

DEFA – A Catalyst for ASEAN Economic Regionalism

The ASEAN Digital Economy Framework Agreement (DEFA) represents a pivotal step toward economic integration in Southeast Asia. Substantially concluded in October 2025, it represents the world's first region-wide digital economy agreement, designed to govern a market that is projected to reach \$2 trillion by 2030.¹ Unlike traditional trade agreements that focus primarily on lowering tariffs on physical goods, DEFA creates a cohesive regulatory architecture for the intangible drivers of the modern economy: data flows, digital payments and electronic commerce. Its strategic importance lies in its ability to transform ASEAN from a fragmented collection of 11 distinct digital markets into a unified, interoperable bloc – accelerating the region's transition into a global digital powerhouse.

However, the urgency of this agreement is defined as much by the cost of inaction as by the promise of growth. In the absence of a binding framework like DEFA, ASEAN risks stagnating in a middle-income digital trap. Without deep integration, the region's digital economy is projected to follow a business-as-usual trajectory, capping at approximately \$1 trillion by 2030 – leaving a trillion dollars of potential value on the table.² Furthermore, without harmonised rules, businesses will continue to struggle against a noodle bowl of conflicting regulations, such as divergent data localisation laws and incompatible payment standards. This regulatory fragmentation currently imposes compliance costs estimated at \$15–20 billion annually, disproportionately stifling Micro, Small and Medium Enterprises (MSMEs) and effectively locking them out of the cross-border digital marketplace.³

This case study seeks to move beyond a theoretical discussion of digital integration to examine the practical mechanics of DEFA. Specifically, it aims to: examine the core elements and guiding principles that constitute the DEFA framework and its regulatory architecture; analyse the agreement's role as a strategic catalyst for enhancing trade efficiency, interoperability and regional competitiveness; evaluate the structural, regulatory and geopolitical challenges impeding effective implementation, illustrated through specific case examples; and assess the future outlook and critical watchpoints for ASEAN policymakers as the region moves from negotiation to domestication.

Understanding DEFA: Core Elements and Objectives

The strategic roadmap for DEFA was laid out in the *Bandar Seri Begawan Roadmap (BSBR): An ASEAN Digital Transformation Agenda*, adopted in 2021. Born from the economic shocks of the COVID-19 pandemic, the roadmap recognised that digital connectivity was no longer optional but a critical economic lifeline.⁴ It established a phased timeline: a recovery phase (2021–2022) to stabilise economies, an acceleration phase

¹ Spencer Feingold and Anne-Katrin Pfister, "ASEAN Takes Major Step toward Landmark Digital Economy Pact," World Economic Forum, October 28, 2025, <https://www.weforum.org/stories/2025/10/asean-defa-digital-economy-pact-negotiations/>.

² ASEAN Secretariat, "Opening Remarks by Secretary-General of ASEAN at the 10th ASEAN Ministerial Conference on Cybersecurity," October 2025, https://asean.org/wp-content/uploads/2025/10/OpeningRemarks_SG_10thAMCC_As-Delivered.pdf.

³ Naomi Wilson, "The Digital Economy Framework Agreement: ASEAN's Anchor in a Turbulent Digital Economy," Information Technology Industry Council, <https://www.itic.org/news-events/techwonk-blog/the-digital-economy-framework-agreement-aseans-anchor-in-a-turbulent-digital-economy>.

⁴ Economic Research Institute for ASEAN and East Asia (ERIA), "Understanding the ASEAN Digital Economy Framework Agreement," April 2023, <https://www.eria.org/uploads/Understanding-the-ASEAN-Digital-Economy-Framework-Agreement.pdf>.

