

Fostering **digital connectivity** in and with the **Indo-Pacific**

OPPORTUNITIES FOR
THE EUROPEAN UNION



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April 2021

Scoping paper for the European External Action Service (European Commission)

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This report has been prepared with the financial assistance of the European Union. The views expressed herein are those of the research team and therefore do not necessarily reflect the official position of EU institutions.

Executive summary

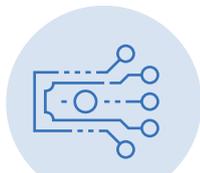
As the European Union (EU) embarks on its own distinctive strategic outlook to the Indo-Pacific region, it should contribute to **open, safe and inclusive digital connectivity** and engage with the region's **thriving digital economies**. While Indo-Pacific countries have called for greater maritime presence by European countries in their increasingly contested waters, European actors may have more to offer in the less-discussed but equally contested high-tech and digital domains.

Recognizing the opportunities and disruptions that accompany the **digital transition and green transformation** globally, the EU and its member states need to increase their engagement with **governments, commercial and civil-society stakeholders and networks in the Indo-Pacific** on a broad array of digitalization issues. The aim should be to establish mutually beneficial relationships, investments and exchanges in a region that is home to a **vibrant digital ecosystem** buoyed by booming e-commerce and FinTech applications, and the largest and most rapidly growing internet user bases in the world. It is in the EU's own interest to do so, as recognized by European Commission President Ursula von der Leyen in September 2020: [‘Europe must now lead the way on digital](#) – or it will have to follow the way of others, who are setting these standards for us’.

This paper assesses tangible steps for the EU to **build such partnerships** with likeminded partners from the Asia–Europe Meeting (ASEM) to advance digital connectivity in and with the **Indo-Pacific region**, in line with its principles, approaches and standards on digitalization. Focus is on the levels of the Association for South-East Asian Nations (**ASEAN**) and three Indo-Pacific countries that are key players in the digital domain: **India, Indonesia and Singapore**, that can act as pillars for the EU to advance its digital connectivity agenda. The ASEAN Digital Ministers Meeting ([ADGMIN](#)), which was held for the first time in January 2021, offers a potentially valuable new platform for engagement. Thematically, attention goes out to e-commerce and data management, FinTech and digital development assistance, and Big Tech regulation. Cybersecurity is not discussed in detail, as initiatives on this front are already relatively more developed.

In each domain, actionable steps are identified for the EU to act on its commitments to promoting an open, transparent and inclusive digital domain, vibrant and resilient digital economies that benefit people, digitally skilled citizens and digital rights and principles, human-centred standardization of new technology applications, data privacy and the free flow of cross-border data transfers, and cybersecurity. Strategic connectivity partnerships, as well as multi-country projects with key partners, should enhance sustainable and secure digital connections that support a prosperous and resilient Indo-Pacific region and European Union. The paper also makes recommendations on how best to use the ASEM and ASEAN fora to achieve these objectives.

Actionable steps



1. Digital economy e-commerce as a hidden gem



2. Data governance fuel for digital growth



3. FinTech key to success



4. Exporting digital infrastructures

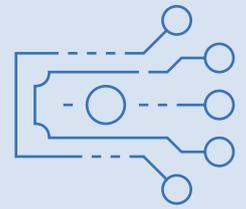


5. Regulating Big Tech

Actionable steps

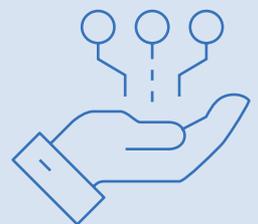
Digital economy e-commerce as a hidden gem

- EU policies must focus on investing in, deepening and harnessing the ongoing digital [trade/e-commerce trends](#) in the Indo-Pacific. Indo-Pacific countries – notably [India](#), [Singapore](#), [Indonesia](#), [Malaysia](#) and [Vietnam](#) – have made heavy investments in various digitalization projects that have accelerated despite prevailing constraints on the broadband end, which also require political, economic and security attention.
- The EU should also push European telecom companies and firms to invest in telecommunications infrastructure (including digital backbones, undersea cables and satellite coverage), provide more affordable telephones and offer data packages that will bring more Asians online. This strategy will generate more jobs and economic opportunities for EU firms and economies.
- EU policies should support the expansion of broadband access across the Indo-Pacific, which would extend and deepen digital infrastructures sustaining thriving digital economies. After all, European efforts towards greater digital inclusion, sustainability and cybersecurity can only be achieved with the availability of hard infrastructure. [Broadband penetration](#) remains low across the ASEAN region, particularly in the landlocked countries, and remote parts of India. Limited broadband also thwarts the embrace of advanced digital technologies like artificial intelligence, big data and the Internet of Things. Broadband expansion requires focused cooperation through partnerships, exchange and discussion of best practices and the uptake of EU standards. Through the ASEM, broadband discussions can be fostered through the Trans-Eurasia Information Network (TEIN), which aims to connect infrastructures between Asia and Europe.
- New governance mechanisms such as public-private partnerships could help to absorb broadband connectivity costs and widen internet connectivity. Alternatively, private financing could also be leveraged given the business potentials for investing in digital infrastructures across the Indo-Pacific. Multilateral development banks like the Asian Development Bank (ADB) and International Finance Corporation (IFC) could help facilitate this effort.



Data governance fuel for digital growth

- The EU must work with Indo-Pacific partners to ensure domestic laws do not constrain or stymie data-sharing between Indo-Pacific and European jurisdictions. Trends point towards selective or conditional localization in some countries (India), to fragmented data governance (Indonesia) and open-data ecosystems (Singapore). Given digital trade trends, it is imperative that – both normatively and substantively – Indo-Pacific external partners like the EU sensitize Asian countries to refrain from instituting policies and rules that nationalize data.
- The EU must encourage ASEAN countries to develop proactive and catalysing data policies that fuel the digital economy's growth. This serves the economic, political and geopolitical interests of European governments and companies, albeit at the risk of data regulation that undermines privacy, distorts markets and allows for data to be controlled and used by governments for various purposes. There is also a need to strengthen the governance of digital data in the ASEAN with a view to promoting the growth of trade and flow of data within and among ASEAN member states in the digital economy.
- The EU's General Data Protection Regulation (GDPR) is one piece of regulation that has inspired several ASEAN countries to adopt viable data standards. Given the EU and ASEAN's thriving economic ties, it is in the EU's own interest to initiate dialogues that can support and steer legislative processes drafting data-protection laws across the ASEAN region. The ADGMIN holds promise for greater engagement on digital convergence, including data-protection regulations. Another avenue is for the EU to influence data policies through the ASEAN's Telecommunications and Information Technology Ministers (TELMIN), a platform for promoting cooperation in information and communications technology (ICT) among the ten ASEAN member states and between the ASEAN and dialogue partners like the EU. Engaging with the TELMIN could spur discussions on harmonizing laws and data policies within the ASEAN region towards stronger convergence with the EU's standards.



FinTech key to success

- Indo-Pacific countries are frontrunners in FinTech¹ and the EU should engage with India and Singapore to smooth over regulatory hurdles that could enable European FinTech start-ups and entrepreneurs to develop problem-solving applications and services for rapidly growing digital finance markets in Asia.
- Cooperation in the digital economy is an important instrument to advance the vision of an open, balanced and inclusive architecture for the region and of countries integrated by trade and connected by cyberspace. The EU and its member states can draw inspiration from the India Stack framework to develop their own secure, interoperable digital platforms that serve as public goods for European citizens and firms.
- FinTech experiences in India and the ASEAN demonstrate that it pays to develop the institutional edifice and components – including know your customer (KYC), anti-money laundering (AML) and digital identity – for a pan-EU digital payments platform that is efficient, reliable and secure.
- The EU can share best practices with the Single Euro Payment Area (SEPA), assisting ASEAN countries to leverage opportunities and improve cross-border payments, including remittances, and business-to-business and business-to-consumer payments. Resulting regulatory convergence between the EU and the ASEAN – and the Indo-Pacific region more broadly – will enhance interoperability and compatibility between both regions' technology networks, which is also in the interests of European companies.



Exporting digital infrastructures

- The EU can promote its human-centred approach to the digital domain by way of exporting hard and soft digital FinTech infrastructures to the Indo-Pacific region, including through trilateral digital official development assistance (ODA) with India. FinTech's rise and expansion in the Indo-Pacific is driven by a large unbanked population who require financial services. Internet connectivity is rising but [considerable gaps](#) still exist between urban and rural areas.
- The EU and India can collaborate through the Modular Open-Source Identity Platform (MOSIP) to advance the development of digital infrastructures in developing countries, which they can use to deliver public goods and entitlements, facilitate digital payments and provide opportunities for e-commerce innovators to develop new applications and services.
- Diplomatically, Asian governments should be encouraged to make digital inclusion central to their future development trajectories, requiring more investments in infrastructure, education and literacy, and communications. In line with the EU Digital Compass, the EU promotes its human-centred digital agenda on a global level and tries to create convergences with EU norms and standards. The EU can help to promote infrastructure investments, including by holding a Digital Investment Forum to assist Asian governments and highlight market opportunities for European companies.



Regulating Big Tech

- Like in the EU, policymakers in the Indo-Pacific face challenges to managing and regulating digital markets. Enhanced dialogues and coordination can help to further a joint human-centred approach that protects consumers and fair markets as well as open, democratic societies. This will also contribute to much-needed interoperability among the digital economies and a stronger position between countries that share interests. The ASEAN and the ADGMIN offer an entry point to enhance interoperability with and within the Indo-Pacific.
- Even if the interests of EU and Indo-Pacific countries largely converge, differences exist between prioritizations, levels of development, market size and norms. Technology and digital issues are more likely to receive attention at new ad-hoc coalitions among like-minded partners, although existing global governance frameworks such as the World Trade Organization (WTO), Organization for Economic Cooperation and Development (OECD), International Telecommunication Union (ITU) and United Nations Group of Governmental Experts (UNGGE) could redirect or precipitate such discussions. Quick multilateral remedies should not be exaggerated, however, even as potential dialogues foster mutual understanding, greater synergies and coordinated approaches in the long term.
- Chinese Big Tech firms (such as Alibaba and Tencent) and venture capitalist (VC) firms [have made inroads](#) into South-East Asia's digital economy, investing to help growing e-commerce firms scale up. They have inked partnerships with firms like Singapore's Lazada and Indonesia's Tokopedia that are on the cusp of expansion. European investors must seize digital market opportunities through capital and knowledge transfer where the scope for potential is long term, differentiating them from Chinese venture capital and Big Tech firms.



