporter, then sends the bill of exchange to the issuing bank and completes interbank settlement.
From a practical standpoint, there may be cases where "before the nominated bank pays the bill to the exporter, interbank settlement with the documentary credit issuing bank is made first".


act Bill of Exchange Application (Collection case)
Beneficiary (Exporter)
Nominated Bank
Issuing Bank
Start
Prepare Bill of Exchange with required documents
Application for collection of documentary bills
Collection Application Message with Bill of Exchange
Receive Collection Application
Bill of Exchange with required documents
Receive Bill of Exchange
Check the Bill of Exchange and required documents
Discrepant
Advice of Discrepancy (SWIFT MT750)
Confirm
Status Notification
Advise of discripancy
Application correction
Interbank Settlement
Payment Confirmation
Payment of Bills
Payment
Payment confirmation
End
Settlement may be made with the nominated bank based on the collection from the applicant (importer).

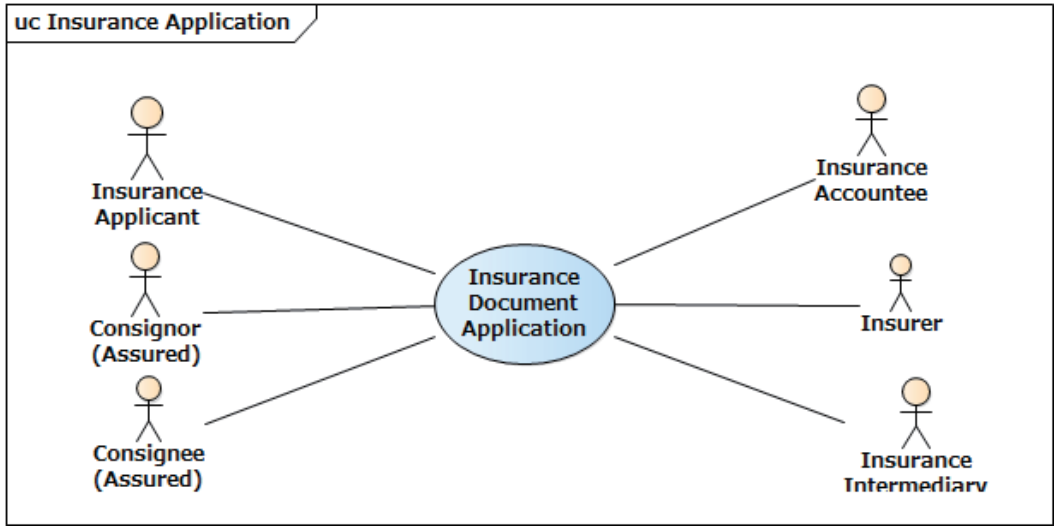
Cargo Insurance（BRS）

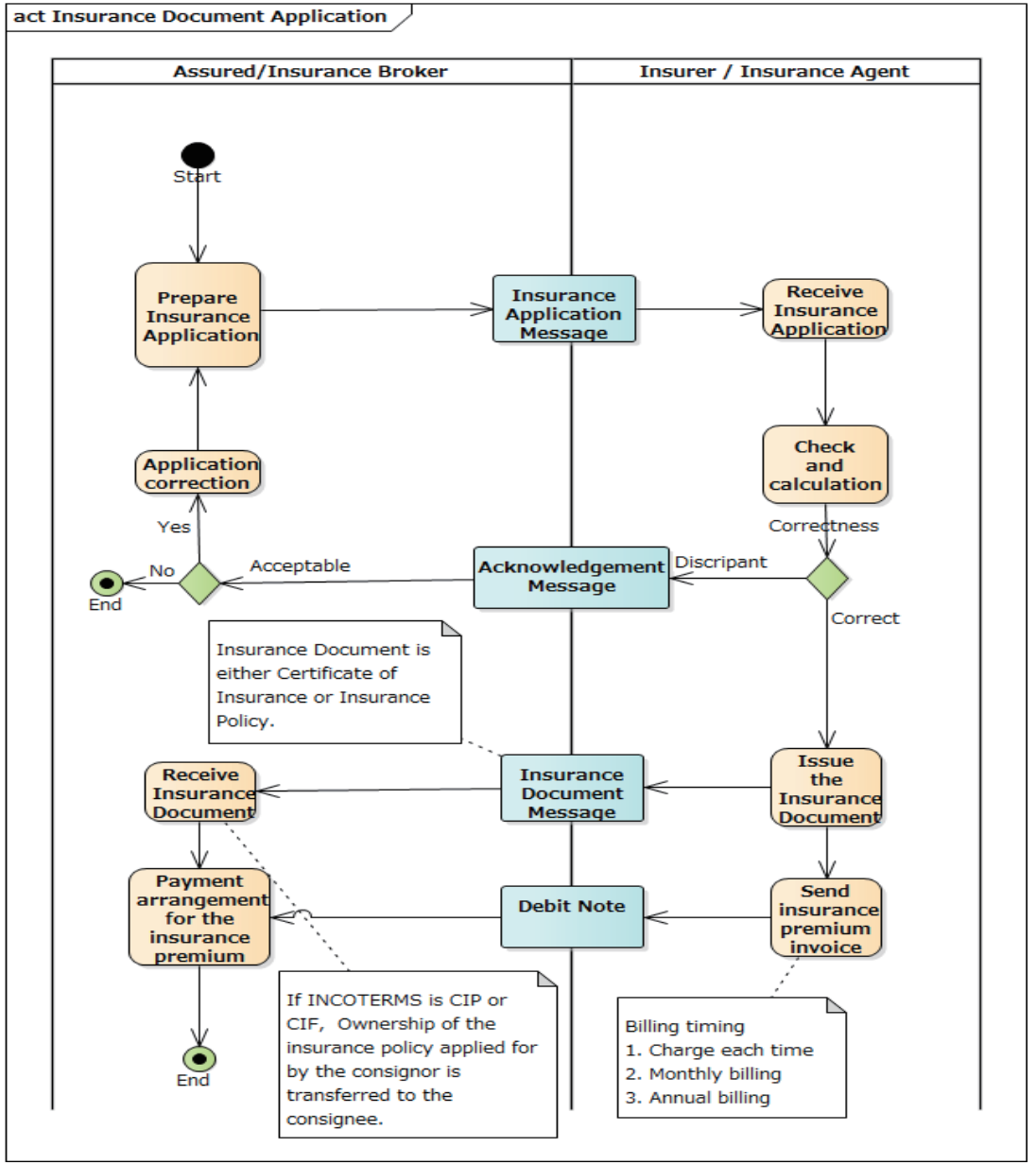
As of November/2024: Under Public Review

Cargo Insurance Process: Domain Use Case

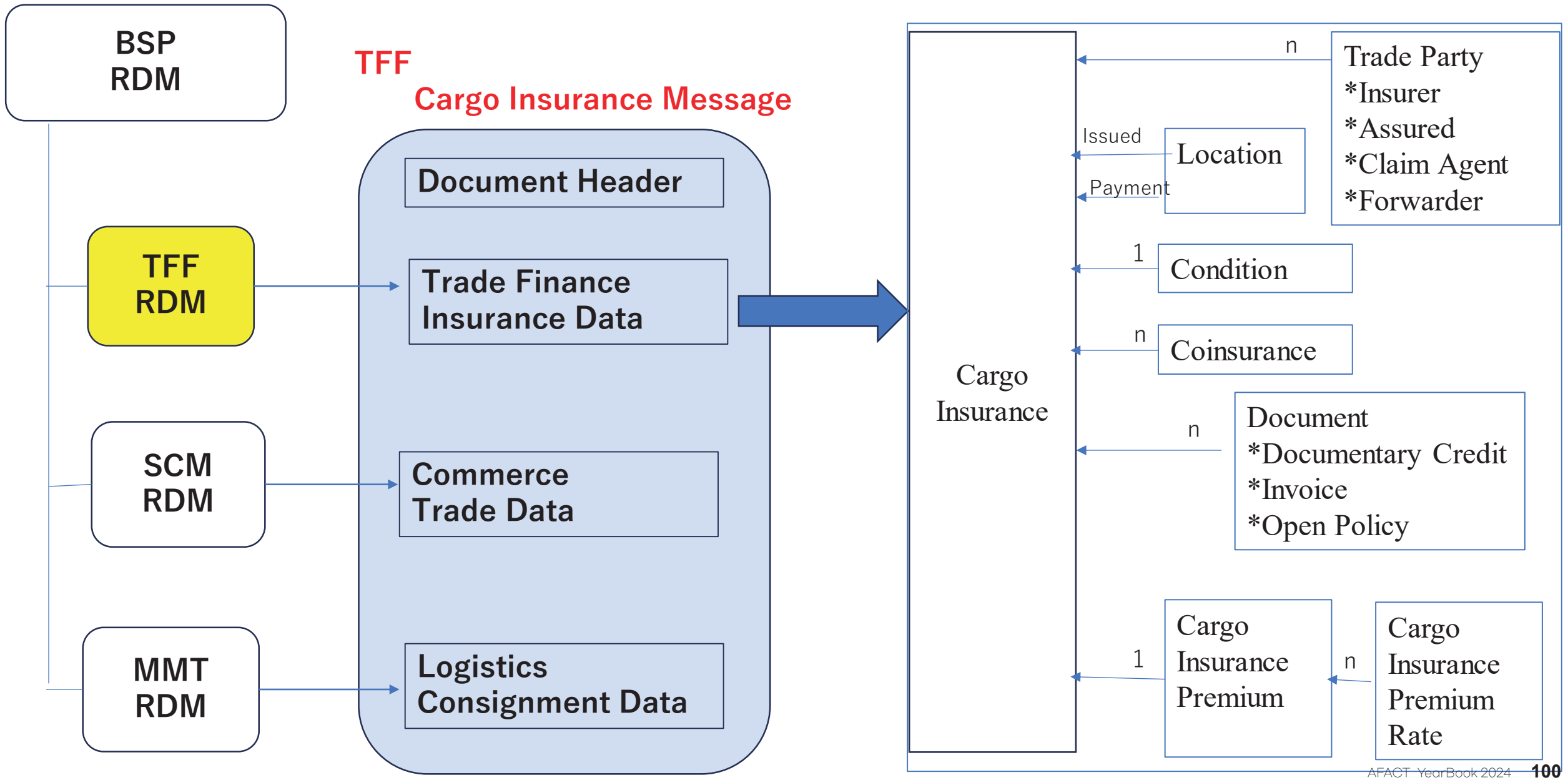


Cargo Insurance : Insurance Issuing Process





Cargo Insurance（Data Model）



Executive Committee Report

Technology and Methodology Committee (TMC)

