BLUEPRINTS FOR THE INDO-PACIFIC:
Infrastructure and connectivity programs for regional integration

Dr Jeffrey Wilson, January 2019
Cross-border infrastructure is critical for the development of the Indo-Pacific region. While intergovernmental economic agreements provide the institutional architecture for regional integration, physical infrastructure is needed to connect economies via road, rail, shipping, energy and telecommunications links.

The Indo-Pacific is currently plagued by a range of ‘infrastructure gaps’ which constrain the economic development of the region. Estimates suggest that $1.5 trillion per annum of new infrastructure investment is required to close these gaps.

In recent years, many governments and regional organisations have directed attention to infrastructure and connectivity (I&C) issues. Since 2010, six new I&C initiatives have been launched in the Indo-Pacific, and two pre-existing institutions have been upgraded. These initiatives are functionally differentiated, offering contrasting institutional architectures, governance frameworks, financing models and strategic orientations.

These new I&C initiatives offer much needed ‘blueprints’ to guide regional connectivity. They collectively promise over $1 trillion of capital to the region’s infrastructure funding pool, and provide dialogue mechanisms to augment inter-governmental cooperation.

However, they also pose geostrategic risks. Infrastructure has become a new front in the contest for regional leadership, as major powers have competitively used I&C initiatives as a tool for diplomatic influence and leverage.

Indo-Pacific governments – on both the donor and recipient sides – now face an ‘infrastructure choice’. Key considerations include appropriate institutional mechanisms, the design of governance arrangements, the involvement of the public versus private sector, architectural and membership issues, and the management of geostrategic tensions.

If these I&C initiatives are to succeed, governments must make informed choices that balance opportunities and risks. It will be important to establish a division of labour between the initiatives, foster cooperative mechanisms that combine their respective strengths, and develop strategies for managing geostrategic concerns.
The ‘Indo-Pacific’ is the most recent addition to the regional lexicon in our part of the world. Its emergence reflects the idea that the boundaries of the region are changing, expanding the older ‘Asia-Pacific’ concept southwards and westwards to incorporate countries on the Indian Ocean Rim. This Indo-Pacific shift has been driven by contemporary transformations in the region’s geography, as economic, security and diplomatic relationships are extending across the junction of the Indian and Pacific oceans.

The Indo-Pacific is often understood as a security-driven phenomenon: responding to new geopolitical balances within the region, and the diverse range of traditional and non-traditional security challenges these have posed. But if the Indo-Pacific concept is to succeed, it must also develop a robust economic architecture. Just as the Asian economic miracle since the 1980s was predicated on deepening integration between countries of the region, so too will the future dynamism of the Indo-Pacific depend on strong trade and investment ties.

Infrastructure and connectivity will prove critical. While the Indo-Pacific has a well-developed institutional architecture to promote trade and investment, the physical infrastructure linking its economies remains under-supplied. Governments are increasingly working to address this, by committing financial, political and diplomatic capital to a diverse range of connectivity initiatives. While these connectivity blueprints are a welcome development, there is a pressing need to ensure these efforts are effective, cooperative, and fit-for-purpose.

In this report, Dr Jeffrey Wilson examines the landscape of infrastructure and connectivity presently reshaping the Indo-Pacific. It analyses the regional infrastructure challenge, catalogues recent efforts to address these problems, and identifies strategies which can ensure their success. This report provides government and business leaders with a ‘map’ that can help guide efforts for a better connected and integrated Indo-Pacific.
The Indo-Pacific is the most dynamic region in the global economy today. For over three decades, its countries have been rapidly transformed by the inter-related processes of industrialisation, urbanisation and high-speed growth. Initially starting in Northeast Asia during the late 1970s, the regional centre of economic gravity is now shifting to the south and west, as countries in Southeast and South Asia begin to exploit their developmental potential. Economic integration has been a key component of the Indo-Pacific’s economic success, as deepening trade and investment ties have fostered regional production networks that knit it together into a single bloc.

However, the Indo-Pacific’s physical connectivity has lagged behind. As urbanisation and industrialisation have accelerated, governments have struggled to supply the infrastructure - road, rail, shipping, energy and telecommunications links - required to properly connect the region. The Indo-Pacific is now plagued by a range of ‘infrastructure gaps’, which have emerged as one of the principal barriers to the next stage of growth and integration.

Indo-Pacific governments have begun taking the infrastructure challenge seriously. Since 2010, a diverse range of infrastructure and connectivity (I&C) initiative have been launched by all major governments and inter-governmental organisations. Each initiative offers a distinct ‘blueprint’ for regional connectivity, different goals, governance arrangements and institutional mechanisms. However, they are united by the objective of mobilising both financial and political capital to ensure infrastructure gaps are closed. This is a welcome development which will greatly aid the future economic integration of the Indo-Pacific.

The wide range of I&C initiatives now on offer poses complex choices. Governments will have to make careful decisions regarding how scarce resources are allocated between competing options. There must be a good fit between the institutional and governance mechanisms of these initiatives, and the specific needs of the countries and projects they support. As infrastructure has increasingly become linked with issues of rivalry between the region’s major powers, geostrategic concerns will also need to be managed to ensure cooperative rather than competitive outcomes. Making well-informed infrastructure choices is essential if the Indo-Pacific is to live up to its economic potential.

This report examines the infrastructure and connectivity landscape of the contemporary Indo-Pacific. It identifies the infrastructure gaps facing the region, and the steps needed to address them. It then reviews eight major I&C initiatives launched in recent years, which offer competing blueprints for how regional connectivity should develop. It argues that for governments to make informed choices between these options, they will need to find ways to maximise synergies, develop cooperative mechanisms, and carefully manage geostrategic concerns.
For three decades, the Indo-Pacific has been the epicentre of global economic growth. The ‘East Asian Miracle’ – as it was labelled by the World Bank in 1994¹ - was a distinctly collective phenomenon. Driven by complementarity between its economies, a dense network of trade, investment and technology ties developed within the region. These led to regional production networks, where countries specialise in different stages within extended value chains in the agro-food, manufacturing, and technology industries². Economic integration was essential in enabling government to execute growth strategies based on attracting inward foreign investment, with which export-oriented manufacturing sectors could be established³.

The Indo-Pacific’s dynamism has not and will not be possible without the progressive integration of its economies.

However, intergovernmental cooperation is required for the success of regional economic integration. A range of regulatory barriers prevent businesses exploiting regional trade and investment opportunities. These include traditional trade barriers, restrictions and conditions imposed on international capital flows, as well as ‘behind the border’ issues which emerge from domestic regulatory environments. As economic connectivity requires the movement of goods, services and people across borders, there are also physical barriers to be overcome. Reliable and cost-effective infrastructure networks – the road, rail, sea, air, energy and telecommunications links connecting economies – are essential enablers for the development of trade and investment ties. One of the principal objectives of regional intergovernmental institutions is to cooperatively address the barriers to economic integration.

The Indo-Pacific has a reasonably well-developed institutional architecture to address regulatory barriers to integration:

• Since the late 1980s, two regional dialogue bodies – the Association of Southeast Asian Nation (ASEAN) and Asia-Pacific Economic Cooperation (APEC) – have provided a forum for intergovernmental coordination on economic policy reform⁴.

