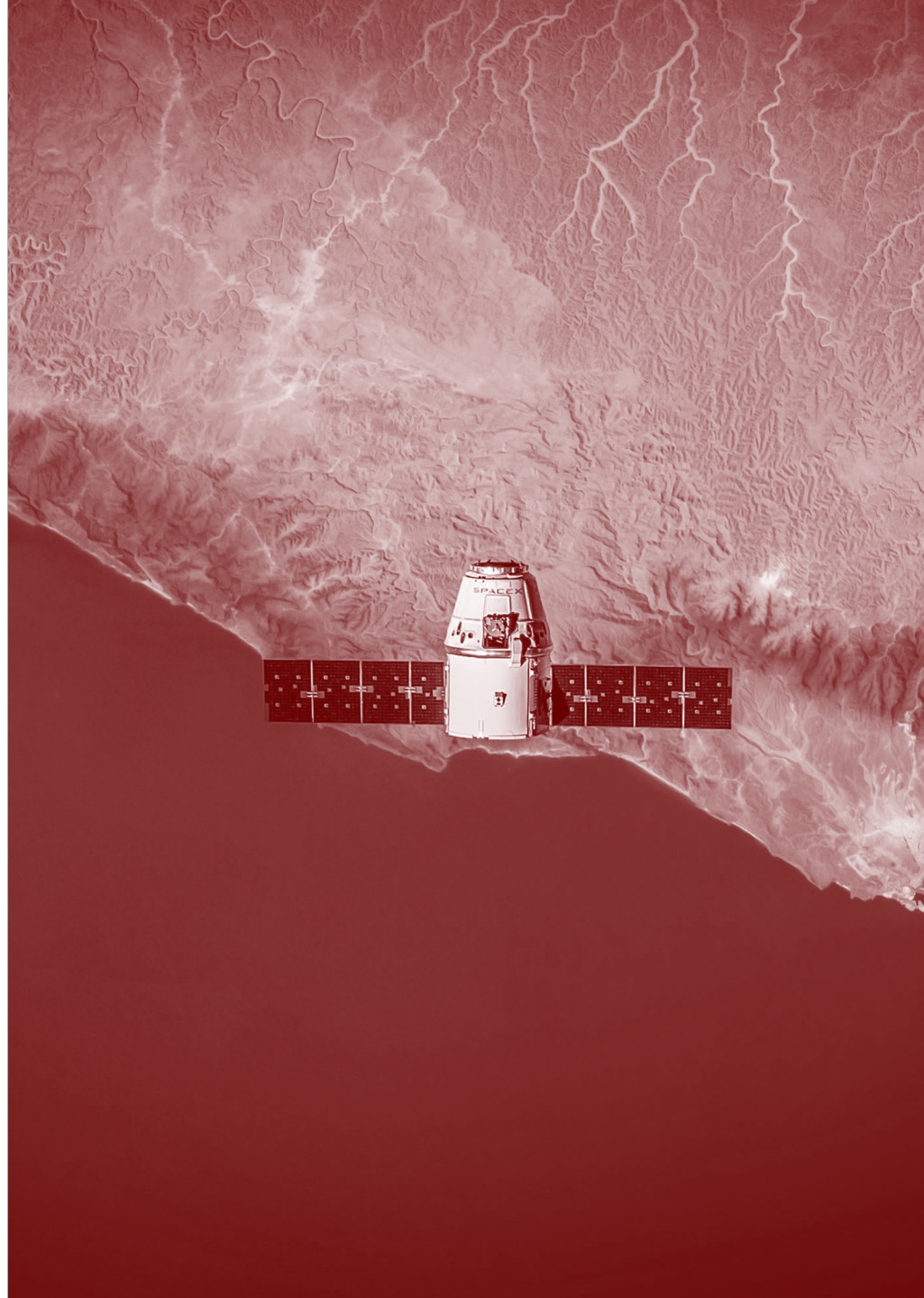


September 2026

Indonesia's Satellite Landscape: a Strategic View

Strategic Context · Market Timing · Stakeholders

Entry Considerations · Satellite Players · Regulations · Outlook



Indonesia's satellite story in seconds

Geography, market, competition, regulation and further outlook.

WHY

17,508 islands

Indonesia's archipelago makes satellite the only viable connectivity for the 3T frontier — 72.2M people still offline (early 2025).

CAPACITY

~400 Gbps current domestic sovereign capacity

SATRIA-1 is already delivering 150 Gbps flagship capacity, reinforced by domestic heavyweights like Nusantara 5 and Merah Putih 2 to power remote regions smoothly as the country prepares to scale even further with SATRIA-2's 300 Gbps capacity.

REGULATION

6 + 7 control levers

Ownership is open, but access remains conditioned by licensing, local anchoring, reciprocity and ongoing regulatory compliance.

MARKET

~\$400M today → **\$850M** 2031

~15.6% CAGR. Services 59.3% of revenue; LEO already 52.7% by orbit. Fastest-growing segment: energy vertical at 16.7%.