I. TMC Terms of Reference

1. Name of the committee

Technology and Methodology Committee (hereinafter referred to as "TMC")

2. Purpose

TMC is to promote the implementation of eBusiness Technologies and Methodologies based on eBusiness standards for facilitating e-Business / e-Trade in Asia Pacific Region, in order to enable a global electronic marketplace where enterprises of any size and in any geographical location can meet and conduct business with each other.
TMC contributes the global business standardization activities of UN/CEFACT, ISO TC154 and other international organizations for standardization and trade facilitation through harmonization and interoperability in e-Business / e-Trade.

3. Work Scope

TMC will handle the issues of interoperability, productivity (reusability, openness), using Technology and Methodology in e-Business / e-Trade.

The scope of work subject may include as follows.

- Reference framework (Technology, Methodology and Library) for eBusiness
- Modeling Methodologies
- Core Component Harmonization (may include Metadata)
- Context methodology (may include Ontology)
- Message Assembly
- XML Schema Design
- Messaging Service Protocol
- API
- Registry and Repository
- Securities

4. Deliverables

Deliverables of TMC are expected as follows.

- Guideline for Reference framework (Technology, Methodology And Library) for eBusiness
- Submission DMRs for CCL
- Core Component Libraries (CCL) in Asian region
- Business Process Library in Asian region
- Implementation Guidelines for CCL and other relevant data models used in Asian Region

- Message Assembly Guidelines
- Interoperability Test Specifications and Certificates
- API Guidelines
- Registry Guidelines (may include Federation)
- Security Guidelines for e-Business

5. Membership and Structure

TMC is an executive committee under AFACT.

TMC may have several working groups, such as Core Component Working Group, API Group, Security Group.

Members of TMC are consists of the person who is representing the member of AFACT.

Participants of TMC are open to any organizations who are interested in e-Business implementation in the Asia Pacific region.

6. Organization

TMC has a Chairperson.

The chairperson is elected by the member of TMC, and ratified by the AFACT Plenary. The chairperson will serve two years term. The chairperson can be re-elected.

The duties of the chairperson are as follows.

- Call to order and preside over meetings and prepare those agenda
- Facilitate Working Groups
- Report activities and results of TMC to AFACT Plenary
- Communicate the official position on the matter of Technology or Methodology to UN/CEFACT Working Groups, ISO TC154 and related standard bodies

TMC may have Working Groups (hereinafter referred to as the "WG").

WGs are subject to be approved by TMC and to be endorsed by Plenary. Establishment each WG should be supported by at least three AFACT members.

To establish a WG under TMC, the interested parties shall submit an expression of interest, Objectives, Scope, a terms of reference and an initial work program to TMC for approval. TMC propose the new WG to Plenary for endorsement.

Each WG shall appoint its own Convener, and may appoint a WG Secretariat whenever necessary. The term of office for the Convener and the WG Secretariat if it is appointed, shall be for a period of two years.

The Convener of each WG shall report its activities to TMC and report to Plenary as requested.

7. Voting Procedure

There are 2 types of voting in TMC, the member voting and the participant voting.

The member voting shall be taken for the following cases.

- Election of TMC Chairperson
- Amendment of TMC ToR
- Creation or Disbandment of WG

The participant voting may be taken for the other cases of the member voting, such as technical matters, working programs.

The objective within TMC is to achieve a consistent consensus in all matters. In case of doubt concerning consensus, then, and only then, shall a vote be taken in an official TMC meeting. Any participants who feel that a consensus has not been reached may call for a vote, while the chairperson declares consensus. These ballots require a simple majority of the members (the case of the member voting) or the participants (the case of participants voting) attended at the official meeting at the time of the vote. Any voting can be taken when at least 3 members are present at the meeting. The use of proxies shall not be permitted. The chairperson is not eligible to vote.

8. Frequency of the Meeting

The meetings shall be held under the coordination of AFACT. Therefore the meeting may be held with AFACT plenary meeting and AFACT midterm steering committee meeting. The chairperson can call for the interim meetings between AFACT meetings. The chairperson can organize the teleconference instead of the face to face meeting.

9. Official Language

English

II. TMC Project

1. CCL Utilization in Asia

- Background:

  - UN/CEFACT CCL is getting too big for covering many domains. It is getting difficult to find the suitable CCs/BIEs in CCL for message designers, and there are concerns about the computer performance using the big XML Scheme modules always.
  - There are several data model libraries other than UN/CEFACT CCL, such as GS1, OAGI, WCO, UBL and local implementations in Asian region. Many of them are developed using CCTS, but there are no interoperability.
  - UN/CEFACT Standard Message has a lot of BIEs in order to cover various domains. But user needs a small part of BIEs for daily EDI, but he has to implement all the parts of the Standard Message.

- Objective:

  To establish the methodology for utilizing CCL in the efficient manner, and to promote

the methodology implementation in the Asian region.

- Work items:
  - Analyze the actual problems around CCL.
  - Prepare the framework for utilizing CCL.
  - Define the packaged CCL for Asian Region.
  - POC for utilizing CCL.
  - Prepare the guidelines for utilizing CCL.
- Deliverables:
  - CCL Framework (based on CCTS V3 and NDR V3)
  - Pilot packaged CCL for Asian Region
  - Guidelines for utilizing CCL

2. Electronic Negotiation use case

Recognizing the negotiation process is entering a digital transformation (DX) where both buyer and seller have developed electronic systems, UN/CEFACT launched the project "eNegotiation". The eNegotiation project is trying to define the automatic negotiation protocol using EDI based on the UN/CEFACT standard. The purpose of this electronic negotiation use case project in TMC is to introduce AFACT members the electronic negotiation protocol and to develop the guidelines for several business domains in Asia.

Travel & Tourism, Leisure Progress Report

Dr. Anthony Chien
Deputy Director of CIDS,
Commerce Development Research Institute
anthonychien@cdri.org.tw
Travel & Tourism, Leisure WG, AFACT

November 26, 2024

Management Team of TT&L WG

- The AFACT Steering Committee Meeting nominated Dr. **Anthony Chien** as TT&L WG Chair.
- The AFACT Steering Committee Meeting nominated Dr. **Mikio Tanaka** as TT&L WG Vice Chair.
- The AFACT Steering Committee Meeting nominated Mr. **Tunghua Tai** as TT&L WG Secretary.

- Dr. Anthony Chien as TT&L WG Chair
- Economy: Chinese Taipei

- Dr. Mikio Tanaka as TT&L WG Vice Chair
- Economy: Japan

- Mr. Tunghua Tai as TT&L WG Secretary
- Economy: Chinese Taipei

■ TT&L WG monthly online meeting from Jan. to Nov. 2024

AFACT TT&L WG Participants (9 members)






TT&L WG Participants		
Name (Abbr.)	**Economy/Org.**	**Projects**
Sachin Mehta (SM)	India	Coordinator, UN/CEFACT Travel and Tourism and Project Lead
Anthony Chien (AC)	Chinese Taipei	Chair, TT&L WG, AFACT and ST Project Editor
Tunghua Tai (TT)	Chinese Taipei	Project Leader
Matt Jiang (MJ)	Chinese Taipei	Project Editor
Wanchun Hsiung (WH)	Chinese Taipei	Project Sub-Lead
Gary Lin (GL)	Chinese Taipei	
Raye Chiang(RC)	Chinese Taipei	
Mikio Tanaka (MT)	Japan	Vice Chair, TT&L WG, AFACT
Akio Suzuki (AS)	Japan	Project Editor
Tadashi Ishihara(TI)	Japan	Project Sub-Lead
Kazuo Hotta (KH)	Japan	
Shoji Nakagome (SN)	Japan	Project Sub-Lead
Kazuyoshi Itagaki (KI)	Japan	Project Editor
Gil-jun Ko (GK)	Korea	
Md. Abul Kalam Azad (Milan) (AA)	Bangladesh	
Jahidul Hasan (JH)	Bangladesh	
Meetham Naranong (MN)	Thailand	
Ian Watt	Australia	Former Vice Chair, UN/CEFACT
Gerhard Heemskerk	Netherland	
Daniele Tumietto (DT)	Italy	

UNECE SUSTAINABLE DEVELOPMENT GOALS

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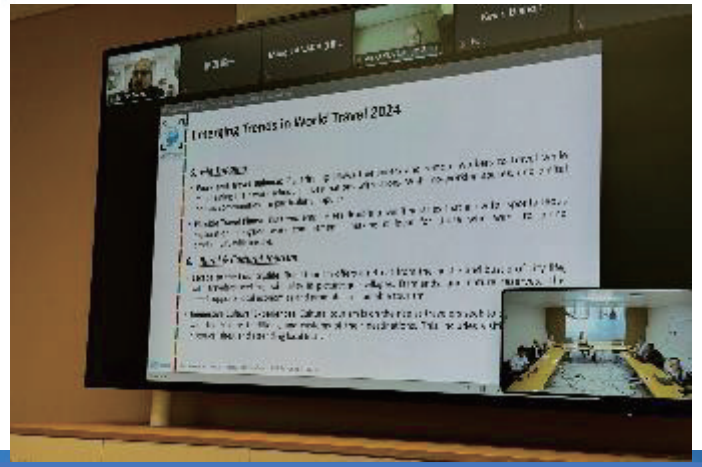
Parallel Session - Fostering Sustainable Travel and Tourism