• A dense network of free trade agreements (FTAs) has coalesced over the last decade. This is centred on the ASEAN FTA of 1992, and the linkages to and between its ‘Plus Six’ dialogue partners: Australia, China, India, Japan, Korea and New Zealand (Figure 1).

• In the wake of the Asian Financial Crisis of 1998, the ASEAN ‘Plus 3’ group (China, Japan and Korea) established the Chiang Mai Initiative, a set of bilateral and multilateral currency swap arrangements designed to respond to a future financial crisis⁵.

• In more recent years, governments have also launched negotiations for two ‘mega-regional’ FTAs: the Trans-Pacific Partnership (signed in March 2018 following the withdrawal of the US)⁶ and the Regional Comprehensive Economic Partnership (which remains under negotiation between the ASEAN+6 group)⁷.

² INFRASTRUCTURE, CONNECTIVITY AND INDO-PACIFIC INTEGRATION
These intergovernmental institutions have been instrumental in facilitating regional economic integration. While less dense than the economic arrangements of the European Union, they have nonetheless proven successful at progressively lowering the regulatory barriers amongst Indo-Pacific economies. For three decades, tariffs levels have been steadily falling, as unilateral reforms have combined with bilateral and regional trade agreements to reduce trade protection.

Applied tariffs are now below 5 percent in most economies, a fraction of their level in the early 1990s (Figure 2). This has enabled a rapid rise in intra-regional trade, as firms moved to exploit lower tariff barriers and construct regional production networks. Intra-regional trade grew from 40 percent of two-way trade by APEC economies in 1997 to 70 percent by 2017.
Unfortunately, the Indo-Pacific’s physical infrastructure lags behind its institutional development.

As high-speed growth has led to rapid industrialisation and urbanisation, the supply of infrastructure has failed to keep pace with demand. This has led to a complex set of ‘infrastructure gaps’ across the region, where the required transportation, telecommunication and energy links are either absent or of an appropriate quality for contemporary needs. Many quantitative estimates have been made as to the scale of these infrastructure gaps\textsuperscript{12}. While methodological differences produce a wide range of results, all indicate that the scale of the problem is immense. The most recent, published by the Asian Development Bank in 2017, indicates that regional economies will need to make a staggering $1.5 trillion of infrastructure investment per year, every year, from 2016 to 2030\textsuperscript{13}.

These infrastructure gaps have a complex set of causes. The problem is not simply a lack of capital. Most regional economies have very high savings rates, and in macroeconomic terms have the capacity to significantly increase their infrastructure spend\textsuperscript{14}. Rather, it is policy factors which constrain both public and private investment in infrastructure. These include a lack of technical capacity to identify, design and develop projects; public sector capacity to implement complex financial and engineering arrangements; and an absence of non-governmental mechanisms to mobilise private finance to supplement public funding. For cross-border infrastructure – which spans two or in some cases many countries – these problems are doubly complex.

Collectively, these challenges are known as the bankability problem: while Asia has an adequate supply of available capital, there is a dearth of well-designed infrastructure projects ready for investment\textsuperscript{15}.
Infrastructure gaps have become a major barrier to economic integration in the Indo-Pacific. Because trade liberalisation has steadily driven down tariffs, non-tariff barriers have now become the main obstacle to trade. Figure 3 shows the level and composition of trade costs faced by Indo-Pacific economies to China, the number one trade partner of most countries in the region. It reveals that tariffs account for only a small portion (on average, 11 percent) of total trade costs, with non-tariff issues – imposed by transport and logistics, foreign transaction and regulatory compliance requirements – contributing the lion’s share. The quality and efficiency of infrastructural connections contributes a significant proportion of these costs, as poor-quality infrastructure raises both the time and financial costs of trade¹⁶.

These costs also impact Indo-Pacific economies unevenly. They are roughly correlated with developmental level, reflecting the reduced capacity of developing country governments to fund and execute complex infrastructure projects. The less-developed economies of South Asia presently face non-tariff trade costs more than twice as high as OECD countries, with ASEAN members falling midway between these two groups.

Moreover, non-tariff trade costs have proven stubbornly hard to reduce (Figure 4). Over the last decade, some Indo-Pacific economies – notably Cambodia, India and Vietnam – have made major progress in reducing their trade costs, albeit in Cambodia’s case from very high initial levels. But from a regional perspective the trend is less positive. Most economies have seen real¹⁸ non-tariff trade costs rise over this period; with the Philippines experiencing a worrying 22 percent increase. These increases have occurred despite concerted efforts by governments to increase investment in both domestic and cross-border infrastructure.

FIGURE 3 TRADE COSTS FOR SELECT INDO-PACIFIC ECONOMIES TO CHINA, 2013

Source: Author’s calculations, from UN-ESCAP/World Bank Trade Costs Database. See note 17 for methodology.
These infrastructure gaps are a major challenge for the Indo-Pacific’s ongoing economic development:

- For trade, high infrastructure costs reduce the competitiveness of a country’s exports against third countries, pricing them out of key markets.
- In terms of investment, poor infrastructure also deters foreign investors, who favour markets with more reliable and/or lower cost infrastructural platforms.
- They also inhibit the development of regional production networks, which rely on reliable and competitively-priced transport, energy and telecommunications linkages across borders.

- These problems are particularly concentrated in the least-developed parts of the Indo-Pacific, whose under-developed infrastructure constrains opportunities to exploit export- and investment-led development strategies.

The continued success of Indo-Pacific economies, and deepening integration between them, will require a significant improvement in the infrastructural connections within the region.
Infrastructure gaps also pose a particular problem for the building of economic ties across the Indo-Pacific. Until recently, the economies of South Asia have only been weakly connected to partners in Northeast and Southeast Asia, with limited trade or investment connections spanning the Indian and Pacific Oceans. The recent articulation of the Indo-Pacific concept aims to close this gap, by formally incorporating South Asian countries into the Asian region. However, asymmetries in infrastructure gaps will act as a barrier to the achievement of this integration objective.

As Table 1 shows, South Asian economies have considerably poorer infrastructure than their peers in Asia, and currently perform well-below world average. As a result, they face non-tariff trade costs some 30 percent higher than their Southeast Asian peers, and 88 percent higher than the developed economies in the region [Figure 3]. These infrastructure gaps place South Asia at an immediate disadvantage when exporting to regional markets, making them a less attractive location when competing for foreign investment. Cross-regional infrastructure gaps will need to be significantly narrowed if economic integration across the two halves of the Indo-Pacific is to be achieved.

As Table 1 shows, South Asian economies have considerably poorer infrastructure than their peers in Asia, and currently perform well-below world average. As a result, they face non-tariff trade costs some 30 percent higher than their Southeast Asian peers, and 88 percent higher than the developed economies in the region [Figure 3]. These infrastructure gaps place South Asia at an immediate disadvantage when exporting to regional markets, making them a less attractive location when competing for foreign investment. Cross-regional infrastructure gaps will need to be significantly narrowed if economic integration across the two halves of the Indo-Pacific is to be achieved.

