



## DANANG PARIKESIT

Universitas Gadjah Mada

# Recent Advances in Indonesia's Infrastructure Development through Private Sector Financing

## Abstract

This paper highlights Indonesia's demand for infrastructure development and the investment policy scenario that needs to be developed. The strategy to diversify the source of capital investment is the centerpiece of the current administration, by combining public and private sector finance, as well as leveraging the financial capacity of state-owned enterprises (SOEs). In this article, the evolution of the Indonesian public-private partnership (PPP) scheme and the most recent framework are elaborated.

Case studies of the Central Java Power Plant and a limited concession scheme for Soekarno-Hatta International Airport are used to highlight some of the lessons learned by the contracting agencies to improve the quality of Indonesian PPP schemes and attract international investors to develop infrastructure in Indonesia. On the way forward, future Indonesian PPP policies should (1) be linked with the macroeconomic policy of the Indonesian government by incorporating the PPP planning process into the budgetary pro-

cess, (2) be focused to improve the capacity of the government contracting agencies, (3) improve the quality of concession agreement design, renegotiation and dispute settlements, (4) strengthen the role of SOEs as project developers and partners in infrastructure investment, and (5) ensure a regular PPP policy review process, repository of Indonesia's experience, and public information disclosure for PPP plans and contracts.

## Indonesia's Infrastructure Development and the Need for a Comprehensive Financing Strategy

The current Indonesian administration, through BAPPENAS (National Development Planning Agency, which also serves as the Ministry of National Development), identifies that in order to stimulate development for the high-growth and least-developed economy of the country, the government should invest heavily in infrastructure and provide enough energy. Right after President Joko Widodo took power, he has continuously and consistently expressed his vision that infrastructure should be his top priority\*<sup>1</sup> besides adjusting the expenditure and revenue structure, including rationalizing subsidies and ener-

gy prices, as well as continuing a reform in the natural resource sector, notably oil, gas and mineral resources. He also continues his campaign for improving the condition of people at the Indonesian border, in villages and in remote areas. Reallocation of financial resources coming from the new fiscal window (due to the reduced fuel subsidy) is used to develop infrastructure in those regions, both using decentralized funds, direct investment and the newly established "village funds" to be allocated to each village in Indonesia. The government is committing to increase its infrastructure spending by more than 5% in the next 5 years.

Large investments, including commercially feasible projects such as power plants, toll roads, and ports, continue to seek financial resources from the private sector, either through PPP or by utilizing SOE financing as an investment vehicle. BAPPENAS data analysis demonstrates that there is an up-and-down of investment among the privately funded projects. The telecom sector, which is relatively fully deregulated and the most investment-friendly sector, records the highest proportion of privately funded projects, followed by the energy sector – where the government is still using PLN and PERTAMINA (the Indonesian energy company, previously oil and gas company) to invest heavily in power plants and oil and gas production/refinery facilities. The electricity connection from designated power plants and the main gridline is still an issue due to the loss of energy.

The Mid-Term review from the BAPPENAS/JICA (Tusk Advisory, 2013) just before the new administration took over indicated that the budget window for infrastructure is merely 7% of the existing budget,<sup>\*2</sup> leaving a huge demand for investment to come from other sources.

The study team estimated that, with the government's plan to utilize SOEs as the main driver for economic development, the method to reallocate the IDR 2,086 trillion funding gap will be determined. Rinaldi (2016) however reported that the Indonesian government through BAPPENAS has indicated that IDR 4,796 trillion<sup>\*3</sup> (around USD 368 billion, at 1USD=IDR13,000) is required. Out of that number, 41.3% will be financed using the government budget (national and sub-national), 22.2% is to be SOE capital investment, and 36.5% is expected from the private sector.<sup>\*4</sup> The fact that the earlier analysis depicted in Figure 1, and

the current estimate of more than double, shows either that the demand for infrastructure finance is expanding to include expenses not covered in the earlier analysis i.e., only infrastructure with commercial value, or that the method of estimating infrastructure needs was not robust. The later issue is considered critical by foreign investors and they view it as political risk exposure.