This document is associated with the following:

Event

- 42nd UN/CEFACT Forum



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***PPT: https://unece.org/sites/default/files/2024-07/Parallel-Session_FosteringSustainableTravel-Tourism.pdf**

8-12 July 2024

Palais des Nations
Geneva

Sustainable and Digital
Trade Facilitation Week

UNECE

UN/CEFACT

8-12 July 2024

Palais des Nations
Geneva

Sustainable and Digital
Trade Facilitation Week

UNECE

UN/CEFACT

Mr. Sachin Mehta
Domain Coordinator, Travel and Tourism
MD Stuti Tourism Pvt Ltd

Mr. Tain-Tsair Hsu
Chairman
Commerce Development Research Institute

Mr. Tunghua Tai
Leader, Project of CEFACT
General Manager, Siloam Travel Agency

Mr. Kazuyoshi Itagaki
Sub Leader, Project of CEFACT
AFACT expert

Mr. Anthony Chien
Deuty of Director, CIDS,
Commerce Development Research Institute
Deputy Secretary General, AFACT

Mr. Tadashi Ishihara
Sub Leader, Project of CEFACT
Executive Supervisor of JTREC

Fostering Sustainable Travel and Tourism through e-business Standards

- This session will delve into the transformation of Application Programming Interfaces (APIs) pertaining to Electronic Press (EP) technical components that incorporate sustainability claims.
- It will explore the dynamics of package tours offered by both the Travel Agency and Destination Management Company & Destination Management Organization (DMC&DMO) within the travel industry, considering their alignment with the United Nations Sustainable Development Goals (SDGs).

42nd AFACT Plenary Meeting

UNECE
UN / CEFACT

42nd AFACT Plenary Meeting

Travel & Tourism Domain

- **PROJECT:** Travel Agency and DMC&DMO Package Tour Project
- **Supporting VC's:** (T&T) @Nancy Norris
- **Domain Coordinator:** (T&T) @Sachin Mehta
- **Project Lead:** @Tunghua TAI
- **Project Purpose:**

  The project enables replacing the current emails and spreadsheets used to exchange tour package data between Travel Agencies (mostly SME's) and Destination Managing Company (DMC) and Destination Managing Organization (DMO) with harmonized data and comments. (Ref red arrows in the diagram below). This will deliver additional semantic data definition into the CCL, RDM establishing the ability to write standardized APIs.

- **Project status: Launch: 2023-May-08; Completion 2024-Dec-30; Publication (Plenary) 2024-May-30**

- **The project deliverables are:**

1. A Reference Data Models (RDM) of and APIs specifications to cover the travel agency, Destination Managing Company (DMC) and Destination Managing Organization (DMO).

2. The other related Reference Data Models (RDM) and API specifications developed and information involved.

Travel & Tourism Domain

PROJECT: API Transformation of EPs Technical Artefacts with Sustainability Claims

Supporting VC's: (T&T) @Nancy Norris

Domain Coordinator: (T&T) @Sachin Mehta

Project Lead: @Sachin Mehta

Project Purpose:

Experience Programs Technical Artefacts Project (P1082) was completed in October in 2022, and some members in the tourism industry expect to have the artefacts transformed into API formats based on the newly constructed technical specifications of UNCEFACT to trade Experience Programs (EPs) much lighter and easier for the use of smart phones. Therefore, this project is proposed to make API applicable to the use of the trade of EPs, which will support the facilitation of their trade.

Project status: (Launch: 2023-05-08; Completion 2024-04-30; Publication (Plenary) 2024-05-31

Next Steps:

1: Begin by working based on UN/CEFACT developing procedures.
2: Reviewing existing BRS
3: Work step by step to Complete the API Transformation.

43th UN/CEFACT Forum

Day 2 Session Proposal – please try to link with the Program of Work

DECEMBER 2024 I ROOM (APPROX. CAPACITY 15 PEOPLE)

Domain:	Travel and Tourism
PoW:	
Title:	Fostering Sustainable Travel and Tourism through API Standards
Date:	11 December
Time:	09:30 – 11:00

BACKGROUND:

This session will delve into the transformation of Application Programming Interfaces (APIs) pertaining to Electronic Press (EP) technical components that incorporate sustainability claims.

It will explore the dynamics of package tours offered by both the Travel Agency and Destination Management Company & Destination Management Organization (DMC&DMO) within the travel industry, considering their alignment with the United Nations Sustainable Development Goals (SDGs).

43rd UN/CEFACT FORUM | 10-12 December 2024 | Rome, Italy

KEYNOTE SPEAKERS:

1. Immersive Digital Walking Tour Platform: Increasing the Feasibility of Sustainable Tourism, Bringing Sustainability Closer to Tourists / *Ms. Chih-Chen Kuo*
2. The Business Requirement Specification (BRS) and Reference Data Model Project for Sustainabile Tourism Industry / *Mr. Tunghua Tai, Dr. Anthony Chien, Dr. Wanchun Hsiung and Mr. Tadashi Ishihara*
3. The API Transformation of EPs Technical Artefacts with Sustainability Claims / *Mr. Sachin Mehta Domain Coordinator, Travel and Tourism, Mr. Kazuyoshi Itagaki and Dr. Mikio Tanaka*

MODERATORS: Dr. Anthony Chien, Deputy of Director, CIDS, Commerce Development Research Institute and Deputy Secretary General, AFACT

PANELISTS:

1. Mr. Sachin Mehta, Domain Coordina-tor, Travel and Tourism
2. Mr. Tunghua Tai, Leader, Project of CEFACT, General Manager, Siloam Travel Agency
3. Dr. Ms. Wanchun Hsiung,Sub Leader, Project of CEFACT, Associate Professor in Tourism and Leisure, Ling-Tung University
4. Mr. Tadashi Ishihara, Sub Leader, Project of CEFACT and Executive Supervisor of JTREC
5. Mr. Kazuyoshi Itagaki, Sub Leader, Project of CEFACT and AFACT expert
6. Mr. Matt Jiang, General Manager, Riversoft Information Inc.
7. Dr. Raye Jiang, Research Fellow, Commerce Development Research Institute and AFACT expert

42nd AFACT Plenary Meeting

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Thank you for your attention!

Anthony Chien / Deputy Director of CIDS,
Commerce Development Research Institute
anthonychien@cdri.org.tw
Travel & Tourism, Leisure WG

TURING SPACE

We bridge trust across borders.

 https//turingcerts.com/

International collaboration, national certification in Taiwan

Turing Space partners with WHO, UNHCR, UNESCO, APEC and 400+ authorities to empower digital trust, including eCredential and eID.

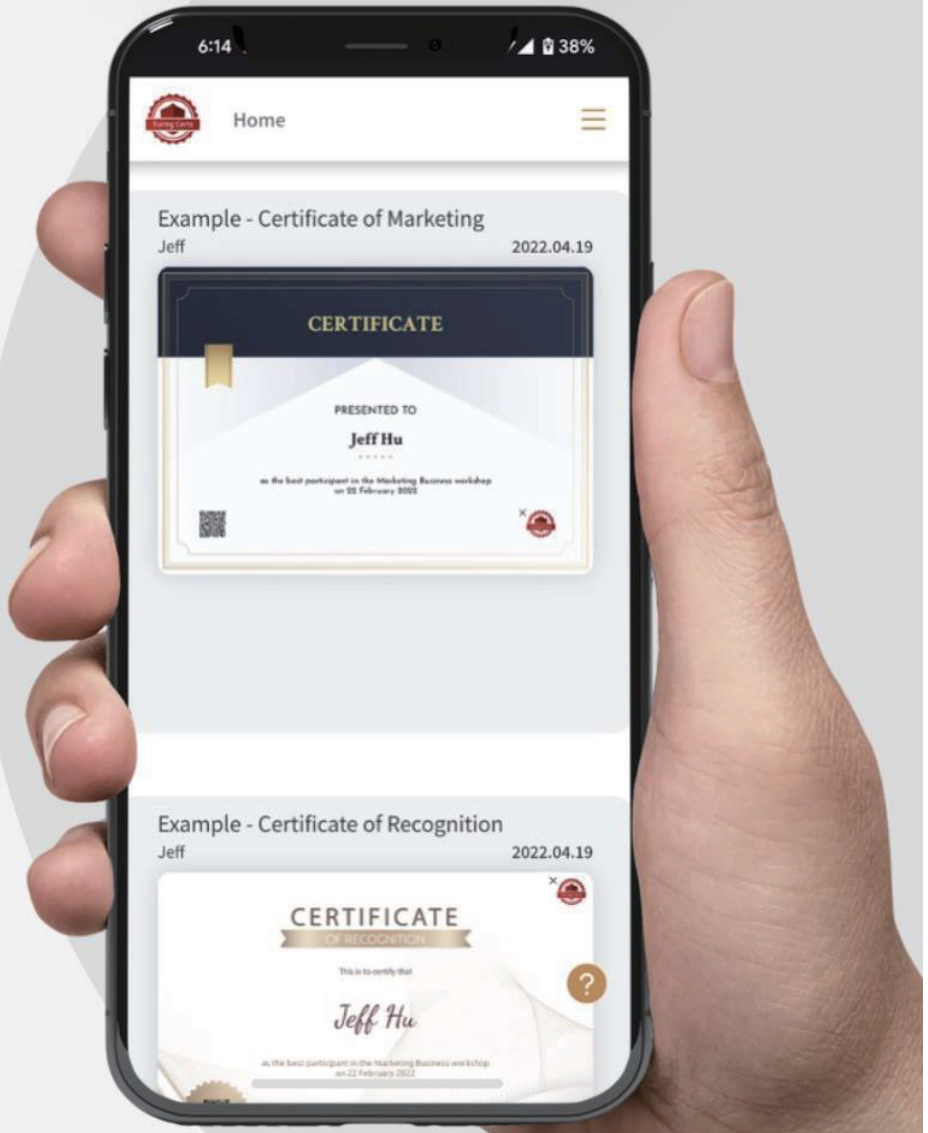
TURING SPACE World Health Organization unesco APEC

4 million+ renewable energy certificates, ensuring more authentic transaction records within the Green Energy Certificate Center's trading system.

