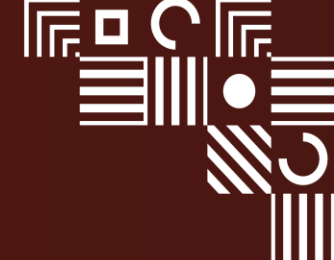# How Partnership Boosts BAKTI Contribution
to Close the Digital Gap
# in the Country's Effort to Digitalize the Nation

Anang Achmad Latif (President Director of BAKTI KOMINFO)

ITU Regional Development Forum Online 2020
Session 2a: Partnerships for Supportive Policies and Regulations for ICTs
Tuesday, November 3, 2020 – 12.00 JKT TIME

MCIT targets to complete the construction of fiber optics, BTS, and microwave links by the end of 2022, to have 4G access. BAKTI is committed to facilitate access to internet coverage throughout Indonesia.

KOMINFO **BAKTI**
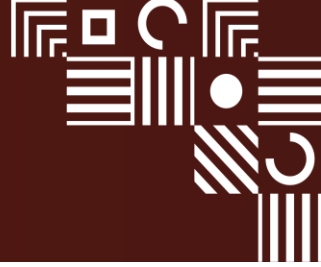
BLU-BAKTI is a Non-echelon organizational unit in the Ministry of Communication and Information Technology (MCIT) that implement the Public Service Agency Financial Management Pattern

BAKTI main task is to **provide ICT (Information and Communication Technology) infrastructure and ecosystems for the public**, funded by the contribution of the USO from Telecommunications Operators, 1.25% of the telecommunications provider's annual gross revenue.

VISION

Bridging the digital divide for a better future for Indonesia.

MISSION

Providing quality and targeted Universal Service Obligation (USO) services in order to address the digital divide in Indonesia.

Kewajiban Pelayanan Universal **(KPU)**
Universal Service Obligation (USO)

"The concept of the USO Telecommunications and Informatics is one of the government's efforts to equalize the ICT network in the country"

PRESIDENT JOKOWI MANDATES ON HOW TO ESCALATE THE DIGITAL TRANSFORMATION

KOMINFO **BAKTI**
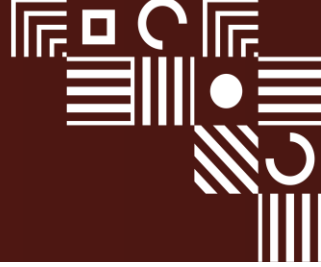
1 Immediately accelerate the expansion of accessibility and enhancement of digital infrastructure and the provision of internet services

2 Prepare a digital transformation roadmap in strategic sectors. Whether in the government, public services, social assistance, education, health, trade, industry and broadcasting sectors

3 Accelerate the national data center integration

4 Prepare the need of digital talent human resources

5 Those related to regulations, funding schemes and financing should be prepared as soon as possible

Presiden Jokowi
Monday, August 3 2020

BAKTI
KOMINFO

Indonesia's vast geographical landscape requires robust and strong digital infrastructure

Vigorous collaborations have enabled Indonesia to deploy massive digital infrastructure from the first mile to the very last mile

