



# POLICY, REGULATION, AND USO TECHNOLOGY

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## Background

- The Declaration of ASEAN Concord II (Bali Concord II): the broad outlines for economic integration
- To implement Siem Reap Declaration on Enhancing Universal Access of ICT Services in ASEAN: “ICT Reaching out to the Rural”
- Input for recommended ASEAN Framework Agreement the Integration of Priority Sectors (USO/ICT)
- ASEAN Policy Guideline on Standards and Conformance:
  - ☐ Harmonization of Standards
  - ☐ Adoption of Technical Regulations
  - ☐ Conformity Assessment
  - ☐ Post Market Surveillance
  - ☐ Transparency

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## Policy Options

- Definitions and US Criteria
  - ☐ USO
  - ☐ USP
- Funding
  - ☐ Private Direct Investment for Rural
  - ☐ State Budget
  - ☐ USO Fund
  - ☐ Revenue Management
- Tender Mechanism
  - ☐ Incentives for Bidder
  - ☐ Subsidy
  - ☐ Tender Principle

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## Case Study

	INDONESIA	MALAYSIA
Definitions	USO (Universal Service Obligation) From "Play" to "Pay"	USP (Universal Service Provision) From "Pay or Play" to "Pay"
Funding	USO Fund Established	USO Fund Established
US Criteria	Area with no village public phone access	Area under 20% of fix telephony national average penetration rate
	Performance Based Contract: Buy the service	USP Claim: No Gain No Loss
Incentives for Bidder	License, FWA, Interconnection Profit Margin Revenue	Capital for Infrastructure Investment USP Claim Exclusivity
Subsidy	From Capex to Opex	Capex and Opex
Tender Principle	Outcome Requirement Technology Neutral and Internet Ready Least Cost Subsidy	USP Claim for Eligible Cost for 500 lines per villages Technology Neutral with fixed feature and internet and broadband ready Criteria: License, Technical, Track Record

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## Regulatory Frameworks

- National Laws
- Government Regulation
- Presidential Decree
- Ministerial Decree
- Deputy Minister Decree

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## Regulatory Frameworks in Indonesia

- **National Laws: National Telecommunication Law:**
  - UU No.36, 1999:
    - Termination of monopoly regime, liberalized environment for telecommunication in Indonesia
    - Promoting competition
    - Restructuring telecom sector
    - Universal Service Obligation
- **Government Regulation**
  - PP No.52, 2000:
    - USO Definition: Access and Service of Un-served area
  - PP No. 28, 2005:
    - USO Fund Contribution 0.75% of gross revenue
- **Presidential Decree:**
  - Keppres 80
    - Tender Mechanism

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## Regulatory Frameworks in Indonesia

- **Ministerial Decree**
  - KepMen Perhubungan No.KM 34/2004
    - USO: Provision Access and Service
  - KM/PerMen on USO
    - USO Deployment Mechanism (11/2007)
  - PerMen Kominfo
    - USO Authority Establishment (BTIP) (35/2006)
    - USO Location/Target Area (145/2007)
  - KM/PerMen
    - Interconnection Regime (8/2006)
    - Numbering
    - Licensing Regime
    - Spectrum Frequency Allocation
  - **Ministry of Finance:**
    - Permit for Multi Years Contract Agreement (S-205/2007)
    - BLU for BTIP (1006/2006)

