INDONESIA BROADBAND PLAN: LESSONS LEARNED

presented by:
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Coordinating Ministry for Economic Affairs
Jakarta, 9 September 2015
Outline

1. The Indonesia Broadband Plan 2014–2019
2. The Links to Medium-Term National Development Plan (RPJMN) 2015–2019
3. IBP Implementation: The First Year
The Indonesia Broadband Plan 2014–2019
the world’s largest archipelago

more than 17,500 islands
spanning the length of 3,977 miles
total areas of 1.9 million sq miles

more than 248.8 million people

34 provinces; 514 districts;
74,093 villages

scattered rural areas
difficult landscape
challenging weather

Robust ICT connectivity is a must

source: Indonesia Statistics Agency, 2014
## ICT Infrastructure

### NATIONAL

<table>
<thead>
<tr>
<th></th>
<th>HH w/cellular</th>
<th>HH w/computer</th>
<th>cellular coverage</th>
<th>SIM cards</th>
<th>HH w/internet</th>
<th>FO backbone coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH w/cellular</td>
<td>86.09%</td>
<td>15.62%</td>
<td>&gt; 90% population</td>
<td>&gt; 337 millions</td>
<td>32.21%</td>
<td>74% districts</td>
</tr>
</tbody>
</table>

### SUMATERA
- HH w/cellular: 89.23%
- HH w/comp: 14.03%
- HH w/internet: 28.36%

### KALIMANTAN
- HH w/cellular: 90.51%
- HH w/comp: 19.12%
- HH w/internet: 31.63%

### SULAWESI
- HH w/cellular: 86.93%
- HH w/comp: 17.92%
- HH w/internet: 30.33%

### MALUKU - PAPUA
- HH w/cellular: 58.00%
- HH w/comp: 12.66%
- HH w/internet: 16.46%

### JAVA
- HH w/cellular: 86.47%
- HH w/comp: 15.94%
- HH w/internet: 35.36%

### BALI - NUSRA
- HH w/cellular: 78.38%
- HH w/comp: 13.67%
- HH w/internet: 24.42%

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Broadband as a driver in national development.

Need for a systematic, comprehensive, and integrated broadband development plan.

Calls for Broadband Acceleration

National Agenda
- Article 28F of Constitution 1945
- Long-Term Development Plan 2005-2025 and Medium-Term Development Plan 2015-2019
- Economic Master Plan 2011-2025
- Connectivity, Competitiveness, and Economic Transformation

International Commitment
- MDG and WSIS
- ASEAN Masterplan on Connectivity
- Broadband Commission
- Connectivity and Broadband

Global Trends
- Globalization
- Shifting of Government’s Roles
- Technology Innovation
- Required Adjustment
Definition

- always-on internet connectivity with triple-play capability;
- resilient and secured information;
- 2 Mbps (fixed), 1 Mbps (mobile)

Objective

To give direction and guidance for acceleration of Indonesia broadband development in a comprehensive and integrated manner for the period of 2014-2019

Function

- A reference/guidance for ministries and local governments to prepare policies and action plans
- A reference for private sectors to invest

They are required to consult and coordinate with Minister of National Development Planning/Bappenas in doing so

Priority Sectors

Long-term Vision 2025: Prosperous Indonesian society

2010 - 2014 CONNECT

RPJMN II

2014 Targets, among others:
- FO backbone connects all big islands
- BB in 88% districts
- e-gov index: 3.0 out of 4.0

2015 - 2019 INNOVATE

RPJMN III

- Providing BB services to all districts, schools, and other public facilities;
- Strengthening government connectivity by improving government secured network and consolidating data center;
- Promoting adoption and effective use of BB

2020 - 2025 TRANSFORM

RPJMN IV
IBP Targets

2013

Fixed Broadband: 15% HH (1Mbps) and 5% population;
Mobile Broadband: 12% population (512 kbps)

2019

Urban:
Fixed Broadband: 71% HH (20Mbps);
Mobile Broadband: 100% pop (1 Mbps)

Rural:
Fixed Broadband: 49% HH (10Mbps);
Mobile Broadband: 52% pop (1 Mbps)

Utilization:
- Broadband service price: max 5% of average monthly income
- Priority Sectors: e-Government; e-Education; e-Health; e-Logistic, e-Procurement
Priority Sectors

G2G - e-Government (back office)

G2C - e-Education

G2B - e-Logistic

- To integrate all government institutions enabling more efficient way to communicate and share data
- To manage the demographic bonus
- To support prompt flow of commodities and promote efficiency in government spending
## Broadband in Public Sector

<table>
<thead>
<tr>
<th>Priority Sectors</th>
<th>Issues</th>
</tr>
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</table>
| e-Government       | - Mostly in the digitalization phase, limited business process transformation  
                      - Various directions/guidance in the operational level, both in central and local governments  
                      - Inefficient investment due to activities duplication  
                      - Deal with sensitive data |
| e-Education        | - Limited broadband access, not optimal for multimedia-based schooling  
                      - Need for reliable data warehouse |
| e-Health           | - Very limited broadband access to support telediagnostic (tele-consultation, tele-radiology, tele-cardiology)  
                      - Many but disconnected e-health systems  
                      - Need for data security/protection |
| e-Logistic         | - Various logistic information systems |
| e-Procurement      | - Need for robust data warehouse and access for in-time tender process  
                      - ICT infrastructure gap between regions hinder tender process |
Common Issues