1. The Basel Committee on Banking Supervision (BCBS) defines FinTech as 'technologically enabled financial innovation that could result in new business models, applications, processes, or products with an associated material effect on financial markets and institutions and their provision of financial services'. Available [online](#)

Introduction: the EU's strategic approach to the Indo-Pacific

The EU is embarking on its own distinctive strategic approach to the Indo-Pacific region. [The EU Strategy for Cooperation in the Indo-Pacific](#) – as announced in the EU's Foreign Affairs Council Conclusions of 19 April 2021 – aims to deepen cooperation, in particular with like-minded partners, across a broad range of priority areas, including research and development (R&D) cooperation and working in the ASEM context towards the greening and digitalization of a sustainable socio-economic recovery.

The EU's turn to the Indo-Pacific follows steps in this direction by most of its strategic partners in Asia, as well as several EU member states. Since the Indo-Pacific as a term has its roots in the maritime domain, it is hardly surprising that countries in the region – India and Japan in particular – have so far primarily called for greater maritime presence by the EU and specific member states. While it is indeed important that the EU promotes maritime security and unhindered safe passage on shipping routes, European actors have an interest in thinking beyond the maritime and traditional security realm as they consider actionable steps. Aiming to contribute to this effort, this paper offers suggestions for cooperation in a less discussed but equally contested area: the high-tech and digital domains.

Acting on the opportunities and disruptions that accompany the **digital transition and transformation** globally is in the EU's best interest. As European Commission President Ursula von der Leyen put it in September 2020: '[Europe must now lead the way on digital](#) – or it will have to follow the way of others, who are setting these standards for us'. She added: 'We must make this 'Europe's Digital Decade'. In March 2021, the European Commission presented a vision, targets and avenues for a successful digital transformation of Europe in its '[2030 Digital Compass: the European way for the Digital Decade](#)'.

The risks of failing to act on the 'Digital Decade' were laid bare by the COVID-19 pandemic. As governments resort to (sometimes intrusive) digital tools to monitor and combat the novel coronavirus, digital freedom of speech, transparency and inclusiveness are at stake. At the same time, innovative approaches to research, development and commercialization of innovation are needed to uphold economic competitiveness in the digital age. The pandemic reaffirmed the need for improved resilience at home, as well as cooperation among like-minded partners that wish to uphold an open and inclusive cyber domain.

This scoping paper assesses tangible steps for the EU to build partnerships with like-minded partners within the ASEM arena to advance digital connectivity in and with the Indo-Pacific region, in line with its approaches and standards on digitalization. It looks at how the ASEM and the ASEAN could act as pillars for the EU to advance its digital connectivity agenda. The ASEAN's [ADGMIN](#), which was held for the first time in January 2021, offers a potentially valuable new platform for engagement. During this meeting, Japan and India were acknowledged for their assistance in various areas of cooperation, and the ASEAN–India and the ASEAN–JAPAN ICT Work Plans were endorsed. This illustrates the importance of the ASEAN as part of the broader Indo-Pacific region. At the ASEM's upcoming 13th summit ([ASEM13](#)), which is expected to take place in November 2021, the EU will work with European and Asian partners to finalize an ASEM Phnom Penh Declaration on socio-economic recovery, where digitalization is expected to play an important role.

Key questions include the following: how can the EU operationalize the ambitions put forward in the half-page on 'digital' in the 2018 [EU Connectivity Strategy](#) through partnerships with ASEM member countries in the Indo-Pacific region and within the ASEM arena? Set against the backdrop of continuing US–China trade–tech–data conflict, what opportunities exist to cooperate on the EU's human-centred approach with partners in the region? In what areas can the European private sector intervene to help put the digital connectivity agenda into practice?

In answering these questions, this paper starts with an overview of the state of affairs and forthcoming actions by the EU in the digital and connectivity domains, as well as the Indo-Pacific. Next, the focus turns to the ASEAN-level and three specific Indo-Pacific countries that are key players in the digital domain: India, Indonesia and Singapore. Thematically, attention focuses on e-commerce and data governance, FinTech and digital ODA, as well as Big Tech regulation. Cybersecurity is not discussed in detail, as initiatives on this front are already relatively more developed.²

This scoping exercise thus has clear limitations in its regional and thematic focus. More research is needed to address sector-specific questions and ways by which the private sector may be incentivized to help deliver inclusive and sustainable growth in the Indo-Pacific region, while also serving Europe's economic and strategic interests.

2. The EU–ASEAN Joint Communication on Cybersecurity was adopted in 2019 and various EU member states have taken initiatives of their own. For example, the Netherlands established the Global Forum on Cyber Expertise ([GFCE](#)) at the 2015 Global Conference on Cyberspace in The Hague, and held a first Indonesia–Netherlands Cyber Policy Dialogue in December 2020 (see also Annexe 1).

W(h)ither EU digital connectivity in the Indo-Pacific?

Digital connectivity efforts by the EU and its member states and their approach to the Indo-Pacific are largely shaped by policies in three, partly overlapping, domains: the [digital agenda](#); the [EU-Asia connectivity agenda](#); and the approach to the Indo-Pacific (primarily external). Workable suggestions for future EU action depend on a coordinated approach by policymakers and stakeholders working in these fields. This requires a proper understanding of evolving policies in these three fields, which until now have largely been discussed separately:

The EU digital agenda: current state and forthcoming actions

Digital regulation: has been long in the making and was given significant impetus in February 2019 with the publication of the [European Digital Strategy](#), including a European data strategy and an EU approach to artificial intelligence (AI). In 2020, this strategy was expanded with the [Digital Services Act](#) (DSA) and [Digital Markets Act](#) (DMA) packages. Focused on the EU internal market, these acts intend to rein in the mightiest of technology platforms and monopolists. Further down in the stack are data-governance laws, cybersecurity legislation and more. A vision of what a successful digital transformation will mean for Europeans in the decade ahead is detailed in the [2030 Digital Compass](#) of March 2021.

Digital global player: By means of its Digital Strategy and Digital Compass, the EU has set out to position Europe as a global digital player, including as a global standards-setter. At the global level, it seeks to inspire countries with its digital governance model, notably in the adoption of GDPR-like measures to regulate data governance. Although no reference is made to the Indo-Pacific region, the Digital Compass does specifically mention the EU's intention to build strong international digital partnerships and its proposal to establish a [new EU-US Trade and Technology Council](#).

Cybersecurity: the EU is aiming for a bigger, bolder EU cyber agency. The European Union Agency for Cybersecurity (ENISA) is ramping up its operational capacity, setting up an office in Brussels and launching new cybersecurity initiatives that also aim to enhance Europe's 'common situational awareness'.

Digital infrastructure: the Portuguese EU Presidency pitched a grand plan for [undersea cable connectivity](#) and in March 2021, 25 EU member states, as well as Iceland and Norway, signed the declaration on '[European Data Gateways as a key element of the EU's Digital Decade](#)'. The Commission's Digital Compass sets out the EU's concrete digital ambitions by 2030, such as fostering European development of the next generation of digital technologies, unleashing the full potential of digital technologies to achieve the EU's environmental and climate action objectives, and upgrading digital skills in education systems. The Digital Compass aims to safeguard EU values and citizens' digital rights and principles as a key element of the digital transition.

Digital norms: underpinning European efforts in the digital domain – including its [Strategy on Artificial Intelligence](#) – has been the 'human-centred approach',³ which seeks to empower individuals and advocates for openness and transparency in the cyber domain. A declaration on digital democracy, to be presented in June 2021, aims to further this normative agenda, following up on the [Digital Compass](#) of 2016. This declaration is to list several 'digital rights' that Europe signs up to, which could feed into some kind of charter on digital rights in the future.

EU connectivity: current state and forthcoming actions

- **The EU strategy on connecting Europe and Asia** was published in September 2018. This so-called '[Connectivity Strategy](#)' highlights the importance of digital connectivity in an increasingly globalized world, along with transport, energy and human connectivity.⁴
- Just one day after the publication of this so-called 'Connectivity Strategy', the EU hosted the **ASEM Summit in Brussel**, where connectivity featured high on the agenda. The EU played a crucial role in pushing this agenda, including by launching an [ASEM Sustainable Connectivity Portal](#) – a data-set that should measure quantity and quality of connections – and a '[Connectivity Inventory](#)' – an overview of lessons learned in the field from the ASEM's activities, matched with ideas for how to improve and deepen policies and action.
- **Connectivity Partnerships:** the [EU-Japan Partnership on Sustainable Connectivity and Quality Infrastructure](#) of 2019 was the EU's first partnership of this kind with a non-EU country. Notably, it includes the first mention of the Indo-Pacific in an official EU document. The second connectivity agreement was forged with the ASEAN in December 2020 by way of the [EU-ASEAN joint ministerial statement](#)

3. Internationally, the term human-centric – that is, focusing on human beings – is used more often. However, in this context, we deem human-centred to be more appropriate, as it includes humanistic values and devotion to human welfare as well.

4. Connectivity was first defined at the 13th ASEM Foreign Ministers Meeting in November 2017 as entailing hard and soft aspects, physical, institutional and social-cultural linkages, facilitating access and as a means to foster deeper economic and people-to-people ties, as well as a means to enhance economic, political-security and socio-cultural ties. More details are available in Annexe 1 of the [13th ASEM Foreign Ministers Meeting](#).

[on connectivity](#). A Connectivity Partnership is currently being negotiated with India, possibly to be launched at the 8 May 2021 EU–India summit. In addition, agreements with the United States and with the ASEAN and the Mekong River Delta are being discussed, while South Korea is said to be also of potential interest. These two connectivity partnerships serve as a framework for further practical cooperation by the EU and Japan and the ASEAN, focusing on issues like infrastructure, energy, digital and transportation. Both partnerships also look to adopt, promote and advance mutually shared rules governing core matters like trade, investment and sustainability, and to leverage existing bilateral and multilateral channels like the G7, G20, OECD, European Bank of Reconstruction and Development (EBRD) and ADB to advance this fundamental objective.

- **Towards connectivity 2.0:** An instrumental push to bring the connectivity strategy to a next level came in December 2020 with the [report of the European Parliament](#) prepared by MEP Reinhard Bütikofer. The report calls on the European Commission and the EEAS to bring the EU Connectivity Strategy to a global level; to strengthen partnerships with democracies around the world that share Europe’s fundamental values; to prioritize the Western Balkans as a region and digital connectivity as a thematic focus, among other things.

Indo-Pacific: current state and forthcoming actions

EU member states and the Indo-Pacific: France was the first EU member state to speak out on the Indo-Pacific, by way of a policy paper on Indo-Pacific security in 2018 (led by the French Ministry of Defence), which was updated to become [a strategy in 2019](#) (led by the French Ministry of Foreign Affairs (MFA)). Next came Germany’s [Policy Guidelines for the Indo-Pacific region](#) (September 2020, with the German MFA taking the lead) and the Netherlands’ [Guidelines for strengthening Dutch and EU cooperation with partners in Asia](#) (November 2020, with the Dutch MFA taking the lead).