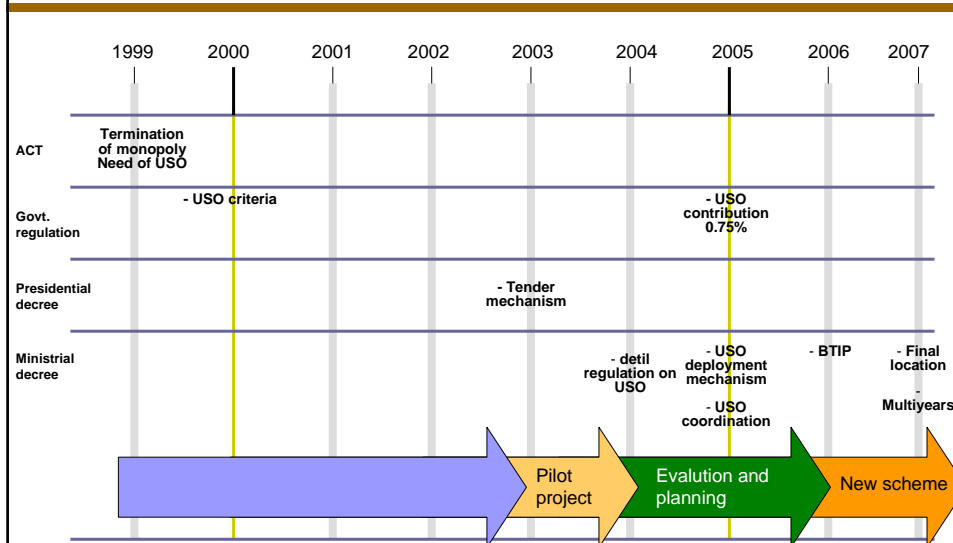
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## Regulatory Frameworks in Indonesia

- Deputy Minister Decree
  - Ministry of Telecommunication, Ministry of Internal Affair
    - Joint Agreement on Proposing USO Location
- PPK
  - Establishment of Tender Committee
  - Final budget: 125/2006
  - RFP Document: Spec and Requirement
  - Contract

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## TIMELINE OF INDONESIA's USO



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## OBSERVATION ON POLICY, REGULATION AND TECHNOLOGY

- Definition of USO/USP
  - Policy on definition and target area (market efficiency gap: commercially feasible AND/OR access gap: politically and socially desirable) will affect the regulatory framework and technology design
- Pay or Play:
  - Effective Incentives to attract existing and new operators to PLAY is essential
- Capex or Opex Subsidy:
  - Capex: extra incentive for vendor of technology, sensitive for long-term sustainability
  - Opex: Subsidy for maintain ACCESS with regard on Capacity, Coverage and Quality of service
  - Avoid subsidy on usage for efficient utilization of the resources

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## OBSERVATION ON POLICY, REGULATION AND TECHNOLOGY

- No Gain No Loss:
  - Should be managed effectively to avoid inefficient resources allocation
- Gross or Net Cost Contract:
  - Gross Cost: 100% cost provided by authority, revenue goes to authority
  - Net Cost: 100%-x cost provided by authority, revenue goes to bidder (operator)
  - A suitable technology that enable to implement proper revenue management is important for sustainable access provision
- Definition on “fixed telephony” penetration
  - Encouraging an emerge of multi platform technology: mobile (GSM) with “fixed” feature (numbering, limited mobility)
  - Radio Frequency is become importance resource

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## OBSERVATION ON POLICY, REGULATION AND TECHNOLOGY

- Number of line
  - Number of subsidized line per village encourages certain type of technology with regard to demand and capacity of technology
- Pricing Policy:
  - A regulated tariff for USO potentially create disincentive for the operator in promoting traffic if the average cost is higher than average revenue per usage
- Hybrid Technology
  - Potential of Portable Fixed Satellite and IP-Based Technology has limits on local call termination due to limited number of IP-Gateway availability and interconnection regime.

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## CONCLUSIONS

- A set of policy and regulatory system for providing sufficient incentive for operator should be provided with consider to efficient USO deployment
- Albeit under “technology neutral” principle, a good foundation on technology assessment is essential for effective and efficient USO planning and execution
- With regard to special characteristic on rural demand, opportunities for technology innovation for rural technology are widely opened
- Policy on interconnection and roaming on country border should be addressed
- New trend is wireless, therefore consideration of USO design is moving form Wireless Network Design to Radio Resources Management

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