



Reforming Public-Private Partnerships in Railway Services: Learning from the Jakarta Monorail Project Debacle

Diantha Arafia

Ministry of National Development Planning, Jakarta, Indonesia

Corresponding author:

Diantha Arafia | diantha.arafia@gmail.com

ABSTRACT

Public-Private Partnerships (PPPs) offer a promising strategy for accelerating railway infrastructure development, yet they entail significant risks if not executed correctly. Indonesia has adopted PPPs since the 1990s, but their impact on railway services remains underexplored. This paper suggests improvements to Indonesia's railway PPP mechanism to improve effectiveness, efficiency, and service deliverability. It argues that the effectiveness of railway PPPs is hindered by the public sector's limited capacity and weak regulatory and institutional frameworks. The research employs a case study of the Jakarta Monorail project, terminated in 2015 after 11 years of problematic development. The research methods include literature reviews and a comparative analysis of the case with two prominent railway PPPs in other developing countries: the Bangkok Transit System in Thailand and the Delhi Mass Rapid Transit System Phase I in India. The findings lead to two key recommendations for the government: reorganizing the roles and coordination processes of key PPP agencies and establishing a continuous capacity-building scheme for PPP stakeholders. These recommendations may create a more supportive environment for PPPs, thereby increasing the likelihood of successful railway PPP implementation in Indonesia.

Keywords: Infrastructure; Public-private partnerships; Railway

ABSTRAK

Kerjasama Pemerintah dan Badan Usaha (KPBU) merupakan skema pembiayaan infrastruktur yang berpotensi mempercepat pembangunan infrastruktur kereta api namun dapat menimbulkan risiko signifikan jika tidak dilakukan dengan benar. Indonesia telah mengadopsi skema kerja sama pemerintah dan swasta sejak tahun 1990-an tetapi dampaknya terhadap layanan kereta api masih dipertanyakan. Oleh sebab itu, penelitian ini mengusulkan perbaikan mekanisme KPBU kereta api di Indonesia untuk meningkatkan efektivitas, efisiensi, dan keterjangkauan layanan. Penelitian ini melihat bahwa efektivitas KPBU kereta api masih ambigu karena kurangnya kapasitas Penanggung Jawab Proyek Kerja Sama (PJPK) dan lemahnya kerangka regulasi dan kelembagaan. Penelitian ini menggunakan studi kasus proyek Monorel Jakarta yang dihentikan pada tahun 2015 setelah mengalami permasalahan selama 11 tahun. Metode penelitian yang digunakan adalah tinjauan pustaka dan analisis komparatif antara kasus tersebut dengan KPBU kereta api terkemuka di dua negara berkembang: Bangkok Transit System di Thailand dan Delhi Mass Rapid Transit System Fase I di India. Penelitian menghasilkan dua rekomendasi pada pemerintah, yaitu menata ulang peran dan proses koordinasi lembaga kunci KPBU termasuk PJPK dan pihak swasta, serta membangun skema peningkatan kapasitas yang berkelanjutan bagi para pemangku kepentingan kunci KPBU. Rekomendasi ini dapat menciptakan lingkungan yang lebih mendukung bagi KPBU dan meningkatkan peluang keberhasilan pelaksanaan KPBU kereta api di Indonesia.

Kata Kunci: Infrastruktur; Kereta; KPBU

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INTRODUCTION

Public-Private Partnerships (PPPs) have been widely recognized as a global innovative infrastructure development strategy since the 1990s (Bovaird, 2010). In this context, PPPs involve cooperation between public and private entities through contractual agreements to deliver public services, improve service quality, and boost infrastructure investments (Alexandersson & Hulten, 2009). One of the key characteristics of PPPs is the risk transfer from the public to the private sector, which administers the project (Yang et al., 2017). It requires the public sector to have a good understanding of the overall concept of PPPs, particularly risk-sharing, since a lack of comprehension can lead to high-risk contracts that threaten public service delivery (Floyd et al., 2017). The paper aims to examine the effectiveness of PPPs in railway projects in Indonesia, identify critical success factors, and suggest improvements to the current system to enhance its implementation efficiency.