**TABLE 1 INDO-PACIFIC ECONOMIES’ CONNECTIVITY PERFORMANCE, 2017**

<table>
<thead>
<tr>
<th>World Bank Logistics Performance Index</th>
<th>Global Competitiveness Index Infrastructure Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Northeast Asia</strong></td>
<td></td>
</tr>
<tr>
<td>Score (/5.0)</td>
<td>Rank (/160)</td>
</tr>
<tr>
<td>China</td>
<td>3.61</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>3.92</td>
</tr>
<tr>
<td>Japan</td>
<td>4.03</td>
</tr>
<tr>
<td>Korea</td>
<td>3.61</td>
</tr>
<tr>
<td>Taiwan</td>
<td>3.60</td>
</tr>
<tr>
<td><strong>South Asia</strong></td>
<td></td>
</tr>
<tr>
<td>Score (/5.0)</td>
<td>Rank (/160)</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2.58</td>
</tr>
<tr>
<td>India</td>
<td>3.18</td>
</tr>
<tr>
<td>Pakistan</td>
<td>2.42</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>2.60</td>
</tr>
<tr>
<td><strong>Southeast Asia</strong></td>
<td></td>
</tr>
<tr>
<td>Score (/5.0)</td>
<td>Rank (/160)</td>
</tr>
<tr>
<td>Brunei</td>
<td>2.71</td>
</tr>
<tr>
<td>Cambodia</td>
<td>2.58</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3.15</td>
</tr>
<tr>
<td>Laos</td>
<td>2.70</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3.22</td>
</tr>
<tr>
<td>Myanmar</td>
<td>2.30</td>
</tr>
<tr>
<td>Philippines</td>
<td>2.90</td>
</tr>
<tr>
<td>Singapore</td>
<td>4.00</td>
</tr>
<tr>
<td>Thailand</td>
<td>3.41</td>
</tr>
<tr>
<td>Vietnam</td>
<td>3.27</td>
</tr>
<tr>
<td><strong>OECD Average</strong></td>
<td></td>
</tr>
<tr>
<td>Score (/5.0)</td>
<td>Rank (/160)</td>
</tr>
<tr>
<td>OECD Average</td>
<td>3.70</td>
</tr>
<tr>
<td>World Average</td>
<td>2.87</td>
</tr>
</tbody>
</table>


As Table 1 shows, South Asian economies have considerably poorer infrastructure than their peers in Asia, and currently perform well-below world average. As a result, they face non-tariff trade costs some 30 percent higher than their Southeast Asian peers, and 88 percent higher than the developed economies in the region [Figure 3]. These infrastructure gaps place South Asia at an immediate disadvantage when exporting to regional markets, making them a less attractive location when competing for foreign investment. Cross-regional infrastructure gaps will need to be significantly narrowed if economic integration across the two halves of the Indo-Pacific is to be achieved.
Until recently, governments in the Indo-Pacific have not paid a great deal of attention to I&C issues. For the last three decades, developing the institutional architecture for economic integration has been the principal focus of regional organisations. These efforts have delivered an extensive network of bilateral and regional trade agreements, which have made significant progress in terms of reducing traditional tariff barriers between Indo-Pacific economies. However, physical connectivity has not historically had as prominent a place as trade liberalisation on the regional economic agenda.

This is now beginning to change. The Asian Development Bank (ADB) played a catalytic role in promoting awareness of the I&C challenge through its path-breaking *Infrastructure for a Seamless Asia* report of 2009. This report drew attention to the importance of connectivity for the region’s economic success, demonstrating that the regional production networks that underpinned the Asian economic miracle depend on efficient, reliable and seamless infrastructure connections. It assessed Indo-Pacific connectivity, identifying that while parts of the region enjoyed world-class infrastructure, it was generally below the global average due to pressures resulting from rapid urbanisation and industrialisation. It was also the first technical study to quantify the size of the infrastructure gap, estimating that $750 billion of investment per year was needed between 2010 and 2020. Subsequent ADB-sponsored estimates have double this figure to $1.5 trillion per year²².

The ADB also argued that without region-wide mechanisms for facilitating greater levels of public and private investment in infrastructure, these targets are not likely to be met. As the ADB concluded:

> “In the long term, the full benefits of Asia’s size and diversity can be realized only by creating a single Asian market where goods and services can move freely and seamlessly. Moving towards that long-term vision requires world class and environment-friendly pan-Asian infrastructure networks—with open connections to regional and global markets, driven by political leadership as well as economic logic; built up from national, bilateral, and subregional programs; and guided and supported by broad-based and effective regional institutions that ensure their proper development and financing.”²³

Fortunately, governments have responded to the ADB’s call with enthusiasm. Since the publication of *Infrastructure for a Seamless Asia*, the region has seen six new I&C initiatives launched, and two existing mechanisms upgraded and refined. All governments in the Indo-Pacific have been involved in at least one of these, and the region’s two main economic bodies – ASEAN and APEC – have launched their own I&C programs. There is considerable diversity within the set of initiatives, which can be broadly classified into three types:

- **Three national programs:** from the major economic powers in the region: China’s Belt and Road Initiative (BRI), Japan’s Partnership for Quality Infrastructure (PQI) and the US’s International Development Finance Corporation (IDFC).
- **Two multilateral development banks:** The creation of the Asian Infrastructure Investment Bank (AIIB) and an expanded I&C agenda in the ADB’s most recent Strategy 2030.
- **Three sub-regional regulatory processes:** The Master Plan on ASEAN Connectivity (MPAC), APEC Framework on Connectivity (AFC), and expansion of the Greater Mekong Subregion initiative (GMS).
<table>
<thead>
<tr>
<th>INITIATIVE</th>
<th>MEMBERS</th>
<th>BUDGET</th>
<th>ACTIVITIES</th>
<th>INITIATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Belt and Road Initiative</strong></td>
<td>China</td>
<td>No official budget, est. $1 trillion</td>
<td>FDI, ODA, loans, technical assistance</td>
<td>State agencies support firms to invest in I&amp;C projects</td>
</tr>
<tr>
<td><strong>Partnership for Quality Infrastructure</strong></td>
<td>Japan</td>
<td>$200 billion</td>
<td>FDI, ODA, loans, technical assistance</td>
<td>Targeting ODA and technical assistance to I&amp;C projects</td>
</tr>
<tr>
<td><strong>International Development Finance Corporation</strong></td>
<td>United States</td>
<td>$60 billion</td>
<td>FDI, ODA, loans, technical assistance</td>
<td>Reorienting ODA to leverage private sector investment</td>
</tr>
<tr>
<td><strong>Asian Development Bank</strong></td>
<td>67 members</td>
<td>$147 billion subscribed capital</td>
<td>Loans, grants, technical assistance</td>
<td>Longstanding regional MDB; major I&amp;C focus in recent years</td>
</tr>
<tr>
<td><strong>Asian Infrastructure Investment Bank</strong></td>
<td>68 members</td>
<td>$100 billion subscribed capital</td>
<td>Loans (commercial only)</td>
<td>New regional MDB, with functional specialisation in I&amp;C projects</td>
</tr>
<tr>
<td><strong>Master Plan on ASEAN Connectivity</strong></td>
<td>10 ASEAN members</td>
<td>None, dialogue only</td>
<td>Policy harmonisation and capacity building</td>
<td>Nonbinding intergovernmental planning for priority I&amp;C projects</td>
</tr>
<tr>
<td><strong>Greater Mekong Subregion</strong></td>
<td>Cambodia, China, Laos, Myanmar, Thailand, Vietnam</td>
<td>None, dialogue only</td>
<td>Policy harmonisation and capacity building</td>
<td>Dialogue process to foster I&amp;C-enabling regulatory reforms</td>
</tr>
<tr>
<td><strong>APEC Framework on Connectivity</strong></td>
<td>21 APEC members</td>
<td>None, dialogue only</td>
<td>Policy harmonisation and capacity building</td>
<td>Adoption of best-practice methods for evaluation and implementation of I&amp;C projects</td>
</tr>
</tbody>
</table>
The Indo-Pacific I&C initiatives offer differentiated institutional mechanisms to solve the otherwise common infrastructure gap problem.

