

3. ASEAN Digital Initiatives



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3. ASEAN Digital Initiatives

3.1. Topology Map

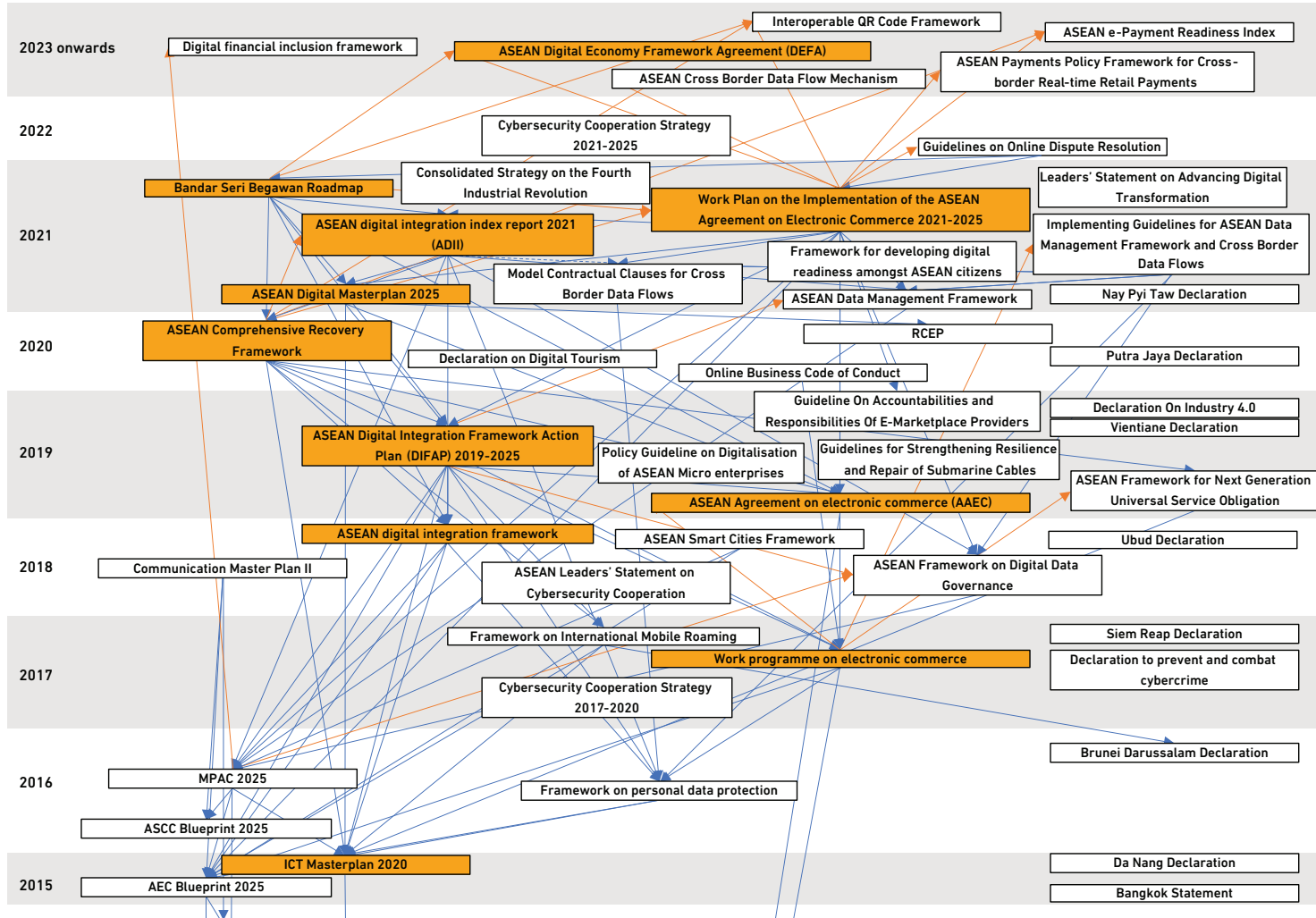
Since the adoption of the ASEAN Vision 2020 in 1997, ASEAN has made significant efforts to promote digital integration and to advance the development of the digital economy in conjunction with building and strengthening the ASEAN community. In this process, ASEAN has adopted several types of documents, such as frameworks, road maps, guidelines, declarations, blueprints, master plans, and agreements.