We must turn this crisis into a giant leap in transforming our digital ecosystem

Johnny G. Plate
Minister of Communication and Information Technology

THE PORTRAIT OF INDONESIA ICT INFRASTRUCTURE
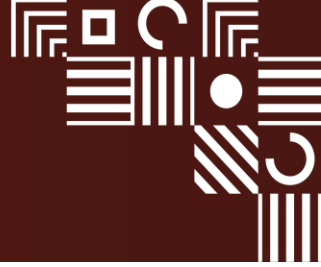
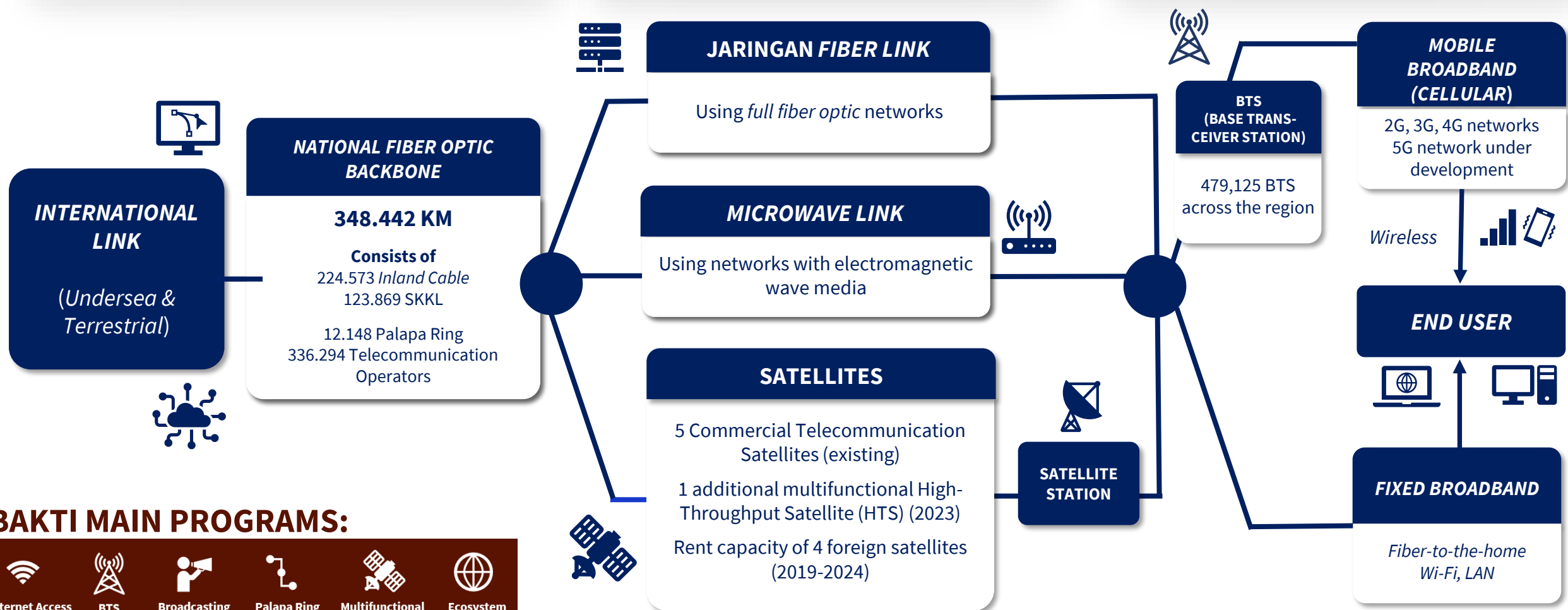## NATIONAL BACKBONE NETWORK (CORE)

connecting between cities/districts
(e.g. Palapa Ring and Telecommunications Operator Networks)

MIDDLE MILE NETWORK (BACKHAUL)

connecting cities / districts with sub-districts
(e.g. Satellite, optical fiber, and microwave)

LAST MILE NETWORK (ACCESS)

connecting to customers
(e.g. 4G BTS, WiFi internet access, etc.)

INTERNATIONAL LINK

(*Undersea & Terrestrial*)

NATIONAL FIBER OPTIC BACKBONE

348.442 KM

Consists of
224.573 *Inland Cable*
123.869 SKKL

12.148 Palapa Ring
336.294 Telecommunication Operators

JARINGAN *FIBER LINK*

Using *full fiber optic* networks

MICROWAVE LINK

Using networks with electromagnetic wave media

SATELLITES

5 Commercial Telecommunication Satellites (existing)

1 additional multifunctional High-Throughput Satellite (HTS) (2023)

Rent capacity of 4 foreign satellites (2019-2024)

SATELLITE STATION

BTS (BASE TRANS-CEIVER STATION)

479,125 BTS across the region

MOBILE BROADBAND (CELLULAR)

2G, 3G, 4G networks
5G network under development

Wireless

END USER

FIXED BROADBAND

Fiber-to-the-home Wi-Fi, LAN

BAKTI MAIN PROGRAMS:

