

## **INFORMATION NOTE**

### **PROGRESS OF THE ESTABLISHMENT OF THE INITIAL ASEAN PRIORITY INFRASTRUCTURE PROJECT PIPELINE UNDER THE MASTER PLAN ON ASEAN CONNECTIVITY (MPAC) 2025**

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#### **1. Background**

The Association of Southeast Asian Nations (ASEAN) is one of the world's fastest-growing regions, driven by increasing productivity and trade within ASEAN, as well with the rest of Asia and globally. However, budget constraints and competing demands for resources, means that investment often struggles to keep up with the infrastructure needs. Indeed, while the annual regional infrastructure investment requirements are estimated to exceed USD 110 billion a year, this amount is between two to six times the annual amount that the ASEAN Member States (AMS) have historically spent on infrastructure. Therefore, to help accelerate investment in infrastructure in the region, the Master Plan on ASEAN Connectivity 2025 (MPAC 2025), recommended the establishment of *"a rolling priority pipeline list of potential ASEAN infrastructure projects and sources of funds."*

As there is not yet an ASEAN regional process for identifying and prioritising infrastructure projects, the ASEAN Secretariat engaged the World Bank, with the support of the ASEAN-Australia Development Cooperation Program Phase II (AADCP II), to provide technical assistance in developing a rolling priority pipeline (the Pipeline) of potential ASEAN infrastructure projects across the transport, energy, and information and communication technology (ICT) sectors. The Pipeline is intended to be a list of well-structured and economically viable physical infrastructure projects that enhances the movement of people, services, goods, and innovations within ASEAN and contribute to ASEAN's objectives of improving access and increasing connectivity in and among the AMS.

Projects were submitted for consideration for the Pipeline by the AMS based on their own national priorities, utilising a standard project proposal template. The projects submitted were assessed in consultation with ASEAN, the AMS, as well as with technical and sector specialists from the World Bank. The Pipeline will be rolling, meaning that projects in the Pipeline will evolve over time, as new project proposals are submitted, and existing Pipeline projects are either implemented or removed from the Pipeline due to lack of progress or change in circumstances. In this way, the Pipeline is designed to be a long-term dynamic tool to help the AMS assess and prioritise infrastructure projects that will have regional impacts

#### **2. Key Considerations When Developing Projects in the Pipeline**

There are a number of key considerations that should be taken into account by ASEAN and the AMS when developing projects, to ensure the success and sustainability of the Pipeline. First, large infrastructure investments often have significant financial trade-offs. On the one hand, infrastructure corridors have great potential as a development tool, but on the other, they are typically very costly to develop, not only in terms of their direct outlays, but also in



terms of other forgone development opportunities. Because such investments require large funding (and often large borrowing) up front, infrastructure corridor investments can potentially jeopardise fiscal sustainability and macroeconomic stability. Even projects with private financing often generate contingent liabilities for the government. In addition, governments often do not adequately budget for the ongoing costs of operating and maintaining an asset once it has been built. Indeed, over the life cycle of an asset, these costs can often be greater than the initial capital outlay. Therefore, ensuring debt sustainability is critical, and within ASEAN, large projects should only be undertaken if it is shown that these projects are affordable to the government and/or end users.

Second, it has been observed in many regions that the selection of projects can often be determined more by geopolitical factors, than whether the actual underlying project is viable and makes economic sense for the country that ultimately has to bear the costs of the project. However, while such geopolitical considerations often do not fit into a paradigm of classic 'best practice' project preparation, there is no reason why they cannot be complementary, as long as such geopolitical infrastructure projects are thoroughly assessed from an economic, financial, and Environmental and Social (E&S) perspective.