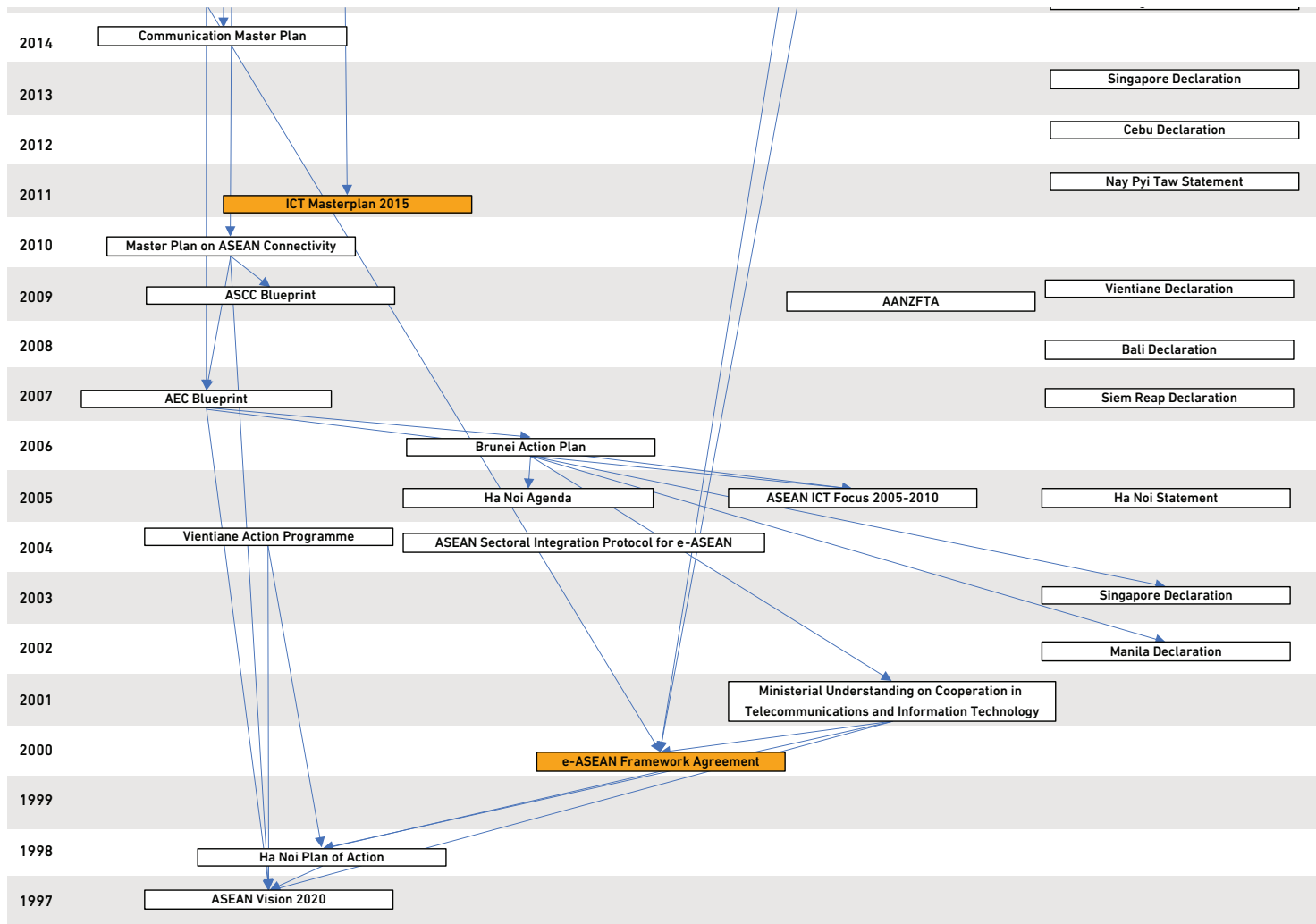
The topology map (Figure 3.1) illustrates the development of digital integration in ASEAN by organising each document from oldest to newest and showing which document refers to which document. Blueprints and master plans are on the left, declarations are on the right, and key digital documents are in the middle.¹ Lines indicate references to other documents in the text. For example, the 2019 AAEC refers to the 2000 e-ASEAN Framework Agreement as 'building upon Article 5 of the e-ASEAN Framework Agreement' (ASEAN, 2021f). References to existing documents are in blue, while references to non-existent documents are represented by orange arrows.²

¹ This map does not contain documents related to dialogue partners, and not all ASEAN documents are included.

² Links from the declaration text to the documents referred are omitted but are used in practice to identify important documents.

Figure 3.1 Topology Map of ASEAN Digital Documents





AANZFTA = ASEAN–Australia–New Zealand Free Trade Agreement, AEC = ASEAN Economic Community, ASCC = ASEAN Socio-Cultural Community, ICT = information and communications technology, MPAC = Master Plan on ASEAN Connectivity, RCEP = Regional Comprehensive Economic Partnership.
 Source: Authors.

Rather than looking at the detailed relationships between individual documents, this topology map is intended to provide an understanding of how many framework documents have been published in recent years, creating complex relationships. Since 2017, the number of frameworks and documents has increased; a concentration can be seen in 2019 and 2021. This indicates the increasing importance of and ASEAN's efforts in the digital field in recent years. There are several documents related to digital integration, with similar names, such as the *Digital Integration Framework* (DIF), the *Digital Integration Framework Action Plan* (DIFAP), and the *ASEAN Digital Integration Index Report 2021* (ADII 2021), as well as documents related to e-commerce such as the *ASEAN Work Programme on Electronic Commerce*, the *ASEAN Agreement on Electronic Commerce* (AAEC), and the *Work Plan on the Implementation of the ASEAN Agreement on Electronic Commerce 2021-2025* (*Work Plan for AAEC*).

In addition, the number of orange lines has increased in recent years. These orange lines represent non-existent documents, meaning that the creation and conclusion of certain frameworks or agreements in the future have been identified as actions. This reflects a trend toward increased concretisation of efforts. The BSBR and *Work Plan for AAEC* explicitly mentioned multiple future frameworks and agreements, and the DEFA, which at the time of writing has not yet been negotiated, is discussed in both of them.

In this topology map, important documents in ASEAN's digital integration can be identified by using both the scale of their reference from many documents and the scale of referencing other documents. The AEC blueprints, connectivity master plans, and ICT/digital masterplans are referred to by many framework documents. The ADII 2021 and *Work Plan for AAEC* both play roles in summarising previous efforts. The DIFAP is at the core of ASEAN's digital integration history, as it summarises many efforts and is referenced in many documents.