On the supply side, the source of capital will have a challenge. Trihargo (2016) reported that at the moment the big government-owned banks can only provide IDR 338 trillion loan facility over the next five years. Non-bank financing is currently holding IDR 1,484 trillion in assets under management which should be allocated to various asset classes. The source of these assets is insurance and pension funds as well as capital held by fund managers.

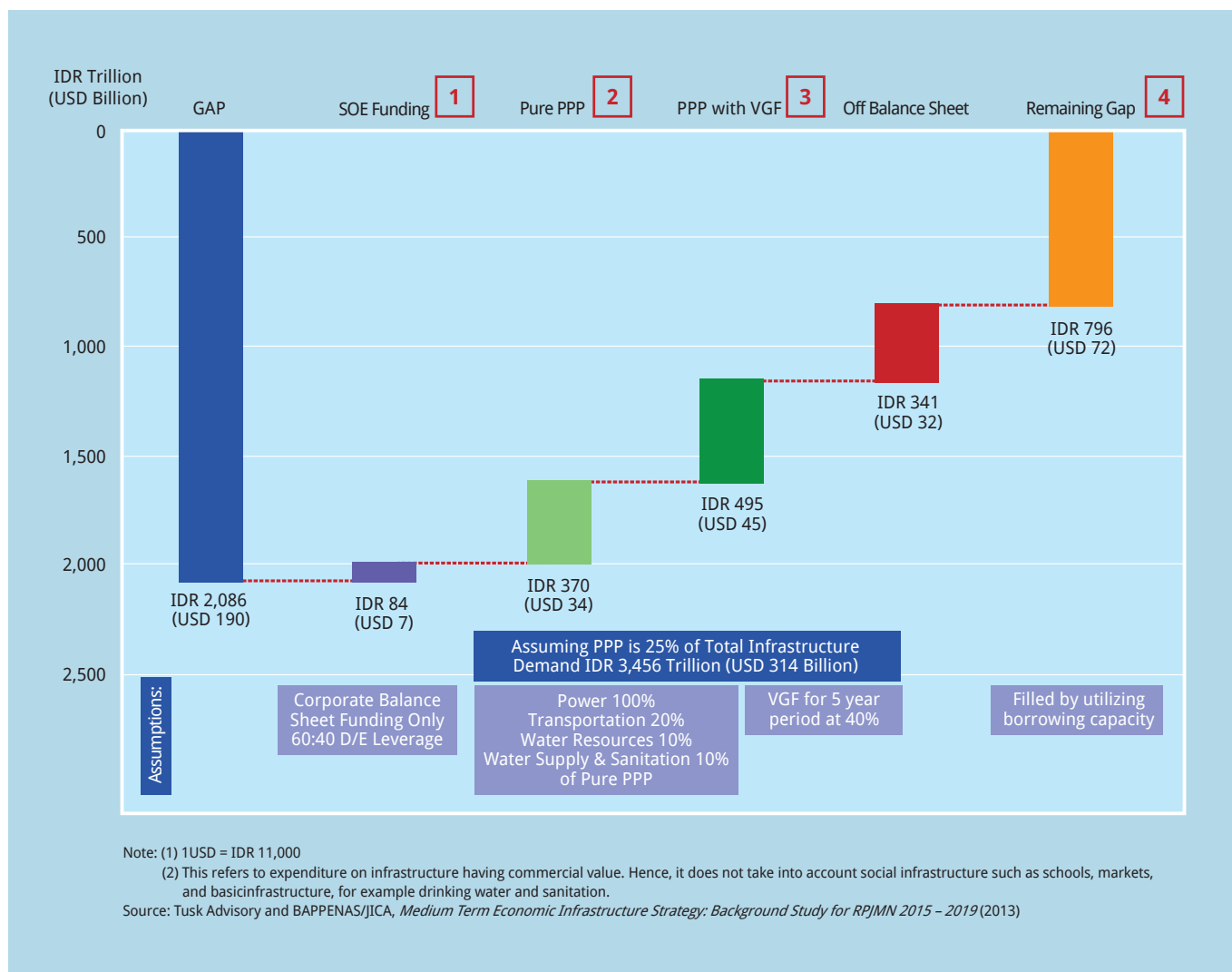
## Evolution of the Regulatory Framework in the PPP Scheme

Until today, Indonesia's PPP regulations can be divided into four stages of development. Parikesit and Laksmi (2016) have identified the stages and summarized them as follows.