The first are their institutional mechanisms. The three national programs adopt an official development assistance (ODA) approach, where the donor governments offer loan and/or equity financing on a bilateral basis to support specific infrastructure projects in partner countries. By contrast, the ADB and AIIB are multilateral development banks: intergovernmental organisations which provide sovereign loans, grants and technical assistance to applicant countries which satisfy a set of transparent and rules-based guidelines for project governance. The three subregional regulatory processes further differ in that they do not offer either capital or technical assistance. Rather, they function as intergovernmental dialogue processes, designed to facilitate cooperation that lowers the regulatory barriers for private investment into identified priority infrastructure projects.

A second are their distinctive sectoral foci:

• Some take a "bricks and mortar" approach, focusing on the construction of traditional forms of infrastructure such as roads, railways and ports. This is especially prominent in the initiatives with Chinese involvement (BRI, AIIB and GMS), which reflect the capacity of its state-owned enterprises (SOEs) in the construction sector.

• Others adopt a broader ‘connectivity’ agenda: adding more sectors beyond traditional infrastructure (such as telecommunications and energy); and placing greater emphasis on the regulatory cooperation required in these higher-technology domains. This approach is typically found in initiatives with significant developed-country involvement, such as the APEC Framework on Connectivity, Japan’s PQI and the US-IFDC.

• The ADB is unique given its status as multilateral development bank, with an official remit of poverty alleviation and economic integration (rather than infrastructure). While 59 percent of ADB loan financing in the decade to 2017 was to infrastructure projects, its efforts in this space must be integrated within a broader development planning framework.

There are also architectural differences in terms of their leadership and membership.

• The three national programs are strictly bilateral, with the donor government negotiating packages directly with the recipient. This grants China, Japan and the US significant scope to set the terms for infrastructure they support, and on occasion has led to political controversies over the governance of key projects.

• The ADB and AIIB have the opposite architecture: multilateral, controlled by a large group of member states, with loan decisions made on a set of transparent policy criteria. Multilateralism offers a model which is less politicised due to shared ownership, but can often be less flexible due to the need to meet complex institutional policy requirements.

• Between these are the subregional processes, which are minilateral²⁴ groups using dialogue-based rather than decision-making mechanisms. Subregional processes have the advantage of taking a bottom-up approach to infrastructure planning amongst a more-tightly organised group of stakeholders; but suffer from a lack of dedicated budgetary resources to support to the projects they identify as priorities.
THE INFRASTRUCTURE CHOICE: EVALUATING BENEFITS AND RISKS

The recent proliferation of these initiatives has changed the game for I&C efforts in the Indo-Pacific. Where only a few years ago there was a lack of attention to I&C issues in the region, governments now enjoy a diverse menu of infrastructure options. Recipient countries have multiple options through which they can access financial, technical and/or regulatory support; while donor governments can direct their efforts through a wide range of institutional channels. The available options cater to a diverse range of preferences, with each offering different support mechanisms, sectoral foci and architectural configurations.

Indo-Pacific governments now have ‘infrastructure choices’ regarding which of these initiatives will best realise their connectivity objectives.

Presently, governments in the region are weighing their I&C options. While closing infrastructure gaps is a shared goal that will benefit all parties, the great diversity amongst countries in the Indo-Pacific mean each government has its own distinctive interests, objectives and priorities. A model that suits one country’s needs may be poorly aligned with those of another, depending on their developmental level, the specific types of infrastructure they require, and the character of their political and economic relationships with neighbours. Indeed, no single I&C initiative is likely to offer a perfect fit for all countries, and governments will need to weigh the benefits and risks of each when deciding how and with which to engage.

In making these decisions, there are five key considerations which governments must carefully evaluate.

One concerns the type of cooperation offered. There are multiple ways in which donor governments can support the construction of infrastructure projects, with different initiatives prioritising different mechanisms. These include:

- **Equity finance**: where a donor invests directly in a project, either through foreign direct investment or official development assistance modes. It usually includes involvement of the donor country’s firms (in either a constructor and/or operator role), and is attractive to host countries with limited fiscal and technical capacity. Equity finance is currently only offered by the three national programs: China’s BRI, Japan’s PQI and the US’s IDFC.

- **Loan finance**: where a donor offers a loan to support a project, made either on commercial or concessional rates (for sovereign loans, depending on the borrower). Loan finance is important to supplement private capital markets, particularly for long-term or strategically-significant projects with high risk-profiles. Loan finance is available from the multilateral development banks (ADB and AIIB), as well as via the three national programs.

- **Technical assistance**: where a donor offers support to conduct feasibility and design studies for an identified project, to advance it to a stage where it is ‘bankable’ under other financing mechanisms. This is suitable for commercially-attractive projects in countries that lack the domestic technical capacity to develop their infrastructure pipelines. The ADB has historically been the main source of technical assistance for regional infrastructure projects²⁵, but it increasingly being offered on a bilateral basis under the three national programs.

- **Regulatory dialogue**: where governments share information on infrastructure project pipelines, and coordinate to harmonise policy frameworks. These dialogues are especially important for cross-border infrastructure, which requires differences in national regulatory frameworks to be harmonised before investment can occur. It is the principal focus of the MPAC (Southeast Asia) and GMS (Mekong) subregional processes, but also occurs within the ADB and AFC.
• **Standard-setting**: where governments negotiate agreed standards and procedures for the development of infrastructure projects, which can be used by national agencies to streamline the implementation process. This is useful for governments with limited technical capacity in project design; and cross-border projects where each government will construct its own component of a regional network (such as railways and energy grids). Standard-setting is the primary objective of the AFC, and is also promoted under Japan’s PQI. The financing policies of the ADB and AIIB function as de facto standards, as all projects must comply with these organisation’s funding rules.

Importantly, there is no one-stop-shop that offers every form of support. The ADB comes closest, offering all but equity financing; while MPAC and the GMS specialise solely in regulatory dialogue and leave the remainder for other initiatives to address.

A pattern of functional specialisation has become evident, where each I&C initiative offers a limited package of services that reflect its members’ distinctive interests and capabilities.

**Another consideration is project governance.** Here, governments face a choice between a traditional ‘best-practice’ versus newer ‘quick-and-lean’ approaches.

• Some initiatives – particularly more-established ones such as the ADB, GMS, and MPAC – employ a best-practice governance model. This places considerable emphasis on detailed planning, approval and evaluation processes. This approach tends to produce more sustainable infrastructure; but is also often criticised for the complex bureaucratic requirements which increase the time and cost of project delivery.

