

API 2020 Briefing Paper No. 03

Keeping freights moving: Why ASEAN needs a Digital Integration Forum for the logistics sector

Executive Summary

Despite its trade intensity, ASEAN is still not achieving the full potential of digitalisation in logistics the way the EU has done. There are gains to be captured that are missing due to a lack of coordination from ASEAN Member States (AMS) which could be improved through the creation of better forums and channels of information exchange.

Covid-19 has highlighted this vulnerability and serves as an opportunity to improve coordination. The pandemic, including efforts to minimise social contacts for transport and logistics personnel, and the increased strain on global supply chains have highlighted the importance of strengthening resilience in the logistics sector by using digital solutions.

At a regional level, there needs to be more significant leadership through collaboration among member states, including state agencies and commercial stakeholders directly involved in external trade.

A relevant model that is currently operational for the EU is the Digital Transport and Logistics Forum (DTLF). Their framework is useful to utilise as a structure to create an ASEAN committee and forum for Digitalisation in Logistics. This would not require an excessive resource commitment beyond the facilitation of a coordination mechanism that enables focused discussion and collaboration on an ASEAN-wide level. The successes and lessons of the DTLF do not rely heavily on the legal infrastructure of the EU and is more collaborative, with clear policy goals that could be adopted by ASEAN.

To achieve such outcomes, it requires the promotion of the already emerging work with the ASEAN Digital Integration Framework by the creation of a collaborative task force within the ASEAN framework as a forum. The direct institutional capacity for this already exists in AMS Ministries for international trade. Such ministries can engage with relevant business forums to push towards the creation of such platforms and to lead the advocacy to strengthen capacities at an ASEAN level.

Introduction

Digitalisation processes are driving profound changes in the production, exchange, and consumption of goods and services on a global scale¹. This materialises itself prominently in the ASEAN region through its geographically important position in major international trade channels. Thus, the relevance of logistics and its influence on the digitalisation of processes needs to be investigated further to understand the importance of capturing gains from trade to the ASEAN region. Here, digitalisation refers to the technological embeddedness concerning global trade and commerce in platforms that go beyond physical interfacing.

These digitalisation opportunities in the ASEAN region relate to evolving collaboration among nations in the region.² This would reflect particularly on both the historical evolution of ASEAN Member States (AMS) and the potential to widen this within the framework of developments in digitalisation in global economies. As such, this brief will focus on digitalisation issues surrounding logistics and supply chains.

The current relevance of this is highlighted through the lens of Covid-19 via the reconfigurations of global economic activities. A Deloitte research advocated for paperless logistics as a vital element to safeguard productivity during such disastrous events. They also advocate for using this unique social and economic event as a catalyst to reform digitalisation strategies to support business resilience.^{3,4}

The dynamism of interstate collaboration in digitalisation and the approaches within ASEAN are



compared to the framework of the European Union (EU). In the case of ASEAN, the approach will be on intergovernmentalism and thus retaining the fundamental divergence of the basis of collaboration, in contrast to the EU that is formalised by legal Treaty⁵.

The briefing paper will firstly explore the prominence of digitalisation in AMS and its impact on SMEs in the region when gains are effectively captured by better coordination. The institutional challenges facing ASEAN logistics digitalisation will be discussed before exploring the dynamics of the debate between national and regional digitalisation policies. The current institutional environment to facilitate AMS digitalisation in logistics will then be outlined before evaluating this against the model adopted by the European Union as a useful case study, before concluding with policy lessons.

¹ Azmeh, S., Foster, C.G., & J. Echavarri. 2019. 'The International Trade Regime and the Quest for Free Digital Trade'; Maiti, D., Castellacci, F., and A. Melchior. 2019. 'Digitalisation and Development: Issues for India and Beyond'; Guillén, M.E., Moliner, M.A., and D. Monferrer. 2019. 'The Digitalisation of Logistics'

² IDEAS. 2019. 'ASEAN Integration Report' API Report No. 1

³ Deloitte. 2020. 'Increase resilience through digitisation. A global COVID-19 response for legal leaders'

⁴ Mishra, B. 2020. 'COVID-19 Crisis Boosts Ocean Freight Digitalisation'