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(2022–2024) to fast-track digital adoption, and finally, a transformation phase (2025 onwards), culminating in the negotiation and conclusion of DEFA.⁵

Key Elements of DEFA and Guiding Principles

DEFA is engineered to be a living agreement, capable of evolving alongside rapid technological shifts. It is built upon five foundational guiding principles: *impact first* (prioritising high-value barriers), *inclusive growth* (ensuring MSMEs and developing member states benefit), *building on progress* (complementing rather than duplicating existing free trade agreements), *forward-looking* (futureproofing for Artificial Intelligence (AI) and 5G), and *tangible benefits* (focusing on operational outcomes over diplomatic rhetoric).

To operationalise these principles, the agreement is structured around nine core elements that serve as the pillars of the regional digital ecosystem:⁶

1. *Digital trade*: Dismantling non-tariff barriers by digitising the entire trade administration process. It mandates the adoption of frameworks like the UNCITRAL Model Law on Electronic Transferable Records to facilitate paperless trading, e-invoicing and electronic exchange of customs documentation.
2. *Cross-border e-commerce*: Harmonising the rules of the road for digital marketplaces. It establishes regional standards for consumer protection, online dispute resolution and logistics to ensure that a consumer in Jakarta can safely purchase goods from a vendor in Bangkok.
3. *Payments and e-invoicing*: Pushing for the interoperability of national payment systems. It institutionalises initiatives like cross-border QR code linkages and real-time settlement gateways (eg Project Nexus) to ensure trade can flow as fast as information.
4. *Digital ID and authentication*: Creating a seamless digital citizenry by establishing mutual recognition arrangements for digital identities. It aims to allow individuals and businesses to use their home-country digital credentials to access government and private sector services across the region.
5. *Cross-border data flows and protection*: Governing the movement of data – the currency of the digital economy. It balances the free flow of data with privacy protections through mechanisms like the ASEAN Model Contractual Clauses and Data Management Frameworks.
6. *Online safety and cybersecurity*: Focusing on collective defence. It establishes protocols for Computer Emergency Response Team cooperation, information sharing on cyber threats and harmonised standards for critical information infrastructure protection.
7. *Competition policy*: Ensuring a level playing field as digital giants grow. It creates a framework for cooperation between national competition authorities to address anti-competitive behaviours in the digital market, protecting MSMEs and consumers.
8. *Talent mobility and cooperation*: Addressing the region's acute skills gap by facilitating the movement of digital professionals. It promotes the mutual recognition of certifications and supports regional cooperation on digital literacy and upskilling programmes.
9. *Emerging topics*: Futureproofing the agreement by covering forward-looking governance for nascent technologies, including AI, blockchain and 5G infrastructure, setting ethical guidelines and interoperability standards early in their adoption curve.

Collectively, these nine elements function not merely as a trade checklist but as a comprehensive operating system for the regional digital economy. By simultaneously addressing the hardware of integration (eg payments and infrastructure) and the software (eg data rules, talent and trust), DEFA moves beyond piecemeal cooperation to structural transformation. It replaces a patchwork of bilateral agreements with a unified multilateral framework, ensuring that as ASEAN member states digitise, they do so on convergent

⁵ ASEAN Secretariat, "Framework for Negotiating ASEAN Digital Economy Framework Agreement," September 3, 2023, https://asean.org/wp-content/uploads/2023/09/Framework-for-Negotiating-DEFA_ENDORSED_23rd-AECC-for-uploading.pdf.

⁶ Boston Consulting Group, "Study on the ASEAN Digital Economy Framework Agreement," October 21, 2023, https://asean.org/wp-content/uploads/2023/10/ASEAN-Digital-Economy-Framework-Agreement-Public-Summary_Final-published-version-1.pdf.

paths rather than divergent ones. This holistic approach is the primary mechanism through which DEFA aims to unlock the projected \$1 trillion in additional economic value, turning the theoretical potential of a single digital market into a practical reality for businesses and consumers alike.