PPPs have been introduced in Indonesia since the New Order period under President Soeharto's rule, and they were initially used to finance roads and electricity in 1967. However, they became better known after his resignation (Noor, 2016). The regulation of PPPs was formalized in 1998 with the issuance of Presidential Decree No. 7/1998 on PPPs in Infrastructure Development

(Sarana Multi Infrastruktur, 2021). The Minister of Public Works Decree No. 249/KPTS/1995 and DKI Governor Decree No. 1327/95 established one of the first municipal PPPs schemes in Indonesia, followed by the appointment of private operators to oversee clean water provision in DKI Jakarta (Nugroho, 2011).

In this context, Indonesia stipulated Presidential Regulation No. 67/2005, which was later replaced by Presidential Regulation No. 38/2015, on PPPs in Infrastructure Provision. According to the Japan International Cooperation Agency (JICA) (2012), one of Indonesia's PPP projects was the development of the Jakarta Monorail in cooperation with PT Jakarta Monorail and its consortium (JM), with an estimated value of IDR2,6 trillion. The project was aimed to address congestion issues and improve public transportation services. However, it was paused in 2008 due to financial and legal issues. After several attempts to revive the project and lengthy negotiations in 2013, the project was finally canceled by the Governor of Jakarta in 2015 following the consortium's failure to meet the city's proposed requirements (Hansen et al., 2018). The JM case has arguably become one of the most notable examples of PPP failure in Indonesia.

There have been few studies discussing railway PPPs in Indonesia. Most existing

research focuses on technical aspects, such as refinancing mechanisms (Adam et al., 2023) and the evaluation of the operation and maintenance phase (Rahman et al., 2019). This paper takes a broader perspective, examining how the current system can be improved to facilitate the implementation of PPPs in the railway sector. I will compare the institutional arrangements and capacities of two prominent railway projects in Asia, namely the Bangkok Transit System (BTS) in Thailand and the Delhi Mass Rapid Transit System (DMRTS) Phase I in India, with the case in Jakarta.

Based on the comparative analysis and various considerations, the plausible recommendations to the government are to restructure the roles and coordination mechanisms of the PPP key agencies and establish a capacity-building program for PPP key stakeholders. Implementing these recommendations may create an effective enabling environment for PPPs, increasing the likelihood of successful railway PPP implementation in emerging countries, particularly in Indonesia.

LITERATURE REVIEW

Monorail Project in Jakarta: An Overview

Jakarta's severe traffic congestion causes an annual economic loss of approximately IDR5,5 billion due to operating costs and travel time (Badan Perencanaan Pembangunan Nasional [Bappenas] and JICA, 2004). To address this issue, the city established the Study on Integrated Transportation Master Plan (SITRAMP) in 2004, recommending private sector involvement in public transport to reduce costs and improve service quality. Then, JM proposed a circular Jakarta monorail project through a Build-Operate-Transfer (BOT)

Public-Private Partnership (PPP) in 2004, securing a 30-year concession with a possible 10-year extension (JICA, 2012).

Under the agreement, JM would finance and develop the monorail infrastructure, while the government would handle land provision without subsidizing construction (Oxford Business Group, 2007). The monorail was planned to span 29 km through business and commercial areas (Hansen et al., 2018). The project saw frequent changes in private entities, starting with MTrans in 2003 and then a joint venture between JM and Adhi Karya. Despite constructing 170 foundation pillars worth IDR190 billion, JM faced financial difficulties, leading to project suspension in 2007 and the abandonment of the pillars (Marbun, 2014; DetikFinance, 2014).

In 2013, the project was revived by the Governor of Jakarta, with JM at this time backed by Ortus Group from Singapore (Dewi, 2013). The new contract drafts allowed JM to earn revenue from advertisements and rental fees at around 30 stations ('Editorial: Risks', 2013). However, issues such as contractor bank statement failures and land-use changes arose (Investor Daily, 2015). The government set 15 requirements for JM, including a financial guarantee and a business plan, which JM could not meet, leading to the project's permanent termination and a debt of approximately \$88 million to the government (Mcbeth, 2014).

In conclusion, this PPP encountered early termination during the construction phase due to significant legal and financial challenges. The following section discusses the potential benefits and drawbacks of several issues of PPP projects for railway infrastructure development, which is related to the JM case.

