



REPUBLIK INDONESIA

INDONESIA BROADBAND PLAN: LESSONS LEARNED

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INDONESIA BROADBAND PLAN

Connect • Innovate • Transform



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**



1 The Indonesia Broadband
Plan 2014-2019



the world's largest archipelago



scattered rural areas



difficult landscape



challenging weather

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

Robust ICT connectivity is a must





ICT Infrastructure

NATIONAL

HH w/cellular	86.09%	HH w/computer	15.62%	cellular coverage	> 90% population
SIM cards	> 337 millions	HH w/internet	32.21%	FO backbone coverage	74% districts

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%



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

Broadband as a driver in national development.

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



Presidential Decree Number 96 of 2014 on Indonesia Broadband Plan 2014-2019

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

e-Government; e-Health, e-Education, e-Logistic, e-Procurement



IBP Staging

**2010 - 2014
CONNECT**



2014 Targets, among others:

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

Long-term Vision 2025:
Prosperous Indonesian
society

**2020 - 2025
TRANSFORM**



**RPJMN
III**

**2015 - 2019
INNOVATE**

- 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



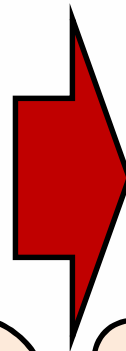
IBP Targets



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)



To integrate all government institutions enabling more efficient way to communicate and share data

G2C

e-Education

e-Health



To manage the demographic bonus

G2B

e-Logistic

e-Procurement



To support prompt flow of commodities and promote efficiency in government spending