DEFA as a Catalyst for ASEAN Economic Regionalism

The implementation of these core elements marks a fundamental shift in ASEAN's approach to integration. While earlier initiatives focused on reducing tariffs on physical goods, DEFA targets the invisible barriers – regulatory fragmentation, digital walls and incompatible standards – that currently stifle the region's potential. By establishing a unified digital operating system for Southeast Asia, the agreement functions as a powerful accelerator for economic regionalism. This catalytic effect is realised through five strategic channels that collectively transform theoretical connectivity into tangible market efficiency: enhancing market integration and trade efficiency; fostering interoperability and harmonisation; promoting inclusive growth and digital transformation; strengthening ASEAN's global competitiveness; and building trust and resilience in the digital environment.

Enhancing Market Integration and Trade Efficiency

Currently, intra-ASEAN trade remains persistently low, accounting for only about 21.2% of the bloc's total trade, compared to nearly 60% within the European Union.⁷ This stagnation is largely driven by non-tariff barriers and antiquated, paper-based customs procedures that act as grit in the gears of regional commerce. Exporters often face opaque licensing requirements and the need to physically transport piles of documentation across borders, inflating costs and delaying shipments.

DEFA catalyses integration by legally mandating the digitisation of these borders. By enforcing the adoption of the UNCITRAL Model Law on Electronic Transferable Records, DEFA gives electronic documents – such as e-Bills of Lading – the same legal weight as paper ones.⁸ This shift allows for the full implementation of paperless trade systems, which are projected to reduce cross-border transaction costs by 30%.⁹ By replacing physical red tape with digital data exchange through the ASEAN Single Window, DEFA effectively merges 11 distinct markets into a seamless trading bloc.

Fostering Interoperability and Harmonisation

The region presently suffers from digital Balkanisation, where incompatible national standards undermine the interoperability of digital systems. A digital identity issued in Thailand is rarely recognised in Vietnam, and a business validated in Indonesia cannot seamlessly register in the Philippines. This fragmentation forces companies to undergo repeated identity checks, creating a significant barrier to entry for cross-border digital services.

DEFA addresses this by establishing frameworks for mutual recognition and interoperability. Under the Digital ID element, the agreement creates a unified identity system that allows a business verified in one member state to be recognised across all member countries.¹⁰ Simultaneously, DEFA harmonises data governance

⁷ Ministry of Industry and Trade of the Socialist Republic of Vietnam, "ASEAN Aims to Strengthen Intra-Regional Trade Linkages to Enhance the Region's Economic Resilience," October 16, 2025, <https://vntr.moit.gov.vn/news/asean-aims-to-strengthen-intra-regional-trade-linkages-to-enhance-the-regions-economic-resilience>.

⁸ ICC United Kingdom, "The Roadmap to Digitalise UK Trade," Trade for Prosperity, June 16, 2025, <https://www.tradeforprosperity.co.uk/the-roadmap-to-digitalise-uk-trade/>.

⁹ Sithanoxay Suvannaphakdy and Guo Wei Kevin Neo, "Assessing the Benefits of the ASEAN+6 Single Window for ASEAN Members," ISEAS – Yusof Ishak Institute, 2022, https://www.iseas.edu.sg/wp-content/uploads/2021/12/TRS1_22.pdf.

¹⁰ ASEAN Business Advisory Council, "ASEAN's Next Trade Breakthrough: Accelerating Cross-Border Growth Through Interoperable Identity," December 12, 2025, <https://asean-bac.org/news-and-press-releases/asean%E2%80%99s-next-trade-breakthrough-accelerating-cross-border-growth-through-interoperable-identity>.

through the ASEAN Model Contractual Clauses, providing a standardised legal mechanism for data to flow across borders regardless of differing national privacy laws.¹¹ This turns a patchwork of incompatible systems into an interoperable network.

Promoting Inclusive Growth and Digital Transformation

A profound digital divide currently separates ASEAN's economic landscape. While large multinational corporations can afford the high costs of compliance, MSMEs are often left behind. Further, while 94% of Singaporean SMEs have adopted digital tools, micro-enterprises in emerging economies like Laos and Cambodia lag significantly, often limited to basic social media usage.¹²

DEFA is explicitly designed to democratise access to the global economy. By standardising e-commerce regulations and simplifying cross-border payments, the agreement drastically lowers the barrier to entry for small businesses. Research indicates that the value multiplier of DEFA is highest for lower-middle-income member states, potentially boosting their digital growth by 6.5 times.¹³ By providing a predictable, simplified rulebook, DEFA allows an artisan in rural Cambodia to access the same regional market as a tech startup in Jakarta.