### 1<sup>st</sup> Generation of PPP (up to 1998)

The first generation of Indonesian PPP is characterized by the market opening of two sectors, namely the toll road and

**Figure 1: Financing Gap and Possible Sources of Funding**



power (IPP) sectors. PPPs or “Kerjasama Pemerintah dan Swasta” (KPS, until 2014) or “Kerjasama Pemerintah dan Badan Usaha” (KPBU, since 2015) were initially introduced in the early 1990s for infrastructure development projects, especially for toll roads. Due to the increased need for the government to expand a toll road project, which had started in 1978, the government began to opt for a financial arrangement under a PPP scheme. Under this scheme, business sector involvement was used to fulfill government targets to accelerate the development of transport infrastructure through partnerships with a state-owned enterprise, PT Jasa Marga, which was assigned as the regulator and operator until being replaced by a buffer body named the Indonesia Toll Roads Authority (BPJT). As a legal foundation for private sector participation as well as to attract private sector interest in the construction of roads through PPPs, the government enacted Act No. 13/1980 concerning Roads. Following this, toll roads began to be managed by the private sector in 1989 from which point private sector participation in toll road operations began to grow, although at a slow pace.\*<sup>5</sup>

#### 2<sup>nd</sup> Generation PPP (1998 – 2004)

The first general PPP regulation that applied to all sectors is the Presidential Decree (*Keputusan Presiden*) No. 7/1998 concerning Cooperation Between Government and Private Business Entities In The Development and or Management of Infrastructure, which was later replaced by Presidential Regulation (*Peraturan Presiden*) No. 67/2005 concerning Cooperation Between Government and Business Entities In The Provision of Infrastructure. This regulation has been amended three times – by Presidential Regulation No. 13/2010, Presidential Regulation No. 56/2011, and Presidential Regulation No. 66/2013. Most recently, on March 20, 2015, Presidential Regulation No. 38/2015 replaced all, with the condition that the matters this regulation does not address are subject to the previous regulation.

The 2015 regulation addresses loopholes in previous regulations, sets the agenda for open and transparent public priority projects to be implemented; created the mechanism for proposing unsolicited projects and increasing government support. Apart from the main regulations related to PPPs, each line ministry has also published a number of relevant government regulations in order to provide more detailed information to private business entities working on and outside of infrastructure projects. The government has also issued

many policies and implemented regulatory reform as an umbrella to speed up PPP project implementation and boost private investment in public services.\*<sup>6</sup>

#### 3<sup>rd</sup> Generation PPP (2005 – 2015)

Many organs supporting PPP were established in the period 2005-2015. These are Committee of Infrastructure Priorities Development Acceleration (KPPIP), an SOE named PT Sarana Multi Infrastruktur (SMI), and the Indonesia Infrastructure Guarantee Fund (IIGF / PT PII). Besides these organs, there are also some new regulations which replaced prior regulations. Local governments began to experiment with their own versions of the PPP scheme, often without a proper risk allocation procedure (Parikesit and Laksmi (2016) ).

#### 4<sup>th</sup> Generation of PPP (from 2015)

The latest generation of Indonesian PPP is marked by the enactment of Presidential Regulation No. 38/2015. The expansion of scope for PPP projects and various new incentives provided to attract project developers, mediators and government contracting agencies are expected to give impetus to the increase of projects financed through the PPP scheme. Table 1 summarizes the content of the regulation.