1.6 million+ SMEs nationwide identity verification including clear access to financial records, award achievements, and operational history.

 https://turingcerts.com/

Turing Certs



Digital Credential Management System

From weeks to minutes

World Health Organization

Issuer ⟷ **Holder**

TURING CERTS
Blockchain-based Platform

Verifier

4 QUALITY EDUCATION
8 DECENT WORK AND ECONOMIC GROWTH
13 CLIMATE ACTION

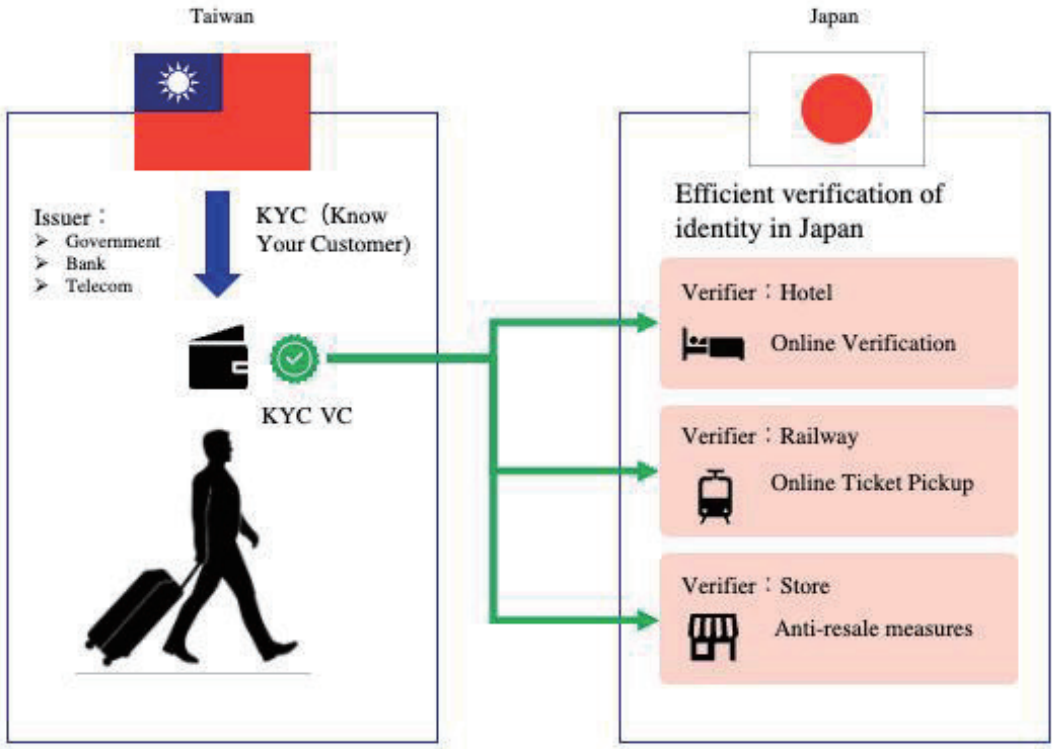
10 Countries and Regions

- USA
- Switzerland
- Italy
- Cyprus
- Turkey
- Japan
- Taiwan
- Hong Kong
- Philippines
- Malaysia

Travel verification - Taiwan x Japan

Digital identity ecosystems

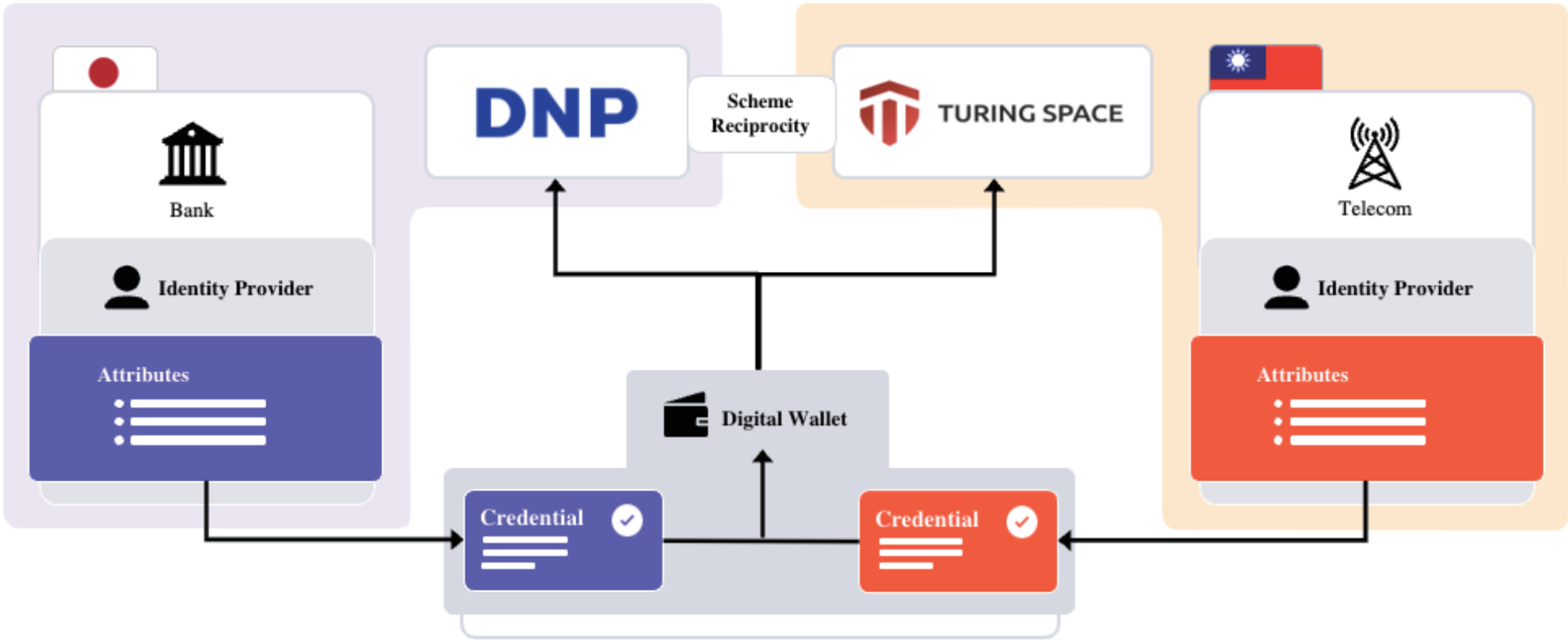
Re-use of Taiwan's digital identity for user convenience and lower verification costs for Japanese service providers.



Work records digitization - Taiwan x Japan

Digital identity ecosystems

Japan and Taiwan are strongly connected economically, and further economic benefits are expected from interoperating digitalidentities. By interoperating on a common scheme, DNP and Turing Space can interconnect the digital identity ecosystems of Japan and Taiwan.



Credentializing the Lifecycle of Digital Product

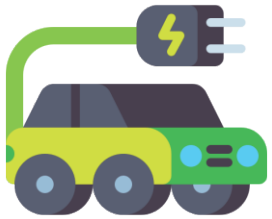
Digital Product Passport's Traceability and Transparency by Verifiable Credential