Strengthening ASEAN's Global Competitiveness

ASEAN currently faces a precarious geopolitical environment defined by the US-China technology rivalry. As major powers bifurcate their technology stacks, Southeast Asia risks being pressured to choose sides, creating uncertainty for global investors. The lack of a unified regional voice leaves individual ASEAN nations vulnerable to external pressure and fragmentation.

DEFA acts as a shield and a magnet, asserting ASEAN centrality in the digital age. By establishing its own high-standard digital rules, ASEAN creates a neutral, unified platform – a third way – that global tech giants must adapt to. This regulatory unity reduces uncertainty and has already helped ASEAN secure 71% of global venture capital inflows into emerging markets.¹⁴ By presenting itself as a single, cohesive market, ASEAN becomes an indispensable node in the global economy.

Building Trust and Resilience in the Digital Environment

As the region digitises, it has become a prime target for cybercrime. In 2024 alone, businesses in Southeast Asia faced an average of 400 ransomware attempts every day, with the average cost of a data breach reaching approximately \$3.67 million in 2025.¹⁵ Currently, cyber defence is handled largely at the national level, leaving the region with blind spots where attackers can exploit the weakest link.

DEFA institutionalises collective defence through the "One ASEAN, One Response" framework. The agreement operationalises the ASEAN Regional Computer Emergency Response Team, which facilitates real-time information sharing and coordinated incident response. By harmonising cybersecurity standards, DEFA

¹¹ ERIA, "Current Status of ASEAN Data Governance and Its Implications for the Digital Economy Framework Agreement," January 2025, <https://www.eria.org/uploads/Current-Status-of-ASEAN-Data-Governance-and-Its-Implications-for-the-DEFA.pdf>.

¹² ERIA and OECD, "SME Policy Index: ASEAN 2024 – Enabling Sustainable Growth and Digitalisation," 2024, https://asean.org/wp-content/uploads/2024/09/Full-Report_ASEAN-SME-Policy-Index-2024_20-Sept-2024.pdf.

¹³ Singaporean-German Chamber of Industry and Commerce, "ASEAN Digital Economy Framework Agreement (DEFA)," December 18, 2024, <https://www.sgc.org.sg/en/content/download/152264/2485154?version=2>.

¹⁴ ASEAN Secretariat, "Opening Remarks by Dr. Kao Kim Hourn, Secretary-General of ASEAN at the 10th ASEAN Ministerial Conference on Cybersecurity (AMCC)," October 22, 2025, https://asean.org/wp-content/uploads/2025/10/OpeningRemarks_SG_10thAMCC_As-Delivered.pdf

¹⁵ UN Office on Drugs and Crime, "Billion-dollar cyberfraud industry expands in Southeast Asia as criminals adopt new technologies," October 7, 2024, <https://www.unodc.org/roseap/en/2024/10/cyberfraud-industry-expands-southeast-asia/story.html>.

ensures that all member states adhere to a baseline level of security, building the necessary trust for consumers and businesses to engage in digital transactions.

Taken together, these five dimensions – efficiency, interoperability, inclusion, competitiveness and trust – constitute the structural machinery of ASEAN’s digital regionalism. By moving beyond the traditional trade focus on goods to encompass the digital nervous system of the modern economy, DEFA does more than just facilitate commerce; it actively constructs a cohesive regional identity. It shifts the narrative of ASEAN integration from a diplomatic project to a tangible, operational reality where a startup in Vietnam, a factory in Thailand, and a bank in Singapore are linked not just by geography, but by a shared digital architecture.

