Presenter 4

Leveraging Public-Private Partnerships (PPP) for Socio-Economic Infrastructure

Dina Irvina

Senior Public Finance Specialist,
Ministry of Finance, Indonesia

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Insights, SLA Benchmarks, and Operational Realities from Indonesia's Palapa Ring Project

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Senior Public Finance Specialist
MoF Indonesia

LESSONS & CASE STUDY FROM INDONESIA

Archipelagic Geography and Market Failure Demand a Viability-Based PPP Strategy

THE SOCIO-ECONOMIC CHALLENGE

- Archipelagic Divide: Over 17,000 islands create severe economic and digital disparities between Western and Eastern Indonesia.
- Market Failure in 3T Areas (**Underdeveloped, Frontier, and Outermost regions)** : Commercial telecom operators refuse to build in remote, border, and lagging (3T) regions due to sparse population and prohibitive CAPEX.
- Fiscal APBN Constraints: The traditional state budget cannot shoulder multi-million dollar capital costs without crowding out other social priorities.

EVOLUTION OF INDONESIA'S PPP ROLE

- Transforming Non-Bankable Projects: Using structured government interventions to turn commercially non-viable social projects into bankable opportunities.
- De-risking Investments: Shifting from direct asset grants to de-risking mechanisms, ensuring private efficiency in construction and O&M.
- Long-Term Service Guarantee: Conditioning government payments strictly on continuous, high-quality public service availability.

Palapa Ring Project Construction Complete, Commercial Utilization has Commenced

Palapa Ring – Project Overview

- The Palapa Ring project aims to provide internet connectivity to 57 Districts/Cities located in 3T areas (Outer-Foremost-Backward) in Indonesia through Fiber Optic and Microwave Radio Link networks.

LESSONS & CASE STUDY FROM INDONESIA

Palapa Ring Case Study: Availability Payment (AP) and USO Integration

1. MARKET FAILURE & CAPEX

- High Capital Cost: More thatn USD 420 million required for Western, Middle and Eastern backbone across rugged terrain & deep seas.
- Low Commercial Demand: Low population density in 3T areas has limited commercial telecom rollout.
- Government Intervention: Mandated nationwide broadband connectivity under national plan.

2. AVAILABILITY PAYMENT (AP)

- Demand Risk Shift: Government takes on the demand risk; private partner receives periodic AP fees.
- SLA-Linked Revenue: Payments are tied strictly to availability and latency SLA benchmarks
- 15-Year Concession: Secures long-term revenue predictability for private lenders.

3. USO FUNDING INNOVATION

- Self-Financing Mechanism: AP funded sustainably via Universal Service Obligation (USO) telecom levy.
- Zero APBN Strain: Fully funded without burdening general tax revenues.
- Socio-Economic Impact: Connects 497 regencies, driving e-education, telemedicine, and digital MSMEs.

LESSONS & CASE STUDY FROM INDONESIA

Key Enablers: Guarantees, PDF Standards, and Asset Accounting Compliance

PT PII / IIGF SOVEREIGN GUARANTEE

- Covers political risks, regulatory shifts, and government payment defaults.
- Drastically enhances project creditworthiness for international & domestic lenders.

PROJECT DEVELOPMENT FACILITY (PDF)

- Government-led, high-quality Feasibility Studies
- Ensures comprehensive technical, environmental, and financial de-risking before tender.

AVAILABILITY PAYMENT CERTAINTY

- Guarantees 15-year periodic payments covering CAPEX, OPEX, and reasonable equity return.
- Automated SLA deduction formulas ensure transparent performance management.

BOOT MODALITY & STATE ACCOUNTING

- Transitioned from BOO to Build-Operate-Own-Transfer (BOOT) to align with fiscal rules.
- Under state accounting, AP is categorized as 'goods & services'; asset returns to state at concession end.

PERFORMANCE REALITIES & SLA BENCHMARKS

Contract SLA Targets vs. Actual Performance & Network Utilization

SLA AVAILABILITY & RELIABILITY PERFORMANCE

- Contractual SLA Target (Baseline): Minimum 95% Availability (or 96% in West Ring) & Latency < 100 ms as stipulated in Agreement Annex 12.
- Actual SLA Achievement (Real): Consistently reached 98% – 100% availability across all monthly monitoring cycles (2018–2025)*.
- SLA Penalty Formula: AP payments are automatically docked if Availability drops below 95%, enforcing strict private O&M discipline.
- Service Resilience: Maintained ~100% SLA in areas facing heightened security challenges*

NETWORK UTILIZATION & CAPACITY SATURATION

- Average Network Utilization: 56.95% overall average nationwide technical utilization, with 8 pairs of Dark Fiber actively leased.
- West Ring Project 1 Saturation: 93.75% utilized (93.75 / 100 Gbps DWDM capacity), requiring new lambda expansion planning.
- East Ring 100% Saturation: FO routes (P11, P13, P15) and Microwave routes (P14-P17) reached 100% saturation—prompting the BAKTI-PTT capacity upgrade agreement.
- Socio-Economic Demand Insight: Proves latent demand in 3T areas was immense; once infrastructure was built, capacity was absorbed instantly.

Source: BAKTI, MCDA Indonesia

CONCLUSION & GLOBAL POLICY TAKEAWAYS

PPP Delivers Socio-Economic Infrastructure when Backed by Robust De-risking

IS PPP AN EFFECTIVE TOOL FOR SOCIO-ECONOMIC INFRASTRUCTURE?

"Yes, absolutely—provided the government decouples revenue from user demand, secures long-term fiscal commitments, and establishes institutional de-risking bodies like IIGF to protect private capital against non-commercial risks."

1. DECOUPLE DEMAND RISK

Use Availability Payment (AP) models for social infrastructure where tariffs cannot cover commercial CAPEX.

2. DEDICATED SOURCING

Integrate sector levies (e.g. USO funds) to back long-term AP commitments sustainably.

3. INSTITUTIONAL DE-RISKING

Establish specialized guarantee entities (e.g. IIGF) to mitigate sovereign & political risks.

4. SATURATED EXPANSION

Build flexible capacity upgrade clauses (as latent 3T demand rapidly absorbs bandwidth).

Terima Kasih

Thank You

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LESSONS & CASE STUDY FROM INDONESIA

Government Supports and Facilities for PPPs

01 — Pre-PDF Facility

As a facility to identify potential options for financing scheme options.

02 — PDF Facility

Assists in preparing project documents and transactions with a focus on meeting project bankability aspects to COD+2 years.

03 — Viability Support

Construction subsidy to make projects bankable. Can be combined with the AP scheme.

04 — Guarantee

Facility to guarantee the financial obligations of the contracting agencies in the PPP agreement.

05 — Availability Payment

Payment based on the Availability of Service measured based on the SLA according to the PPP agreement.