COMPETITION

May 2024 Starlink licenced

Starlink secured a licensed presence in Indonesia in 2024. China's emerging LEO operators are actively pursuing overseas commercialisation, Indonesia has yet to feature publicly in this push.

OUTLOOK

GEO+LEO hybrid outcome

No single orbit wins outright. Jakarta must decide: ride SATRIA-2, deepen Starlink integration, or hedge toward a Chinese LEO entrant.

Why satellites: geography makes fibre uneconomical

Indonesia is the world's largest archipelagic state — terrestrial networks stop where the sea begins.

17,508

Islands nationwide

Spanning ~5,000 km east–west on par with the continental US

72.2Mn

People still offline (early 2025)

25.4% of the population had no internet access at the start of 2025.

1.91%

Share of users from 3T regions

Frontier, outermost & disadvantaged areas remain furthest behind despite national gains.

THE STRUCTURAL CASE FOR SATELLITE

Fibre and 4G economics break down past the populated cores — laying cable across open sea to a handful of remote villages rarely pays back. Satellite is the only technically and financially viable bridge for the frontier.

Java concentration

Java accounts for 58.1% of national internet use and reaches 84.7% penetration — while outer islands sit far behind. Satellite spot-beam capacity is purpose-built to close this gap.

Permanent layer, not stopgap

The government's own broadband targets treat satellite as a permanent infrastructure layer — not something terrestrial build-out is expected to fully replace.

The 3T mandate

Frontier (Terdepan), Outermost (Terluar) and Underdeveloped (Tertinggal) regions are a formal policy target. SATRIA-1 exists specifically because no commercial model reaches them.

Why now: capacity, capital and competition arrived together

Three independent timelines converged inside an 18-month window, turning a policy ambition into a live market.

1

3X available capacity

SATRIA-1 (2024) and Nusantara Lima (2025) roughly tripled Indonesia's domestic high-throughput satellite capacity in under two years. Along with SATRIA-2's planned ~300 Gbps capacity set to further multiply available capacity.

\$850M

Indonesia SATCOM 2031
Indonesia's satellite communications market size estimated at \$412M in 2026

15.6%

CAGR 2026–2031
Indonesia satellite communications market growth (Mordor Intelligence base case).

\$1.59B

ASEAN SATCOM 2025
Regional market growing to an estimated \$3.13B by 2030 at 14.5% CAGR.

2



foreign entry opened

Starlink cleared VSAT + ISP licensing in May 2024; 100% foreign ownership in satellite telecom is now permitted by Komdigi.

59.3%

Service Share
Turnkey managed connectivity contracts bundling capacity, terminal upkeep and monitoring dominate spending.

52.7%

LEO share by orbit
LEO has overtaken GEO/MEO as the largest single orbit-type revenue contributor, a structural shift.

3



digital economy scaled

Indonesia's digital economy is closing in on \$130B in value, the largest in Southeast Asia — creating structural demand for connectivity in every region.

16.7%

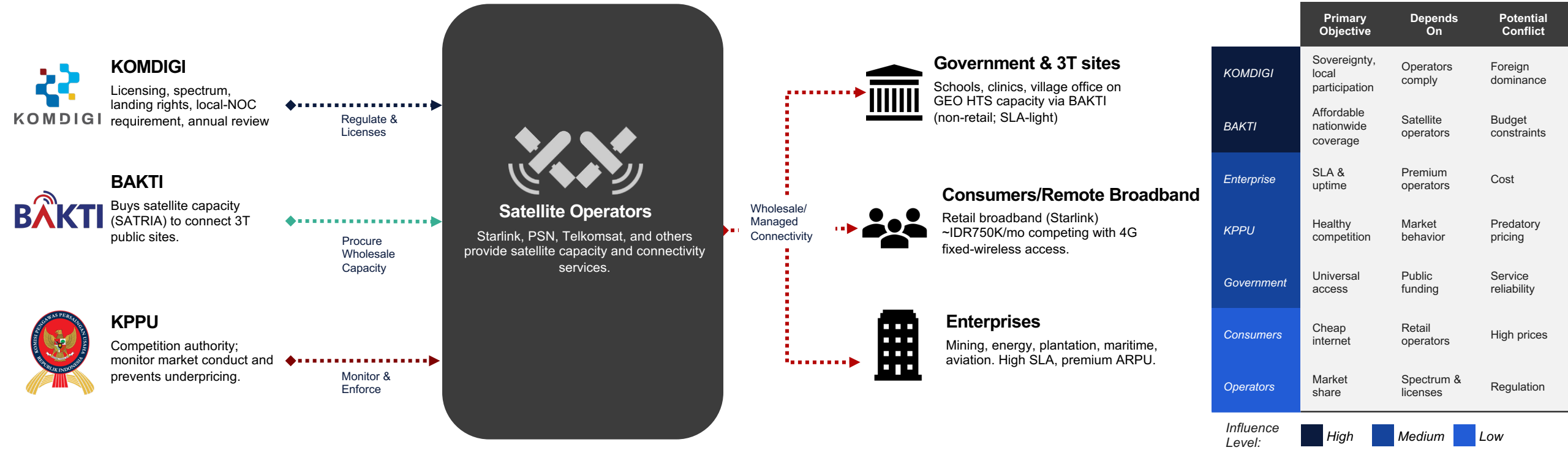
Energy vertical CAGR
Offshore rigs and remote mines are the fastest-growing end-user segment for satellite demand nationally.