Internet Access | BTS | Broadcasting | Palapa Ring | Multifunctional Satellite | Ecosystem

BRINGING MOBILE BROADBAND (4G) TO ALL UNSERVED AREAS (12,548 VILLAGES AND DISTRICTS)
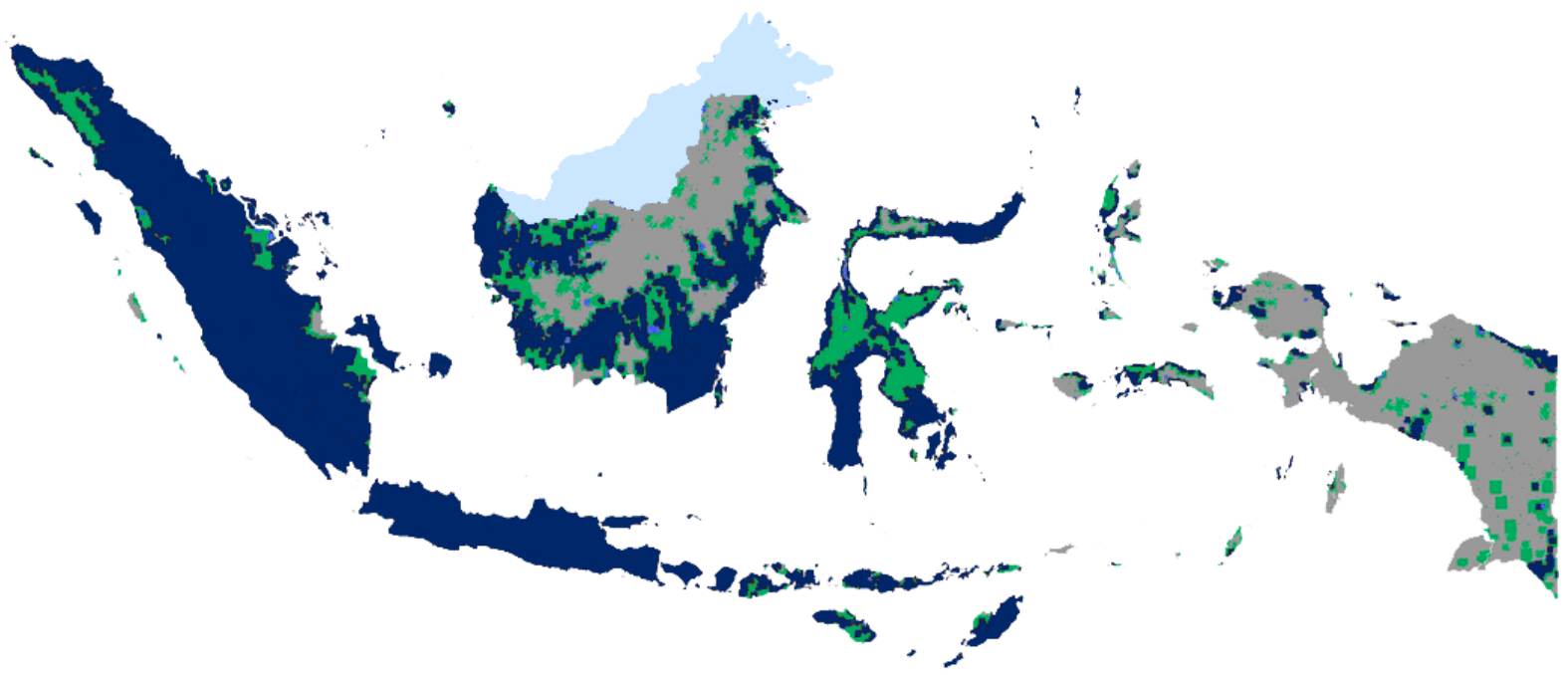
INTERNET REACHABILITY MAP BASED ON ADMINISTRATIVE APPROACH (VILLAGES)