The EU and the Indo-Pacific: At the EU level, discussions on the Indo-Pacific that started in December 2020 led to an [The EU Strategy for Cooperation in the Indo-Pacific](#) that is being launched in April 2021. The debate was pushed by the Dutch, French and German governments, which published a confidential EU non-paper calling for EU engagement with the Indo-Pacific in October 2020. Seven other EU member states co-sponsored the non-paper. In January 2021, Japanese Foreign Minister Toshimitsu Motegi addressed the European Union’s Foreign Affairs Council on the topic.

The EU is thus about to join the ranks of a growing list of countries that have adopted dedicated Indo-Pacific approaches in recent years: Japan ([Free and Open Indo-Pacific](#), since 2007); [Australia](#) (since 2013); [the United States](#) (since 2017); the ASEAN ([Outlook on the Indo-Pacific](#), 2019); [New Zealand](#) (2019); India ([Indo-Pacific Ocean Initiative](#), 2019); and the United Kingdom ([A Very British Tilt](#), 2020). Canada seems to be heading in the same direction, with policies due out in the first half of 2021. The Republic of Korea has not expressed itself definitively so far.

Following several years since 2014 in which connectivity moved increasingly higher on the ASEM’s agenda, discussions seem to have abated in recent years. The ASEM Pathfinders Group on Connectivity (APGC) was established at the 2016 ASEM Summit in Ulaanbaatar, and identified five tangible areas of cooperation in the field of connectivity in 2018. The working groups that were set up to further such cooperation have not delivered real results, however, and the EU since then seems to have turned its attention to bilateral partnerships with specific (groups of) countries.

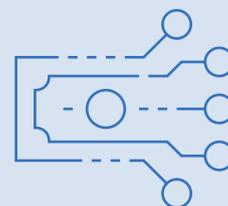
The connectivity partnerships with Japan and the ASEAN offer guidance for the EU on how to enhance co-operation in the digital field – including in the Indo-Pacific – ‘as a powerful enabler of inclusive growth and sustainable development’. The agreement with Japan specifically [mentions](#) ‘digital and data infrastructure, as well as policy and regulatory frameworks, in developing countries’. For its part, the EU–ASEAN statement mentions cooperation in the areas of digital innovation, digital infrastructure and logistics, digitalization of manufacturing and services, ICT security, the adoption of technology by micro-, small and medium enterprises (MSMEs), increasing access to digital services, and ensuring protection of personal and consumers’ data and privacy; people’s rights; data protection and cybersecurity; and global satellite navigation systems. Cooperation in the development of so-called smart cities is also explicitly mentioned. Finally, the [envisioned](#) EU–India partnership – set to be concluded in May 2021 – will likely include soft infrastructure initiatives, the development of sustainable and smart urbanization, digital literacy, FinTech and satellite-based emergency warning services in the domain of space-based data and technology.

1. The digital economy

e-commerce as a hidden gem

Actionable steps

- EU policies must focus on investing in, deepening and harnessing the ongoing digital [trade/e-commerce trends](#) in the Indo-Pacific. Indo-Pacific countries, notably [India](#), [Singapore](#), [Indonesia](#), [Malaysia](#) and [Vietnam](#), have made heavy investments in various digitalization projects that have accelerated despite prevailing constraints on the broadband end, which also require political, economic and security attention.
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The Indo-Pacific houses some of the largest and most-thriving digital economies worldwide. Countries across South and South-East Asia are home to more than one billion citizens who are becoming increasingly digital in transacting and communicating online. Internet user bases are booming across South and South-East Asia. Digital adoption is thriving – India and Indonesia have some of the highest digital adoption growth rates in the G20.

The EU's Digital Strategy discusses [e-commerce](#) at length, but solely focuses on the opportunities and challenges for the EU internal market. Strikingly, despite the impressive growth of the e-commerce market in the Indo-Pacific, only the Dutch Indo-Pacific strategy mentions e-commerce once, while the English translations of the French and German strategies do not mention the digital economy or e-commerce at all – illustrating the lack of attention for this specific domain.

Across the Indo-Pacific, governments have instituted digital economy initiatives to propel the ongoing digital transformation. The EU and its member states can engage with these initiatives as vectors of capital and knowledge for Asian and European countries, particularly on the technical side, given the prevailing gaps in areas like broadband and cybersecurity.

The ASEAN has adopted [several agreements](#) to facilitate e-commerce, most recently the '[Work Plan](#) on the Implementation of the ASEAN Agreement on e-Commerce 2021–2025' (adopted in March 2021). While these agreements acknowledge the need to facilitate cross-border data flows to facilitate trade, ASEAN member states have some leeway to protect personal data within their borders. Moreover, ASEAN states also adopted [guidelines](#) on responsible behaviour by e-marketplace providers. Here, the onus is placed on the e-marketplace provider to protect personal data, with no requirement for data localization. Other topics covered include principles on consumer protection and capacity-building. Several states have varying policies on e-commerce that stipulate various data-localization requirements. Malaysia has also [declared](#) its intention to pursue a Digital Free-Trade Zone and establish Malaysia as a hub for digital commerce. This initiative was undertaken between Malaysia Digital Economy Corporation (MDEC) and China's Alibaba Group and [looks to](#) 'establish Malaysia as a leading logistics centre for global marketplaces, by opening opportunities for companies in Malaysia and other ASEAN countries to leverage a platform that enhances competitiveness and market access'.

The broader South-East Asian e-commerce agenda has been geared towards fostering the growth of small and medium-sized enterprises (SMEs). The ASEAN Digital Integration Framework Action Plan (DIFAP) 2019–2025 notes that 'ASEAN member states shall continue to simplify existing hurdles in setting up and doing business for its MSMEs'. To this end, Malaysia, for instance, positioned its e-commerce policy to support the

development of MSMEs through its governmental Small and Medium Enterprise Corporation. This organization has been tasked with improving SME e-commerce training and talent development and developing a one-stop business portal for SMEs. Thailand's government launched the Thailand 4.0 initiative, which looks to digitize a significant portion of its economy. [Thailand 4.0 emphasizes](#) financial and technological support for start-ups and SMEs to enable e-commerce adoption. Several ASEAN countries have government-led initiatives to develop requisite infrastructure, by improving internet connectivity and providing opportunities for their workforce to improve skills. Furthermore, policy discussions are occurring to harmonize taxation regimes and support the digitization of businesses.

Internet connectivity across the Indo-Pacific

In India, smartphone usage is [expected](#) to rise 84 per cent to reach 859 million users by 2022. In 2014, there were 239 million internet users, 5.4 smartphones per 100 people, and a monthly data consumption per connection of 86MB. By 2018, [these figures had increased](#) — there were 560 million internet users, 26.2 smartphones per 100 people, and monthly consumption of data grew to reach an average of 8GB. As of December 2019, India had 720 million internet users and Indian mobile data users consume nearly 10.4 GB of data each month, more than double the data usage in the United States and China. Meanwhile, for the ASEAN, as of July 2019, ASEAN had 416 million internet users and 853 million mobile phone subscriptions.

Despite these figures, a digital divide exists across the Indo-Pacific. Access to the internet in the ASEAN is [now 60 per cent](#), but internet usage lags in Cambodia, Laos, Vietnam and Myanmar, even as usage rises in Singapore, Malaysia and Brunei. India's digital divide is a cause for concern; in 2019, nearly 400 million people lacked internet access, with internet density poor in rural areas. Women experience more constraints than men when it comes to mobile and internet usage. Digital disparities also exist in Indonesia, although the number of internet users has been rising. In 2020, [196 million Indonesians \(74 per cent of the population\) accessed the internet, up from 171 million in 2018](#). Connectivity, however, is still heavily concentrated in Indonesia's most populous island, Java; moreover, nearly 95 per cent of Indonesians access the internet through mobile phones, signifying the gaps and challenges when it comes to fixed broadband penetration.

Asian countries must prioritize the expansion of accessible high-speed internet through targeted public investments and regulatory reforms that inject more competition in their telecommunication sectors to lower prices, increase speed and broaden access.

In the Indo-Pacific region, India has been the most significant example of change. New Delhi has furthered digitalization by rolling out initiatives to encourage the adoption of digital tools and platforms by businesses – an interest that it shares with the EU. [The Digital India initiative](#), introduced in 2015, aims to bridge and redress digital gaps in society and make India a digitally empowered knowledge economy. Digital India involves three main components: creating accessible digital infrastructures; providing services digitally; and promoting digital literacy among citizens. By 2025, this initiative is expected to contribute US\$ 550 billion to US\$ 1 trillion to India's GDP. Public investments on the digital front have crowded with private investments to spawn a thriving digital economy. Under the Digital India initiative, banks and other financial services providers have been encouraged to partner with the [Government e-Marketplace](#) (GeM) to facilitate a cashless, paperless and transparent payment system that can provide an array of services for citizens. Through this portal, the Indian government has also invited start-ups to register and offer goods and services to government agencies and public-sector units.

E-commerce in India

E-commerce is thus transforming business in India. The value of India's digital sectors, including information technology (IT), communication services and electronics manufacturing, was roughly 7 per cent of India's GDP in 2017–2018, or nearly US\$ 200 billion. By 2025, these sectors' potential value is estimated to be US\$ 435 billion, twice its current value. While previously not considered a part of India's digital economy, sectors like agriculture, education, financial services, healthcare and retail are becoming parts of the digital economy as they slowly digitize. By 2030, e-commerce should transform Indian commerce, specifically how small and medium-sized enterprises operate by providing a range of tools – financing, technology and training to alter how they function and transact. Innovations such as digital payments, hyper-local logistics, analytics-driven customer engagement and digital advertisements will likely support their growth and continued evolution.

The industry, as a whole, has been ticking upwards; India will likely surpass the United States to become the second largest e-commerce market globally by 2035. Despite these policies and strides, uneven patterns of digitalization exist across sectors. Sectors like ICT, professional services and healthcare, with more digitized firms, are represented in the bottom quartile of digital adoption. At the same time, some top-quartile companies hail from sectors like transportation and construction. Gaps between small and large firms could be bridged, as small companies are faster in adopting digital payment technologies, social media and video conferencing systems. The rapid pace of digitalization has also allowed lower-income countries to grow faster than higher-income countries regarding internet infrastructure and internet subscriptions. Between 2014 and 2018, seven of the ten nations with the highest growth rates for internet subscriptions had a lower per capita GDP than the national average. That said, the Indian digital economy's growth trajectory has not yet reached its peak, as nearly 90 per cent of retail transactions are still cash-based, and less than half of India's population have internet subscriptions.