The Cycle of Physical Product

Battery cell maker
Mining
Refining
Cathode production

Battery

First life
Installed in EV car



End-of-life battery collector
Extracted materials

Repurposing

Second life
Installed in windmill

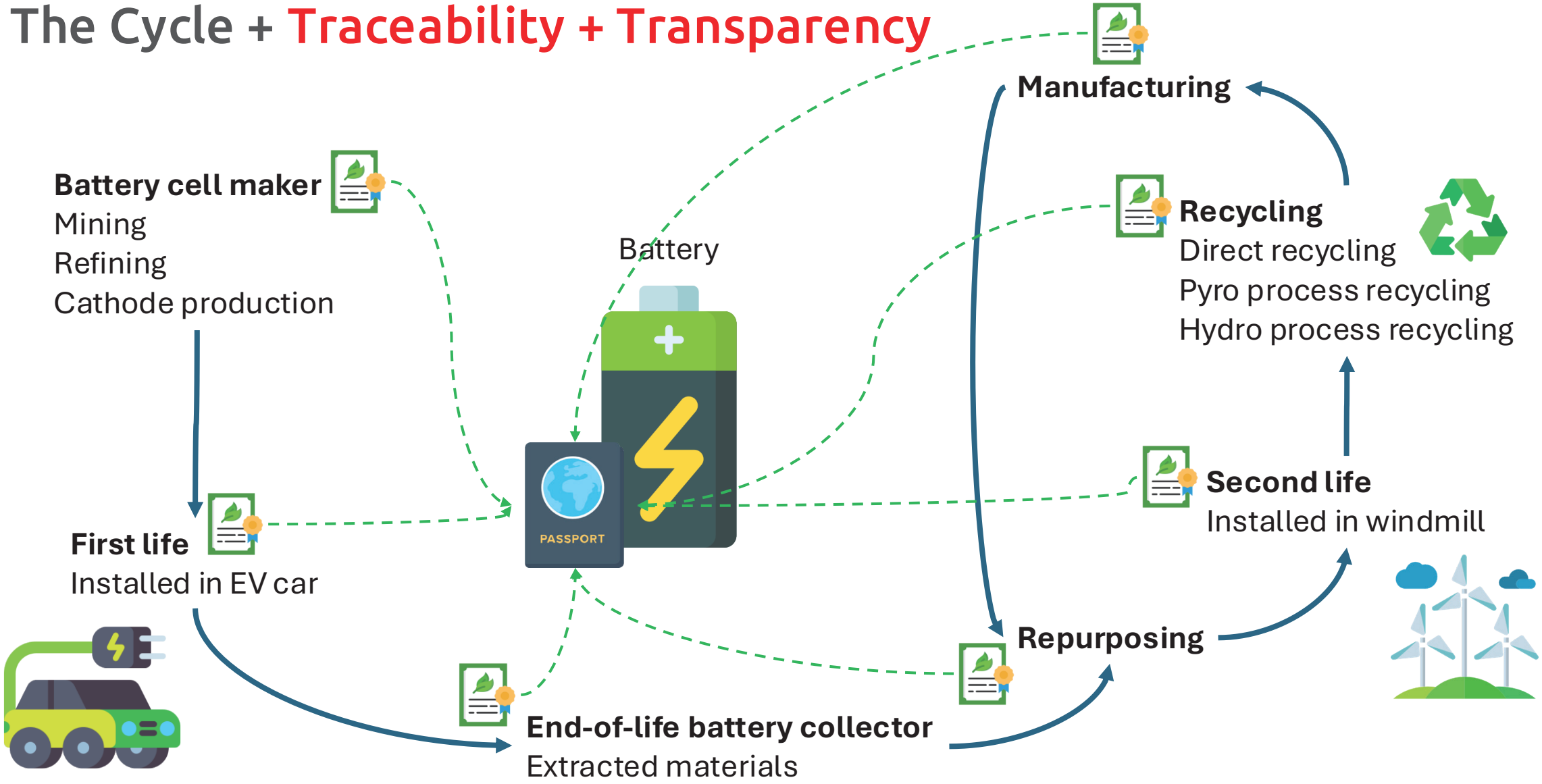
Recycling
Direct recycling
Pyro process recycling
Hydro process recycling

Manufacturing

https://turingcerts.com/

__Note:__ The battery use case shown here is only an example of how our digital product passport can be applied. Our solution can be tailored for a wide range of industries and products.

The Cycle + Traceability + Transparency



https://turingcerts.com/

Note: *The battery use case shown here is only an example of how our digital product passport can be applied. Our solution can be tailored for a wide range of industries and products.*

Stakeholders in Digital Product Passport

Retailer

Obtain information about raw materials and production

Product End User

Receives relevant product information (environmental impact, repair options)

Manufacturer

Provide info about raw materials (location, condition, features)

Receive feedback about the condition of the product and the manufacturing parts

Repair shop

Receive information about repairment and spare parts

Forward information about the condition of products and components

Raw material producer

Send data for production (location, condition, features)

Recycler

Receive information about material composition and quality

Public Sector

Obtain transparent information for auditing and legal purposes

https://turingcerts.com/

Mobile Access to Easy Data Review

Production Data

Material Composition

Technical Documents

Reuse/ Recycle Value

Return/ Repair Information

Standards & Compliance

Chain of Custody

Authenticity Guarantee

To enable sustainable development and circular economy

For each verifiable credential

Authentication (AuthN)
ID/Entity Verification

Authorization (AuthZ)
eIDAS, Digital Signature, RBAC

Interoperability
W3C DID/VC, OpenID4VC

Integrity
SHA256 Hash Comparison,
IOTA blockchain

Confidentiality
AES256 Encryption

Compliance
GDPR, ISO27001, ISO27701

Summary

Each unit has a unique identifier that collects verifiable credentials from authorized entity through the lifecycle. Each verifiable credential has its own access control list of allowance.

Data flow in DPP

Onboarding

- can publish and retrieve documents and data
- highly secure and easy to scale
- Effortless to integrate with internal enterprise systems

Create

- The information included in the product passport refers to the product's individual characteristics like model, batch, BOM, recycle level

Verifiable Credential

- Can create/update/delete/ retrieve information about the dedicated section of Unit IDs by e-signing a verifiable evidences
- digitally signed, sealed, and timestamped

Storage

- stored on a distributed blockchain system in a secure, immutable, and tamper-proof form

Sharing

- documents are available based on given access rights and controlled span of time
- Legal and audit purposes

Easy Access

- available to customers 24/7 from the web, smartphone, or any device connected to the internet

https://turingcerts.com/

Benefits to stakeholders

Reduced Cost and Efficiency Boosted

Fast multiparty document and data sharing capabilities with full audit trail and transparency based on a blockchain system allow stakeholders to increase confidence in supply chain processes

Developing Customer Loyalty and Brand Trust

Providing a digital passport fosters transparency, eliminates the risk of data manipulation, and guarantees the provenance and authenticity of data, therefore builds trust with customers by giving them visibility into the vehicle's lifecycle

Compliant to regulatory standards and Sustainable Callout

A digital product passport simplifies the process of complying with increasingly strict environmental, safety, and traceability regulations

Case study - Digimarc (2023)

Verifiable Credentials

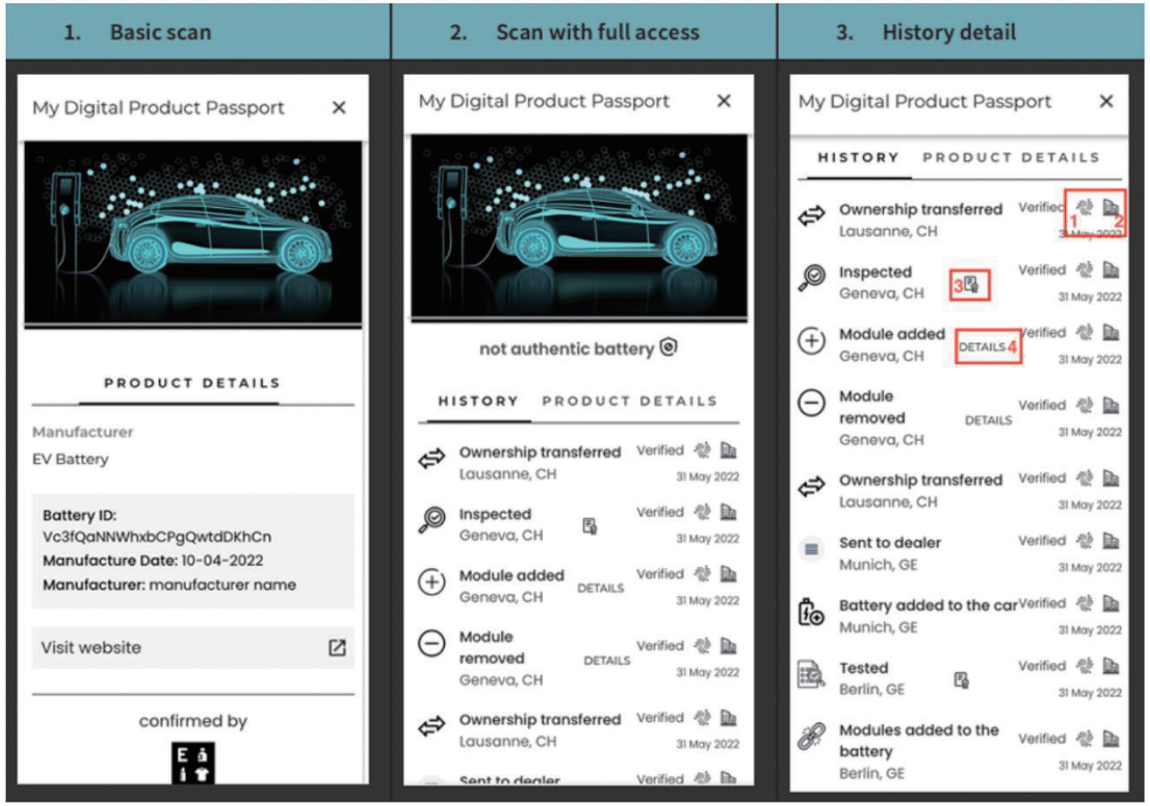
VCs verify the identity and authorization of each participant in the product lifecycle

Blockchain Anchoring for Security

IOTA's DLT anchors lifecycle events securely, preventing tampering while enhancing transparency

Compliance Transparency

The platform integrates the Electronic Product Code Information Services (EPCIS) standard to enable secure tracking and query capabilities across a product's lifecycle