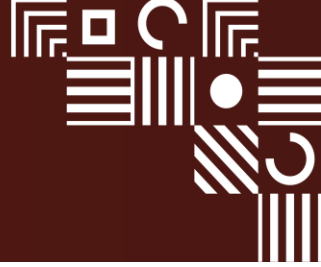| TOTAL VILLAGES IN INDONESIA **83.218** VILLAGES	
VILLAGES WITH 4G ACCESS **70.670** VILLAGES	
VILLAGES WITH NO 4G ACCESS **12.548** VILLAGES	
3T REGION VILLAGES WITH NO 4G ACCESS **9.113** VILLAGES	NON 3T REGION VILLAGES WITH NO 4G ACCESS **3.435** VILLAGES

INTERNET REACHABILITY MAP BASED ON GEOGRAPHICAL APPROACH (INDONESIA LAND AREA)

LAND AREAS: 1.899.753 KM²

2G 68,54 %
SIGNAL COVERAGE 1.302.030 KM²

3G 44,35 %
SIGNAL COVERAGE 842.526 KM²

4G 49,33 %
SIGNAL COVERAGE 937.126 KM²

Note: calculated based on the coverage of Indonesia's land area, including mountains and forests.

source: refined from Dukcapil 2016, BIG 2016, BPN 2015, *data site & coverage* Operator Seluler Q3 2019

TOTAL OF PUBLIC SERVICES POINT

501.112 POINTS

Schools	380.979	points
Local govt.	90.541	points
Medical Fac.	15.404	points
Polsek/Koramil	14.188	points

TOTAL OF PUBLIC SERVICES POINT
WITH GOOD INTERNET ACCESS

351.112 POINTS

Schools	287.079	points
Local govt.	42.041	points
Medical Fac.	11.704	points
Polsek/Koramil	10.288	points

TOTAL OF PUBLIC SERVICES POINT
IN NEED OF ADEQUATE INTERNET ACCESS

150.000 POINTS

Schools	93.900	points
Local govt.	47.900	points
Medical Fac.	3.700	points
Polsek/Koramil	3.900	points
Others (K/L)	600	points

*) KPBU Assumption

Internet — Gateway (Earth Station) — **SATRIA** — Ground Segment — Wi-Fi

SATRIA satellite will provide fast Internet (Wi-Fi) services for public services. **The service is planned to operate in the third quarter of 2023.**
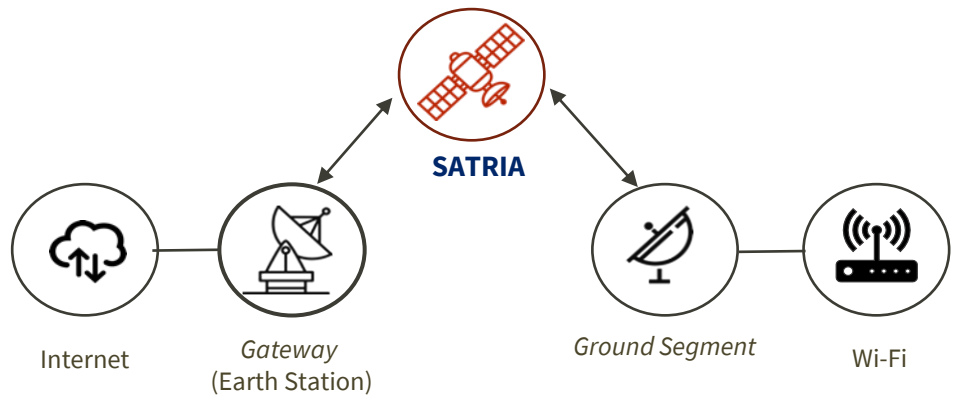
Satellite Road Map to Provide 150,000 Wi-Fi points

2023	2024	2030
Backup 80 Gbps		
SATRIA-1 **150 Gbps**	**SATRIA-2** **300 Gbps**	**SATRIA-3** **500 Gbps**

SPEED OF INTERNET SERVICE

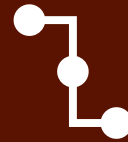| 1 Mbps/points	s.d. 10 Mbps/points	s.d. 20 Mbps/points

THANK YOU

Internet Access   **BTS**   **Palapa Ring**   **Multifunctional Satellite**   **Ecosystem**

www.baktikominfo.id