Challenges to DEFA’s Implementation and Actions Taken by ASEAN Member States

The path from high-level diplomatic agreement to on-the-ground operational reality is fraught with structural friction. While the vision of a unified digital market is compelling, the actual terrain of Southeast Asia is defined by profound heterogeneity. The region is not a monolith but a mosaic of disparate legal systems, economic development levels and technical capacities. Bridging these divides requires more than just a signature on a treaty; it demands a sustained confrontation with the deep-seated challenges that have historically plagued ASEAN integration efforts.

Different Levels of Digital Development and Readiness

One of the most significant hurdles to DEFA is the development gap between member states. For example, while Singapore leads the world in digital competitiveness, nations like Laos and Myanmar face foundational infrastructure challenges. This “two-speed” ASEAN threatens to create an uneven playing field where the benefits of integration accrue disproportionately to the most advanced economies.

This development gap poses a critical threat to DEFA’s consensus-based implementation. High standards for interoperability – such as the requirement for fully digitised customs clearance or real-time application programming interface integrations for payments – may effectively act as non-tariff barriers for less developed members. Without massive investment in last-mile infrastructure and digital skilling, there is a risk that DEFA could exacerbate regional inequality, allowing tech-savvy firms in Singapore and Malaysia to capture the lion’s share of value while leaving smaller players in emerging markets unable to technically comply with the new regional framework.

Box 1. Example: Paperless Trade (ASEAN Single Window)

Challenge: While the ASEAN Single Window (ASW) is legally operational, its success masks deep structural limitations. Currently, the system primarily processes the Certificate of Origin (Form D). Expanding to more complex documents like sanitary and phytosanitary certificates is exponentially harder because it requires coordination between not just Customs, but also Ministries of Agriculture and Health, which often lack digitised back-end systems in less developed member states. Furthermore, the ASW is largely a government-to-government platform, with limited private sector integration. As a result, traders often still need to manually enter data into national portals instead of having it automatically transmitted from their enterprise resource planning systems.

Action Taken: Despite these disparities, the ASW has achieved significant milestones. By the end of 2024, the exchange of the electronic Certificate of Origin (e-Form D) was fully operational across all member states. Statistics indicate this system has already generated over \$6.4 billion in cost savings for businesses.¹⁶

¹⁶ Sharmila Suntherasegarun et al., “ASEAN Integration Report 2024 - Inclusive Trade: Perspectives on Regulatory Challenges for MSMEs in ASEAN,” Institute for Democracy and Economic Affairs, November 20, 2024, <https://www.ideas.org.my/publications/asean-integration-report-2024-inclusive-trade-perspectives-on-regulatory-challenges-for-msmes-in-asean/>.

Status: The system is now upgrading to a Next Generation ASW. As of January 2026, all member states (excluding newest member Timor-Leste) are exchanging the ASEAN Customs Declaration Document through the ASW, demonstrating that technical assistance can bridge development gaps.¹⁷

Regulatory Heterogeneity and Policy Coordination

ASEAN's digital economy is currently constrained by a noodle bowl of non-tariff barriers. Cross-border payments are a prime example: transferring money from Thailand to Vietnam has historically cost upwards of 6% in fees and take several days to settle.¹⁸ Harmonising Anti-Money Laundering and Know Your Customer standards to allow for instant cross-border payments requires banks to overhaul legacy IT systems and regulators to accept a level of mutual risk recognition that is politically sensitive.

Box 2. Example: Interoperable Payment Systems in ASEAN

Challenge: While bilateral QR code linkages are a technical triumph, they face a scalability trap. Connecting all ASEAN nations bilaterally would require 45 separate technical linkages, a spaghetti bowl that is inefficient to maintain. Furthermore, differing Know Your Customer rules mean a bank in Singapore may not automatically trust the due diligence performed by a digital wallet provider in the Philippines.