In terms of value, digital economies across the Indo-Pacific region contribute nearly US\$ 400 billion, with India accounting for half of that amount. The ASEAN is the [fastest-growing digital market](#) in the world, valued at US\$ 72 billion in 2018, roughly 8 per cent of the ASEAN's GDP of US\$ 3 trillion. The ASEAN's digital economy is projected to grow exponentially, estimated to be US\$ 300 billion by 2025. Some countries are leading this charge. Digital markets in countries like Indonesia and Vietnam are growing at 40 per cent every year. Indonesia, the largest market in the ASEAN, will have a digital economy valued at US\$ 130 billion in 2025. Thailand and Vietnam will have digital economies [valued](#) at US\$ 50 and US\$ 43 billion, respectively. Two-thirds of the start-ups in South-East Asia are based in Singapore and Indonesia. Indonesia, for instance, now has more than 1,800 start-ups, including Gojek, the ride-hailing platform, now offering a range of digital services, including payments. Singapore has the most valuable digital start-up, Sea, which initially began as a gaming firm, only to expand widely into areas such as e-commerce and digital money. Grab, a Singaporean unicorn, grew quickly, acquiring Uber's businesses across South-East Asia; it is now using this platform to offer financial and other services. Such digital start-ups and firms are expanding through investments generated from other ASEAN countries, which is allowing them to offer more services by expanding into newer industries. COVID-19 pandemic-induced shifts have accelerated the digital economy's uptake across South-East Asia, with some sectors experiencing rapid growth. [A report](#) from Google, Singaporean investment company Temasek and Bain & Company reveals that 2020 brought more than 40 million people online for the first time in South-East Asia. Interestingly, the report indicates that such trends will rise and endure once the pandemic ebbs. The demand for e-payments and ride hailing has risen exponentially with greater digital adoption and shifts in consumer practices.

The ASEAN and Indian efforts run parallel to EU efforts to shape its internal digital market, with a [revised](#) Payment Services Directive and new rules on cross-border parcel delivery services, revised consumer-protection rules and new VAT rules for online sales of goods and services that are expected to enter into force in 2021. In addition to this, the European Commission's [SME Strategy](#), which was launched on 10 March 2020, focuses on capacity-building and support for the transition to digitalization and sustainability, reducing regulatory burdens and improving market accesses, and improving access to financing. To reach these goals, the EU has initiated '[start-up scale-up initiatives](#)' to strengthen the networking capabilities of SMEs and start-ups within Europe and to address challenges on the ground.

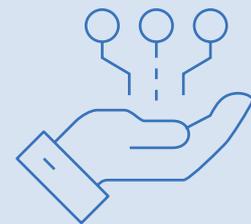
The [upgrade](#) of the EU–ASEAN relationship to a strategic partnership in December 2020 [presents](#) economic cooperation as one of the four pillars of main cooperation, alongside security cooperation, sustainable connectivity and sustainable development. The signing of the Regional Comprehensive Economic Partnership (RCEP) may create more long-term opportunities. A clear framework for cooperation is still missing, however, and the [EU factsheet](#) does not mention any digital element besides so-called smart cities. Towards the future, the inclusion of e-commerce – as a key element of economic cooperation – would serve to underline the importance of the digital economy and acknowledge the growth potential of the ASEAN region in this regard. To connect the ASEAN and EU digital markets, structural Track 1.5 dialogues or a working group in the strategic partnership context could help to identify shared opportunities and challenges, and create interoperability between the e-markets. Initiatives for such dialogues are already under way in the field of [cybersecurity](#) and the [digital economy](#). In view of the economic and strategic importance of these issues, these dialogues should be held more regularly and between a wider range of (technical) experts and stakeholders on the various (sub-)topics of these domains. Within the ASEM, digital economy (and interoperability) issues fall under the purview of the economic and financial pillar, specifically the ASEM’s Economic Ministers Meeting (EMM). Digital connectivity issues were discussed during the last meeting of the EMM in [2017 under South Korea’s chairmanship](#). ASEM members should invest in reviving the EMM, considering the importance of digital issues to a sustainable socio-economic recovery.

2. Data governance

e-commerce as a hidden gem

Actionable steps

- The EU must work with Indo-Pacific partners to ensure domestic laws do not constrain or stymie data-sharing between Indo-Pacific and European jurisdictions. Trends point towards selective or conditional localization in some countries (India), to fragmented data governance (Indonesia) and open-data ecosystems (Singapore). Given digital trade trends, it is imperative that both normatively and substantively, Indo-Pacific external partners like the EU sensitize Asian countries to refrain from instituting policies and rules that nationalize data.
- The EU must encourage ASEAN countries to develop proactive and catalysing data policies that fuel the digital economy's growth. This serves the economic, political and geopolitical interests of European governments and companies, albeit at the risk of data regulation that undermines privacy, distorts markets and allows for data to be controlled and used by governments for various purposes. There is also a need to strengthen the governance of digital data in the ASEAN, with a view to promoting the growth of trade and flow of data within and among ASEAN member states in the digital economy.
- The GDPR is one piece of regulation that has inspired several ASEAN countries to adopt viable data standards. Given the EU and ASEAN's thriving economic ties, it is in the EU's own interest to initiate dialogues that can support and steer legislative processes drafting data-protection laws across the ASEAN. The ADGMIN holds promise for greater engagement on digital convergence, including data-protection regulations. Another avenue is for the EU to influence data policies through the ASEAN's Telecommunications and Information Technology Ministers (TELMIN), a platform for promoting cooperation in ICT among the ten ASEAN member states and between the ASEAN and dialogue partners such as the EU. Engaging the TELMIN could spur discussions on harmonizing laws and data policies within the ASEAN for stronger convergence with the EU's standards.



As internet use and penetration leap across Asia, the digital economy will also advance, adding considerable value to regional economies and GDP over the next decade. The surge in internet use and broadband penetration have raised important concerns about the critical factor driving digital growth: data. Countries across the Indo-Pacific region are grappling with highly complex data environments; soon enough, regulators and officials must establish robust, interoperable data-governance frameworks to sustain the region's digital economy. Countries also need to foster secure data-management policies to manage huge volumes of data. As digitalization trends accelerate, it is imperative not only to create policies to address how data is handled domestically, but also to establish viable interoperable standards of data governance that are applicable to relevant domestic and international stakeholders.

The EU approach is characterized by the centrality of [users of the digital domain](#). This includes the ambition to guarantee the fundamental right to data protection, strengthen data-protection safeguards and increase transparency through the [General Data Protection Regulation](#) (GDPR) – all building blocks of the human-centred approach to (the use of) technology. In line with the EU's efforts to create a strong data-protection architecture, the European Commission implemented rules to end online discrimination based on nationality or place of residence within EU borders, and to prevent unjustified geo-blocking, which creates barriers for consumers in cross-border shopping. The extra-territorial applicability and scope of the GDPR, which applies to any organization that processes the personal data of EU citizens within and beyond the EU border, had an unprecedented international effect on data-protection regulations and standards.

Some countries across South and South-East Asia have instituted new policies governing data, but such efforts have ranged from open-door policies that encourage data-sharing to conditional sharing and data localization that sequester data within territorial boundaries. As a result, data-protection rules could function as protectionist measures, inhibiting digital trade. Indeed, the heavy involvement of governments across Asia in developing technologies through digital projects, so-called smart nation programmes and other initiatives such as AI and the Internet of Things has made regulators relatively more insular when it comes to handling citizens' data, lest this data be extracted and used for private purposes.

Since 2017, Indian officials have been working to erect a data-governance framework ([Personal Data Protection Bill](#)) that respects privacy, safeguards the collection and processing of data and deploys collected data to influence public policy objectives. Finding a balance between these three objectives has not been easy. For legal experts, privacy activists, industry groups and entrepreneurs, the Indian government appears set to sacrifice privacy at the altar of controlling the reams of data that are being generated and harvested, and leveraging this data for public use. Despite a recently enshrined constitutional right to privacy, there is a sense that existing laws governing privacy and the prospective data-governance legislation will stifle digital innovation and e-commerce while harming the existing protections that citizens and users of different applications currently possess. The EU supports the ongoing legislative process on drafting a data-protection law, as it provides a unique opportunity to enhance regulatory convergence with a key data market and to

ensure protection of personal data and privacy, including through a possible data-adequacy decision. This objective is also in the EU's best interest, as it contributes to the convergence of data-protection standards and facilitates coordinated action towards global standards-setting.

The [first iteration of the data-protection legislation](#) (2018) had robust safeguards, which have been revised in the latest version in such a way as to make the bill antithetical to privacy, innovation and ensuring that citizens have basic protections online. It now appears likely that the government will have the authority to access and use private and public data on the grounds of development and sovereignty, which will undermine both the right to privacy and data protection. Surprisingly, while there could be grounds to use data to shape public policy, most experts conveyed their displeasure and anxiety, not sanguinity, with the deployment of data to provide public goods.

Given the dramatic rise and acceleration of the digital economy across South-East Asia, questions around data security and privacy are of considerable importance. Fragmented data policies and measures that facilitate data localization undermine the economic opportunities available for EU firms in the booming digital economy across the Indo-Pacific. Firms, both small and big, in industries like IT, financial services and related fields, require robust and clear data frameworks to develop innovative and efficient services to individuals and businesses. Uneven and coercive data regulation will increase the costs of business for European firms, particularly those in areas like IT, cloud computing, algorithms, data analytics, artificial intelligence and financial services. Poorly conceived localization requirements will hamper digital trade, which relies on effective data-sharing and processing. Compliance will become cumbersome, since digital trade relies on unconstrained data flows. With peak internet usage, an increase in connected devices and data, alongside cloud computing, data localization or conditional localization will splinter the internet, resulting in the use of systems that are fundamentally incompatible.

In 2016, the ASEAN [adopted](#) a framework covering personal data protection, establishing a set of principles that could help countries to devise domestic measures to promote data security and privacy. ASEAN countries also agreed to heighten cybersecurity cooperation to address gaps that had emerged with digital tools and technologies. Yet, on the data side, considerable diversity exists when it comes to domestic data rules. Data-protection laws are marked by [heterogeneity](#).

The EU can influence data policies through the ASEAN's Telecommunications and Information Technology Ministers (TELMIN), a platform for promoting cooperation in ICT among the ten ASEAN member states and between the ASEAN and dialogue partners such as the EU. Engaging the TELMIN could spur discussions on harmonizing laws and data policies within the ASEAN. Additionally, data discussions can occur within the ASEM's [Asia-Europe Business Forum](#), where government officials and private-sector actors meet to increase trade and investment flows. This forum could focus on digital economy issues.