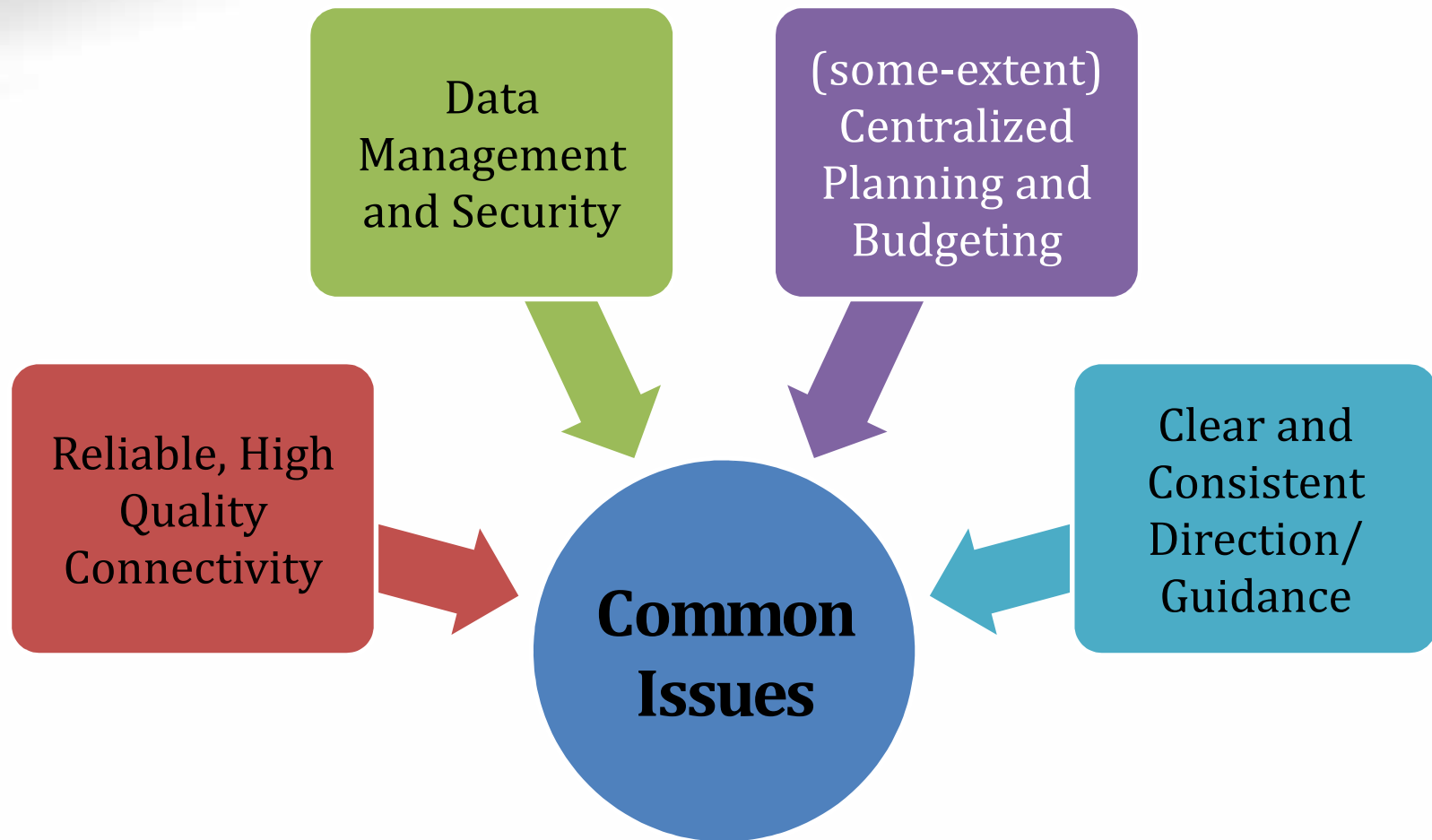


Broadband in Public Sector

Priority Sectors	Issues
e-Government	<ul style="list-style-type: none">▪ 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	<ul style="list-style-type: none">▪ Limited broadband access, not optimal for multimedia-based schooling▪ Need for reliable data warehouse
e-Health	<ul style="list-style-type: none">▪ 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	<ul style="list-style-type: none">▪ Various logistic information systems
e-Procurement	<ul style="list-style-type: none">▪ Need for robust data warehouse and access for in-time tender process▪ ICT infrastructure gap between regions hinder tender process



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

2

The Links to Medium-Term National Development Plan (RPJMN) 2015-2019



ICT Agenda 2015-2019

Goal: Strengthen National ICT Connectivity

Agenda 1: Economic Connectivity

To provide connectivity inter/intra islands and districts

Agenda 2: Government Connectivity

To provide connectivity inter/intra government institutions (government's back office)

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



3 IBP Implementation: The First Year

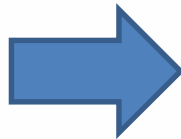


Monitoring & Evaluation Mechanism

1

adopted in

Indonesia
Broadband Plan
(Presidential Decree
No. 96/2014)



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

priority sectors,
flagship programs,
action plans



2



Ministry's Strategic Plans 2015-2019
(Minister's Decree, mid 2015)

elaboration of RPJMN based on
each ministry's duties and
functions

3

assure the consistency
of IBP and Ministry's SP



e-Government

e-Health

e-Education

e-Logistic

e-Procurement

Min. of Bureaucratic
Reform

Min. of Health

Min. of Education

Min. of Trade

Government
Procurement
Agency (LKPP)

Min. of ICT

Min. of Finance

Min. of Home Affairs



Monitoring & Evaluation Mechanism (2)



Report

The President of Rep. of Indonesia

- report progress
- propose revision of IBP

report progress



**Monitoring and
Evaluation**

Min. of National Development
Planning (Bappenas)

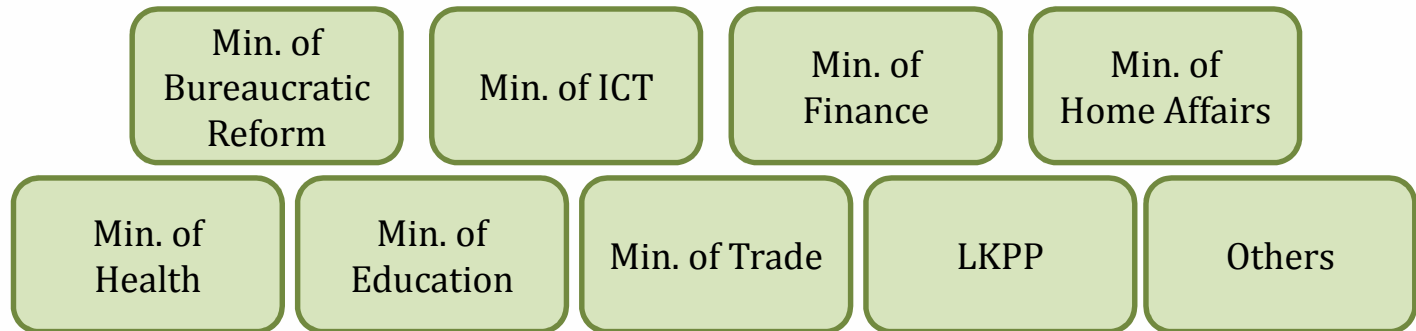
Government Institution

National ICT Council
(Dewan TIK Nasional)

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



Implementation





Progress of the Flagships

Dec 2015

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



concurrent indicators for implementation and money



dynamic plans



keep the momentum



INDONESIA BROADBAND PLAN

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THANK YOU

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