⁵ European Economic Community. 1957 'Treaty of Rome'

The current state of ASEAN Digitalisation

A recent report, by Deutsche Bank, has suggested that "digitalisation must be positioned as a pillar central to the ASEAN Economic Community (AEC) vision of a single economic market."⁶ This would help to reap the benefits of digitalisation in a manner supportive of inclusive growth and sustainability as a catalyst for moving beyond AEC 2025, which provides clarity around how each ASEAN nation's digitalisation strategies link into AEC 2025. The reference to the Master Plan on ASEAN Connectivity 2025 (MPAC 2025), which pushes for ASEAN integration to enable institutional, physical, and peer-to-peer communication linkages and channels as the proposed approach.

In reflecting on crucial strategies, there are already findings from several expert groups that have explored the scope in collaboration within the region. A study, coordinated by the Asia Foundation linked to the ASEAN Coordinating Committee on Micro, Small and Medium Enterprises (ACCMSME), addressed challenges to MSME adoption of digital technology.⁷ They referred to limited knowledge of digitalisation and difficulties of engaging with MSMEs through online and offline platforms.

ACCMSME customises training programmes to suit the local context of AMS and engages local teams of technology professionals and volunteers to deliver the training.⁸ The data refers to the current state of ASEAN and opportunities that can be realised with better usage of digitalisation to match the other

aspects of ASEAN's economic strength. ASEAN ranks third in the world by population, sixth in GDP terms and fourth in trade value; however, ASEAN's digital economy is only 7% of its GDP compared to 16% of China, 27% of EU and 35% of the US, highlighting the missed opportunities that must be capitalised.

In this regard, AMS should accelerate progress on seamless logistics to facilitate trade across borders, including digital-enabled trade within and across AMS. Surveys conducted by Bain and Company highlight the evident gap; even though 75% of SMEs recognise that digital integration presents economic opportunities, fewer than 1 in 5 use digital tools as part of the core business model.⁹ Another study reported a shortage of skills and knowledge as a critical barrier impeding digitalisation.¹⁰

The findings that are emerging point to limited knowledge about digital technologies, and a reluctance to change business processes. This highlights the need for collaboration between governments and digital platformers, and thus in engaging MSMEs to build technological capabilities to promote greater utilisation of digitalisation¹¹. These studies have proposed the need to develop a collaborative framework in digital platforms that will engage more with industry and businesses to enhance digital linkages for international trade.¹² These approaches argue for a reduced time taken within customs clearance and trade facilitation, by using digitalisation with E-documents in international trade and logistics.

⁶ Deutsche Bank. 2017. 'Reimagining ASEAN: The digital journey to 2025'

⁷ ASEAN. 2020. 'Go Digital ASEAN, Digital skills to address the economic impact of COVID-19'

⁸ Ibid.

⁹ Bain and Company. 2018. 'Advancing Towards ASEAN Digital Integration: Empowering SMEs to Build ASEAN's Digital Future'

¹⁰ ERIA. 2019. 'Study on MSMEs Participation in the Digital Economy in ASEAN: Nurturing ASEAN MSMEs to Embrace Digital Adoption'

¹¹ Lall, S. 1992. 'Technological capabilities and industrialisation'

¹² Fu, X. 2015. 'China's Path to Innovation'; OECD. 1997. 'National Innovation Systems'

The Bain and Company 2018 report on ASEAN highlights the barriers preventing SMEs from engaging more within logistics as formed by the uncertainty surrounding a lack of understanding of digital technology.¹³ There are also questions on the affordability of technology, such as high upfront investments required for systems. Further, there are concerns for these SMEs about a lack of support from governments in their adoption of technologies. If such SMEs can utilise digital integration for their logistics, this will allow them to overcome such barriers and lead to asset maximisation and digital integration.

ASEAN, in late 2019, set the foundations for the facilitation of digital integration in place with the Digital Integration framework.^{14 15} The action plan for the framework includes the following five priorities: i) Facilitating seamless trade, ii) Protecting data while supporting digital trade, iii) Enabling seamless digital payments, iv) Developing a digital workforce, and v) Fostering entrepreneurship. There is an additional reference in the framework to prioritise coordination of action with a body to move across the priorities mentioned before. However, such an approach can be refined in light of emphasising useful, targeted forums, including specialised committees, to accelerate information exchange in specific areas, such as the digitalisation of logistics. Further, such action can help to focus the activities proposed by the action plan to integrate private sector expertise into the forums to facilitate more significant technology transfers in a better manner.