The remainder of this chapter provides an overview of how ASEAN's digital integration has progressed and reviews how these key documents have addressed the digital sector.

3.2. 1997–2000: *e-ASEAN Framework Agreement*

The **ASEAN Vision 2020**, adopted in 1997, advocated for the establishment of an ASEAN community by 2020. In the economic sector, it called for the creation of 'a stable, prosperous and highly competitive ASEAN Economic Region in which there is a free flow of goods, services and investments, a freer flow of capital, equitable economic development and reduced poverty and socio-economic disparities' (ASEAN, 1997). Concerning infrastructure, it proposed the interconnection of information highways/multimedia corridors in ASEAN and the integration of the telecommunications network.

The **1999–2004 Ha Noi Plan of Action**, adopted at the 6th ASEAN Summit in 1998, was the first in a series of action plans to realise this vision. It had a time frame of 6 years and focussed on recovering from the 1997/98 Asian financial crisis and strengthening regional integration. Encouraging e-commerce was listed under 'Enhance Greater Economic Integration,' which began with the realisation of the ASEAN Free Trade Area (AFTA). Infrastructure measures related to telecommunications covered the achievement of mutual interoperability and interconnectivity of national information infrastructure amongst AMS, development of an ASEAN action plan on regional broadband interconnection, assurance of seamless roaming of telecommunications services within the region, and promotion of intra-ASEAN trade of telecommunications equipment and services (ASEAN 1998).

The **e-ASEAN Framework Agreement**, signed in November 2000, defined measures to achieve the concept of e-ASEAN. Before that, the e-ASEAN Initiative was endorsed at the 3rd Informal ASEAN Summit held in Manila in 1999. The agreement stated that establishing an ASEAN information infrastructure under the Ha Noi Plan of Action would enhance ASEAN's competitiveness (ASEAN, 2000). Its purpose was to promote (i) cooperation to develop, strengthen, and enhance the competitiveness of the ICT sector in ASEAN; (ii) cooperation to narrow the digital divide within and between AMS; (iii) cooperation between the public and private sectors to realise e-ASEAN; and (iv) liberalisation of trade in ICT products, ICT services, and investment. Measures covered ASEAN information infrastructure; e-commerce in ASEAN; liberalisation of ICT products and ICT services trade and investment; trade facilitation of ICT products and services; e-society and capacity building to narrow the digital divide; e-government; and schedule flexibility.

Notably, the concept of digital integration – which includes developing national ICT sectors; bridging the digital divide; education, training, and capacity building; improving interoperability between AMS; and harmonising national institutions – was addressed in this framework. The agreement was signed by the leaders but was never ratified in full; its status on the ASEAN Legal Instruments website is not in force (ASEAN, 2023). However, the innovative nature of the agreement was passed on in the form of references by the *ASEAN Work Programme on Electronic Commerce* and the AAEK.

Between the DIFAP and *e-ASEAN Framework Agreement*, the major differences are the emphasis on digital innovation and entrepreneurship. The DIFAP highlights digital innovation and entrepreneurship, promotes the development of digital start-ups and MSMEs, and creates a conducive environment for their growth. They were not explicitly dealt with in the *e-ASEAN Framework Agreement*.

3.3. 2000–2009: Launch of Initiatives towards Creation of the Community

The **Ministerial Understanding on ASEAN Cooperation in Telecommunications and Information Technology**, signed at the 1st ASEAN Telecommunications and Information Technology Ministers Meeting (TELMIN) in 2001, provided the institutional working mechanisms of subsequent meetings, telecommunications and information technology senior officials meeting (TELSOM), and associated working groups, as well as the objectives for ASEAN cooperation in telecommunications and information technology.

The **Vientiane Action Programme 2004-2010** was adopted by ASEAN leaders in 2004 to accelerate the implementation of the *ASEAN Vision 2020* (ASEAN, 2004b). In response to the Declaration of ASEAN Concord II in 2003, which aimed to build three communities, the section for economic integration became the AEC in the *Vientiane Action Programme*. Under this, ICT was 1 of 11 priority sectors, and Section 2.7 covered telecommunications and information technology. It called for the creation of digital opportunities through the development of ICT infrastructure and services with universal access; development of ASEAN information infrastructure; promotion of e-government, e-commerce, and e-society initiatives; promotion of trade and investment in ICT services; and development of ICT human resources.

The **Roadmap for Integration of e-ASEAN Sector** is Appendix I to the **ASEAN Sectoral Integration Protocol for e-ASEAN** (ASEAN, 2004a). It outlined achieving integration of the e-ASEAN sector by 2010 and contained both specialised issues that are exclusive to the e-ASEAN industry and horizontal ones that applied to all sectors. Horizontal issues included tariff elimination, removal of non-tariff barriers, customs procedures,

logistics, investment and services trade, mobility of professionals, and human resources development. ASEAN information infrastructure, capacity building, e-government, and e-commerce were classified as specific issues. The development of ASEAN information infrastructure, e-government, e-commerce, and ICT human resources development fell under the responsibility of TELSOM.

In addition, within the document for logistics – another priority area – policies such as the use of RFID, cross-border electronic trading, information sharing, and facilitation of e-payments and e-signatures were designated as measures to be implemented by TELSOM. This action proved that a comprehensive approach to economic integration was necessary for ICT sector integration and that ICT sector integration could contribute to economic integration in other sectors – the concept and scope under the DIFAP.