Soon after the government issued this Presidential Regulation, BAPPENAS enacted Minister Regulation No. 4/2015 highlighting the implementation procedure for the new PPP scheme, notably the processes (1) to identify potential PPP projects, (2) to develop outline business case, (3) to organize market sounding, ensuring the need for viability gap funding and government guarantee scheme, (4) for prequalification and request for proposal, (5) for announcement of the tender winner and establishment of the project company, and (6) for financial closing. Further, the government identified a menu of financing modalities (Trihargo, 2016) as shown in Figure 2.

## Lessons in Engaging the Private Sector for Financing Infrastructure Development

This section will highlight the experiences of the Indonesian government to close the financing on a PPP project and to propose





**Table 1: Summary of Presidential Regulation No. 38/2015**

Aspect	Regulations	
Subject of Partnership	Articles 6, 7, 8 and 9	
	Government Minister Head of Agency Mayor/Governor SOE/LOE	Private Sector SOE/LOE International companies Limited liability companies Cooperatives
Object of Partnership	Article 5	
	Economic and social infrastructure (19 categories)	
Government Contributions	Partial financing (Art. 19) Government support (Art.15 and 16) Government guarantee (Art. 17 and 18)	
Financial Return to Private Sector Investors	Article 11	
	User charge Availability payment Other forms of payment in compliance with government regulations	
Stages	Planning Preparation Transaction	

Source: Rinaldi (2016)

**Figure 2: Various Modalities for Infrastructure Financing**

Securities	Financial Instrument & Product Alternatives	
Equity	IPO / Secondary	Venture Capital
	RDPT Equity	Private Placement / MSOP
Quasi-Equity	Debt-Mezzanine	Subordinated Loan
	Convertible	Hybrid
Asset / Debt Structured	Asset Backed Securities	Leasing
	Factoring	Project Finance
	Obligation / Bonds	Medium Term Notes
	REITS	RDPT Debt
	Short Term Bank Loan (Revolving, Working Capital)	Bank Loan Long Term (Investment, Construction)
Other Product	Forex Hedging / Trading	Open Ended Mutual Fund
	Hedge Fund	SBLC / SKBDN Lending
	Promissory Notes	Others

Do not have impact on leverage
Have impacts on leverage

Source: Trihargo (2016)

a new initiative for a brownfield project. The first case is the financial closing on the Central Java Power Plant (CJPP) project and the second case is the proposal for a limited concession scheme (LCS) for Soekarno-Hatta International Airport (SHIA).

#### Case #1: Central Java Power Plant

The Central Java Power Plant project started in 2008 when the Indonesian energy company PT PLN completed its feasibility study, followed by prequalification of IPP bidders in 2009. This was the first PPP project in power generation using a guarantee mechanism for government non-compliance through IIGF – a newly established SOE having a mandate to guarantee political risks of private sector investors, notably PLN non-compliance on the payment. The drafting process of the guarantee agreement was undertaken between 2010 and 2011. Between March and June, 2011 the tender was organized and granted to PT Bhimasena Power Indonesia – a project company consisting of Indonesia-Japan consortium members. The power purchasing agreement, guarantee agreement and recourse agreement were signed in October, 2011. The financing on the project was expected to close in 2013, but the delay in land acquisition shown in Figure 3 caused a 3-year delay in the closing, which finally took place in June, 2016.

Despite the delay in the financial closing, the Indonesian government especially its contracting agencies and the guarantee firm have been able to learn how to mitigate risks, especially the payment compliance risk and how to measure it. It has successfully formed a Joint Monitoring Committee to ensure that information asymmetry, notably in land acquisition can be managed. Currently for other projects, for example toll roads, IIGF has been able to provide land acquisition compensation for government non-compliance on the project timetable and ramp-up traffic guarantee. The lessons learned from this project have enabled other projects, for example the Palapa-Ring National Broadband project, to reach a financial closing in a record-breaking period of only 6 months.

#### Case #2: Asset recycling for Jakarta Airport

The Indonesian government realized that it is difficult to attract investors for greenfield projects. During Indonesia Infrastructure Week 2016, the President called for a new approach to attracting the private sector to invest in infrastructure projects, including to brownfield projects. Using the limited concession scheme (LCS),

the government will ask a ministry or an SOE to invest and develop the projects and then invite private sector bids for a concession to operate the infrastructure assets.