BTS Skytrain in Thailand

The BTS “Skytrain” in Bangkok arose from the Governor’s frustration with the central government’s inability to alleviate traffic congestion (Floyd et al., 2017). Development partners recommended a rail transit system to enhance transportation in outer areas and reduce city-center congestion. With costs exceeding \$1 billion, the government turned to a 30-year Build-Operate-Transfer (BOT) scheme (Verougstraete & Enders, 2014). Developed by a Thai conglomerate linked to Hong Kong and financed by the International Finance Corporation (IFC), the construction lasted from 1990 to 1999. Despite challenges like the Asian economic crisis and route changes, the system opened in 1999 as a 37 km elevated metro, now serving about 600,000 passengers daily.

The BTS Skytrain is recognized as one of the successful railroad PPP cases, having navigated economic crises and delivered high-quality services despite numerous challenges (Allport et al., 2008; Kokkaew, 2015; Verougstraete & Enders, 2014). The Bangkok Metropolitan Administration (BMA) serves as the Government Contracting Agency (GCA) and is the exclusive government sponsor, holding significant authority in project decision-making and management (Allport et al., 2008). GCA is the key stakeholder providing the infrastructure, which is responsible for the preparation, operation, and monitoring of the PPP projects. It could be ministers, heads of institutions, or heads of regions (Kacaribu et al., 2019). BMA policy mandates that the concessionaire coordinate and negotiate funding and improvement plans directly with BMA, excluding the national government (Floyd et al., 2017).

One of the critical success factors for the BTS Skytrain was the clear and centralized authority of the BMA, which streamlined decision-making and reduced bureaucratic delays (Allport et al., 2008). Regulatory and institutional challenges were minimized by empowering local governments to handle the project independently (Floyd et al., 2017). In contrast, Jakarta’s monorail project faced significant delays and eventual cancellation due to excessive central government involvement and lack of clear authority (Hansen et al., 2018). It led to financial and legal issues, highlighting the importance of a well-defined regulatory and institutional framework for PPP projects (Marbun, 2014).

Comparing the BTS Skytrain with Jakarta’s monorail project underscores the need for a cohesive and empowered local governance structure in Indonesia to ensure the success of infrastructure projects (Allport et al., 2008; Floyd et al., 2017; Hansen et al., 2018; Marbun, 2014).

Delhi Mass Rapid Transit System Phase I in India

The Delhi Metro Rail Transit System (DMRTS) project has been highlighted by the Global Infrastructure Hub (2019) as a notable example of a successful public sector infrastructure initiative in India. It is India’s second-largest metro system after Kolkata Metro, notable for its timely completion within budget and profitability without government subsidies (GIH, 2019). Covering Delhi and nearby areas like Gurugram and Noida, the extensive 405 km network was planned over four phases spanning 20 years.

Established as a 50:50 joint venture between the Government of India and that of Delhi in 1995, the Delhi Metro Rail Corporation

(DMRC) successfully launched Phase I, a 65 km segment costing \$2.1 billion, in 2002. The project was primarily financed by the Japan International Cooperation Agency (JICA) and government funds. The timely and within-budget completion of DMRTS Phase I in 2002 was partly attributed to the involvement of international consultants and advisors from Japan, who significantly bolstered the project preparation capabilities of the GCA on a global scale.

This capacity building during the initial phase was crucial for the successful PPP projects implementation (GIH, 2019). International consultants and advisors from Japan enhanced the project preparation capabilities of the GCA, facilitating timely and within-budget completion of the metro system. This capacity building included expertise in project planning, financing strategies, and technical execution, crucial for navigating the complexities of infrastructure development (GIH, 2019).

Jakarta's monorail project had to adopt such capacity building efforts that contributed to its eventual failure. The project faced significant delays and cancellations due to financial and legal challenges exacerbated by fragmented responsibilities and inadequate local authority (Hansen et al., 2018; Marbun, 2014). The disparity underscores the importance of comprehensive capacity-building initiatives to empower government agencies in effectively managing PPP projects, ensuring better outcomes, and mitigating risks associated with large-scale infrastructure developments.

PPP Regulatory Framework in Indonesia

After the enactment of Presidential Regulation No. 67/2005, infrastructure development efforts waned during the

second term of the Yudhoyono administration, exacerbated by an inadequate regulatory framework, leading to minimal progress until 2014 (Salim & Negara, 2018). Under the current Joko Widodo's administration, there is a renewed focus on addressing the annual economic losses of IDR65 trillion due to escalating traffic congestion in Jakarta (Singgih & Sipahutar, 2019). The government has prioritized private sector involvement in enhancing transportation infrastructure to mitigate urban congestion and improve connectivity, aligning with national development goals (Amindoni, 2016; Salim & Negara, 2018).