• Some newer initiatives therefore aim to be quick and lean. This dispenses with some of the complex bureaucratic elements, so that projects can be designed, built and operational more quickly and at reduced cost. This is an explicit goal for the AIIB, whose functional specialisation in infrastructure is intended to make it a leaner institution in comparison to the ADB or World Bank²⁴. It is also a feature of the BRI, in which Chinese state-owned banks and construction firms can be quickly mobilised to build roads, railways and ports.

Governments need to carefully weigh an efficiency-sustainability trade off in choosing between best-practice and quick-and-lean governance options.

**A related question is the role of public versus private entities.** Infrastructure projects have typically been the preserve of government agencies, given their long time-horizons, complex risk profiles and high levels of societal externalities (both positive and negative). But given the scale of investment required, it is clear that private capital will need to become significantly more involved if the region’s infrastructure gaps are to be successfully closed. The ADB has estimated that 32 percent of infrastructure financing in the region presently comes from private sources, but that this share will need to rise to approximately 50 percent to mobilise the required volume of capital²⁷.

As Japanese Prime Minister Abe Shinzo has argued: “Public funds alone are not enough to cover demand [for infrastructure financing] this large. Precisely to meet such great demand, we must think up a structure for getting a variety of funding from the private sector to flow more into Asia.”²⁸

Some of the I&C initiatives therefore place a high priority on leveraging private capital. This is an explicit aim of the US’s IFDC²⁹ and Japan’s PQI³⁰, which each aim to use of public funding to ‘crowd in’ private capital via public-private partnerships. In recent years, improving private sector engagement has become a deliberate focus for the GMS³¹ and MPAC³² subregional processes. However, others take a more traditional government-led approach. The archetype is China’s BRI, which principally uses state-owned enterprises to finance, build and then operate projects³³. While the ADB and AIIB occasionally join consortia with private investors, the majority of their loan activity presently takes the form of ‘sovereign borrowing’ by host states³⁴. And for some initiatives, a stated goal of attracting private capital is yet to translate into success. For example, of the GMS’s current $39 billion pipeline of projects with identified finance, only $2.5 billion is from private sources³⁵.
Architectural and membership issues are also important. Here, governments face a spectrum of choices: bounded by multilateral institutions at one end, bilateral programs at the other, and minilateral initiatives between the poles. This poses what might be labelled an ‘efficiency-effectiveness’ trade-off. Large multilateral institutions have the advantage of being rules-based, comparatively more transparent, and have political buy-in from a diverse group of stakeholders. However, their size adds to the complexity, bureaucracy and responsiveness in mobilising resources and taking decisions. The small bilateral programs circumvent these problems by simplifying negotiations to only two governments. But they face an opposite set of challenges associated with transparency, consistency and political disputation by third parties. Depending on their design, minilateral initiatives might occupy a sweet spot between these alternatives; or may offer a worst-of-both-worlds outcome. It will be important to ensure a good ‘fit’ between institutional architectures and the infrastructure projects they seek to support.

Finally, issues of geostrategic competition also influence governmental choices. In recent years, great power competition has become a defining feature of international politics in the Indo-Pacific. I&C initiatives have become part of these rivalries. This is because infrastructure is not only an economic, but also a geostrategic issue. I&C initiatives – particularly the national strategies of China, Japan and the US – allow donor governments to make diplomatic side-payments to recipients. By facilitating trade and investment within specific bilateral networks, they also change relative patterns of economic dependence amongst governments in the region. The use of loan and investment financing also raises the potential for intergovernmental debt to be employed as a form of economic leverage in the negotiation of broader strategic relationships.

The complex interaction of economic and strategic logics further complicates the I&C decisions being made by Indo-Pacific governments. For these reasons, geostrategic issues loom large in many of the I&C initiatives in the Indo-Pacific. Examples include:

- The BRI has been widely interpreted as a Chinese move to develop an economic ‘sphere of influence’ amongst countries in Central and Southeast Asia, whose economies will become more closely bound to China with the construction of stronger infrastructure linkages.⁶
- Several port developments under China’s BRI have stirred controversy, with suggestions they may be ‘debt traps’, attempts to diplomatically buy-off clients, and/or could be used for military operations in the future. China-backed ports at Hambantota in Sri Lanka, Gwadar in Pakistan, Sihanoukville in Cambodia and Kyauk Pyu in Myanmar have all attracted such criticisms.
- The PQI and IDFC have each been framed as rivals to the BRI, through which the governments of Japan and the US are providing an alternative I&C model to compete with Chinese efforts.
- The establishment of the China-led AIIB has been viewed as a challenge to the longstanding (and Japan-led) ADB, which has now lost its position as the region’s principal MDB for infrastructure financing.
- ASEAN has designed the MPAC process not only to upgrade its internal economic connectivity, but also to strengthen and secure the ‘centrality’ of the ASEAN bloc within the Indo-Pacific’s institutional architecture.⁴⁴

For these reasons, governmental choices amongst the I&C options are not solely dictated by economic considerations. Strategic factors – including great power rivalry, institutional competition, and diplomatic signalling – are also part of the calculus. Donor governments and institutions can deploy I&C initiatives as leverage in contests for regional leadership; while recipient governments can use participation to bandwagon, balance and hedge their relationships with great powers. This poses an economic-strategic trade-off for both donors and recipients. Some infrastructure projects will have compelling economic rationales, while others may be justified (or inhibited) on strategic grounds instead.
The emergence of the new I&C initiatives is a welcome development for the Indo-Pacific region. Collectively, they promise to add approximately $1.4 trillion of public investment to the regional infrastructure funding pool. While this is only a small fraction of the $1.5 trillion per year the region requires, by leveraging additional private capital it will make an appreciable difference.

They also indicate that governments are now taking the connectivity problem seriously, and are willing to commit political capital to develop solutions to close infrastructure gaps. In this way, the regulatory efforts embedded in these initiatives may prove more important than their financial commitments, by creating cooperative institutions within which regulatory barriers to connectivity can be addressed. This combination of financial, political and institutional efforts will go a long way to building the physical infrastructure needed to sustain the Indo-Pacific’s economic dynamism.

However, with eight major initiatives now in play, governments are spoiled for choice. Donors have several vehicles with which to deliver their I&C commitments; and recipients have options as to which initiatives can be drawn on for support. This is a positive development, insofar as it means there are now multiple models which suit a diverse range of countries and infrastructure types. However, it also means there are clear overlaps, which may lead to duplication, inefficient allocation of resources, institutional fragmentation, or internecine competition between the different initiatives. There is also the shadow of geostrategic competition, as the region’s major powers have begun using I&C initiatives as a tool in contests for leadership. If not properly managed, these rivalries might render infrastructure a competitive rather than cooperative domain of Indo-Pacific politics.

If aspirations for a connected Indo-Pacific are to be realised, governments will need to make carefully informed decisions to manage risk and maximise results. There is no single yardstick by which these decisions should or will be made. One of the defining features of the Indo-Pacific is its marked diversity: bringing together countries with a wide range of political institutions, economic structures, developmental levels, strategic geographies and diplomatic relationships. No single I&C template will therefore provide a solution that meets the needs of all, and each government will pursue options best calibrated to its particular circumstances and objectives.

Nonetheless, there are three common principles which should inform the decision-making process.