In response to this policy directive, the Coordinating Ministry for Economic Affairs through the Committee for Acceleration of Priority Projects is drafting a plan for the first infrastructure asset-recycling project under LCS, that of SHIA. The plan is following Turkey's success with the LCS scheme used for Ataturk Airport in Istanbul (Winaryo, 2016), which was able to generate a USD 3 billion upfront concession fee paid to the Turkish government, attracted international airport operators to increase the airport's standards and technologies, and exposed Turkey and its infrastructure to best practice PPPs. The LCS plan for SHIA was already presented to the Indonesian government, and currently is

in the planning stage for tender process.

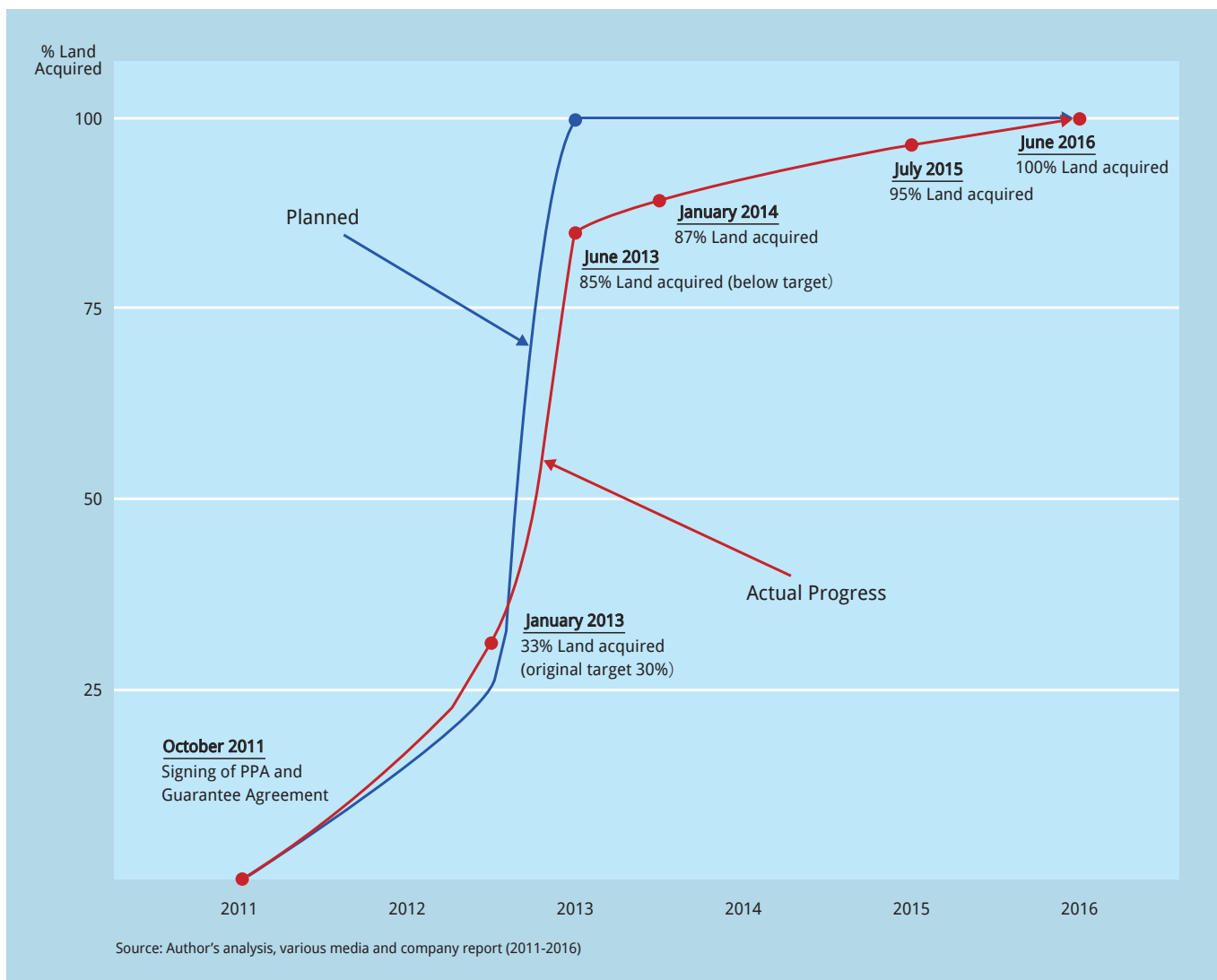
## The Way Forward for Next Generation Private Sector-financed Infrastructure Projects