Institutional Challenges for Logistics in ASEAN

Logistics, as a service, is especially crucial for export-dependent countries whose economic growth and sustainability rely on international trade¹⁶. The sector can be supported by policies to develop and improve its contribution to the competitiveness of ASEAN in international trade. Logistics is considered a pillar of the ASEAN Economic Community (AEC), which facilitates trade and services flows and movements across the ASEAN region.¹⁷ ASEAN logistics comprises of linkages with infrastructure which encourages the participation of service providers. Their combined efforts reflect and influence the general quality contributing to the international competitiveness of ASEAN logistics services.¹⁸

In comparison to the EU and the USA, the ASEAN logistics sector is more fragmented and less developed. Further, the sector is dominated by large foreign logistics providers. Additionally, to improve the connectivity of E-commerce within the ASEAN region requires the coordination of local transport and forwarding companies. However, such local companies face a resource constraint and thus will not be able to progress with integration without regional support from AMS governments and the ASEAN as a whole.

In ASEAN, policy formulation and implementation are regarded as problematic, mainly reflecting the variations in transport modes, including governance

¹³ Bain and Company. 2018. 'Advancing Towards Asean Digital Integration: Empowering SMEs to Build ASEAN's Digital Future'

¹⁴ ASEAN. 2019. 'Digital Integration Framework'

¹⁵ The ASEAN Digital Integration Framework Action Plan 2019-2025 was ratified at the 18th ASEAN Economic Community meeting on the 31st of October 2019.

¹⁶ Tongzon, J., and I. Cheong. 2014. 'The challenges of developing a competitive logistics industry in ASEAN countries'

¹⁷ Ibid.

¹⁸ ERTICO. 2020. 'Digital Logistics: Essential in Mitigating the Spread of Covid-19 and for our Sustainable Future'

by state bodies and agencies within member states. This is seen in Myanmar and Cambodia with multi-agency engagement involved in policy for the sector such as those involved in trade, foreign investments as well as customs authorities.¹⁹ Further, the data on ASEAN logistics are mostly weak and does not provide in-depth statistics on the stakeholders, including their business outcomes, as well as their socio-economic performance such as market structure, costs, and employment.²⁰ The data which is captured is mostly decentralised, and there are no standard formats to enable cross country comparisons within ASEAN.²¹

National versus Regional Digitalisation Policy

There is a need for ASEAN to overcome their coordination problems since this would lead to gains from trade as advocated in the literature on "South-South" cooperation between developing nations²². Such South-South Cooperation for progressing on Digital Single Market (DSM) has integration processes on regional markets that make them easily accessible to all stakeholders in the countries within the region.²³ However, in the digitalised world, regional markets can only be genuinely integrated if they progress towards a digital single market in the region. A regional digital single market (RDSM) would lead to richer online access across the region and will stimulate the benefits through positive

network externalities.

The EU's initiative on 'Digital Single Market strategy' (DSM), which was adopted in 2015, can provide rich learnings for ASEAN, although may not be immediately replicable given the lack of digital capacities in ASEAN. It is estimated that DSM can contribute EUR 415 billion per annum to Europe's economy and create jobs and transform public services.²⁴ The progress made by advanced countries on digitalisation and regional digital integration implies that the Global North-South digital divide may widen in the future if developing countries do not make extensive efforts at both national and regional level to progress on digitalisation.

There is a lesson on the need to reinforce ASEAN integration with a more interventionist approach that can be vital in countering these challenges. For small open economies of relatively high technological capacities, such as in ASEAN member states, a digitally open approach can allow for the integration of leading digital firms into the economy. Regional digital policies can also be utilised, such as the EU Digital Single Market, to support smaller nations using integrated markets.²⁵

Foster and Azmeh, in a study on African Digitalisation harmonisation, argue that it is likely that successful e-commerce firms in Africa will begin to grow when integrated into regional markets.²⁶ With the digitalisation

¹⁹ Yean, T.S., and S. Basu-Das, 2016. 'Moving the AEC Beyond 2015: Managing Domestic Consensus for Community Building'

²⁰ Ibid.