Data-protection laws across the ASEAN impose security obligations on data processors to protect personal data. But not all ASEAN countries impose mandatory requirements to inform authorities and data subjects of data breaches. Singapore has the most thorough and comprehensive set of rules under the [2012 Personal Data Protection Act](#) (PDP). Both Singaporean organizations, and organizations outside Singapore that are engaged in data use, collection or disclosure in Singapore, must comply with the Singapore PDP. In March 2018, Singapore joined the [Asia-Pacific Economic Cooperation \(APEC\) Cross-Border Privacy Rules \(CPBR\)](#) system, the third economy after the United States and Japan to operationalize the system. Meanwhile, Indonesia does not have a comprehensive personal data-protection law or regulation; instead, Jakarta relies on several different sectoral regulations to govern data, which complicates regulation, given the litany of actors involved. [Sector-based laws](#) (such as Law no. 11) cover IT and electronic transactions, requiring parties to implement basic security measures, including personal data, as citizens engage on these platforms. Malaysia has a law governing data and privacy, but it is seldom enforced. Other countries, such as the Philippines, Vietnam and Thailand, have varied legal frameworks and regulations that strive to protect privacy and advance data security. Some of these laws (in Malaysia and the Philippines) reflect principles forwarded by the APEC Privacy Framework that are also consistent with [OECD principles](#) and the European Data Protection Directive.

In fact, the data-protection laws of several ASEAN countries – including [Singapore](#), [Malaysia](#), [Indonesia](#) and [Thailand](#) – are similar to the European Data Directive, encompassing principles of transparency, legitimate purpose and proportionality. Adherence to Europe's GDPR is becoming important for firms and countries across the ASEAN, leading to many countries reviewing and upgrading their data-protection laws to develop regulatory frameworks that protect citizens and enable their businesses to transact with ease. Numerous companies have voluntarily extended several GDPR safeguards to their non-EU customers in order to create a competitive differentiator, making use of a tendency among customers to [consider privacy](#) in their online shopping behaviour.

That said, [the extra-territorial impact](#) of the GDPR also causes a burden on firms, because firms within the Indo-Pacific region will have to comply with both domestic and foreign (EU) regulations with respect to privacy and data-sharing. This will not only affect how firms operate and function, but also innovation could suffer from additional compliance burdens. Small and medium-sized financial institutions could bear additional costs *vis-à-vis* compliance, which will possibly affect their market operations and position. Assisting governments and companies – in particular, SMEs – to unlock the potential of the GDPR, both for their own use and their customers, could be a useful step forwards. This could help to lower the administrative burden by outlining the differences and overlaps in domestic and foreign regulations, as well as encouraging the adoption of digital tools that ease compliance.

3. FinTech

key to success

Actionable steps

- Indo-Pacific countries are frontrunners in FinTech and the EU should engage with India and Singapore to smooth over regulatory hurdles that could enable European FinTech start-ups and entrepreneurs to develop problem-solving applications and services for rapidly growing digital finance markets in Asia.
- Cooperation in the digital economy is an important instrument to advance the vision of an open, balanced and inclusive architecture for the region and for countries that are integrated by trade and connected by cyberspace. The EU and its member states can draw inspiration from the India Stack framework, to develop their own secure, interoperable digital platforms that serve as public goods for European citizens and firms.
- FinTech experiences in India and the ASEAN demonstrate that it pays to develop the institutional edifice and components – including know your customer (KYC), anti-money laundering (AML) and digital identity – for a pan-EU digital payments platform that is efficient, reliable and secure.
- The EU can share best practices with the Single Euro Payment Area (SEPA), assisting ASEAN countries to leverage opportunities and improve cross-border payments, including remittances, and business-to-business and business-to-consumer payments. Resulting regulatory convergence between the EU and the ASEAN – and the Indo-Pacific region more broadly – will enhance interoperability and compatibility between both regions' technology networks, which is also in the interests of European companies.



Some of the world's [most advanced FinTech](#) markets are in Asia. Adoption of FinTech has exponentially increased among citizens, consumers and small businesses, particularly in China, India and financial hubs like Hong Kong and Singapore. Over the next few years, trends in digital finance across the Indo-Pacific should continue to advance, influenced by shifts in technology, regulation and competition. [Several factors](#) have fuelled this ongoing digital financial revolution. Financial markets continue to deregulate. Across Asia, financial regulators have generally been insular, favouring safety over innovation. That has fundamentally changed. Financial sectors have also encouraged competition, with virtual banks and start-ups vying for supremacy with traditional financial institutions. And countries have opted to invest in digital platforms, both public and private, to expand financial access and inclusion, especially for citizens who have been unbanked. The rise of mobile and internet penetration has also aided financial inclusion. Mobile and contactless payments can dramatically lower the cost of providing basic financial services across Asian populations. Although China and India are the largest FinTech ecosystems based on investments and start-ups, innovators like Singapore are positioning themselves as clear leaders in the ASEAN, given the range of supportive measures undertaken to advance digital commerce. FinTech's future remains fundamentally bright, given the range of development gaps, specifically financial, that exist across the Indo-Pacific region. The World Bank estimates that 42 per cent of the global population lacks financial access, a vital opportunity for FinTech organizations to address the gaps left by traditional financial institutions. Asia has the largest percentage of the under-banked population and a large growing middle class who need solutions to their banking needs.

Considering the depth, access and efficiency of its financial institutions and markets, the EU market has long been a [global leader in financial development](#). Moreover, financial inclusion is notably higher in Europe than elsewhere. FinTech companies such as Adyen and Klarna originate from Europe and offer a suite of payment solutions, and the Dutch iDEAL and Polish BLIK are popular ways to avoid card schemes. Notwithstanding these successes, the European market is among the [least developed](#) when it comes to mobile money penetration, despite the fact that it is leading in internet penetration. This significant difference with upcoming digital economies such as India, Singapore and Indonesia derives from a heterogeneity of regulation among countries, and a cultural or institutional preference for cash because of privacy concerns and anonymity, especially visible in Germany.

For Europe, interaction and mutually beneficial relationships between banks and FinTechs are yet to be established. [Over 80 per cent](#) of European banks have adjusted their strategies to counter the advancing competition from FinTechs, by attracting in-house technologies or through acquisition. Large European banks have adopted technologies such as cloud computing and mobile wallets. For European FinTechs, a dialogue with Indian counterparts could be of interest, sharing best practices on how to operate effectively in the financial market, how to create trust among customers and how to develop interaction with banks by means of strengthening, rather than bringing down, each other.

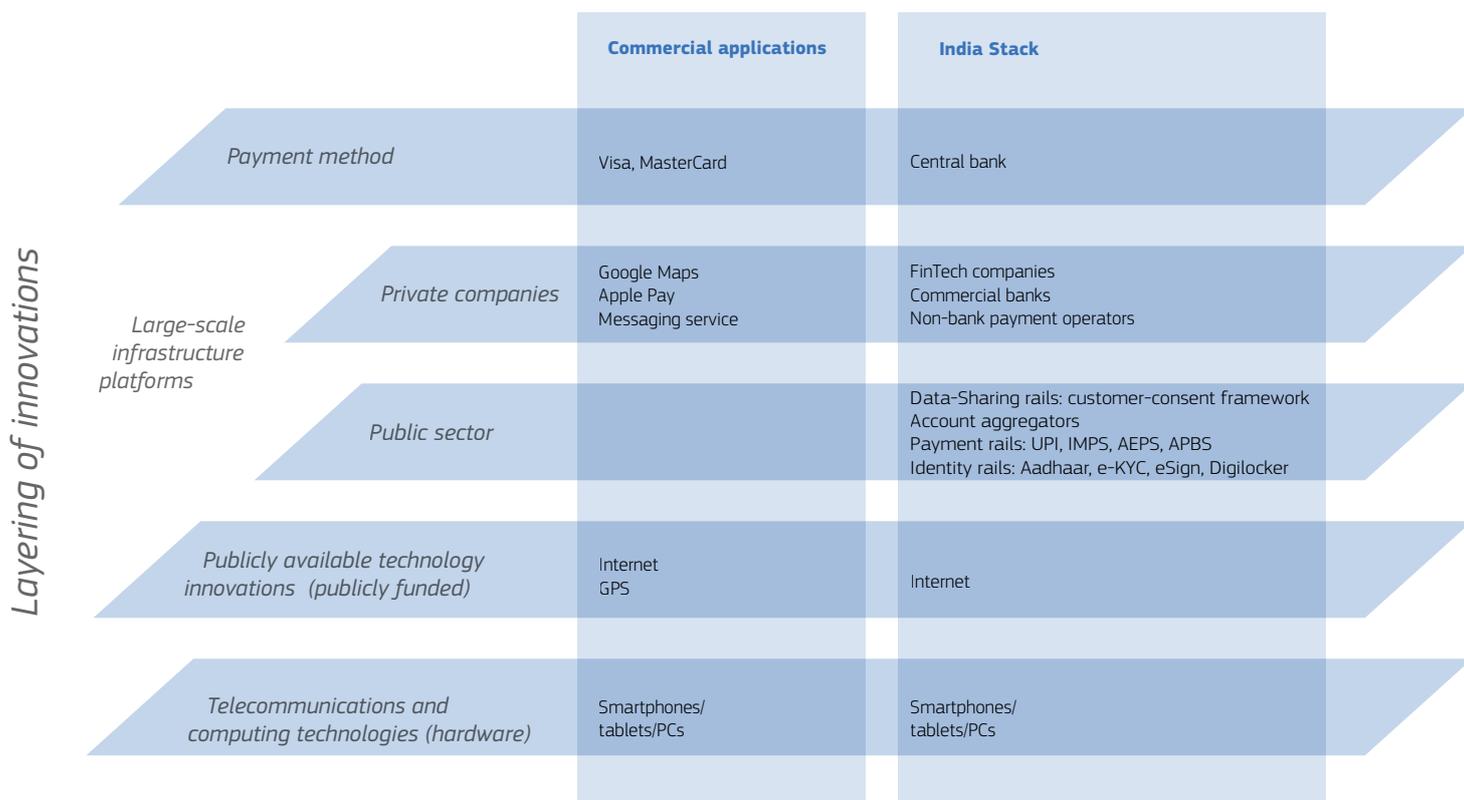
India's FinTech industry is the product of several drivers, technological and regulatory, coupled with rising business opportunities and gaps that are somewhat specific to India. The domestic FinTech revolution sits on the tremendous strides made in internet and mobile penetration since the late 1990s. According to the Department of Telecommunications (DoT), India had nearly 1 billion wireless subscribers in March 2020. Per capita internet use has been increasing, and so has wireless data usage. Demographics have boosted India's FinTech trajectory. Besides these structural features, India's FinTech evolution has been fundamentally led by the [India Stack](#) framework, the range of indigenous technologies that has catalysed innovation in this space.