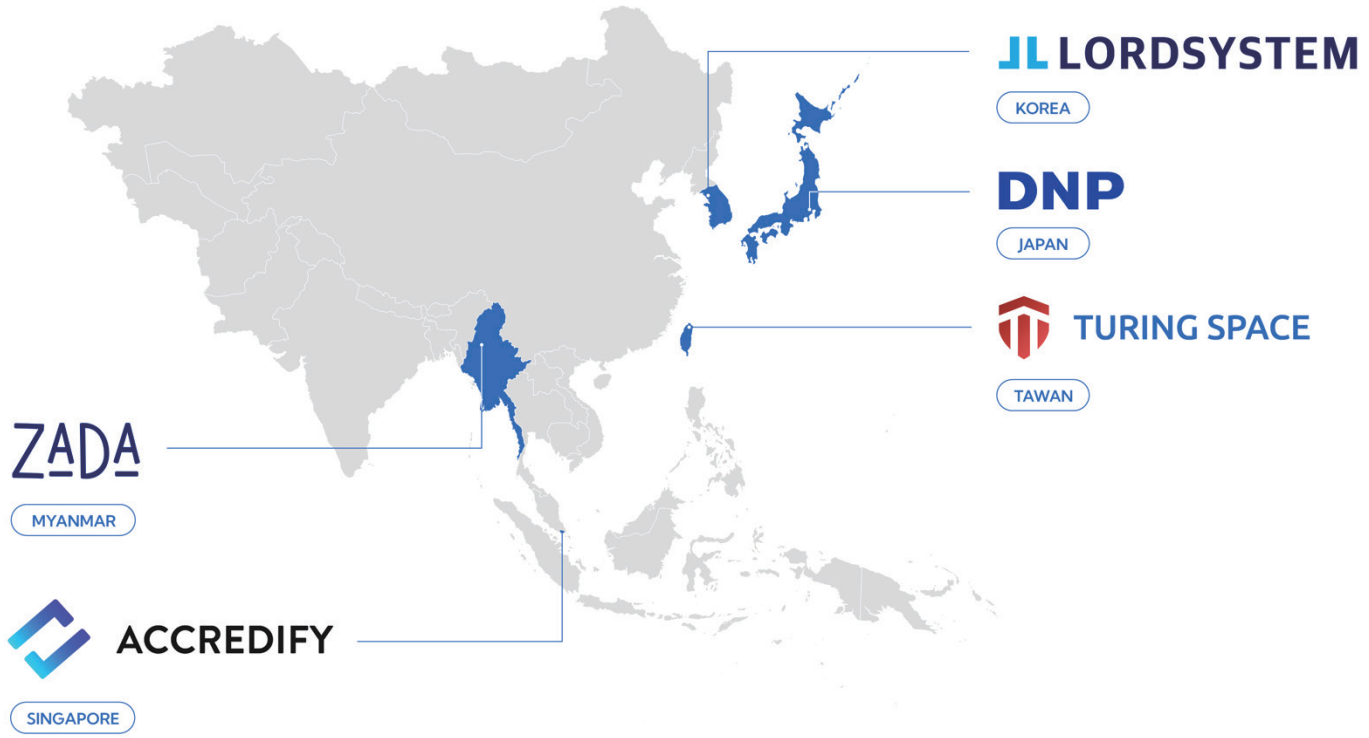


Source: https://www.digimarc.com/blog/decentralized-blueprint-digital-product-passports

APDI

Trust, Bridge, and Inclusion

- The Asia-Pacific Digital Identity (APDI) consortium



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Misson and role

Leading Digital Identity Promotion in the Asia-Pacific Region.

Developing Cross-Border Efficiency and Safety on Trustful Data Exchange.

Preparing Us for A Sustainable Growth of Future Technology.

APDI Consortium – Trust, Bridge, Inclusion

Trust

We are here to propose a digital identity solutions and foster digital trust in the Asia-Pacific region.

Bridge

Being a bridge in the world, between Asia-Pacific and Western or other regions.

Inclusion

Ensuring that everyone, regardless of socio-economic status, has access to digital services is crucial for social and economic development.

The Asia-Pacific region is diverse in culture, religion, and language
While referring to the EU's efforts,
we will also try to take a unique Asia-Pacific approach.

デジタル ID

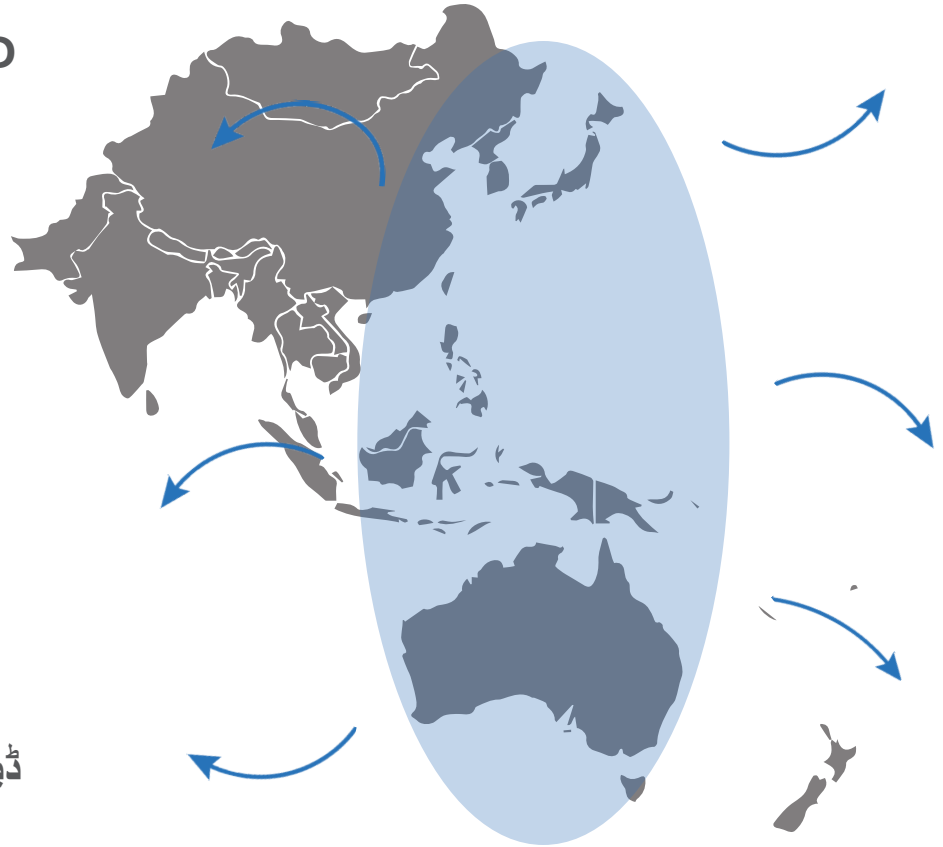
數位身份

디지털 신원증명

định danh điện tử

ระบบยืนยันตัวตนดิจิทัล

ڈیجیٹل شناخت



identitas digital

pengenalan digital

डिजिटल पहचान

Digital Identity

https://turingcerts.com/

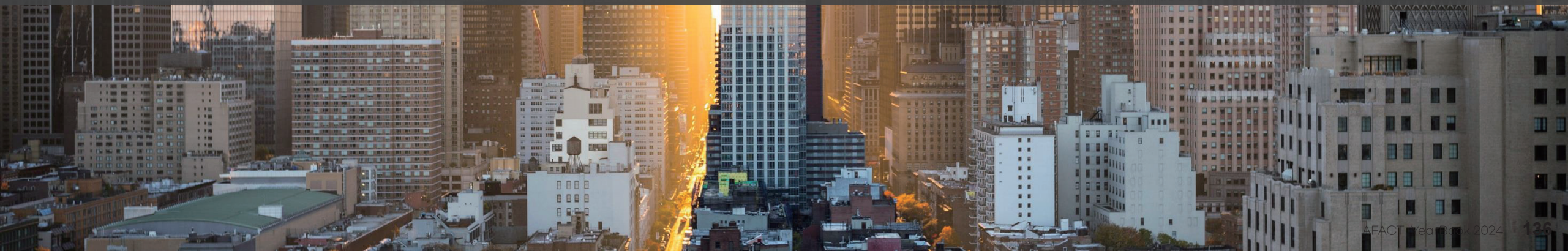
Thanks for your attention
Any Questions?

TURING SPACE

Now we can trust!

We are founding a new nation of trustful identities. Without us, it may happen in the future, nevertheless.

By us, it can be all set by sooner future.



Tractions

12+
Healthcare Institutes

40+
Governments

5M+
E-credentials

50+
Universities

400+
Certificate Body

13 industries

Government
Digital Identity

Green Energy/ Carbon Credits

Healthcare
Digital Health Screening
Certificate of Diagnosis Medical Staff Certificate
Training Certificate
Birth/Death Certificate
Remote Prescription

Real Estate
Project Portfolio
Investment Contract

Luxury Goods

Education
Digital Diploma
Lifelong Learning Resume
Certificate of Employment

Funeral
Permanent Family Memorial

Art
Ownership Certificate
Evidence of Creation
Donation Proof

International Organization
Volunteer Certificate
Forum Participation Certificate

Agriculture
Product Origin Traceability
Processing Quality Record
CSR Resume
top-shelf liquor
Anti-counterfeiting Certification

Car
Digital Vehicle Identification Number
Specialized Training Certificate
Vehicle Maintenance Record

Pets
Pedigree papers
Trainer License
Pet Store License
Cat/Dog Award Certificate

Sports
Marathon Achievement Proof
Professional Talent Certificate
Giant Fan Certificate