**First, these diverse I&C initiatives do not pose governments an either/or choice.** The scale of the region’s infrastructure gaps is so large that all can clearly be accommodated. No initiative is intrinsically better or worse than another, as each have distinct benefits and risks. Their different governance models instead hold the potential for a beneficial division of labour, with initiatives matched to the specific projects and countries that best fit their model. For example:

- **The development of integrated energy grids in Southeast Asia is best suited to ASEAN’s MPAC, given its focus on regulatory harmonisation and aligned geographical scope.** For similar reasons, hydropower projects in the Mekong Basin are should be managed under the GMS process.
- **Cross-border infrastructure requiring sovereign loans are best served by the ADB and AIIB, as their multilateral membership allows risk to be shared amongst participants. Conversely, single-country project are aligned to the BRI, PQI and IDFC, whose bilateral architecture offer the advantage of more easily linking donor and recipient.**
- **Infrastructure platforms which require the negotiation of common standards (such as rail and telecommunications links) will be aided by dialogue processes such as the AFC and MPAC.** Those which principally require finance or construction capabilities (ports and roads) can instead look to the national programs or MDBs.
- **Higher-risk projects that are unlikely to be justified on purely commercial grounds will need to secure state-led financing mechanisms (BRI, ADB, AIIB); whereas more easily bankable projects can look to private-sector oriented alternatives (PQI and IDFC).**
The infrastructure choice is therefore one of efficient resource allocation, not picking winners. Infrastructure projects require both financial and political capital to succeed, both of which are in finite supply. Donor and recipient governments need to make allocative choices about where to invest these forms of capital to maximise returns. It will be important to ensure there is close alignment between the needs of a project, and the specialised features of the I&C initiative which supports it.

Second, there are fruitful opportunities for building linkages between the initiatives. As no initiative provides all the potential forms of support, joint projects which combine their respective strengths could develop innovative solutions. Indeed, cross-institutional I&C collaborations have already begun to form. These include:

- Four loan packages offered on a joint venture basis by the AIIB and ADB, which leverage the former’s capital stock and the latter’s technical expertise⁴⁵.
- Coordination between the GMS and ADB, which links the former’s planning mechanisms with the latter’s project evaluation capacity⁴⁶.
- A 2018 Memorandum of Understanding between the US, Japan and Australia to coordinate their infrastructure activities⁴⁷ creates mechanisms for collaboration between the PQI and IDFC.
- The Singapore-Kunming Rail Link (SKRL) project links ASEAN’s MPAC process (which manages the SKRL pipeline⁴⁸) with China’s BRI (which has funded and constructed several of its stages⁴⁹).

These initial collaborations indicate there is ample scope for developing further linkages across the I&C initiatives. Clear synergies exist between those with large pools of available capital (BRI, PQI, IDFC and AIIB), those with in-house technical capacity and expertise (ADB, AFC), and those which provide dialogue mechanisms to facilitate inter-governmental cooperation (GMS, MPAC). Infrastructure packages which combine capital, knowledge and dialogue will provide more effective solutions to the bankability problem than those which offer only one form of support. They will also reduce the likelihood of duplication and overlap between the initiatives, and ensure cooperative and mutually-beneficial outcomes.

Third, geostrategic concerns will need to be handled carefully. The importance of connectivity for the Indo-Pacific’s future means it is inherently linked to strategic considerations. While these initiatives can help close infrastructure gaps, they also allow governments to make diplomatic side-payments, shape patterns of economic dependence, and reshape institutional architectures. In an era when geostrategic rivalry in the region is increasing, there is already evidence that infrastructure has become a vehicle for major power competition. If this pattern accelerates, there is a risk that internecine competition between the various I&C initiatives may result in zero-sum games. This will further exacerbate the bankability problem that has caused infrastructure gaps in the first place, undermining efforts to upgrade regional economic integration.

While it is impossible to separate the strategic and economic dimensions of infrastructure, their relationship can certainly be managed. Investing in cooperative institutions with a diverse range of stakeholders will prove critical. By providing a space for the negotiation of shared interests, these institutions help ensure the regional infrastructure game is positive-sum in nature. They can improve transparency regarding the I&C efforts of both donors and recipients, building trust and lowering risks of conflict. They can also negotiate mutually-agreed standards, principles and processes, which will build consensus behind rules-based approaches to infrastructure development. By framing connectivity as a shared problem requiring collaborative solutions, a cooperative approach to I&C will help secure the ongoing economic dynamism of the Indo-Pacific.
APPENDIX: CATALOGUE OF INDO-PACIFIC I&C INITIATIVES
China’s BRI is an infrastructure development initiative that aims to develop greater connectivity in between China and Eurasia. It has two components: the Silk Road Economic Belt, a series of overland infrastructure projects connecting China to Europe across Central Asia; and the 21st Century Maritime Silk Road, a set of maritime projects connecting China to the Middle East along the Pacific and Indian Ocean littorals.

The BRI is a mobilising initiative, under which Chinese agencies (principally state-owned enterprises and banks) provide loans and technical assistance to build infrastructure projects in regional partners. The bulk of BRI projects are negotiated and managed on a bilateral basis between China and the host government. No official list of BRI projects is maintained, but some prominent examples include rail links to Southeast Asia, economic corridors through Pakistan, and Hambantota Port in Sri Lanka.

The BRI features both economic and strategic motives. Economically, it aims to develop China’s western provinces, encourage greater trade integration with contiguous partners, deploy China’s massive foreign currency reserves, and provide an outlet for surplus industrial and construction capacity. Strategically, the BRI is designed to strengthen China’s political influence abroad, secure China’s energy supply, improve the country’s diplomatic image, and increase its economic leverage over its neighbours. Some unique features of the BRI include its willingness to invest in politically-challenging countries such as Pakistan; the extension of large (and potentially unsustainable) amounts of sovereign debt to small nations; and an emphasis on the use of Chinese state-owned construction firms. These have been the subject of external criticism, and on occasion has led to local opposition or controversy over BRI projects.
The PQI aims to promote a Japanese vision for ‘quality infrastructure investment’ in collaboration with other governments and the Asian Development Bank (ADB). It contains four pillars, which combine a financing commitment of $200 billion with regulatory and technical cooperation measures.

These comprise: (1) an expansion of Japanese development assistance for infrastructure projects; (2) additional collaboration between Japan and the ADB; (3) increased funding for high-risk infrastructure projects via the Japan Bank for International Cooperation (JBIC); and (4) promoting a model for ‘quality infrastructure’ through the development of global standards. The PQI also intends to leverage Japanese funding commitments to mobilise private sector investment, and projects are principally delivered by private firms.

Many have interpreted the PQI as a Japanese counter-response to China’s BRI, citing its timing and similar content. It is differentiated by its focus on quality infrastructure, emphasis on private sector involvement, and multilateral involvement via the ADB. There are several instances where Japanese and Chinese firms have competed for infrastructure investment opportunities in the region, notably over high-speed rail projects in Indonesia and deep-water ports in Bangladesh. Despite its modest (state-funded) budget compared to the BRI, the involvement of private capital means the PQI’s impact is greater than headline figures suggest.

Surveys indicate that Japanese firms have invested almost twice their Chinese counterparts in infrastructure in Southeast Asia.
The International Development Finance Corporation (IDFC) aims to facilitate the involvement of the private sector in the economic development of low- or lower-middle-income countries. It creates a new institution, which merges the existing Overseas Private Investment Corporation (OPIC) with a number of other US development finance institutions.