The **Brunei Action Plan** in 2006 summarised efforts in the ICT sector more specifically (ASEAN, 2006). These included ICT capacity building and information infrastructure development, improving access to ICT, and promoting policies and domestic laws related to e-commerce. Cooperation with dialogue partners, strengthening cybersecurity networks, developing ICT skills standards, and promoting universal access were also emphasised. Specific ICT technologies and topics were highlighted, such as voice over internet protocol (VoIP), open standards and open-source technology, wireless broadband, mobile number portability, international mobile roaming charges, and prepaid SIM cards (ASEAN, 2006).

In November 2007, the **ASEAN Economic Community Blueprint**, now known as the *AEC Blueprint 2015*, was adopted at the 13th ASEAN Summit in Singapore. This document reflected the commitment made at the 12th ASEAN Summit in January 2007 to accelerate the establishment of the ASEAN Community, including the AEC, by 2015. The blueprint aimed to transform ASEAN into a single market and production base, a highly competitive economic region, a region of equitable economic development, and a region fully integrated into the global economy, incorporating a strategic schedule of measures (ASEAN, 2007).

As can be seen from the topology map, the *AEC Blueprint* integrated already proposed initiatives towards the goal of an AEC. Digital initiatives were divided into two main areas – information infrastructure under B4: Infrastructure Development and B6: E-Commerce. The facilitation of connectivity and the ASEAN mutual recognition arrangement for telecommunications equipment were mentioned under information infrastructure. ICT was stated in items for tariff elimination in the e-ASEAN sector, the ASW, and the acceleration of Cambodia–Lao PDR–Myanmar–Viet Nam integration through the ASEAN Integration Initiative. E-processing of rules of origin was also mentioned. The schedule for information infrastructure referred to the *Brunei Action Plan* and ICT Focus 2005–2010.

ICT initiatives have not been confined to the AEC. The **ASEAN Socio-Cultural Community Blueprint** encouraged the use of ICT to promote education and lifelong learning, particularly in underserved communities, through open education, distance learning and e-learning. The actions included references to digital content and digital broadcasting (ASEAN, 2009).

The **ASEAN–Australia–New Zealand Free Trade Area** was created in February 2009 and entered into force for the first eight countries in January 2010. It is characterised by its chapters on electronic commerce, including e-authentication and digital certificates, online consumer protection, online data protection, paperless trading, and cooperation.

3.4. 2010–2014: First ICT Master Plan

The 2010 **MPAC** was designed to strengthen regional connectivity within ASEAN and to accelerate community building. The plan was adopted at the 17th ASEAN Summit in 2010 and focussed on three main areas: physical infrastructure development (i.e. physical connectivity), effective institutional arrangements (i.e. institutional connectivity), and empowered people (i.e. people-to-people connectivity) (ASEAN, 2011a). Regarding the digital sector, ICT fell under physical connectivity, and establishing an ASEAN broadband corridor was selected as a priority project. Developing ICT skill standards was also a priority project under people-to-people connectivity.

The **ASEAN ICT Masterplan 2015** was the first ICT masterplan in the ASEAN region, adopted in January 2011. It intended to bring about the following four key outcomes: ICT as an engine of growth for AMS, recognition as a global ICT hub, enhanced quality of life for the people of ASEAN, and contribution towards ASEAN integration (ASEAN, 2015b). Six strategic thrusts were thus defined: economic transformation, people's empowerment and engagement, innovation, infrastructure development, human capital development, and bridging the digital divide. Seventeen initiatives and 29 actions were set, and a timeline was created for the initiatives to be realised. The key outcomes and strategic thrusts reaffirmed ASEAN's recognition of the ICT sector as the foundation for ASEAN integration and its focus on the development of each AMS through ICT development – not only trade facilitation in ICT sector. These initiatives and actions led to the initiation of 87 projects, with at least one project having been completed for each action point by 2015 (ASEAN, 2015b).

Despite the progressive nature of the inclusion of human resources development and innovation, the scope for the digital economy was limited. For example, e-commerce was not mentioned in the masterplan. Yet the Intra-ASEAN Secure Transactions Framework, a 2011 project by Thailand, did contribute to the e-commerce sector as well (ASEAN, 2015b).

3.5. 2015–2016: Formal Launch of the ASEAN Community and New Master Plans

In November 2015, ASEAN leaders adopted the declaration of the AEC establishment and released the **AEC Blueprint 2025**, which sets out the economic integration path for the next decade (ASEAN, 2015a). It built on the 2015 blueprint and aimed to strengthen and to reinforce the following five features of the AEC by 2025: a highly integrated and cohesive economy; competitive, innovative, and dynamic ASEAN; enhanced connectivity and sectoral cooperation; resilient, inclusive, people-oriented, and people-centred ASEAN; and global ASEAN. The 2025 blueprint further emphasised ASEAN's focus on the development and promotion of MSMEs.

Although it had a greater emphasis on ICT, the digital sector – by its current definition – was featured in several areas. In the *AEC Blueprint 2015*, e-commerce was located in B6 under 'B: Competitive economic region', and information infrastructure was positioned as a component of 'B4: Infrastructure development' (ASEAN, 2007). In 2025 blueprint, ICT and e-commerce were under 'C: Enhanced connectivity and sectoral cooperation', i.e. 'C2: Information and communication technology' and 'C3: E-commerce' (ASEAN, 2015a). Under 'A4: Financial integration, financial inclusion, and financial stability', the need to address the digital gap,

utilise digital payments, and implement personal safeguard measures against the threat of digital fraud was highlighted. In 'B9: Global megatrends and emerging trade-related issues', the need to utilise accelerating technology-digital advancements was mentioned (ASEAN, 2015a).