Third, it is important to weigh the advantages and disadvantages between different modalities of transport and take into account the risk of infrastructure redundancies. For example, highways are typically cheaper to build and maintain than railways and have the advantage of allowing more connectivity and access along their routes, compared with railways, which have fixed access points (i.e. stations) along their route. On the other hand, rail routes can move much higher volumes of freight and passengers with lower environmental impacts. At the same time, given budget constraints, the AMS must be wary of creating infrastructure redundancies, such as building both a road and a railway along the same corridor, or two ports that are close to one another. Furthermore, it is important to take into account the changing pace of technology when assessing projects and estimating future demand. In this context, governments can be supported in their decision-making processes by undertaking well-prepared feasibility studies, which, inter alia, should have an options analysis that will help determine whether a road or rail route is the best option to serve a particular infrastructure 'need'.

Fourth, there is often a need to consider different development objectives. ASEAN is a diverse region, with countries of varying income levels and, as such, it will be important to ensure that any exercise in regional planning takes into account the differing development objectives of all of the countries involved and prioritises the lower-income countries, so they can 'catch up' to the rest. In addition, certain corridor investments may benefit some people more than others, and the failure to identify the relative and absolute 'winners and losers' and to support them as needed could lead to social problems that may impede the successful development of a project. Various policies and institutional reforms ('soft' interventions) can be used to ensure that the benefits of a project are more widely shared. The most promising complementary interventions are upgrading skills<sup>1</sup>, strengthening public sector governance, and upgrading land administration systems around the corridors.

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<sup>1</sup> For more on upgrading skills, please refer to the World Bank World Development Report 2019 on the Changing Nature of Work, found at: <http://www.worldbank.org/en/publication/wdr2019>



Fifth, it is important to appraise the potential of the corridor using robust spatial data and reliable econometric methods. It is recommended to use more than one rigorous method for robust economic appraisals and to avoid assumptions where possible by maximising the use of spatial data. For instance, network modelling could be the best method for appraising corridor placement for transnational and trans-regional connectivity and efficiency, reduced form modelling could be best for rapidly assessing the corridors' potential, and general equilibrium modelling could be best for capturing indirect economic effects<sup>2</sup>. Systematic national infrastructure modelling would also help link sectors and allow a "whole of infrastructure" approach.

Sixth, while mobilising private sector investment is critical, it is also important to ensure that the public sector considers any disparities in regional development that such private sector investment can cause. While private investment can help enhance the financial sustainability of connectivity projects, the private and public sectors tend to have different incentives in relation to the development of corridors. For example, the private sector will typically tend to cluster its investments around fast-developing growth centres on or near the corridors. Therefore, public investment may be needed to correct the ensuing disparities in spatial development by rebalancing the rapid growth of corridor nodes compared with the relatively slower growth in less productive regions.

Finally, physical infrastructure will reach its full economic potential only in a supportive enabling environment—what is often referred to as the development of "soft infrastructure." MPAC 2025 recognises this through its complementary pillars "institutional connectivity" and "people-to-people connectivity." To maximise the socio-economic gains from the investment in physical infrastructure, it will be important to continue to remove barriers to regional trade and competition, harmonise regulations and develop regionally-recognised standards. These measures, when taken alongside the development of physical infrastructure, will help effectively reduce the costs of trade and spur overall regional connectivity and growth. For those countries looking to attract private sector involvement in the Pipeline projects, it will also be critical to ensure that the policy and enabling environment of the AMS is supportive of such private investment.

### 3. Initial and Potential Pipeline Projects<sup>3</sup>

Based on an assessment of the projects submitted by the AMS, three pipelines of infrastructure projects have been developed:

- **Initial Pipeline A (6 projects):** Consists of projects that are at an advanced stage of project preparation, have relatively robust economic cases, and are likely to be able to substantially mitigate risks, including E&S risks. Consequently, Initial Pipeline A projects could start procurement or implementation within the next one to two years.

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<sup>2</sup> 'The Wider Economic Benefits (WEB) of Transport Corridors in South Asia' prepared by ADB, DFID, JICA, and World Bank.

<sup>3</sup> The list of Initial and Potential Pipeline Projects will be provided in a presentation that will be circulated prior to the briefing on 10 June 2019 in Jakarta.