Indonesia's PPP framework has progressed quite significantly since it was introduced in 1998. At the same time, the Indonesian government is also committed to the principle of good governance, and hence all procedures and mechanisms should be bulletproof to avoid misconduct and misappropriation of authority, especially by the gov-

ernment contracting agencies. The amount of investment required for infrastructure development, using both public and private sector money is huge, and requires a careful planning and implementation strategy. PPP project processes will have to be harnessed despite the difficulties in implementing the scheme and the complex government policy-making exercise often cited by international investors. The presence of an infrastructure financing company established by the Indonesian government (SMI, and its subsidiary, PT Indonesia Infrastructure Finance IIF), as well as the infrastructure guarantee company, PT Penjaminan Infrastruktur Indonesia or IIGF, have served as catalysts for the complex undertaking of Indonesia's PPP scheme.

Learning from the case studies, there is scope for improvement in implementing PPP projects in Indonesia. Reiterating

**Figure 3: Land Acquisition Progress**



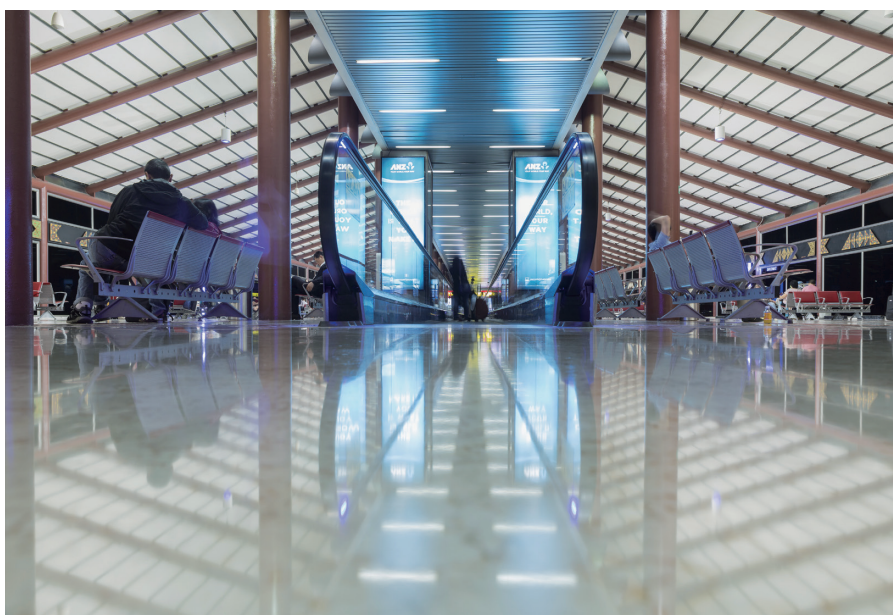
the earlier works of Parikesit and Laksmi (2016), given the size of investment required, and the existing government capacities to procure infrastructure projects, Indonesia's private financing scheme should (1) be linked with the macroeconomic policy of the Indonesian government, for example by incorporating the PPP planning process into the government budgetary process, (2) focus on improving the capacity of the government contracting agencies, especially when it comes to sub-national levels of government, (3) ensure the improved quality of concession agreement design, renegotiation and dispute settlement, (4) strengthen the role of SOEs as project developers and partners in the infrastructure investment, and (5) ensure a regular PPP policy review process, repository of Indonesia's experiences, and public information disclosure of PPP plans and contracts.