The IDFC has three distinctive features: (1) a doubled portfolio cap of $60 billion; (2) new authorities including taking minority equity positions and offering technical assistance grants for feasibility studies; and (3) an independent accountability mechanism to publish project-level data on loan and investment activities. These reforms are designed to provide a single, more flexible institution that can better leverage private-sector investment into US government development projects. Infrastructure and connectivity projects are expected to comprise a large part of IDFC’s work.

The enabling legislation (the BUILD Act) was passed by the US Congress on 3 October 2018. At time of writing the IFDC remains in an institutional-setup phase, and no projects have yet been launched. However, its activities will be differentiated from other I&C initiatives by its focus on the private sector, with an objective of facilitating private-sector led projects rather than government-driven efforts. Its independent accountability mechanism also distinguishes it from other national programs (particularly the BRI), which lack this level of transparency. In this regard, many commentators have contrasted the IDFC with China’s BRI, as it provides an alternate model for I&C financing which better addresses competitiveness, transparency and sustainability objectives.

COUNTRY
United States

YEAR LAUNCHED
2018

TYPE
National program

BUDGET
$60 billion

INVOLVED COUNTRIES
Global

SECTORAL FOCUS
Private sector involvement in development finance.
The Asian Development Bank is an MDB which offers various forms of development assistance – including loans, grants and technical assistance – to developing countries in the Asia-Pacific. Its principal official objective is to eradicate extreme poverty in a manner that promotes integration, inclusivity, sustainability and resilience.

While its remit includes a diverse array of developmental areas, infrastructure has historically been a major focus of its work (accounting for 59% of all loans in the decade to 2017). The ADB has a deep pool of specialist expertise in infrastructure development built over five decades, and an extensive network of country offices throughout the region. Japan has historically played a leadership role in the ADB, holding the bank presidency since inception and contributing the largest share of subscribed capital.

The ADB is widely regarded as a geopolitically-neutral institution, pioneering international best practices in development finance and adopting a technocratic approach to project governance. One prominent criticism focusses on the need for more representative governance. Another concerns bureaucracy imposed by its high governance standards, which raise the cost of project development and delay investment decisions for complex infrastructure projects. The ADB has worked closely with the AIIB since its inception, supporting its institutional-development and providing opportunities to participate in ADB-led projects. Its most recent strategic document – the ADB Strategy 2030 of 2018 – seeks to achieve better leverage from its loans, prioritising co-financing from both government and private sector partners. It also plans to scale up its infrastructure investments to account for 70% of all loan activity by 2020.
The AIIB is a China-initiated and -led MDB, which offers loan finance to infrastructure projects in Asia. Established in 2015, its $100 subscribed capital makes it the world’s fourth largest MDB, and has a broad membership including fourteen G20 members⁷⁸. China is the largest shareholder (with 27% of the voting stock)⁷⁹, and currently holds the presidency and headquarters. In comparison to other MDBs, the AIIB specialises solely on infrastructure, with the intent of providing a ‘lean’ institution that can quickly move projects through the development pipeline⁸⁰. It is currently in a start-up phase, with most projects thus far undertaken as joint ventures with either the ADB or World Bank. It presently only offers commercial loan financing, but may offer concessional financing in the future⁸¹.

The AIIB is significant because it is the first multilateral institution proposed and led by China, demonstrating China’s shift from being an ‘institution taker’ to ‘institution maker’ in global governance. The AIIB’s initial announcement – made by Xi Jinping in 2013 simultaneously with the BRI⁸² – has led to suggestions it will function as the “BRI Bank”⁸³. Others have argued it will fail to meet normal MDB governance standards⁸⁴. Citing such governance concerns, the US⁸⁵ and Japan⁸⁶ have declined membership. However, the AIIB has entered into cooperative MoUs with the other major MDBs⁸⁷, adopted similar governance systems to these partners⁸⁸, and made most of its loans in joint-venture with them⁸⁹. As the AIIB builds in-house capacity to develop an infrastructure pipeline, and begins to issue loans independently, the robustness of its governance frameworks will be tested.
MPAC began life in 2010 as a vehicle for the ‘connectivity’ elements of the ASEAN Economic Community (AEC) initiative\(^9\). On completion of the AEC, MPAC was renewed and updated in 2016\(^1\). It is principally a regulatory initiative, comprised of ministerial, technical and expert working groups which aim to facilitate connectivity-enhancing projects within the ASEAN bloc. MPAC addresses three key pillars in its approach to regional integration: physical (transport infrastructure), institutional (reducing trade barriers) and people-to-people (education, human resources and mobility) connectivity. It has no dedicated budget. Instead, it focuses on fostering the regulatory reforms and cooperation needed for other parties – governments, MDBs and/or the private sector – to finance and build connectivity-enhancing projects.

MPAC serves both economic and strategic agendas for ASEAN. Economically, it aims to provide the connectivity platforms needed to foster deeper trade and investment connections amongst ASEAN member states. An emphasis is on promoting the development of the CMLV states. Strategically, it is intended to secure ASEAN position as a central actor in the Indo-Pacific region, and to counter-balance against larger neighbours to the north and west.

While MPAC has produced several successes (particularly in road-building and shipping), many of its more ambitious initiatives have languished, with limited progress in the energy, railway and ICT sectors. This is principally due to political barriers to regulatory harmonisation in these sectors, and a lack of private sector financing for high-risk projects\(^2\). To address this, the 2016 update to MPAC puts considerably greater emphasis on mobilising private sector financing than its first iteration.

**HOST INSTITUTION**
Association of Southeast Asian Nations

**YEAR LAUNCHED**
First iteration 2010, updated in 2016

**TYPE**
Subregional process

**BUDGET**
None, dialogue only

**MEMBER STATES**
All ASEAN member states: Brunei, Cambodia, Indonesia, Laos, Myanmar, Philippines, Singapore, Thailand and Vietnam

**SECTORAL FOCUS**
Physical, institutional and people-to-people connectivity
APEC has a long history of contributing to connectivity within the Asia-Pacific region, through its broad set of official-level working groups and annual Leaders' Summits. At the 2013 Leaders’ Summit, the member economies agreed to establish an APEC Framework on Connectivity to integrate efforts already underway in its dialogue mechanisms, such as the transport, telecommunications, energy, supply chain and investment working groups.

Recognising the importance of infrastructure (alongside liberalisation) for regional economic integration, the AFC was a move toward incorporating I&C into APEC’s Bogor Goals for the creation of a free trade and investment region amongst Asia-Pacific economies. An APEC Connectivity Blueprint 2015-2025 was subsequently agreed at the 2014 Leaders’ Summit, which enumerated a set of I&C priorities to guide future work and a set of measures by which its goals would be benchmarked.

As a non-binding dialogue institution, APEC’s activities in the I&C space principally consist of intergovernmental policy dialogues. These aim to build consensus regarding regulatory reforms for better infrastructure development, which governments will then implement on a voluntary basis. A distinctive feature of APEC’s recent work has been consultation with technical experts to define best practices for the assessment, implementation and ongoing management of infrastructure project proposals. Capacity-building workshops and a Guidebook on Quality of Infrastructure Development and Investment have helped to promote these practices amongst member economies. These efforts have particularly been focussed on infrastructure needed to facilitate the development of regional supply chains. In this way, APEC functions primarily as a best-practice ‘knowledge bank’, rather than a planning vehicle for specific infrastructure projects.
The GMS was established as an ‘economic community’ of the Mekong subregion in 1992, under the sponsorship of the ADB⁹⁷. It was the pioneer of the model subsequently embodied in the ASEAN MPAC: a dialogue initiative aiming to foster the regulatory reforms needed to enable government and private actors to undertake connectivity-enhancing projects.