In February 2017, the AEC 2025 *Consolidated Strategic Action Plan* was adopted, providing a detailed action plan for the AEC Blueprint 2025, which was further revised in August 2018. 'C2: ICT' included promotion of digital trade, bridging the digital divide initiatives, innovation, ICT infrastructure development, human resources development, and actions on cybersecurity. 'C3: E-commerce' comprised consumer protection, harmonisation of the legal framework for online dispute resolution, e-identification, and actions on personal data protection. In addition, digital-related actions appeared in Financial inclusion (A4), Emerging trade-related issues (B9), and Strengthening MSMEs (D1). Actions on the ASW were covered in 'A1: Trade in Goods' (ASEAN, 2017a).

The **ASEAN ICT Masterplan 2020** was adopted at the 15th TEMLIN in 2016 to articulate ASEAN's ICT development plan for 2016–2020. It aimed to drive ASEAN towards a secure, sustainable, and transformative digitally enabled economy, empowering an innovative, inclusive, and integrated ASEAN Community (ASEAN, 2016c). It was structured according to a hierarchy of five key outcomes, with a notable reference to the digital economy: an accessible, inclusive, and affordable digital economy; deployment of next-generation ICT as enablers of growth; sustainable development through smart city technologies; multiple ICT opportunities across a single regional market; and secure digital marketplaces and safe online communities. Eight strategic thrusts were set: economic integration and transformation; people's integration and empowerment through ICT; innovation; ICT infrastructure development; human capital development; ICT in the single market; new media and content; and information security and assurance.

Unlike the *ASEAN ICT Masterplan 2015*, e-commerce was mentioned. Action point 1.1.1 specified the contribution to e-commerce and SMEs. The three targets/projects of this action point were to research and identify policies and best practices to accelerate e-commerce and digital services in ASEAN; identify regional policies that will benefit ASEAN businesses, especially SMEs; and raise awareness of the use of digital transactions and electronic payments amongst businesses. It can be argued that the six DIF/DIFAP areas were addressed in this plan as well (ASEAN, 2016a).

During the implementation period of the *ASEAN ICT Masterplan 2020*, the following was adopted: *ASEAN Framework on Digital Data Governance*, *ASEAN Framework on International Mobile Roaming*, *ASEAN Guidelines for Strengthening Resilience and Repair of Submarine Cables*, *ASEAN Framework on Personal Data Protection*, *ASEAN Cybersecurity Cooperation Strategy*, and *ASEAN Framework for the Next Generation Universal Service Obligation* (ASEAN, 2020b).

Of these, the **ASEAN Framework on Personal Data Protection**, adopted in 2016, was the starting point for a growing number of frameworks and is mentioned in many documents due to its importance. The framework's goals are to improve ASEAN personal data privacy laws and to make it easier for AMS to collaborate (ASEAN, 2016a). However, the framework is non-binding and does not constitute nor create obligations under national or international law. It only advised that AMS should cooperate, promote, and implement the principles of personal data protection into national laws and regulations while continuing to ensure and to facilitate the free flow of information between AMS (ASEAN, 2016a).

The **MPAC 2025** was adopted at the 28th ASEAN Summit in 2016. It aimed to achieve a seamlessly and comprehensively connected and integrated region that will promote competitiveness, inclusiveness, and a greater sense of Community through 15 initiatives across five strategic areas: sustainable infrastructure, digital innovation, seamless logistics, regulatory excellence, and people mobility (ASEAN, 2016b). The 2010 MPAC did feature ICT as a topic of physical connectivity, but the MPAC 2025 clearly stated that digital innovation contributes to all three connectivity pillars. Under digital innovation, four initiatives were specified: technology adoption support for MSMEs, development of the ASEAN digital financial inclusion framework, the Open Data Network, and establishment of an ASEAN digital data governance framework (ASEAN, 2016b).

3.6. 2017–2019: ACCEC-led Integration of Digital Sector Initiatives

The **ASEAN Work Programme on Electronic Commerce**, adopted in 2017, aimed to promote interoperability and harmonisation of e-commerce-related regulations and standards to facilitate cross-border e-commerce in ASEAN. The framework focussed on accessibility enhancement, human resources development, consumer protection, promotion of interoperability and harmonisation of e-commerce-related regulations and standards, personal data protection, cybersecurity, international logistics, e-payment, and cross-border e-commerce by MSMEs. Notably, the development of the AAEC was also listed as an outcome (ASEAN, 2017b).

In the course of developing the work programme, the Senior Economic Officials Meeting (SEOM) agreed to establish the ASEAN Coordinating Committee on Electronic Commerce (ACCEC), which would prepare the work programme. It is significant that the work programme included development of broadband infrastructure as an outcome under the jurisdiction of TELMIN, given that the document is about e-commerce – the first major step towards the convergence of the ICT and e-commerce sectors under coordination of the ACCEC.

The **DIF** was thus prepared by the ACCEC and adopted in 2018. It is noteworthy that the six pillars leading to the DIFAP and ADII were identified as priority areas in it: facilitating seamless trade, protecting data while supporting digital trade and innovation, enabling seamless digital payments, broadening the digital talent base, fostering entrepreneurship, and coordinating actions.

At the 32nd ASEAN Summit in April 2018, ASEAN leaders established the ASEAN Smart Cities Network, a collaborative effort by cities from the 10 AMS to work towards the common goal of smart and sustainable urban development. The **ASEAN Smart Cities Framework** was adopted in November 2018 in Singapore, which noted that planning and managing smart and sustainable urbanisation can be supported by key enablers such as 'Technological and digital solutions' and 'Partnership and Funding' (ASEAN, 2018b).