²¹ Kawa, A. 2020. 'Improving Logistics Connectivity of E-commerce in the ASEAN Region'

²² Use of "South" here refers to the Global South from development studies literature.

²³ UNCTAD. 2020. 'South-South Digital Cooperation for Industrialisation: A Regional Integration Agenda'

²⁴ European Commission. 2015. 'A Digital Single Market Strategy for Europe'

²⁵ Azmeh, S., Foster, C.G., and J. Echavarri. 2019. 'The International Trade Regime and the Quest for Free Digital Trade'; Foster, C.G., and S. Azmeh. 2019. 'Latecomer Economies and National Digital Policy: An Industrial Policy Perspective'

²⁶ Foster, C.G., and S. Azmeh. 2019. 'Latecomer Economies and National Digital Policy: An Industrial Policy Perspective'

of global and regional value chains, there is also likely to be increasing demands for cross-border business-to-business e-commerce within regionally integrated multinationals in the future. However, infrastructure and logistics issues remain essential barriers to e-commerce, as logistics networks in these countries are underdeveloped. The approach on a detailed level of collaboration among business and commercial stakeholder facilitated by regional states in AMS would be useful to consider.

ASEAN Digital Master Plan

To enhance ASEAN connectivity, the Master Plan on ASEAN Connectivity 2025 (MPAC 2025) was created on the assumption that there is already a robust logistics structure in place. In reality, the efficiency in this sector has not improved since the 2010 Master Plan (MPAC 2010) based on indicators of transportation costs and delays slowing trade flows. Arising from this, there is a need for greater coordination between state agencies, in addition to an improved platform for sharing best practices. To achieve these aims requires collaboration between the service providers, academic institutions, and ASEAN member states within an innovation systems framework²⁷. Such alliances would enable the identification of bottlenecks within the supply chain and policy hurdles that may emerge.²⁸ An institutional instrument that could be explored by AMS to encourage further collaboration and integration relates to the EU Digital Transport and Logistics Forum (DTLF).

European Union Perspective Digital Transport and Logistics Forum (DTLF)

The DTLF provides a platform among EU Member states to exchange knowledge and coordinate policies in transport and logistics digitalisation. This approach refers to digital corridors and information system and is structured on collaboration among sovereign states in Europe within the European Union. Importantly, its function is not grounded in legal Treaty, but in a collaborative arrangement that is mutual for EU member states.

The DTLF highlights how new technologies and big data from digitalisation can be utilised to innovate on methods of organising and managing cargo and traffic flows. Such approaches can revolutionise the sector by creating channels of innovation, new opportunities for business, and the generation of different business models and services.

The institutional importance of such a forum supported by member states is that it enables cooperation between supply chain actors regardless of their base country, better supply chain visibility, real-time management of traffic and cargo flows with the improved shared data. This reflects in the business case for firms to desire such a useful forum with simplification and the reduction of administrative burden, better use of infrastructures and resources, thereby increases efficiency and lowers costs with the removed uncertainty that arises from standardisation.²⁹

²⁷. Fu, X. 2015. 'China's Path to Innovation'; OECD. 1997. 'National Innovation Systems'

²⁸. IDEAS. 2020. 'Post-COVID Supply Chain Reconfigurations:

Convergence or Divergence in ASEAN Economic Integration?'

²⁹. DTLF. 2020. 'Digitalisation of Freight Transport Information: Council Adopts New Rules'

BOX: Digital Transport and Logistics Forum (DTLF)

"The DTLF is a collaborative platform, where the Member States, public entities and organisations exchange knowledge and coordinate policy and technical recommendations for the European Commission, in the fields of transport and logistics digitalisation across all modes of transport."³⁰

The DTLF have been able to work on refining rules relevant to electronic freight transport information. Additionally, the DTLF have developed the notion of a digital corridor to facilitate information systems between different stakeholders in various supply chains. This is designed to enable more significant linkages within the framework of existing cross border IT platforms.