The India Stack framework has involved developing secure, interoperable digital platforms that serve as public goods for Indian citizens and firms. India Stack's backbone is [Aadhaar](#), the biometric database that provides unique, verifiable identities to Indian citizens, which can then be used by FinTech firms to provide services to these citizens following verification. Through Aadhaar, other public digital platforms have been developed, including electronic identification system e-Know Your Customer (e-KYC), which verifies customers, eSign for digital signatures, DigiLocker, which provides cloud storage, and other payment-related services that facilitate financial interactions between service providers and customers. For payments, the United Payments Interface (UPI) serves as a crucial accelerant, allowing customers to use the virtual interface to transact with one another digitally.

Even within India, [concerns exist about Aadhaar](#) failing to ensure data privacy, the vulnerability of the system itself, and the unethical use of the system's data for AI development. This points to significant normative divergences with the EU. Practically, however, there should be scope for European actors to work with India's new data regulator, the Data Protection Authority (DPA), to ensure 'data principals' get adequate protections, albeit under the state's purview. Beyond this, there is vast room to deepen dialogues with actors in Indian civil society that focus on digital rights, privacy, consent, and how to ensure technology rules do not veer from India's constitution and democratic ethos.

India Stack

Technology stacks



Source: Monetary and Economic Department (2019), *The design of digital financial infrastructure: lessons from India*, BIS Paper no. 106, Bank of International Settlements, December, p. 14.

The [Indian FinTech market was worth US\\$ 8 billion in 2016 and was expected to grow 1.7 times by 2020 alone](#). Growth will be primarily led by innovative FinTech start-ups working with big banks and other financial institutions. India appears to have everything to establish itself as a global FinTech hub – a large market of underserved customers, increasing mobile, broadband and fibre penetration, favourable demographics and a thriving start-up ecosystem. FinTech firms and start-ups in India can work and exploit opportunities provided by the India Stack framework and range of applications including Aadhaar, UPI and eKYC, etc., which do not exist in most markets. Moreover, government policies and regulations – especially from agencies like the Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI) and Insurance Regulatory and Development Authority (IRDA) – have catalysed the sector's growth. Innovators have used space accorded by these regulators to create applications and tools for consumers, including applications like blockchain, e-wallets and other related technologies that drive financial transactions.

To advance financial innovation without inhibiting competition, some regulators have opted to use new options, such as '[regulatory sandboxes](#)' – that is, spaces where existing rules are relaxed to introduce new financial services and tools for the consumer market, before deciding whether to amend regulations thereafter. India and Singapore are collaborating to smooth over regulatory hurdles that could enable FinTech start-ups and entrepreneurs to develop new applications and services for their business and financial sectors. Under this framework, both financial regulators – [India's RBI and the Monetary Authority of Singapore \(MAS\) – are working to build infrastructures](#) that allow interoperability, or seamless fund transfers, across various jurisdictions through a single interface like the UPI. Such interoperability could catalyse digital payments between countries.

India and Singapore have also discussed FinTech cooperation through the [ASEAN FinTech Network \(AFIN\)](#), an integrated platform where ASEAN banks, non-banking financial institutions and regional FinTechs can interact and collaborate. The AFIN's objective is to support the development and experimentation of innovative digital financial products and services that can, over time, increase trade and financial linkages. India and the ASEAN could also work towards an interoperable payments system through AFIN that also prioritizes discussions on privacy, data localization and cross-border data flows. Cooperation in the digital economy is an important instrument to advance the vision of an open, balanced and inclusive architecture for the region and of countries integrated by trade and connected by cyberspace.

Lessons from the Indo-Pacific: a European stack, insourcing and more sandboxes?

The case of the Indian Stack shows a newly emerging [entrepreneurism](#), with governments using in-house experts to build services and applications on such government-led biometric identity systems. Through such systems, innovative applications, ranging from cloud spaces to financial inclusion, are incorporated into citizens' daily lives. EU member states are lacking this in-house expertise because of a longstanding trend of privatization and outsourcing. This created a strong private European technology market, but also encouraged a system driven by economic efficiency rather than a service-based system for customers. To adapt to the growing need of interoperable digital platforms on a European scale, to support solutions in FinTech and beyond, EU governments and the EU itself need to start 'insourcing' to attract in-house expertise. The most significant challenge will be to build such a stack in line with the European GDPR, address privacy and security concerns, and operate on a European, rather than a member state, level.

Within the EU, the innovation facilitators can be broadly divided into two categories: [innovation hubs and regulatory sandboxes](#). Innovation hubs provide a platform to exchange information and seek guidance, clarification or non-binding guidance on compliance. In addition to this, sandboxes also provide a specific scheme to test innovative financial products, services or business models. In 2020, six EU member states had operational sandboxes, and another six member states were in an advanced stage of developing them. Notably, [Germany](#) is one of the EU member states that has no intention to set up a regulatory sandbox in the near future, deeming the current system suitable to facilitate development in the FinTech sector. The Portuguese government went one step further, introducing a plan to establish [technological free zones \(ZLTs\)](#) with 'tailored regulatory regimes which facilitate both innovation and experimentation'. A remaining challenge is the inclusion of cross-border activities within sandboxes, thereby creating the possibility to test and innovate across multiple jurisdictions. At the EU level, this challenge has been acknowledged and cross-border coordination options are being explored in conjunction with the European Commission and the three European supervisory authorities' endeavours on FinTech innovation. As part of this endeavour, global cross-border cooperation also needs to be pushed higher on the agenda, and connections with Indian sandboxes, or the inclusion of foreign companies in European innovation hubs, could be one way forward.

FinTech for digital financial inclusion in South-East Asia

The FinTech landscape in the South-East Asia region is promising and dynamic, covering areas ranging from payments, insurance and asset management to crowdfunding. Singapore and Indonesia [are leading](#) the FinTech charge, owning about 50 per cent of the FinTech firms in South-East Asia, with the rest spread across Malaysia, Thailand, Vietnam and the Philippines. Like India, FinTech's rise and expansion in South-East Asia is driven by a large unbanked population who require financial services, specifically digital payments and lending, to cover their daily needs. Seeing their potential, ASEAN governments began supporting the FinTech industry through new regulations and other incentives.

The insatiable demand for FinTech in the ASEAN is backed by embrace of digital technologies, high rates of internet penetration and mobile usage, a large unbanked population that is increasingly urban, and the rapid growth of small and medium-sized enterprises that also require cutting-edge banking options. [More than half](#) of the ASEAN's adult population is currently unbanked, a problem that is more acute in rural areas. Most ASEAN countries, including Malaysia, Singapore and Thailand, have high levels of bank penetration but are rather poor in providing credit to the SME sector. As a result, FinTech players have focused greatly on serving these underserved segments through payments and mobile wallets, as the first step towards deepening financial inclusion. FinTech diffusion, which has attracted global investors, has also seen a profusion in the use of data to conduct digital activities. Payments appear to be the link that connects the digital and physical aspects of e-commerce. Agile payment mechanisms are required to support the rapidly shifting e-commerce landscape that has been transformed by the COVID-19 pandemic. In 2018, digital payments in the ASEAN were [valued at US\\$ 73 billion](#), a figure that is expected to double by 2023. More than any other financial services area, FinTech's impact has been most profound in the payments landscape. Digitally advanced FinTech start-ups are altering how, when and where payments are made, given rising internet access and smartphone use. The pandemic has turbo-charged digital payments, both adoption and usage. Building on the European experience with the Single Euro Payments Area (SEPA), the Indo-Pacific region can leverage opportunities arising from digital technologies to improve cross-border payments, including remittances, business-to-consumer and business-to-business payments. This will [likely start in the ASEAN region](#) and can be expanded regionally, facilitating intra-regional and inter-regional payments.

Singapore is regarded as a highly innovative global FinTech hub. The FinTech ecosystem was carefully nurtured by the Singaporean government under its ['Smart Nation' initiative](#), shaped by conducive business regulations and the entry of a large number of domestic FinTech firms that have drawn more players in. Singapore is also signing cooperation agreements with other countries, including Australia, the United Kingdom and India, to assist foreign FinTech firms gain access and expand into Asian markets. The financial regulator (MAS) has openly urged financial institutions to partner with FinTech start-ups to expand the role of financial technologies in society.

The Indonesian FinTech space is rapidly expanding. The second largest economy in the ASEAN, Indonesia currently has [a largely unbanked population](#), but an increasingly digital population that requires new financial solutions. Clear opportunities exist for FinTech firms to disrupt traditional financial models and systems. Gradually, the Indonesian FinTech regulator has launched a series of initiatives, including digital payment gateways, peer-to-peer (P2P) lending services, digital banking and insurance vehicles to provide banking systems for the Indonesian population.

That said, the ASEAN bloc of ten nations is not easy to navigate, given the region's heterogeneity, which has spurred regional platforms that attempt to bridge governance gaps and spur innovation. Policy harmonization is a challenge. The ASEAN FinTech Network was formed to facilitate collaboration between FinTech communities and market participants in each country, to advance financial inclusion for the unbanked and to propel the cross- and intra-border flow of goods, services and payments. Three other problems [inhibit financial innovation](#) and FinTech adoption. First, broadband access must be improved across the ASEAN region. Internet connectivity is rising, but gaps still exist in rural areas, especially in Indonesia, Thailand, Vietnam and the Philippines. Widespread broadband access could spur greater FinTech use and adoption. Second, ASEAN countries need to harmonize laws and regulatory frameworks covering issues such as privacy, data-sharing, e-commerce and intellectual property rights. For now, only Singapore, Malaysia and the Philippines have data-protection laws. Indonesia and Vietnam have data-privacy requirements embedded in IT transaction laws, which fall short. Third, ASEAN countries need to adopt a unified payments network to reduce frictions around cross-border payments. Digital interoperability spurs FinTech adoption.

The primary problem in the domain of European FinTech innovation and development is much similar. After all, a unified market, prices and similar consumer services are also lacking in Europe, and consumers are not eager to venture into cross-border bank relationships. The pre-existing national banking infrastructure and high levels of financial inclusion are also deterring customers from turning to FinTechs. Nevertheless, traditional banks should innovate and embrace FinTech tools in order to stay competitive, either by acquisition or attracting in-house expertise.

4. Exporting digital infrastructures

Actionable steps

- The EU can promote its human-centred approach to the digital domain by way of exporting hard and soft digital FinTech infrastructures to the Indo-Pacific region, including through trilateral digital ODA with India. FinTech's rise and expansion in the Indo-Pacific region is driven by a large unbanked population who require financial services. Internet connectivity is rising, but [considerable gaps](#) still exist between urban and rural areas.
- The EU and India can collaborate through the Modular Open-Source Identity Platform (MOSIP) to advance the development of digital infrastructure in developing countries, which they can use to deliver public goods and entitlements, facilitate digital payments and provide opportunities for e-commerce innovators to develop new applications and services.
- Diplomatically, Asian governments should be encouraged to make digital inclusion central to their future development trajectories, requiring more investments in infrastructure, education and literacy, and communications. In line with the EU Digital Compass, the EU promotes its human-centred digital agenda on a global level and tries to create convergence with the EU's norms and standards. The EU can help to promote infrastructure investments, including by holding a Digital Investment Forum to assist Asian governments and highlight market opportunities for European companies.