Representative Clients

WHO PMNCH

Asia-Pacific
Economic Cooperation

Dun & Bradstreet

Audi Taiwan

Giant Group

Berkeley Law Executive
Education

Governmental

Overseas Community Affairs
Council, Taiwan

Education Bureau of Hsinchu
County Government, Taiwan

Administration for Digital
Industries, Taiwan

Trustable Ecosystem

Turing Facts

for corporations

Turing Green

for industry

Certified by  **Turing Certs**

MUTUAL RECOGNITION FOR CROSS-BORDER ELECTRONIC DOCUMENT MANAGEMENT

Tahseen Ahmad Khan
takhan@meity.gov.in

TABLE OF CONTENTS

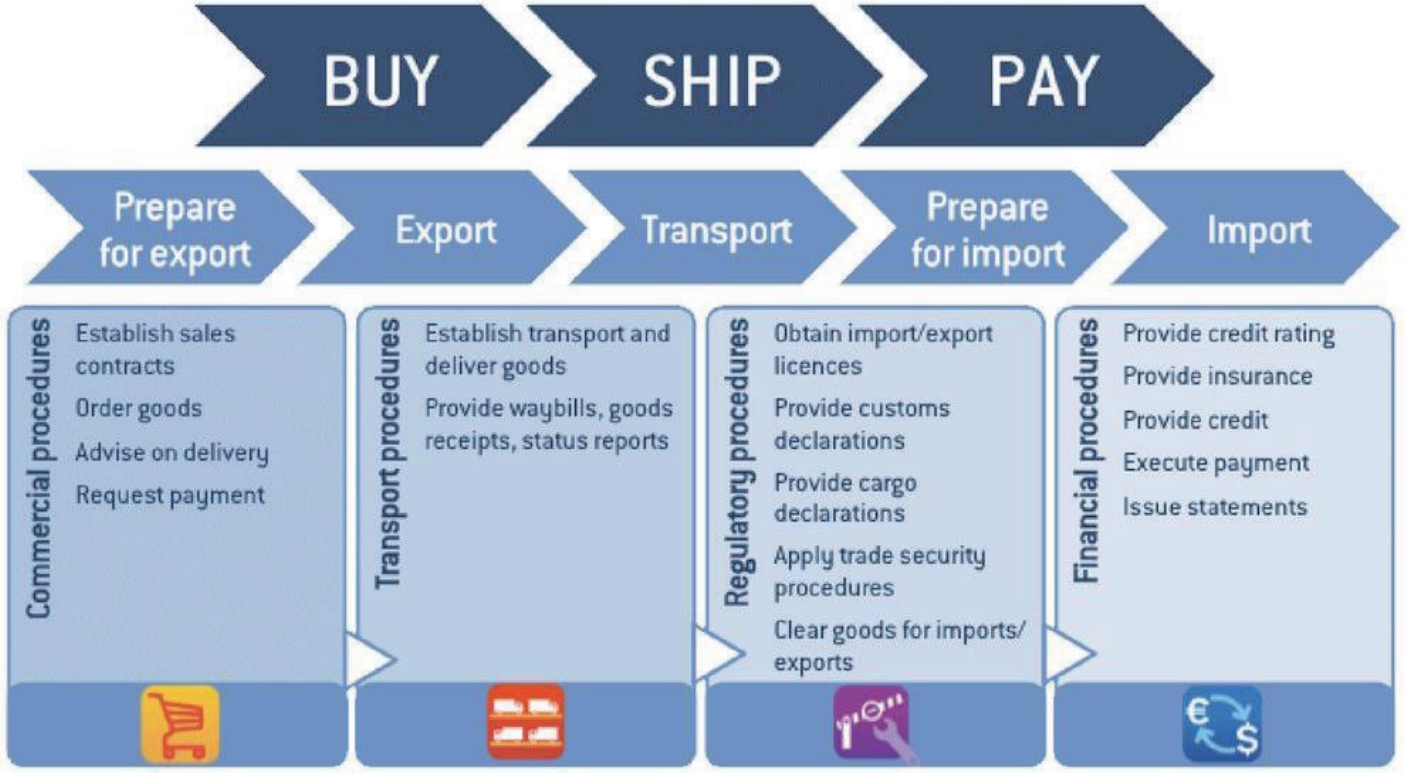
Background: Why Mutual Recognition is important?

- Electronic exchange of data across borders requires a certain degree of trust
- Legislative frameworks exist within national jurisdictions that recognize electronic data and their exchange
- In a cross border electronic data exchange
  - Establishing confidence and “substantial equivalent level of reliability” can be difficult because of differing local legislation
  - Electronic data exchange, storage and retention standards may differ and may have evolved based on local regulatons
  - Usage of technologies such as cloud computing results in data residing in multiple jurisdictions
  - Emerging technologies such as Blockchain, IoT are adding new dimensions resulting in increased types and source of data

To address these issues, a mutual recognition mechanism is required to create trusted trans-boundary electronic interaction and enable cross border exchange of electronic data

Electronic Data and its inherent nature

- **The Buy Ship Pay process developed by UN/CEFACT indicates that a number of documents and data are exchanged during a trade related process**



Electronic Data and its inherent nature

- As electronic systems have matured, over time, standards have also evolved which define how electronic data can be exchanged, for example: Electronic Data Interchange
- Reliable exchange and acceptance of electronic data needs to tackle a number of issues
  - Data could be in structured or unstructured form
  - Interoperability and compatibility issues arising out of different data standards, for example: XML, PDF etc and different technologies used
  - Ability to ascertain integrity of data where required
  - Need for tackling high volume and velocity of data as in the case of big data use cases such as IoT
  - Usage of legacy systems and need for migration of data
  - Differing language environments

Given this context, electronic data poses significant challenges in enabling digital trust in cross border exchange of trade related data and documents

Scope of Mutual Recognition

- The scope of mutual recognition mechanism should cover aspects and areas that allow establishment of “substantial equivalent level of reliability”
- This may have to go beyond just trade related data and take into account
  - Technical standards used in data exchange (for ex: ability to ascertain data integrity)
  - Entities owning, certifying and/or transmitting data,
  - Establishment of level of confidence (identification, authentication methods) through a trusted environment
  - Role that accreditation bodies could play in monitoring the trusted environment

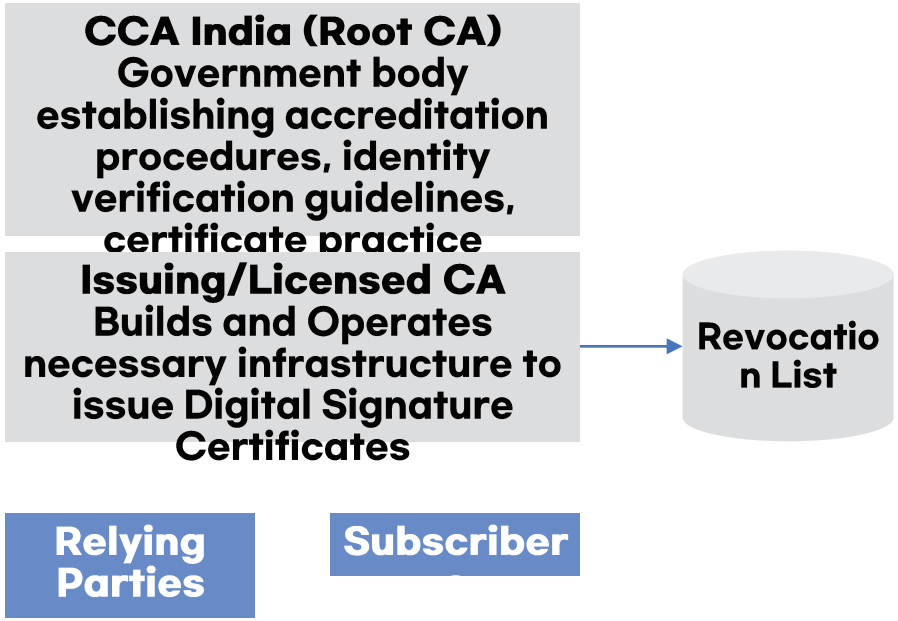
Preliminary Research and Findings

- A number of bi-lateral and multi-lateral institutional and inter-governmental arrangements exist for cross-border mutual recognition
- A closer analysis helps us make the following general observations
  - The concept of trusted trans-boundary legally significant electronic interactions is still fairly new
  - While most countries have put in place national legislation recognizing electronic documents or signatures, the scope is domestic or regional or limited to highly integrated union of states
  - Instruments are generic and not legally binding from the perspective of cross-border trade
  - Awareness levels are generally low across multiple sectors and their regulators making cross-sectoral adoption challenging
  - There is no concrete action at an implementation level to facilitate paperless cross-border electronic trade
  - Initiatives at the level of Association of Southeast Asian Nations(ASEAN), Eurasian Economic Union(EEU), European Union (EU),UN/ESCAP and UN/CEFACT are worth mentioning.

Experiences from India

- In India, the journey started 18 years back
- Key milestones achieved
  - 2000 – IT Act was passed based on UNCITRAL model law with following provisions introduced
    - Legal recognition to electronic records
    - Authentication of electronic records
    - Manner in which authentication can be satisfied (for ex: through the use of electronic signatures)
    - Procedures for licensing Certifying Authorities that can issue digital certificates
    - References with Indian Penal Code, Indian Evidence Act, 1872, Bankers Book Evidence Act, 1891, Reserve Bank of India Act, 1934
  - 2008 – Key amendments made including distinction between electronic signature and digital signature