- Reliable, High Quality Connectivity
- Data Management and Security
- (some-extent) Centralized Planning and Budgeting
- Clear and Consistent Direction/Guidance

Broadband in Public Sector (contd)
IBP Flagships

**Economic Connectivity**

1. **Palapa Ring Project**
   To build FO backbone to all districts

2. **Shared Duct**
   To construct a shared pipe/duct to accommodate fiber optics from different operators

3. **Regional Terrestrial Broadband Piloting**
   To serve as extension of Palapa Ring in USO areas using wireless solution

**Government Connectivity**

4. **Government Networks and Consolidated Data Warehouse**
   To build a secured, dedicated, high-speed government networks and consolidated data centers

**Enabling**

5. **USF Reform**
   To accommodate more extensive use of USO Fund to cover broadband ecosystem development

6. **National Digital Literacy Program and Local ICT Industry**
   To improve ICT literacy nationwide in order to promote adoption and meaningful use of broadband and strengthen local ICT industry
The Links to Medium-Term National Development Plan (RPJMN) 2015-2019
# ICT Agenda 2015-2019

## Goal: Strengthen National ICT Connectivity

<table>
<thead>
<tr>
<th>Agenda 1: Economic Connectivity</th>
<th>Agenda 2: Government Connectivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>To provide connectivity inter/intra islands and districts</td>
<td>To provide connectivity inter/intra government institutions (government’s back office)</td>
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### Policies/Strategies

- **Redesigning USO to accommodate broadband deployment**
- **Optimalizing spectrum frequency management:**
  - spectrum refarming, migration to digital TV, dynamic use of spectrum frequency
- **Fixed broadband development:**
  - sharing of passive infrastructure (dark fiber, poles, tower, right of ways), open access, multi-mode access (fiber, spectrum, satellite)
- **e-Government:**
  - consolidation of national data center, security, obligation to use “go.id” email account for government communication
- **ICT-literacy**
- **Local ICT industry**
- **Restructuring broadcasting industry**
ICT Targets for 2015-2019

1. ICT services in non-commercial areas
   - 100% coverage of telco and internet in USO areas*
   - 90% coverage of RRI and 88% of TVRI (national broadcasters for radio and TV) to population
   * can be rural, border areas, schools

2. Broadband as Information Highway
   - National FO backbone networks connecting all districts
   - Fixed BB (HH coverage): 71% (urban); 49% (rural)
   - Mobile BB of 1 Mbps (population coverage): 100% (urban); 52% (rural)

3. Spectrum Management
   - Completion of migration to digital TV
   - Addition of 350 MHz bandwidth to support mobile BB

4. ICT literacy
   - National ICT literacy: 75%

5. e-Government
   - e-Government Index of 3.4
IBP Implementation: The First Year
Monitoring & Evaluation Mechanism

1. Indonesia Broadband Plan (Presidential Decree No. 96/2014)
   - adopted in
   - priority sectors, flagship programs, action plans

2. Medium-Term National Development Plan (RPJMN) 2015-2019
   (Presidential Decree No. 2/2015, January 2015)
   - elaboration of president’s vision (national agenda): priorities, policies, strategies, identified programs

3. Ministry’s Strategic Plans 2015-2019
   (Minister’s Decree, mid 2015)
   - elaboration of RPJMN based on each ministry’s duties and functions

- Government
  - Procurement
  - e-Logistic
  - Min. of Home Affairs
  - Min. of ICT
  - Min. of Finance
  - Min. of Bureaucratic Reform
  - Min. of Health
  - Min. of Education
  - Government Procurement Agency (LKPP)
Monitoring & Evaluation Mechanism (2)

Report

The President of Rep. of Indonesia

- report progress
- propose revision of IBP

Min. of National Development Planning (Bappenas)

Government Institution

National ICT Council (Dewan TIK Nasional)

Multi-stakeholder organization chaired by the President. Minister of Bappenas is the Executive Chairman of Steering Team

Monitoring and Evaluation

Implementation

Min. of Bureaucratic Reform

Min. of ICT

Min. of Finance

Min. of Home Affairs

Min. of Health

Min. of Education

Min. of Trade

LKPP

Others
## Progress of the Flagships

**Dec 2015**

<table>
<thead>
<tr>
<th>Flagship</th>
<th>Completion/Details</th>
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</table>
| **Palapa Ring**                               | Target: 57 districts  
  PQ: completed  
  Tender process  
  Contract signing                                                      |
| **Regional Terrestrial Broadband Piloting**   | Pilot rural connectivity using Wireless Regional Access Network (WRAN 802.22) in Jogjakarta: completed  
  Preparation of the 2nd trial  
  Formulation of policy brief                                      |
| **USO Reform**                                | Revision of Ministerial Decree on USO to accommodate broadband ecosystem: completed  
  Appraisal of proposal submitted by ministries and local governments (bottom-up) to use USF  
  Technical planning (preparation for implementation)                  |
| **Consolidated Data Center**                  | Regulation on moratorium of new construction for government’s DC: completed  
  Approval of concept on government’s consolidated data center  
  Signing of Presidential Decree on e-Government                      |
Lessons Learned

- focal point connecting to all related parties/institutions
- support from the highest-rank officials and have it put in regulation
- multi-stakeholder active participation
- context which relates to national agenda to create urgency
- tasks delegation
- concurred indicators for implementation and money
- dynamic plans
- keep the momentum
THANK YOU

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