In January 2019, ASEAN economic ministers signed the **AAEC**, which aimed to strengthen the capacity of ASEAN to establish common principles and rules and to implement them to promote the growth of e-commerce in ASEAN and to create an environment of trust and confidence in the use of e-commerce (ASEAN, 2019a). The AAEC entered into force in December 2021.

The **DIFAP** was adopted by ASEAN economic ministers later that year. It set out initiatives, outputs, timelines, and implementing bodies through the six priority areas of the DIF. The ministers recognised the DIFAP as a blueprint to further develop the ASEAN digital economy. It incorporated action plans under the *AEC Blueprint 2025*, *ASEAN ICT Masterplan 2020*, *ASEAN Work Programme on Electronic Commerce*, MPAC 2025, and relevant strategic action plans. For initiatives already in progress, it featured a description of the status of implementation. As discussed in the next chapter, at the time of this writing, the DIFAP covered actions across the widest range of ASEAN framework documents. Of the initiatives, the *ASEAN Data Classification Framework* has since been renamed the **ASEAN Data Management Framework** (ASEAN, 2021a).

In October 2019, it was agreed to rename TELMIN to the ASEAN Digital Ministers' Meeting (ADGMIN) as well as TELSOM the ASEAN Digital Senior Officials' Meeting (ADGSOM). This reflects the role of ICT as an enabler of digital transformation in other sectors and the change in scope from ICT to digital.

3.7. 2020 Onwards: Digital Masterplan and Recovery from the COVID-19 Pandemic

The number of framework documents with action lists increased in response to the COVID-19 pandemic. The **ACRF** and its implementation plan were adopted by ASEAN leaders in November 2020 as a consolidated exit strategy from the COVID-19 crisis. It focusses on key sectors most affected by the pandemic and sets out a broad strategy for recovery in line with sectoral and regional priorities, thereby clarifying ASEAN's response through the different phases of recovery. The following five broad strategies were set out, with a number of actions in the digital area set out in the fourth strategy: enhancing health systems, strengthening human security, maximising the potential of intra-ASEAN market and broader economic integration, accelerating inclusive digital transformation, and advancing towards a more sustainable and resilient future (ASEAN, 2020a).

The **ADM 2025**, adopted in January 2021, is regarded as the successor to the *ASEAN ICT Masterplan 2020* and envisions ASEAN as a leading digital community and economic bloc, powered by secure and transformative digital services, technologies, and ecosystems (ASEAN, 2021b). It specifies eight desired outcomes, by noting that to achieve a digital economy and digital society, three conditions need to be met across ASEAN: high-quality and ubiquitous connectivity, secure and relevant services for end-users, and removal of barriers on the use of digital services by businesses and consumers. The desired outcomes speed up ASEAN's recovery from the pandemic, improve fixed and mobile broadband infrastructure, deliver trusted digital services, create a sustainable market for digital services, improve e-government services, connect businesses and facilitate cross-border trade, increase digital economy participation, and create a digitally inclusive society.

In 2021, the ACCEC presented the first iteration of the **ADII**. It aimed to assess ASEAN and AMS progress in the following six DIF-based pillars: digital trade and logistics, digital data protection and cybersecurity, digital payments and identities, digital skills and talent, innovation and entrepreneurship, and institutional and infrastructural readiness. In addition to country editions, it compares the index with dialogue partners in Annex B. Indicators in the ADII are often external objective indicators, such as OECD Trade Facilitation Indicators and the UN Global Survey on Digital and Sustainable Trade Facilitation, so it does not directly examine progress in each action of the DIFAP but indexes general digital integration progress.

The **BSBR** was endorsed at the 20th AEC Council in October 2021. To capitalise on the ongoing digital transformation in ASEAN, the BSBR outlines short-term steps for the digital sector that ASEAN can take by drawing on existing related initiatives without creating duplicative ones. Specifically, the BSBR aims to transform ASEAN into a leading digital economy through strong commitment; work on a single coherent document, with key areas of action, flagship initiatives, specific targets, timelines, and accountability; and prioritised actions that harness technology to jumpstart the region's economy, simplify business processes, promote access to and trust in digital applications, enhance protection of intellectual property rights, capacitate people on digital technologies, and improve cross-sectoral cooperation. In implementing the BSBR, the ACCEC will act as the coordinating sectoral body, with oversight by senior economic officials and support and input from representatives of relevant sectoral bodies in each AMS. AMS also agreed to conduct a study on establishing the DEFA by 2023 and to start negotiations on the DEFA by 2025. Subsequently, the chair's statement of the 40th and 41st ASEAN summits in 2022 changed the timing for the start of negotiations to 'as soon as' (ASEAN, 2022b).

The **Work Plan on the Implementation of the ASEAN Agreement on Electronic Commerce** (*Work Plan for AAEC*) was endorsed at the 53rd ASEAN Economic Ministers' Meeting in September 2021. This publication was supported by the Government of Australia through the ASEAN-Australia Development Cooperation Program Phase II. It outlines steps to be implemented across the region over 5 years to expand ASEAN's digital resilience, draws on existing ASEAN activities in various sectoral organisations, and highlights the ACCEC's coordination role to drive the overarching work plan (ASEAN, 2021f).