- **Initial Pipeline B (13 projects):** Consists of projects where the economic case is reasonably strong but may need further substantiation and/or risks appear to be manageable, but further studies need to be undertaken. Consequently, Initial Pipeline B projects could start procurement or implementation within the next two to five years.
- **Potential Pipeline (21 projects):** Consists of projects where the economic cases are currently not robust and/or risks appear to be substantial or are not yet determined. As such, further studies will be necessary to substantiate the viability of the projects before procurement or implementation.

The projects in the Initial Pipeline and Potential Pipeline were selected from project applications submitted by the AMS based on their national level priorities. A total of 42 projects were submitted by eight AMS. Forty projects were confirmed to have satisfied the initial screening criteria, of which the majority are road projects (17), followed by railways (10), power interconnections and transmission lines (5), bridges (3), ports (2), airports (2), and ICT networks (1).

The Initial Pipeline projects were selected taking into consideration their strategic relevance, impact on regional connectivity, E&S impact, project feasibility, and the contracting agency's implementation capacity.

#### **4. Linking the Pipeline Projects to ASEAN's Connectivity Agenda**

Economic corridors are routes along which people, services and goods move, stimulating economic growth. Whilst economic corridors may have different definitions and serve multiple purposes, they typically feature three complementary components: a transport corridor, industrial production centers, and urban centers. As such, economic corridors in the ASEAN region build on the existing infrastructure network and aim at expanding their connectivity, in order to facilitate travel, trade and economic activity, not only within the ASEAN region, but also with neighboring countries.

The major economic corridors in the ASEAN region include the Greater Mekong Sub-region (GMS) economic corridors, the East ASEAN Growth Area (BIMP-EAGA) and the Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT). The launch of the Belt and Road Initiative (BRI) in 2013 will add additional economic routes, helping to further connect AMS by sea and by land.

Based on an assessment of these projects, many of them fall within these corridors and, as such, have the potential to complement and strengthen the existing economic corridors by enhancing connectivity and facilitating new connections and gateways.

It is important to note that many of the Pipeline projects are still at an early stage of project development and, as such, further assessment will be required before the projects can move forward to implementation. Important policy recommendations to support project implementation include:

- Undertaking early environmental and social assessments and consultations;



- Mitigating infrastructure redundancy risk by undertaking an options analysis of competing projects in a given corridor;
- Sequencing those projects with interdependencies on other projects, so that they can maximise their value;
- Undertaking debt sustainability and fiscal risk assessments of the projects, including any direct and contingent liabilities (in the case of PPPs);
- Ensuring transparency and competition in procuring the project; and
- Where projects are proposed with bilateral tied financing, carefully assessing the economic benefits from the country's perspective.

In addition, while the 19 projects selected for the Initial Pipeline were chosen for their positive impact on ASEAN's connectivity agenda, these projects form only a part of the overall infrastructure network necessary to meet ASEAN's connectivity vision and, as such, there is a strong need for continued master planning and prioritisation of projects with connectivity impact.

## **5. Importance of Capacity Building and Master Planning at the Regional Level**

The capacity of the AMS to plan, prioritise, structure, procure, and manage infrastructure projects varies greatly from country to country and sector to sector. If this capacity is not strengthened through wide ranging capacity building support, there is a risk that some of the projects in the Pipeline may not progress, despite strong support at the country level. As such capacity building will take time, it will be important for the AMS to be able to access professional advisers to help them prepare and structure projects.

In addition, there are a number of regional, sub-regional, and national master plans that are often overlapping and sometimes conflicting with each other. Therefore, it is important for ASEAN and the AMS to coordinate and monitor the various master plans and project pipelines at national and regional levels to ensure they are consistent not only with each other, but more importantly with ASEAN's vision for connectivity. This will require active and open discussion and cooperation among the AMS.

In this context, the focus moving forward should be on (a) building capacity, (b) providing funding to support certain AMS to complete the due diligence and structuring required to turn the projects in the Pipeline into implementable infrastructure projects that can help enhance ASEAN regional connectivity, and (c) strengthening master planning and coordination at the ASEAN regional level.

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