Action Taken: ASEAN has pioneered a mesh of bilateral QR code payment linkages (eg Singapore-Thailand, Indonesia-Malaysia), allowing consumers to pay in local currency. To solve the scalability issue, the region launched Project Nexus with the Bank for International Settlements Innovation Hub.

Impact: Project Nexus is building a multilateral gateway – a single hub that domestic instant payment systems connect to. In April 2025, the Nexus Global Payments entity was incorporated in Singapore to operationalise this scheme. The system targets live multilateral transactions by 2027, aiming to process cross-border payments in under 60 seconds.¹⁹

Implementation Gaps and Capacity Building

Even when agreements are signed, the implementation gap in ASEAN remains wide. Many member states suffer from a shortage of technical expertise within their government agencies. For example, while DEFA mandates the protection of personal data, several member states still lack a comprehensive, functioning Data Privacy Authority or the cybersecurity forensic capabilities to handle cross-border breaches.

This capacity deficit creates a scenario where rules exist on paper but are ignored in practice. Without robust domestic institutions to enforce them, DEFA's provisions on consumer protection or IP rights may become toothless. The reliance on external donor funding for capacity building also creates sustainability risks: once a project ends, the technical progress often stalls. Bridging this gap requires a shift from short-term workshops to long-term institutional strengthening, ensuring that officials in every member state have the resources and mandate to implement the agreement effectively.

¹⁷ Singapore Customs, "ASEAN Customs Declaration Document (ACDD)," January 22, 2026, <https://www.customs.gov.sg/businesses/international-connectivity/acdd/>.

¹⁸ ASEAN +3 Macroeconomic Research Office, "ASEAN+3's Cross-Border Payments Revolution and Its New Policy Risks," November 18, 2025, <https://amro-asia.org/asean3s-cross-border-payments-revolution-and-its-new-policy-risks>.

¹⁹ Monetary Authority of Singapore, "Project Nexus Completes Comprehensive Blueprint for Connecting Domestic IPS Globally," June 30, 2024, <https://www.mas.gov.sg/news/media-releases/2024/project-nexus-completes-comprehensive-blueprint-for-connecting-domestic-ipses-globally>.

Box 3. Example: Cambodia's Digitalisation Process

Context: Cambodia's *Digital Economy and Society Policy Framework 2021–2035* sets an ambitious agenda, yet the country faces a profound dual divide.²⁰

Challenge: There is a critical shortage of advanced technical talent. Data indicates that less than 30% of the population possesses basic digital skills (eg using a spreadsheet).²¹ Furthermore, a vast portion of Cambodia's digital commerce happens informally via social media (eg Facebook and Telegram) rather than registered e-commerce platforms, making it difficult for the government to tax or regulate these businesses.

Action Taken: The government has established the Techo Startup Center to incubate digital innovation. Programmes like the Digital SME Accelerator and partnerships with financial institutions like Wing Bank have supported over 60 startups. Furthermore, the SME Go Digital initiative is actively working to formalise these businesses. DEFA acts as an external anchor, driving these domestic reforms.²²

Balancing National Interests with Regional Integration

The tension between digital sovereignty and regional integration is the most contentious fault line in DEFA negotiations. Countries like Indonesia and Vietnam have enacted strong data localisation laws – Regulation 71 in Indonesia and Decree 53 in Vietnam – which mandate that certain data be stored domestically. These measures are driven by national security concerns and a desire to incubate local data centre industries.

These digital protectionist measures act as significant non-tariff barriers, imposing duplicate infrastructure costs on businesses and preventing the economies of scale that cloud computing offers. Resolving this is difficult because these laws are often framed as matters of national security rather than trade policy. Convincing regulators to roll back these requirements in favour of the free flow of data requires a high level of trust that neighbour states have equally robust privacy and security standards – a level of trust that is currently still being built through mechanisms like the ASEAN Model Contractual Clauses.