The forum supports EU efforts in the field of seamless digital information exchange, including the preparatory work for Commission Proposals on electronic freight transport information, and the development of a concept for corridor freight information systems. The DTLF comprises public sector agencies involved in transport as well as private stakeholder organisation with expertise in logistics. This has been a catalyst towards more engaging access to generate information in the field of transportation.³¹

ASEAN-DTLF Lessons

Although there are institutional differences between the EU and ASEAN, ASEAN may want to adopt a modified version of the DTLF. ASEAN should push to form an ASEAN-wide committee, supported by the member state governments, to facilitate a more significant forum for information exchange. This is likely to be a role supported by Ministries with portfolios of international trade to leverage their existing platforms and networks. For example, the Malaysian Ministry of International Trade and Industry (MITI) currently support digitalisation initiatives in the form of SME Business Digitalisation Grants as blanket support. However, the DTLF and its success show how such benefits require coordination on an international level. The AMS governments must provide a platform for such coordination and shared lessons to drive digitalisation in logistics forward, recognising their export-heavy economies.

Deliberations of the DTLF point towards logistics stakeholders' current and continued use of paper documents instead of digital documents and procedures. Within the EU, there is an exact single market and coordination of cargo destined to different countries that could be discharged to any member states. Further, there are also institutional

provisions which include dispute resolutions and operational scenarios.³² These approaches show the framework for initiatives within the DTLF and how they could be modified within a collaborative dimension in ASEAN, by building on the ASEAN Digital Integration Framework.

³⁰ European Commission. 2018. 'Setting up the group of experts on digital freight transport and logistics: the Digital Transport and Logistics Forum'

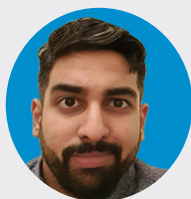
³¹ Ibid.

³² European Commission. 2018. 'Setting up the group of experts on digital freight transport and logistics: the Digital Transport and Logistics Forum'

Policy Recommendations

1. To move towards a more competitive ASEAN economy, regional integration to support digital logistics infrastructure is essential. It will be a missed opportunity to not capitalise on the scale benefits of the ASEAN region if there is no push towards digital integration that is supported in action and intent of member states. This is significantly highlighted by the global transition toward digitalisation to enforce economic resilience from Covid-19 related economic shocks. Furthermore, there is broad consensus as to the benefits to the rest of the economy and society in terms of inclusive and sustainable growth as we transition further into the global digital economy.
2. Promotion of greater AMS collaboration in digitalisation and furthering the role of ASEAN Digital Integration Framework to strengthen institutional hubs and digitalisation ecosystems would ease the flows of information and expertise, as is the case with the EU Digital Transport and Logistics Forum (DTLF).
3. Set up a collaborative task force within the ASEAN framework to include, firstly, business and commercial stakeholders, secondly, the state institutions engaged in international trade and commerce, and thirdly, supporting a forum to allow for information exchange between AMS.

Author



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** The views expressed in this report are the authors own.*

The ASEAN Digital Integration Framework Action Plan 2019 - 2025

Ratified at the 18th ASEAN Economic Community meeting
on 31 of October 2019

The 5 priorities:

-  → Facilitating seamless trade,
-  → Protecting data while supporting digital trade,
-  → Enabling seamless digital payments,
-  → Developing a digital workforce and,
-  → Fostering entrepreneurship

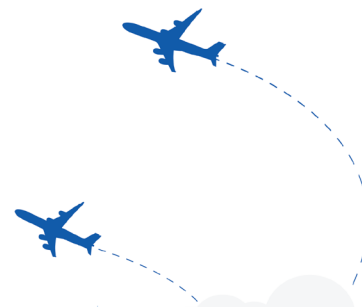


Digital Transport and Logistics Forum (DTLF)

A collaborative platform by EU members to support efforts in the field of seamless digital information exchange within the region

Why DTLF is the way to go for ASEAN?

- ▶ Improve regional integration to support essential digital logistics infrastructure
- ▶ Strengthen institutional hubs and digitalisation ecosystems to ease the flows of information and expertise



How should ASEAN do it?

Set up a collaborative task force within the ASEAN framework to include:

- ▶ Business stakeholders
- ▶ State institutions engaged in international trade and commerce and,
- ▶ Creating a forum that allows for information exchange between member states



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