Potential exists to adapt and export the range of India's FinTech and related public digital platforms. Countries across South and South-East Asia that are experiencing similar challenges can draw insights from the India Stack story and apply it to address policy gaps. Indeed, countries need not have all, or even some, of the gaps that India faced before the establishment of the India Stack; in fact, should countries have existing identity databases that verify identity and social safety systems, digital infrastructure can map existing systems to create digital solutions. This means that countries with a wide range of challenges and capabilities can extract nuggets of insight from the India Stack story that are relevant to their own digital trajectories.

The ideas behind Aadhaar, UPI and the range of different applications that facilitate digital payments in India can be embedded within existing economic systems. Some efforts are under way. From an identity perspective, the open-source identity platform called [Modular Open-Source Identity Platform](#) (MOSIP), which is based at the Indian Institute of Technology Bangalore, assists governments and other organizations to implement a digital foundational identity document (ID) with sufficient privacy measures that can be scaled. MOSIP appears to have some flexibility in advocating for how countries should configure and implement their foundational ID systems. The fundamental objective is to ensure that other countries receive an open-source platform that they can adapt and use. Morocco and the Philippines are two countries currently engaged with MOSIP to remake their national identity programmes. Sri Lanka, Ethiopia and Guinea are also exploring pilot projects through MOSIP's assistance. MOSIP's presence reveals the growing popularity and reliance on open-source technologies in India. The Indian government, alongside key Indian technology firms, has been driving the adoption of open-source platforms for its e-governance projects to generate socio-economic gains.

[India's Unified Payments Interface](#) (UPI) system, which powers digital payments, is also garnering greater global attention. UPI has made impressive strides – millions of people and merchants use it daily, 141 banks exist on the system and transaction volumes increased tenfold in 2019. By 2025, digital transactions could reach a US\$ 1 trillion threshold in India. Several major technology firms, including Google and Microsoft, are championing FinTech architectures that are powered by UPI, even encouraging the US Federal Reserve to remake US payment systems. Singapore has also been an early adopter and proponent of UPI, with plans to deploy a UPI-like system for domestic and cross-border payments. India's domestic FinTech model stands ahead of what most financial systems around the world have achieved. Its success offers lessons for other institutions developing or considering the introduction of a real-time payments system. In fact, the vital decision to include third parties such as firms and applications has spurred adoption and innovation. Google [introduced](#) its [Google Pay](#) application in India's digital payment ecosystem in 2017. There is scope to expand and use India's payments platform in other countries – in 2019, at least 54 countries had rolled out digital payments systems, which could increase to 70 countries by the end of 2021.

The ASEAN will greatly benefit from a single digital payments platform that consists of harmonized regulations around digital payments. Payments across ASEAN markets are riddled with inefficiencies and gaps. Some countries, like Singapore, have highly developed digital payments systems. Other countries, including Malaysia, the Philippines and Thailand, are making headway in creating robust domestic payments systems, given the rapid increase in cashless transactions. Broadly, the ASEAN region's regulatory structures around finance must be reformed to enable innovation, given the widespread use of smartphones and other devices.

Beyond FinTech, trilateral digital ODA by European countries in the Indo-Pacific region could be expanded to other public goods and services, and partner countries. Singapore and Japan, [for example](#), are active on cybersecurity and cyber capacity-building, while [e-health](#) has been a focus area for Taiwan in South-East Asia since before the COVID-19 pandemic. Improved synergies between partners that share European concerns about creeping digital authoritarianism in the Indo-Pacific is needed in order to make the most of the relatively limited funds and action that each actor can bring to the region. Coordinated action and synergies will also contribute to more convergence *vis-à-vis* standards, given the various projects. The [EU's Digital for Development](#) (D4D) initiative and similar digital ODA programmes of EU member states should also look to the Indo-Pacific region. This includes, for example, the EU's [Cyber4Dev](#) to promote cyber resilience and cybersecurity, the EU's Policy and Regulation Initiative for Digital Africa ([PRIDA](#)), to harmonize the legal and regulatory framework for the use of ICT for social and economic development in Africa, and the Netherlands' [Digital Agenda for Foreign Trade and Development Cooperation](#) (2019).

5. Regulating Big Tech

Actionable steps

- Like in the EU, policymakers in the Indo-Pacific region face challenges to manage and regulate digital markets. Enhanced dialogues and coordination can help to further a joint human-centred approach that protects consumers and fair markets as well as open, democratic societies. This will also contribute to much-needed interoperability among the digital economies and a stronger position between countries that share interests. The ASEAN and the ADGMIN offer an entry point to enhance interoperability with and within the Indo-Pacific region.
- Even if the interests of the EU and Indo-Pacific countries largely converge, differences exist between prioritizations, levels of development, market size and norms. Technology and digital issues are more likely to receive attention at new ad-hoc coalitions among like-minded partners, although existing global governance frameworks such as the WTO, OECD, ITU and UNGGE could redirect or precipitate such discussions. Quick multilateral remedies should not be exaggerated, however, even as potential dialogues foster mutual understanding, greater synergies and coordinated approaches in the long term.
- Chinese Big Tech firms (such as Alibaba and Tencent) and venture capitalist (VCs) firms [have made inroads](#) into South-East Asia's digital economy, investing to help growing e-commerce firms scale up. They have inked partnerships with firms like Singapore's Lazada and Indonesia's Tokopedia that are on the cusp of expansion. European investors must seize digital market opportunities through capital and knowledge transfer where the scope for potential is long term, differentiating them from Chinese venture capital and Big Tech firms.



Questions about the regulation of US Big Tech firms are emerging across the Indo-Pacific region and Europe. Rising cases of data breaches, predatory practices, misinformation and sorting out liability have cast suspicions on technology companies. Like other jurisdictions, Asian policymakers face challenges managing digital markets, protecting consumers and instituting laws to manage the social and political effects of Big Tech.

Big Tech companies have been growing unimpeded and far beyond the original purpose for which the companies and platforms were once created. In 2020, Google [commanded](#) a 92 per cent share of the global internet search-engine market and Facebook controlled 75 per cent of global social media usage. The ability to alter citizens' behaviour and perception, either with facts or misinformation, based on users' digital data footprints and the self-regulatory nature of the sector, creates unease within governments globally. Besides, not only consumers are affected by the endeavours of Big Tech companies; local businesses are also wary. The concern is that certain entities – particularly US-headquartered technology companies Google, Amazon, Facebook, Apple and Microsoft (colloquially known as GAFAM) and Chinese companies like Baidu, Alibaba and Tencent (BAT) – are growing at the expense of every other business entity. How to make the economy competitive, but also open and inclusive is at the heart of discussions in countries torn between GAFAM and BAT – in Europe and in Asia alike.

Countries across South-East Asia are [lagging](#) in terms of restraining Big Tech firms. Given their nascent stage of digital development, these countries often serve as jurisdictions where tech firms game and exploit laws covering issues such as data collection and processing and anti-competitive behaviour. Data-privacy laws are inadequate across the ASEAN. Cyber breaches are the norm, not the exception. And digital markets are seldom assessed for their nature and competitiveness. Technology firms like Google and Facebook have faced criticism for indiscriminately collecting and monetizing data gathered from ASEAN consumers; the value these firms extract from their data trumps the benefits of the services they provide. Chinese conglomerates like Alibaba and Tencent have made [recent acquisitions](#) in South-East Asia, including Singapore's e-commerce platform Lazada and Indonesian online shopping site Tokopedia. China's increasingly saturated digital markets, combined with the ASEAN region's rapidly digitizing economy and rising internet and mobile phone penetration, are ushering in these Chinese technology giants.

Even if the European Union (when it still consisted of 28 member states) has long been the [biggest overall investor in the ASEAN](#), European investors have yet to seize digital market opportunities in the region. They should do so through capital and knowledge transfer, where the scope for potential is long term, differentiating them from Chinese VCs and Big Tech. Trade and investment missions organized by the European Commission and European governments can steer companies' focus towards the particularly promising sectors of e-commerce and FinTech markets, as well as AI and cloud computing.

The ASEAN states have a responsibility to strengthen privacy laws in order to prevent indiscriminate collection and sharing of personal data that could possibly lead to theft or misuse, as exemplified by the rising number of data breaches occurring across South-East Asia. Moreover, asymmetric data-protection laws, with some countries, such as Singapore, having robust frameworks that safeguard and protect data, and others, like

Indonesia and Vietnam, with patchy laws that expose, not address, gaps, create opportunities for Big Tech firms to play jurisdictions off one against the other. Big Tech firms can also use data to corner and conquer markets, enabled by data monopolies that these firms acquire over time.

In the ASEAN, there is a danger of not only US, but also local firms using data to entrench their market positions, making digital markets anti-competitive. Some firms like [Grab and Gojek](#) are quickly using their platforms to bundle and offer services across areas. While consumers may find these clubbed-together services useful and convenient, they could suffer from unfair pricing, greater competition and lack of alternatives. Cooperation among ASEAN member states could help in governing the increasingly digital economy and avoid regulatory arbitrage, where companies swoop into and game states with lax obligations and laws on issues such as data and privacy. ASEAN frameworks could advance clarity for technology companies when it comes to handling personal data, and detailing how it is used and shared. The two big dangers are irresponsible data-collecting and sharing, and anti-competitive actions. Countries should use the ASEAN guidelines to draft and revise laws that govern the booming digital economy.

Competition policy

In Europe, two much-discussed ways to rein in Big Tech companies by regulation are competition policies and digital taxation. Regulation aims to empower individuals and to put them in control of their own data and digital footprint, showing again the EU's human-centred approach. Europe's aspiration to limit the power of Big Tech companies derives from a history of cases in which [EU competition law](#) has been used to determine whether practices have been anti-competitive. This is [antagonistic](#) with the US economy, wherein market leadership and protecting efficiency and low costs – rather than potential competitors – have been guiding government regulations. The pressure, however, to rein in (primarily US) Big Tech companies' monopolies and to create space for EU-based companies is now eminent in European circles, which fear that US companies will also take over the last remainders of the EU's digital sector. Relatedly, concerns about Chinese companies' [mergers and acquisitions](#) in Europe are an incentive for EU governments to invest in companies that are subject to Chinese buyers.

India could be a strong, like-minded partner for the EU in this respect. There is a growing consensus in India that Big Tech's conduct should be evaluated across multiple dimensions. One key area of focus for the Indian government is the functioning of digital markets: are they fair and open? Indian officials appear keen to root out unfair market practices, including the acquisition of competitors, predatory pricing and bundling products without cause. All of these concerns fall under the ambit of the Competition Commission of India (CCI).