PKI Hierarchy



Experiences from India

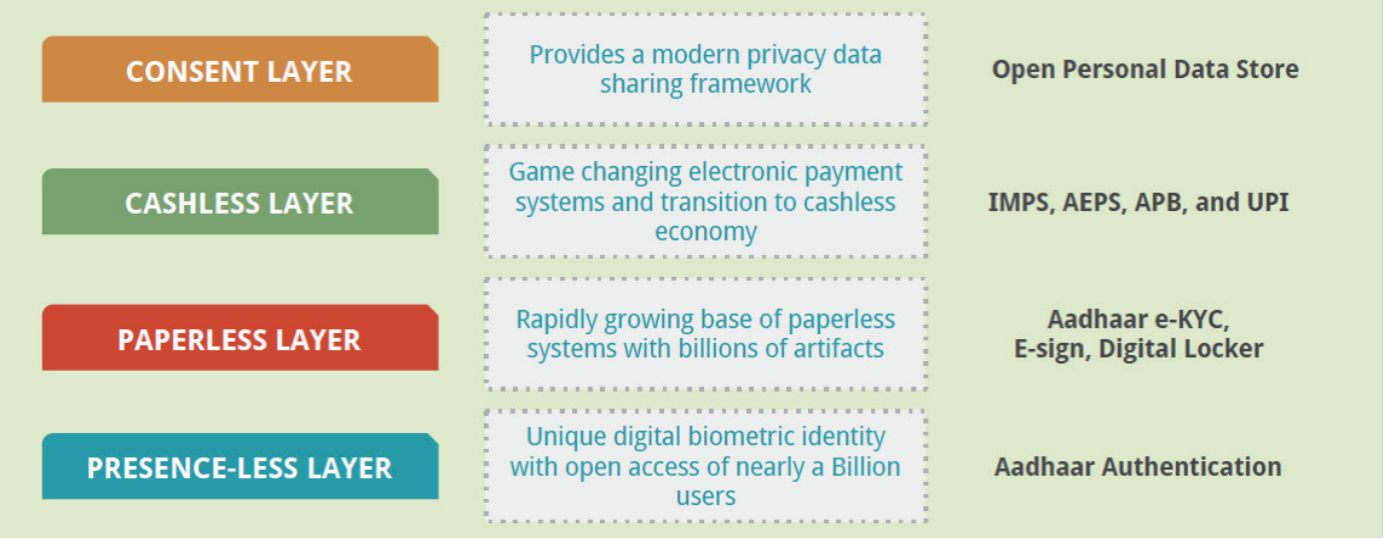
- Key milestones achieved (contd..)
  - 2012 – Powers given to Controller of Certifying Authorities, Ministry of Information Technology to sign mutual recognition agreements with other countries
  - 2013 – First such mutual recognition agreement signed with South Korea
  - 2014 – Central Bank (Reserve Bank of India) and published a comprehensive report outlining need for enhancing cyber security measures in Banking
    - Electronic signature was recommended to be **provided as an option** to customers for securely logging into internet banking or for fund transfers
    - Other cyber security measures include use of Two Factor Authentication
  - 2014 – Tax Administration and others adopted similar approach

Experiences from India

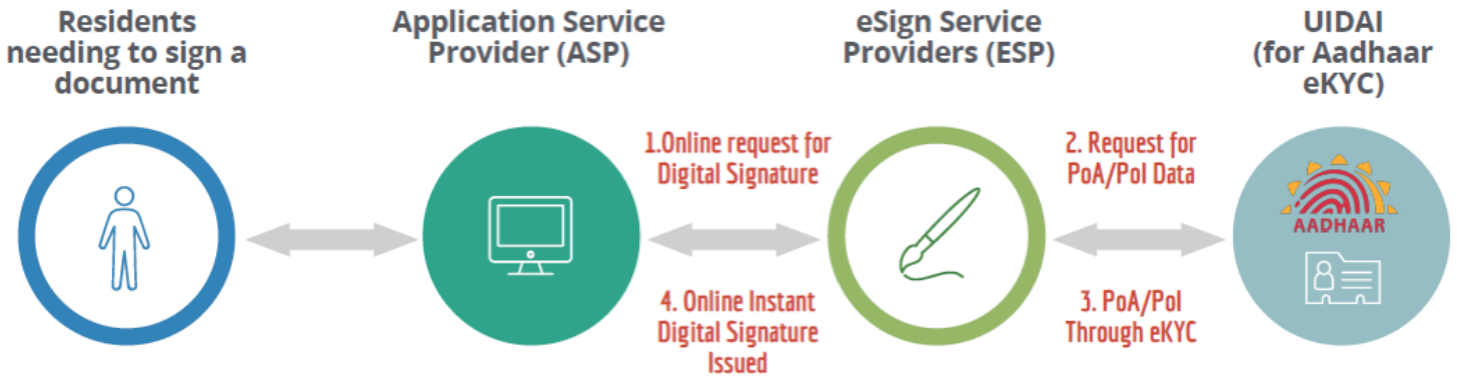
- Key milestones achieved (contd..)
  - 2015 – Launch of AADHAAR enabled electronic Signatures
    - AADHAAR is India's Digital ID now rolled out to **1.3bn residents**
    - Electronic signatures use OTP/Biometric authentication and leverage KYC data available with Govt of India to create **dynamic one time signatures that are legally valid**
    - Helped bring cost of adoption to **USD 10 cents** per transaction and create large scale adoption
    - Use cases include Account Opening in Banks, Insurance, Capital Markets, availing eGovernance services, employee onboarding etc

Experiences from India

- Creation of India Stack – a technology stack based on Open API's and Layered Innovation to enable electronic KYC, Signatures and Payments based on user consent



- AADHAAR eSign – Digital Id based electronic signatures



Experiences from India

- Key milestones achieved (contd..)
  - **2024 – Huge success of Digital India program**
    - **Over 21bn cumulative electronic KYC's**
    - **Over 250mn electronic signatures yearly**
    - **Over 400mn electronic payments daily**

Conclusion

- The following will need to be considered in enabling mutual recognition
  - Creation of a strategy which can help arrive at a legal, technical and operational umbrella framework. This need to be progressively created at national, sub-regional, regional and global levels.
  - Domain and country specific legislation, conforming to international standards, supporting cross border paperless trade.
  - Use of interoperable open standards in technology frameworks for Identity, Authentication etc
  - Capacity building for implementation

Thank You

Tahseen Ahmad Khan
takhan@meity.gov.in

Meeting History

No.	Year	Date	Place	Remark
1st	1990	Nov. 5~6	Tokyo, Japan	JS/EB Plenar
2nd	1991	Jun. 25~26	Singapore	JKS/EB Plenary & EDICOM '91
3rd	1991	Oct. 28~29	Tokyo, Japan	AS/EB Plenary
4th	1992	Jun. 11~12	Tokyo, Japan	AS/EB Plenary & EDICOM '92
5th	1992	Oct. 29~30	Seoul, Korea	AS/EB Plenary
6th	1993	May. 20~21	Beijing, China	AS/EB Plenary
7th	1993	Oct. 25~27	Seoul, Korea	AS/EB Plenary & EDICOM '93
8th	1994	Jun. 6~8	Kuala Lumpur, Malaysia	AS/EB Plenary
9th	1994	Nov. 28~30	Chinese Taipei	AS/EB Plenary & EDICOM '94
10th	1995	Jun. 5~7	Bangkok, Thailand	AS/EB Plenary
11th	1995	Nov. 1~3	Kuala Lumpur, Malaysia	AS/EB Plenary & EDICOM '95
12th	1996	Jun. 4~7	Manila, Philippines	AS/EB Plenary
13th	1996	Oct. 28~30	New Delhi, India	AS/EB Plenary & EDICOM '96
14th	1997	Apr. 30~May. 2	Singapore	AS/EB Plenary & EDICOM '97
15th	1997	Nov. 2~6	Colombo, Sri Lanka	AS/EB Plenary
16th	1998	Jul. 4~10	Tehran, Iran	AS/EB Plenary
Management Team Meeting	1999	Apr. 22~23	Singapore	
17th	1999	Sep. 5~10	Seoul, Korea	AS/EB→AFACT Plenary & EDICOM '99
18th	2000	Sep. 11~15	Chinese Taipei	AFACT Plenary & EDICOM '00
19th	2001	Oct. 1~3	Jakarta, Indonesia	AFACT Plenary & EDICOM '01
20th	2002	Oct. 28~Nov. 1	Kuala Lumpur, Malaysia	AFACT Plenary & EDICOM '02

No.	Year	Date	Place	Remark
21st	2004	Jan. 11~14	Karachi, Pakistan	AFACT Plenary & EDICOM '03
22nd	2004	Sep. 19~22	Singapore	AFACT Plenary & EDICOM '04
23rd	2005	Oct. 24~27	Hanoi, Viet Nam	AFACT Plenary & EDICOM ‘05
24th	2006	Aug. 7~11	Karachi, Pakistan	AFACT Plenary & EDICOM ‘06
25th	2007	Aug. 6~10	Bangkok, Thailand	AFACT Plenary & EDICOM ‘07
26th	2008	Oct. 13~16	Seoul, Korea	AFACT Plenary & EDICOM ‘08
27th	2009	Nov. 2~6	New Delhi, India	AFACT Plenary & EDICOM ‘09
28th	2010	Nov. 24~26	Yokohama, Japan	AFACT Plenary & EDICOM ‘10
29th	2011	Oct. 31~Nov. 4	Taipei, Chinese Taipei	AFACT Plenary & EDICOM ‘11
30th	2012	Nov. 19~22	Tehran, Iran	AFACT Plenary & EDICOM ‘12
31st	2013	Vov. 27~29	Ho Chi Minh, Vietnam	AFACT Plenary & EDICOM ‘13
32nd	2014	Nov. 24~27	Bangkok, Thailand	AFACT Plenary & EDICOM ‘14
33rd	2015	Dec. 10~12	Tehran, Iran	AFACT Plenary & eAsia Awards
34th	2016	Nov. 7~9	Tokyo, Japan	AFACT Plenary
35th	2017	Sep. 11~13	Chinese Taipei	AFACT Plenary & eAsia Awards
36th	2018	May. 9~11	Dhaka, Bangladesh	AFACT Plenary
37th	2019	Nov. 18~21	Bangkok, Thailand	AFACT Plenary & eAsia Awards
38th	2020	Dec. 9	Online (Host: Malaysia)	AFACT Plenary
39th	2021	Nov. 8	Online (Host: Malaysia)	AFACT Plenary
40th	2022	Dec. 15	Online (Host: Japan	AFACT Plenary
41st	2023	Dec. 1	Taipei, Chinese Taipei	AFACT Plenary & eAsia Awards
42nd	2024	Nov. 26	Seoul, South Korea	AFACT Plenary