In 1998, it also pioneered an ‘economic corridors’ approach to development planning, identifying three cross-regional corridors around which infrastructure projects would be focused⁹⁸. It has achieved marked successes in transport, with other 10,000 km of new roads built under GMS action plans between 2002 and 2016. Its efforts in trade facilitation and energy have comparatively lagged behind, due to political and institutional challenges for the harmonisation of regulatory regimes⁹⁹.

The GMS is widely considered one of the most successful I&C initiatives in Asia. However, it is not without controversy. Despite its ADB sponsorship, since 2005 China’s Yunnan province has been one of the principal funders of GMS projects. Some analysts have suggested it has since been used as a geoeconomic tool to bind the Mekong into China’s economic orbit¹⁰⁰. The GMS has also been a major vehicle for hydropower construction across the subregion (particularly in Myanmar), where such projects have had a chequered record in terms of social impact and environmental sustainability¹⁰¹. In its most recent strategic update – the Ha Noi Action Plan of 2018 – the GMS has begun pursuing linkages with other regional I&C initiatives, notably China’s BRI and ASEAN’s MPAC¹⁰².
ACKNOWLEDGEMENTS

The Perth USAsia Centre would like to thank the wide range of individuals who have supported the production of this report. Aedelina Ebert provided invaluable assistance during the research exercise, and led data collection on the Appendix to this report. Participants at the Centre’s Indo-Pacific Infrastructure and Connectivity workshop held in Perth on 11 October 2018 added critical governmental and private sector perspectives on policy solutions for the bankability problem. The author benefited greatly from the invaluable resources provided by the Centre for Strategic and International Studies’ Reconnecting Asia project. Many other individuals — across business, government and academia — kindly offered insights, information and feedback that have enriched the report. Nonetheless, the author is responsible for all content and arguments contained herein.

ABOUT THE PERTH USASIA CENTRE

The Perth USAsia Centre located at The University of Western Australia is a non-partisan, not-for-profit institution strengthening relationships and strategic thinking between Australia, the Indo-Pacific and the USA. The Centre is a leading think tank focusing on geopolitical issues, policy development and building a strategic affairs community across government, business and academia. Since the Centre’s inception in 2013, we have collaborated with over thirty partners to convene more than four hundred events across sixteen cities in eight countries, engaging a world class community network of more than 6,500 strategic thinkers and leaders.

Dr Jeffrey Wilson, Research Director

Jeffrey provides leadership and strategic direction in developing and managing the Centre’s research programs across its publications, policy and dialogue activities. He specialises in how transformations in the regional economic architecture — including trade agreements, multilateral organisations and policy dialogues — are reshaping the contemporary economic and business environment of Asia. He has contributed to a range of national and international policy dialogues with the governments of the US, China, Korea, Indonesia, India, Singapore and Australia. He is the author of two books, over two dozen scholarly articles and chapters, and a wide range of policy analyses and reports for both Australian and international audiences.


@JDWilson08
DISCLAIMER

This publication is designed to provide accurate and authoritative information in relation to the subject matter covered. It is provided with the understanding that the publisher is not engaged in rendering any form of professional or other advice or services. No person should rely on the contents of this publication without first obtaining advice from a qualified professional person.

© PERTH USASIA CENTRE
2018

This publication is subject to copyright. Except as permitted under the Copyright Act 1968, no part of it may in any form or by any means (electronic, mechanical, microcopying, photocopying, recording or otherwise) be reproduced, stored in a retrieval system or transmitted without prior written permission. Enquiries should be addressed to the publishers.

Notwithstanding the above, educational Institutions (including schools, independent colleges, universities, and TAFEs) are granted permission to make copies of copyrighted works strictly for educational purposes without explicit permission from the Perth USAsia Centre and free of charge.
ENDNOTES


10. Author’s calculations, from UNCTAD (2018), UNCTADStat Database, http://unctadstat.unctad.org/EN/


12. For a summary of recent estimates, see Jeffrey Wilson (2018), Connecting the Asia-Pacific: Australian Participation in Chinese Infrastructure Initiatives, Sydney: Australia-China Relations Institute, Table 1.


17. “Trade costs” measures all additional costs imposed on trade over and above the cost of domestic (i.e. not international) trade, expressed in ad valorem equivalent. The UN-ESCAP/World Bank database decomposes these into tariff and non-tariff costs. Non-tariff costs originate from a variety of sources, including compliance with customs procedures, business transaction costs associated with operating in foreign markets, and transport/shipping charges. While infrastructure is not the sole contributor to non-tariff trade costs, they account for a significant component. For information see UN-ESCAP World Bank (2018), Trade Costs Database https://www.unescap.org/resources/escap-world-bank-trade-cost-database

18. As non-tariff trade costs as expressed in ad valorem terms, any measured increase indicates a real rather than nominal rise.


22. Supra n. 13.

1. 'Minilateral' refers to a grouping which contains a subset of, but not all, relevant parties involved in a given issue area. For the purposes of Indo-Pacific connectivity, APEC is therefore considered a minilateral institution, as it does not presently include all members of the Indo-Pacific region.


4. Asian Development Bank (2017), Meeting Asia’s Infrastructure Needs, Manila: Asian Development Bank, Figure 5.4.


9. Association of Southeast Asian Nations (2010), Master Plan on ASEAN Connectivity, Jakarta: ASEAN Secretariat, Chapter 4.


16. Supra n. 45.


22. Association of Southeast Asian Nations (2010), Master Plan on ASEAN Connectivity, Jakarta: ASEAN Secretariat, p. 5.

46. The principal mechanism is the RIF, launched in 2011. Supra n. 31.


48. Association of Southeast Asian Nations (2016), Master Plan on ASEAN Connectivity 2025, Jakarta: ASEAN Secretariat, p. 79.


53. Supra n. 53.


57. South China Morning Post (2018), ‘China, Pakistan can resolve investment problems, but ‘Belt and Road’ concerns should not be ignored, experts say’, 10 September.


59. Supra n. 33.


62. Supra n. 41.


68. Supra n. 29.


70. Supra n. 42.

71. Author’s calculations, from Asian Development Bank [various years], ADB Annual Reports, Manila: Asian Development Bank.


75. Supra n. 49


89. Supra n. 82.
90. Association of Southeast Asian Nations (2010), Master Plan on ASEAN Connectivity, Jakarta: ASEAN Secretariat.
91. Association of Southeast Asian Nations (2016), Master Plan on ASEAN Connectivity 2025, Jakarta: ASEAN Secretariat.
92. See Association of Southeast Asian Nations (2017), Assessment of the Implementation of the Master Plan on ASEAN Connectivity 2010, Jakarta: ASEAN Secretariat.
95. A review of efforts undertaken within the AFC process is available in Asia-Pacific Economic Cooperation (2017), Study on Infrastructure Investment in the APEC Region, Singapore: APEC Secretariat, Table 1.