Digital taxation

Another big area of concern tied to digital markets pertains to digital taxation, or instituting appropriate ways to tax digital firms for the services they provide. As multilateral talks in the OECD stalled, several EU member states have taken matters into their own hands. In October 2020, Austria, France, Hungary, Italy, Poland, Spain and the United Kingdom implemented a digital services tax, while Latvia, Norway and Slovenia have either shown serious intentions or have officially announced the implementation of such a tax. These measures are considered interim measures until an agreement is reached at the OECD level.

In the broader Indo-Pacific region, similar tendencies surrounding the influence and power of Big Tech are becoming more visible. In [Singapore](#), Uber and Grab merged in 2018 and were fined with a total of S\$ 13 million for reducing competition in the ride-hailing market, and [Thailand](#) took legal action against Facebook and Twitter when the companies ignored requests to take down content.

Also in the digital taxation domain, countries are stepping up their game. [Indonesia](#) introduced a 10 per cent value-added tax on sales of specific technology companies, including Google, Netflix, Facebook, Zoom and Twitter. [Singapore](#) also implemented an indirect digital tax regulation for non-resident vendors that are operating in the Singaporean market. New Delhi is keen to tax digital activities that originate and occur within Indian borders. In April 2020, India levied a [2 per cent digital tax \(equalization levy\)](#) on Big Tech firms as compensation from firms that access and provide services to their local consumer base. Despite recrimination, Indian officials maintained that the tax was justified and fair and was not targeting specific Big Tech firms. That said, New Delhi has promised to drop the 'levy' once a global agreement or framework that recovers taxes from Big Tech firms is equitable. India will likely support a global accord aimed at digital taxation.

While India thus seems to be a natural partner for the EU in this matter, India operates from a position of strength that naturally arises from its large digital market that is appealing to foreign Big Tech. Much like China in the industrial era, this results in assertive policies by India, which seeks to rein in foreign compa-

nies – by simply excluding some companies (from China) and by way of forced data localization. The Indian government's wish is to develop and enact domestic legislation before entering international agreements (including on e-commerce), as exemplified by the government's departure from the RCEP. This suggests that discussions between the EU and India will be difficult for the time being, other than on shared concerns related to foreign Big Tech's practices in the domestic (in the EU case: internal) market.

Moreover, the [unilateral actions](#) of numerous countries within Europe and Asia have resulted in diverging definitions of the scope of digital tax, the decision to adopt direct or indirect taxes or tax based on the significant economic presence of a company, and the thresholds triggering any such tax. For businesses, the divergences between jurisdictions poses a challenge when trying to expand their operations in other countries. A consensus on international agreed standards on digital taxation may thus be welcomed by both governments and businesses, and is currently being discussed within the framework of the OECD. While talks about fundamental changes in international tax regimes have been ongoing since 2015 on the OECD level, the COVID-19 pandemic and the subsequent move by citizens to the digital domain have spurred international awareness of the issue. Currently, the package is nearly finished, but a political accord must be found.

The clash between the EU and the US over this matter was, however, impossible to overcome after the US decided [to pull out](#) of negotiations at the OECD level in June 2020. With the new Biden administration seemingly taking a [less-conflictual approach](#), however, international expectations are rising that a minimum digital taxation can be agreed upon within the OECD framework. OECD consensus could facilitate the cross-border and inter-regional operations of businesses with Indo-Pacific countries. Also, transatlantic agreement on digital taxation could boost relations on digital issues, as well as enhance policy coordination in the Indo-Pacific region.

Free speech, and the limitation thereof

Free speech on specific social media platforms, and the accountability and responsibility of platforms in this matter, have become increasingly contested. In Europe, proposals to protect online consumers – the [Digital Service Act](#) (DSA) and a [Digital Market Act](#) (DMA) – were presented in January 2021. With regard to free speech, the DSA is of relevance, as it focuses on better protection of consumers, establishing transparency and accountability frameworks for online platforms. This includes efforts to [limit harmful behaviours](#), such as spreading (political) disinformation and hoaxes, yet in full respect of the freedom of expression.

With this regulatory experience, the EU can reach out to India. Of late, the Indian government has had public spats with both Facebook and Twitter about free speech, specifically regarding posts that cause public harm or inflame public attitudes. The Indian government has taken a hard line with Twitter, threatening to use existing sedition laws to restrain the platform. Policy discussions around social media must evolve to focus not only on free speech, but also the very nature and obligations of social media platforms that function as curators and publishers of content, which shifts the burdens under which they operate. New Delhi [just released new guidelines](#) ('Intermediary liability') that place additional responsibilities on social media companies to manage and remove content on their platforms – through new identification requirements that facilitate verification, conditions to remove user content, and the use of algorithms to eliminate harmful and malicious content proactively. That said, these new guidelines place very few constraints on the government, whose regulatory oversight of these companies increases. Broadly, there is also recognition that domestic institutions should be reformed to better confront the Big Tech problem. Problems caused by Big Tech are currently dealt with by agencies across different issue-areas, such as finance, IT, law, commerce and communications, etc. New Delhi is hoping to develop an integrated and flexible framework that can respond quickly and deftly to the litany of issues regarding Big Tech.

Conclusion:

Navigating through digitalization and multilateralism

As the EU embarks on its own distinctive approach to the Indo-Pacific, it should seek to contribute to **open, safe and inclusive digital connectivity and thriving digital economies** in the region. Engagement with the Indo-Pacific must respond to calls from the region's countries for greater maritime presence in their increasingly contested waters. Ultimately, however, the EU and its member states may have more to offer in the equally contested high-tech and digital domains. The aim should be to establish mutually beneficial relationships on a broad array of digitalization issues.

Most Indo-Pacific countries are undergoing **digital transformations**. The COVID-19 pandemic and efforts to manage and mitigate the novel coronavirus, including social distancing and lockdown measures, have turbo-charged the region's transition towards a more digitized economy. Yet **gaps remain in digital connectivity**. Despite impressive strides, a 'digital divide' exists between and within countries, and between rural and urban areas. Internet infrastructures merit greater attention. Data-governance frameworks are fragmented, inhibiting digital trade regionally and across regions, given regulatory differences. Moreover, scope exists to deepen partnerships on issues like exporting digital infrastructures, FinTech, digital taxes and Big Tech regulation.

This paper assesses tangible steps for the EU to **build partnerships**, including within the ASEM framework, to advance digital connectivity in and with the Indo-Pacific region, in line with its approaches and standards on digitalization. Strategic **connectivity partnerships** with key partners enhance **sustainable and secure digital connections** that support a **prosperous and resilient** Indo-Pacific region and European Union.

Limitations on time and scope induced a focus on the **ASEAN**-level and three Indo-Pacific countries that are key players in the digital domain: **India, Indonesia and Singapore**. Actionable steps in the fields of **e-commerce and data management, FinTech, digital ODA and Big Tech regulation** were at the heart of this scoping exercise.

Ultimately, **digital connectivity is about data** – whether the concern is with Big Tech (regulation), e-commerce, health, digital ODA, internet infrastructure, FinTech, or norms. Therefore, it is crucial for the EU and its member states to understand how each country in the Indo-Pacific wishes to manage and regulate data, and how they can engage with this to promote an open, transparent and inclusive digital domain, with vibrant and resilient digital economies that benefit people, digitally skilled citizens and digital citizenship, human-centred standardization of new technology applications, data privacy and the free flow of cross-border data, and cybersecurity.

Seen in this light, this paper may be considered a **first attempt to unpack the interests and approaches** of countries and companies in the Indo-Pacific region, and how the EU should deal with these in the face of disruptions that accompany the digital age and that are exacerbated by the intensifying geopolitical competition.

Annexe:

selected digital connectivity initiatives

Initiatives in the Indo-Pacific

Digital Connectivity and Cybersecurity Partnership (DCCP): a US\$ 60 million US-led inter-agency initiative to promote an open, interoperable, secure and reliable internet in developing countries.

South Asia Regional Digital Initiative (SARDI): an activity under the DCCP ‘to improve digital connectivity in South Asia, strengthen the private sector and civil society’s digital capacity, and improve their ability to engage on ICT policy issues’.

Digital Asia Accelerator (DAA): an activity under the DCCP that ‘aims to advance economic development by increasing business’ and citizens’ capacities to use digital technology safely and effectively across South-East Asia’.

ASEAN Digital Ministers Meetings (ADGMIN): the 1st ADGMIN was held via video conference on 21 and 22 January 2021. The ministers also held consultations with their counterparts from China, Japan, the Republic of Korea, India, the United States and the ITU.

Quad Tech Network (QTN): a Track 2 initiative, and Australian government proposal, between think tanks and academic institutions to foster technology policy collaboration among the member countries of the Quad: Australia; India; Japan; and the United States.

Forum on Supply Chain Restructuring: a forum to improve resilience among like-minded partners, held for the first time in September 2020 in Taiwan, to discuss a variety of policy tools to restructure supply chains, while ensuring that businesses and economies can thrive.

Initiatives of the EU and EU member states in the Indo-Pacific

EU–Japan Partnership on Sustainable Connectivity and Quality Infrastructure (September 2019): a [connectivity partnership](#) whereby the two partners vow to cooperate bilaterally and multilaterally, based on shared values and their belief in the benefits of a level playing field, in neighbouring regions of the EU as well as in the Indo-Pacific region.

Dialogue on Digital Economy (DDE): comprehensive policy discussions on major issues of digital economy development, held between the [EU–ASEAN](#) and the [EU–Taiwan](#), among other countries.

ASEAN Digital Index (ADIX): a policy tool to measure the progress and impacts of digitalization on society and the economy, providing a global indication of digital development.

International Digital Cooperation Project on ICT Standardization (InDiCo): aims at building the bridges needed for collaboration on digital policies and the related standardization topics with partner countries. The focus is on key technological enablers for a digital society, where inclusiveness, privacy and security are paramount.

EU–ASEAN Joint Communication on Cyber Security (August 2019): [joint statement](#) underscoring the commitment to promote an open, secure, stable, accessible and peaceful ICT environment, consistent with applicable international and domestic laws.

EU–ASEAN Joint Ministerial Statement on Connectivity (December 2020): [agreement](#) to strengthen, among others, cooperation in the development of so-called smart cities, and to recognize digital connectivity – with a focus on people – as a key enabler for inclusive growth and sustainable development.

1st Indonesia–Netherlands Cyber Policy Dialogue (January 2021): [Multi-agency dialogue](#) reinforcing the close cyber cooperation and partnerships between Indonesia and the Netherlands, as well as national policies to increase cybersecurity, to improve the digital resilience of companies and communities, and to prevent and counter cybercrime.

SuperComputing Asia 2021 (March 2021): This [EU–ASEAN–Japan high-performance computing \(HPC\) event](#) is a symposium to discuss new challenges and trends in HPC and data infrastructure.