The **Consolidated Strategy on the Fourth Industrial Revolution for ASEAN** was endorsed in October 2021. This publication was also supported by the Government of Australia. It aims to maximise digital transformation opportunities; maintain openness, transparency, and security; promote economic growth and connectivity; and foster inclusive and equitable economic development in the increasingly converging physical and digital worlds known as Industry 4.0 (ASEAN, 2021d). The integrated strategy presents six enablers: digital infrastructure, capacity building, institutions and governance, resource mobilisation, cooperation and collaboration, and effective monitoring. Annex 2 of the strategy lists 73 frameworks and other initiatives regarding Industry 4.0 in ASEAN, under technological governance and cybersecurity (13 initiatives), digital economy (29 initiatives), digital transformation of society (27 initiatives), and cross-dimensional (4 initiatives). Initiatives include the *Kuala Lumpur Transport Strategic Plan, 2016–2025*; *ASEAN Framework Action Plan on Rural Development and Poverty Eradication, 2016–2020*; and *ASEAN Work Plan on Sports, 2021–2025*. Although not originally digital integration documents, the document recognises the increasing digital involvement in all activities. The document explains the impact of digital transformation and Industry 4.0 on all three community pillars and the need for coordination of the various initiatives.

The **ASEAN Leaders' Statement on Advancing Digital Transformation in ASEAN**, adopted at the 38th ASEAN Summit in October 2021, outlined ASEAN's key points such as accelerating digital transformation, promoting Industry 4.0, and encouraging multi-stakeholder collaboration across all ASEAN sectoral institutions and pillars of the community (ASEAN, 2021c).

3.8. Initiatives with Dialogue Partners

ASEAN has continued to work with dialogue partners in promoting digital integration. Within the framework of various agreements and initiatives, ASEAN is actively working with dialogue partners such as Australia, Canada, China, the European Union (EU), India, Japan, New Zealand, the Russian Federation, South Korea, the United Kingdom (UK), and the United States (US) to build on each other's strengths and to address common challenges. There was a trend in the last few years when ASEAN elevated partnership titles from strategic partnerships to comprehensive strategic partnerships (CSPs) towards Australia, China, India, and the US. In the development of SP to CSP transformation, China and Australia have explicitly listed specific CSP initiatives. This is reflected by including new initiatives as an Annex to the Plan of Action to Implement the ASEAN–China and ASEAN–Australia strategic partnership. These new initiatives in the digital area provide an insight into the interest of ASEAN and dialogue partners. Meanwhile, as of the time of writing, the US and India have still not published the specific CSP initiative with ASEAN. This section summarises the current state of cooperation with dialogue partners, focussing on the content of the latest strategic partnership document.

ASEAN cooperates with China, Japan, and South Korea in the digital sector bilaterally and through the ASEAN+3 framework. The ASEAN–**China** Strategic Partnership for Peace and Security includes commitments on ICT cooperation, digital tourism, and MSME development. Following the establishment of the CSP, the 2022 ASEAN–China Ministerial Meeting adopted an annex that includes strengthening digital connectivity and supply chain resilience, exploring synergies between the ADM 2025 and the Initiative on Building ASEAN–China Partnership on Digital Economy, and adding practical cooperation in digital learning and technical and vocational education. The annex also includes a joint feasibility study on the ASEAN–China Free Trade Area and the launch of upgrade negotiations. Moreover, the ASEAN–China CSP highlights digital area priorities, such as cybersecurity, digital economy, and e-commerce.

In July 2020, ASEAN and **Japan** agreed to an economic resilience action plan, which includes supporting regional digital trade transformation, protecting businesses in digital trade and e-commerce, providing financial support for digital transformation, establishing a digital transformation platform, holding an ASEAN–Japan Industry 4.0 dialogue, and identifying MSME digital technology needs. Japan also provided assistance in ICT cooperation at the ASEAN Digital Ministers' Meeting. Furthermore, Japan committed to narrowing development gaps in ASEAN through subregional development initiatives, which focus on connectivity, digital innovations, and Sustainable Development Goals. In March 2023, Japan formally requested establishment of a CSP with ASEAN. Cooperation between ASEAN and Japan has also been realised through the adoption of an ASEAN–Japan ICT work plan, which covers the issues of digital connectivity and infrastructure, digital transformation, robustness, reliability and security, digital policy, regulation and standards, and cooperation and collaboration.

The ASEAN–**Republic of Korea** Plan of Action for 2021–2025 outlines areas of cooperation between ASEAN and South Korea in the digital economy. They will seek to promote cybersecurity cooperation and enhance policy dialogue and information exchange through the ASEAN Digital Ministers' Meeting and other relevant mechanisms. Use of digital technology for MSMEs, implementation of the ADM 2025, and civil services are included. The plan also includes support for Industry 4.0, creative industries, ASEAN youth through digital skills development, sustainable infrastructure, digital innovation and people mobility, and ASEAN Smart City Network. ASEAN and South Korea are committed to establishing and growing a network for upcoming generations through the development of digital skills and youth participation in the region's policy dialogue by signing the ASEAN–South Korea Next-Generation Opinion Leaders Programme as well.

The **ASEAN Plus Three** Cooperation Work Plan, 2023–2027 outlines several areas of cooperation related to the digital sector, including trade and investment promotion through digital technologies, ASEAN+3 financial cooperation in areas such as Fintech and disaster risk financing, digital infrastructure, and MSME development through digital capacity building. It also includes promoting the digital economy through activity areas such as the DEFA, e-commerce, cybersecurity, digital human resources development, digital financial services, ASW, and payment connectivity.