## Notes

- \*1 <http://www.antaranews.com/en/news/96567/jokowi-leads-cabinet-meeting-focuses-on-infrastructure-development>
- \*2 The study team (Tusk Advisory, 2013) utilized a method to obtain the available budget for economic infrastructure by deducting the total revenue from tax, oil/gas and other revenues by debt servicing, mandatory and emergency spending such as salaries for government officials, and social infrastructure.
- \*3 Other reports, for example those published by Trihargo (2016) from the Ministry of SOEs, identify that the total infrastructure development needs in 2015-2019 is IDR 5.519 trillion, of which the Ministry of SOEs is responsible for 19.32% of investment.
- \*4 BAPPENAS uses a global benchmark of 22%, with countries like UK, Thailand, Portugal and Brazil are utilizing more than 40% private sector investment for their infrastructures.
- \*5 Strategic Asia for the UK Foreign Commonwealth Office, "PPP (Public-Private Partnerships) in Indonesia: Opportunities from the Economic Master Plan," presented in Jun 2012, p 48.
- \*6 Ibid

## Acknowledgement

*The author would like to thank the National Research Council and R&D agency of the Ministry of Transportation for facilitating the focused group discussion on infrastructure financing. This study is indebted to the Indonesia Infrastructure Guarantee Fund for the research works on the PPP regulatory framework.*



## Reference

- Parikesit, Danang and Irene N. Laksmi. (2016) Managing PPP for Infrastructure Development in a Changing Regulatory Environment: Challenges for Indonesia's New Administration, IIGF Institute, Jakarta.
- Parikesit, Danang. (2013) Yogyakarta Bus Terminal – The Private Provision of Municipal Infrastructure, Case Program – Harvard Kennedy School of Government, Cambridge.
- Rinaldi M. Taufik. (2016) Public Private Partnership in the Provision of Infrastructure: Policy review under Presidential Regulation No.38/2015 and Bappenas Regulation No.4/2015, Bappenas, Jakarta.
- Trihargo, Gatot. (2016) Road Map of the Ministry of SOE for Transportation Infrastructure Financing Managed by the State Owned Companies, presented to the R&D Agency of the Ministry of Transportation GOI, Jakarta.
- Tusk Advisory. (2013) Medium Term Economic Infrastructure Strategy: Background Study for RPJMN 2015 – 2019, BAPPENAS/JICA, Jakarta.
- Winaryo, Dwianto E. (2016) Limited Concession Scheme (LCS) Concept for Indonesia Airports - Pilot Project: Soekarno-Hatta International Airport, KPIP/Tusk Advisory, Jakarta.

## DANANG PARIKESIT

Professor, Universitas Gadjah Mada

Dr. Danang Parikesit is a professor at Universitas Gadjah Mada (UGM) and a founder of the Center for Transportation and Logistics at UGM, a board member of Indonesia Infrastructure Development Initiative (IndII) and a coordinator of the University Network of Indonesia Infrastructure Development (UNIID). He was a former policy adviser of the Minister of Public Works (2010-2014). Dr. Parikesit is a member of the Board of Commissioners and the Chairman of the Risk Management Supervisory Committee at the Indonesian Railway Company and currently a vice chairman of the Oversight Committee of the LRT Jakarta Project at the Ministry of Transportation.

He is a certified engineer from the Institution of Engineers Indonesia and a fellow of ASEAN Federation of Engineering Organizations. He is a contributor of case studies of the Infrastructure in the Market Economy (IME) course of the Harvard Kennedy School. Since 2013, he has been assisting The Indonesia Infrastructure Guarantee Fund (IIGF) to set up IIGF Institute, a think-tank and capacity building unit of IIGF. Dr. Parikesit has published more than 200 research and journal papers, articles, and publications; and is regularly consulted by national government and private sectors on various transport and infrastructure policies, regulations and project financing structure.