Box 4. Example: Balancing Data Sovereignty (The ASEAN Model Contractual Clauses Solution)

Challenge: Vietnam's Decree 53 requires domestic data storage for service providers and mandates that foreign tech firms establish local branches. Indonesia's Government Regulation 71 imposes heavy compliance burdens, requiring public electronic system operators to manage data onshore.²³ These laws effectively act as digital tariffs. For a regional startup, building separate data centres in every country is cost-prohibitive.

DEFA Solution: Rather than forcing a repeal of national laws (which is politically impossible), DEFA promotes the ASEAN Model Contractual Clauses. These are standardised, pre-approved contract templates that businesses can use to transfer data legally. By signing these clauses, a company ensures that data leaving the country is still protected to a standard accepted by the regulator.²⁴

²⁰ Bower Group Asia, "Cambodia's Ambitious Digital Agenda Invigorates Economic Modernization Strategy," March 27, 2024, <https://bowergroupasia.com/cambodias-ambitious-digital-agenda-invigorates-economic-modernization-strategy/>.

²¹ Overseas Development Institute, "Fostering an Inclusive Digital Transformation in Cambodia," July 2020, <https://set.odi.org/wp-content/uploads/2020/07/Briefing-Inclusive-Digital-Economy-in-Cambodia-1.pdf>.

²² World Bank, "Benefiting from the Digital Economy: Cambodia Policy Note," 2018, <https://documents1.worldbank.org/curated/en/100841543598854492/pdf/128267-REVISED-Digital-Economy-web.pdf>.

²³ Information Technology and Innovation Foundation, "Indonesia's Data Localization Regulation," June 9, 2025, <https://itif.org/publications/2025/06/09/indonesia-data-localization-regulation/>.

²⁴ Singapore Fintech Association, "Data Without Borders: Harmonising ASEAN's Digital Regulations for Growth," August 2025, <https://singaporefintech.org/wp-content/uploads/2025/11/Data-Without-Borders.pdf>.

Geopolitical Landscape

ASEAN's digital integration is occurring in the shadow of the intensifying US-China technology war. Southeast Asia is a patchwork of competing technology stacks: Chinese companies (eg Huawei and ZTE) dominate the 5G infrastructure in countries like Indonesia and Malaysia due to cost competitiveness, while other sectors may lean towards Western standards. This bifurcation risks creating a scenario where the region's digital systems are technically incompatible.²⁵

The physical layer of the internet – subsea cables – has also become a geopolitical chessboard. Recent projects regarding the cable systems have been routed to bypass the South China Sea entirely to avoid perceived security risks associated with Chinese territory. This politicisation of infrastructure forces ASEAN nations into a delicate balancing act.

Box 5. Example: The Subsea Cable Tug-of-War

Situation: The physical backbone of the digital economy – subsea cables – has become politicised. The US government has reportedly pressured consortiums to avoid using Chinese cable-laying firms for strategic projects. Consequently, major cables like the Apricot and Echo systems are being routed to connect Singapore, Indonesia and the US while bypassing the South China Sea to avoid perceived security risks. This creates a physical bifurcation of the internet. If ASEAN nations are forced to connect to separate, non-interoperable cable networks based on political allegiance, the vision of a unified ASEAN digital zone collapses.

DEFA Response: ASEAN asserts digital non-alignment through DEFA. By setting its own regional standards for cybersecurity and data governance, ASEAN ensures that any infrastructure provider – whether Chinese or American – must adhere to ASEAN's rules to plug into the network.

Outlook: What's Next for DEFA?

With the substantial conclusion of negotiations announced in October 2025, the path forward is focused on transition and implementation. The official signing of the agreement is scheduled for 2026, which will trigger the ratification process across member states.²⁶ While this is a diplomatic triumph, the true test of DEFA will lie in its ability to navigate the complex realities of implementation.

The Lowest Common Denominator Trap

A critical risk facing DEFA is the potential for the agreement to settle for the lowest common denominator. The ASEAN way of consensus-based decision-making often necessitates compromise to accommodate member states with lower regulatory capacity or higher political sensitivity. Consequently, there is a danger that the final legal text may be riddled with public policy exceptions. If member states like Indonesia and Vietnam continue to invoke broad national security exceptions to maintain data localisation, DEFA risks becoming a paper tiger – symbolically important but operationally toothless in dismantling non-tariff barriers.