The **ASEAN–India** Partnership for Peace, Progress, and Shared Prosperity (2021–2025) outlines initiatives for cooperation in the digital sector. These include enhancing practical defence cooperation, including cybersecurity; expanding digital trade; developing a digitally enabled workforce; and supporting the ASEAN Smart City Network. In addition, the plan includes cooperation through capacity building and knowledge sharing in AI, Industry 4.0, ICT in disaster management, cyber forensics, next-generation transmission technologies, and advanced satellite communications, as well as enhancing women and youth participation in human resources and digital skills development programmes. The India–ASEAN Digital Work Plan 2023 includes similar initiatives such as capacity building and knowledge sharing in emerging areas of the ICT sector, such as AI in cybersecurity, IoT and AI applications in next-generation smart cities and Society 5.0, and future sustainable data and transport networks. An ASEAN–India CSP intends to enhance cooperation on the digital economy and FinTech.

The **ASEAN–US** Leaders’ Statement on Digital Development encourages deeper cooperation between the two sides by first creating the ADII. The Plan of Action to Implement the ASEAN–United States Strategic Partnership (2021–2025) describes a US–ASEAN digital economy initiative to support regional cybersecurity, intellectual property rights strategies, digital inclusion of youth and women, access to technology for MSMEs, and efforts to bridge the digital divide. The plan also includes the US–ASEAN Smart Cities Partnership; Digital Connectivity and Cybersecurity Partnership; and ASEAN–USAID Inclusive Growth in ASEAN through Innovation, Trade, and E-Commerce. The digital sector is prioritised in the ASEAN–US CSP by advancing economic cooperation through digital connectivity, digital economy, and digital trade standards.

The Plan of Action on ASEAN–**EU** Strategic Partnership (2023–2027) includes cooperation on digital trade, intellectual property rights in a digital environment, ICT infrastructure, public–private partnerships, MSMEs, the ADM 2025, digital data governance, ASEAN Digital Index (ADIX), and cybersecurity. The plan encourages people-to-people exchanges and cooperation in education, science, and culture to achieve universal access to quality education and to enhance digital transformation. It calls for joint cooperation in the implementation of MPAC 2025 and support for the ASEAN Smart City Network. Additionally, the EU helped deliver the second phase of the ADIX through the Enhanced Regional EU–ASEAN Dialogue Instrument Facility, which facilitates the EU and ASEAN in collaborating on issues of common concern (EU, 2021).

Australia has supported the development of key framework documents in recent years, such as the *Work Plan for APEC* and the *Consolidated Strategy on the Fourth Industrial Revolution for ASEAN*. The Plan of Action to Implement the ASEAN–Australia Strategic Partnership (2020–2024) includes initiatives on digital connectivity, digital trade, entrepreneurship and developing a digital-ready workforce, and strengthening cooperation on digital integration. The plan also assisted ASEAN in developing the DEFA and covered smart cities and cybersecurity. After the establishment of the CSP in 2021, the focus now includes digital transformation and future skills initiatives, regional security, support for recovery from COVID-19, MSMEs and start-ups, and enhanced cooperation on gender equality and women’s empowerment, including financial inclusion.

The 19th ASEAN–**Canada** Dialogue reaffirmed the commitment to further deepen their partnership and to note progress in the implementation of the ASEAN–Canada Plan of Action (2021–2025). Both parties are looking forward to the first round of free trade agreement negotiations, scheduled for August 2022. The advancement of the Women, Peace, Security Agenda; cybersecurity; public health emergencies/preparedness; digital economy, sustainable development and environment; connectivity; innovation; smart cities; human capital development through education; and people-to-people exchanges have also been discussed (ASEAN, 2022a).

The 2021–2025 Plan of Action to implement the ASEAN–**New Zealand** Strategic Partnership aims to strengthen cooperation in various areas, including the digital economy. The plan will strengthen the region’s digital transformation and support the development of human capital to address the challenges and to seize opportunities of Industry 4.0, e-commerce, and digital trade through leveraging the experience of the Digital Economy Partnership Agreement, possible ASEAN and New Zealand capacity development programmes, and exchange of information and best practices. It will also cooperate in the field of cybersecurity and support technical and vocational education and training and the ASEAN Smart Cities Network.

The 2021–2025 Plan of Action outlines areas of cooperation between **Russia** and ASEAN in the digital sphere. The plan highlights enhanced ICT cooperation in cybersecurity, disaster management, counterterrorism, and international crime. The plan promotes experience exchange and capacity building in trade and investment-related areas of mutual interest, such as green technology, and financial technology, and strengthens cooperation in the digital economy, including MSME capability in digital literacy and business development, smart manufacturing, and Industry 4.0. It proposes to explore the establishment of an ASEAN–Russia Joint Working Group on Smart Cities as well.

The Plan of Action to Implement the ASEAN–**UK** Dialogue Partnership (2022–2026) shows a strong interest in the digital sector. ASEAN and the UK will work together on digital connectivity, cross-border digital trade, and operationalising the ASEAN–UK Digital Innovation Partnership. It will also support the collaboration between the UK–ASEAN Business Council and ASEAN Business Advisory Council in the digital sector, including digital innovation, infrastructure development, and MSME development. It will share best practices and information on data protection and emerging digital technologies. The plan explores the possibility of exchanging best practices and discussing the interoperability of the ASW and the UK National Single Window and channelling UK expertise into improving trade facilitation in ASEAN through cooperating on digital transformation; digital technical standards; digital inclusion; and adoption of digital tools in areas such as regulation, e-payments, and the digitisation of supply chains.