Presidential Regulation No. 38/2015 on PPPs in Infrastructure Provision has also spanned opportunities for private investment and provides more comprehensive guidance for stakeholders engaged in PPP projects (Tan & Tan, 2016; Widjaja, 2017). Despite solid political support, existing PPP regulations are perceived as inadequate during the implementation, particularly in the railway sector (Rahman et al., 2019). Notably, the risk of project termination due to uncertain political factors and inconsistent commitments remains a significant challenge for PPPs in Indonesia (Barker & Wibowo, 2019; Wibowo & Permana, 2015).

Furthermore, conflicts within the regulatory framework stem from overlapping regulations at both national and local levels, causing confusion among private investors and GCAs, which hinders their engagement in PPP projects (ADB, 2016; Lin, 2014; Salim & Negara, 2018). Moreover, the proliferation of PPP-related regulations complicates matters for national and local governments, resulting in inconsistent application of regulations across PPP projects (ADB, 2016). For example, delays in land acquisition for the Jakarta-Bandung

high-speed rail project are attributed to unclear and conflicting local and national regulations (Salim & Negara, 2018). Despite the recognized need for regulatory reform, it is acknowledged as a complex, long-term process requiring extensive collaboration (Kacaribu et al., 2019).

PPP Institutional Capacity in Indonesia

The Indonesia Infrastructure Guarantee Fund (IIGF) has highlighted key barriers to the adoption of PPP projects in Indonesia, including the need for dedicated commitment from GCAs and insufficient expertise in implementing PPP schemes effectively (Rahman et al., 2019). PPP implementation in Indonesia, for example, should pay more attention to the Value for Money (VfM) principle during feasibility assessments.

Capacity building for GCAs in Indonesia is crucial to address these challenges. GCAs play a vital role in facilitating PPP projects by overseeing procurement processes, conducting feasibility studies, and ensuring compliance with regulatory frameworks. However, capacity constraints within GCAs have been identified as a barrier to their effective operation (Wibowo & Permana, 2015). Strengthening the capacity of GCAs through training programs, knowledge exchange initiatives, and partnerships with international organizations could enhance their capability to manage PPP projects efficiently and transparently (ADB, 2016).

Probability of Success for Railway PPPs

Railway PPPs often need help to achieve their objectives in both developed and developing countries (Dehornoy, 2012; Rahman et al., 2019). Challenges typically arise during the operational phase due to

high operation and maintenance costs, slow profit returns, and limited experience in both the public and private sectors. The risk of private entities abandoning unprofitable projects can undermine government credibility in public transportation (Alexandersson & Hulten, 2009). In contrast, Japan's successful commuter line privatization highlights the potential profitability of PPPs, driven by effective marketing strategies and strong public engagement (Wunderlich & Mayer, 2017). It underscores that the effectiveness of PPPs depends significantly on a country's commitment and strategic approach.

Additionally, the monopolistic nature of the transport sector (Transport and ICT Unit, 2017) and the 15-year history of rail monopolization by the Indonesian Railway Company have resulted in a heavily regulated rail infrastructure (Widyanto & Malkhamah, 2013). Despite the private sector being allowed to invest in railway infrastructure since the enactment of the Railway Law in 2007, the regulations supporting such investments have not been helpful to trigger private sector participation.

DISCUSSION

Key Challenges: Government Agencies' Coordination and Capacity Issues

One of the factors hindering the success of PPP projects is the lack of coordination within the central government and between local and national governments (ADB, 2016; Purbo et al., 2019; Wibowo & Permana, 2015). With regards to PPPs, various institutions play different roles, such as:

1. PPPs Joint Office led by Bappenas, which comprises several institutions to ensure intense coordination across agencies in

- PPPs preparation and implementation (Global Infrastructure Hub [GIH], 2019);
2. The Indonesia Infrastructure Guarantee Fund (IIGF), which handles the government financial guarantee to tackle political risks issues in PPPs (World Bank, 2019);
 3. PPPs Unit under the Ministry of Finance (MoF) to assist GCAs in preparing the feasibility studies and contractual documents until they reach the final agreement (Salim & Negara, 2018);

However, since some of these various PPP bodies overlap in their responsibilities, they need help to coordinate in a way that results in high-quality PPPs (Salim & Negara, 2018; World Bank, 2019, GIH, 2019). Moreover, PPP adoption in Indonesia has also been significantly hampered by insufficient public sector technical capacity (Purbo et al., 2019; Rahman et al., 2019; Wibowo & Permana, 2015).