The Persistence of Regulatory Heterogeneity

DEFA aims to harmonise but does not erase national sovereignty. The noodle bowl of regulations is unlikely to disappear overnight. Even with the agreement in place, businesses may still face a form of regulatory

²⁵ Melinda Martinus, "The Intricacies of 5G Development in Southeast Asia," ISEAS – Yusof Ishak Institute, November 13, 2020, https://www.iseas.edu.sg/wp-content/uploads/2020/11/ISEAS_Perspective_2020_130.pdf.

²⁶ Allen & Gledhill, "ASEAN Digital Economy Framework Agreement Substantially Concludes; Key Agreements and MOU Signed," October 24, 2025, <https://www.allenandgledhill.com/sg/publication/articles/31630/asean-digital-econoframework-agreement-substantially-concludes-key-agreements-and-mou-signed>.

arbitrage, where enforcement varies considerably between jurisdictions. A company might find that a digital contract valid in Singapore is challenged in a Cambodian court due to a lack of local judicial capacity. Without a supranational enforcement body – which ASEAN lacks – compliance will rely entirely on national will and peer pressure.

Strategic Watchpoints for Policymakers

To ensure DEFA delivers on its \$2 trillion promise, policymakers must remain vigilant on three fronts:

1. *Defining security exceptions:* Governments must resist the temptation to use national security as a catch-all excuse for digital protectionism. Clear, narrow definitions of what constitutes critical data are essential.
2. *Futureproofing for AI:* The digital economy is moving faster than diplomacy. DEFA's provisions on emerging topics must be activated immediately to govern AI ethics and interoperability, or the agreement risks becoming obsolete before ratification.
3. *Realising inclusion:* If the benefits of DEFA accrue only to the unicorns of Singapore and Jakarta while rural MSMEs in Laos and Myanmar remain offline, the agreement will fail its mandate. Policymakers must prioritise funding for digital literacy and last-mile infrastructure in developing member states to ensure the digital bloc does not become a two-tier society.

Conclusion

The substantial conclusion of DEFA negotiations in 2025 marks the end of the beginning. As ASEAN pivots from diplomacy to domestication, the region stands on the precipice of a digital decade that could redefine its global standing. The agreement is more than a trade pact; it is a declaration of intent to forge a unified economic block capable of holding its own against global tech giants and superpowers.

The journey ahead will be defined by the implementation imperative. Success will not be measured by the signing ceremonies in 2026, but by the speed at which a customs officer in Cambodia accepts a digital signature from Singapore, or how easily a Vietnamese startup can store data in an Indonesian cloud. The \$2 trillion prize is attainable, but it requires a sustained political commitment to tear down the invisible walls of regulatory nationalism.

Ultimately, DEFA offers ASEAN a chance to prove that its model of consensus-based integration can work in the fast-paced digital age. If successful, ASEAN will not just participate in the global digital economy – it will help set the rules for it, proving that diversity and digital integration can coexist. The world is watching; the digital future of 680 million people depends on getting this right.

Discussion Questions

1. How can DEFA prevent its high interoperability standards from becoming unintentional barriers to entry for emerging economies like Cambodia?
2. Are the ASEAN Model Contractual Clauses a sustainable solution to the region's entrenched data localisation laws, or merely a temporary workaround?
3. Can DEFA's strategy of digital non-alignment realistically protect ASEAN's digital infrastructure from the bifurcation caused by the US-China technology rivalry?
4. Does the ASEAN way of consensus decision-making risk reducing DEFA to a lowest common denominator agreement with limited real-world impact?
5. Why have technical mechanisms like Project Nexus progressed faster than regulatory harmonisation? Can this bottom-up integration sustain long-term regionalism?