Since many railway PPPs are conducted locally, the GCAs must take into consideration the local context and value when designing PPPs (Barker & Wibowo, 2019). GCAs and state-owned enterprises (SOEs) should also improve their institutional capacities to keep up with the rapidly growing demands of the PPPs.

POLICY RECOMMENDATIONS

The JM case, which failed to achieve financial close despite prolonged negotiations, exemplifies a common issue in Indonesian PPPs projects where relatively few reach contract finalization (Lin, 2014). This situation prompted reforms in the 2015 PPPs Regulation, particularly requiring competitive tendering for unsolicited proposals and establishing several institutions to oversee PPPs (Bappenas, 2019).

Despite these reforms, it is noteworthy that Indonesia has only managed one railway project funded through PPPs, namely the Makassar-Parepare Railway (ADB, 2020). Therefore, the following reforms remain crucially necessary.

Provide Sustainable Capacity Building for GCAs

This paper recommends establishing a capacity-building mechanism for GCAs to address institutional deficiencies in PPPs' implementation. Enhancing GCAs' skills in identifying, evaluating, structuring, tendering, managing, and monitoring PPP projects is crucial for success (Foster Infrastructure, 2016). Turbo et al. (2019) emphasize the need for technical training programs tailored to local contexts to improve PPP design.

India's DMRTS case which utilized international consultants to strengthen GCA capacity in project preparation (GIH, 2019), for example, is a worth noting initiative. In Indonesia, despite efforts by the PPPs Joint Office to build stakeholder capacity, challenges persist mainly due to staff turnovers and inadequate resources (Kacaribu et al., 2019). The PPPs Joint Office needs to establish sustainable training programs by collaborating with academics and institutions (nationally or internationally) to enhance GCA capabilities effectively.

Moreover, incorporating VfM concepts into PPPs' decision-making, as advocated by Bappenas (2019), will improve the public sector's ability to achieve competitiveness and effectiveness in partnering with the private sector.

Restructuring the Institutional Framework

Drawing from Thailand's BTS Skytrain PPPs, which share similarities with Indonesia's rail sector in governance and coordination challenges (Allport et al., 2008), decentralizing authority to local agencies like BMA could serve as a model. BMA's direct oversight and flexible decision-making have contributed to successful PPP outcomes (Floyd et al., 2017). This approach suggests that empowering GCA could similarly enhance project performance and responsiveness, benefiting from local insights and streamlined decision-making.

This paper suggests enhancing the authority of GCA to improve PPP implementation, whereas JM's project involved multiple parties, including significant central government participation, is also seen as potentially problematic (Allport et al., 2008). According to Higon (2005), successful PPPs require GCAs to focus on stable, fair, and detailed contracts to prevent frequent changes. Reforming the roles and responsibilities under the 2015 PPPs regulation could empower the GCA to select suitable concessionaires and adapt projects to local needs more effectively. They can also be more agile in their decisions.

Simplifying the flow among numerous agencies is also crucial to streamline coordination in PPPs. In the BTS case, the lack of national and local cooperation led to the central government only supervising the project (Mandri-Perrott, 2010). Effective coordination between the local and national governments is essential to prevent

regulatory conflicts. The PPPs Joint Office can enhance coordination by publishing a standard operating method for all participants, reducing miscommunication and conflicting policies, and expediting negotiations, thus ensuring smoother railway PPP preparation.

CONCLUSION

PPP can improve public service delivery efficiency and effectiveness, but implementing them in railways is challenging in many countries, especially developing countries like Indonesia. The JM case highlights issues such as vague regulations and insufficient public sector capabilities, leading to non-compliant private sectors and financial losses. To manage PPPs in public transport, enhancing public authorities' skills and establishing robust frameworks are crucial. Reforms should focus on supporting GCA's capacity, granting more authority to GCAs in PPP management, restructuring the institutional framework, and improving coordination mechanisms. These steps can create a better environment for successful railway PPPs in developing countries.

ABOUT THE AUTHOR

Diantha Arafia serves at Indonesia's Ministry of National Development Planning, Directorate of Regional II. With a master's degree in public policy and management from the University of Melbourne, she specializes in regional development. You can reach her at diantha.arafia@gmail.com.

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