KEY SIGNAL

The market opened at the moment supply arrived. That combination is rare and it's why Indonesia's SATCOM market is growing at ~15.6% CAGR rather than the low single digits that characterized the pre-SATRIA era.

The full stakeholder map

Operators, government bodies, financiers and end-users all have different stakes — and they don't always pull in the same direction.



DEFENSE DEMAND – OFTEN MISSED

PT Len Industri and Thales signed a strategic partnership (April 2022) covering radar, military satellites, electronic warfare and battle-management systems — a reminder that demand isn't purely civilian. Defense modernization is its own SATCOM driver and sits outside the commercial market estimates cited in this brief.

How it works with all three operating models

Capital structure shapes pricing and risk — Indonesia runs all three models simultaneously, under a single licensing framework.





Government-funded, Operator-run

Public capital addresses market failure. Government finances uneconomic coverage through BAKTI, while private operators deliver and operate services under commercial contracts.



Objective
Universal Access



Capital
Public (APBN)



Return
Social Impact



Commercial Wholesale Capacity

Wholesale separates infrastructure from retail. Satellite operators monetize network capacity through ISPs, VSAT integrators and enterprise providers rather than serving end-users directly.



Objective
Capacity Monetization



Capital
Private



Return
Wholesale ARPU



Vertically Integrated (own the sky)

Vertical integration compresses the value chain. One provider controls space assets, ground infrastructure and customer relationships, reducing intermediaries and improving economics.



Objective
Go-to-market & scale



Capital
Private



Return
Retail ARPU

HOW IT HOLDS TOGETHER

The three models don't fight — they stack. State-funded GEO HTS serves the public sector mission; commercial wholesale fills enterprise and backhaul; vertically integrated LEO captures consumer upside. The government's trick is keeping all three under the same licensing tent.

6

Wellington Capital
Advisory

Sources: Mordor Intelligence; spacesgp.com;

The players over Indonesia

Two categories, and one watchlist name that could reshape the market.

Satellite Operator / Fleet	Primary Market Role	Target User	Key Bandwidth & Tech	Interoperability
Government (BAKTI / Komdigi) • SATRIA-1 & SATRIA-2 (in Pipeline)	Direct Public Service	3T region schools, health clinics, border posts	Ka-Band VHTS (150 Gbps scaling to 450+ Gbps)	Core Client: Leases emergency backup capacity from PSN (Nusantara Lima). Coordinates ground gateways alongside PSN's network.
PSN (Pasifik Satelit Nusantara) • Nusantara Series (N5 / Nusantara Lima)	Commercial Enterprise & National Infrastructure	Telecom operators, maritime, mining, ASEAN regional markets	Ka-Band & Ku-Band HTS (160 Gbps via N5)	The Ecosystem Bridge: Operates the central Network Operations Center (Cikarang) that controls government SATRIA satellites. Acts as official failover backup for SATRIA-1.
Telkomsat (Telkom Indonesia) • Merah Putih 1 & 2	Cellular Backhaul & Banking Networks	Telkomsel mobile towers, state banks (ATMs), maritime shipping	C-Band (Rain-resistant) & Ku-Band HTS	The Hybrid Competitor: Partners with Starlink to land global data packets into domestic fiber networks, while directly competing against Starlink for corporate enterprise clients.
BRIsat (Bank Rakyat Indonesia) • BRIsat-1	Dedicated Financial Infrastructure	Rural bank branches, secure ATM networks, financial data syncing	C-Band & Ku-Band	Isolated Security Layer: Operates independently from public/commercial internet traffic. Uses dedicated, encrypted channels to prevent transaction congestion.
Starlink (SpaceX) • LEO Constellation	Premium Consumer Retail & High-Speed Wholesale	Isolated high-income users, remote businesses, cellular backhaul	Ku-Band & Ka-Band LEO (Low Latency ~30-40ms)	The Disruptor-Partner: Sells bulk LEO capacity to Telkomsat for cellular tower backhaul, while competing directly with PSN and Telkomsat for rural business customers.
Chinese Players (State & Commercial) • STAR.VISION / STAR-1 (Lampung-1) • IAMCAS Constellation (19 LEO) • APSTAR / China Satcom	Earth Observation (EO), Smart Agritech, Maritime Tracking & Regional Broadcasting	BRIN (National Research Agency), Provincial Govts (e.g., Pemprov Lampung), regional TV broadcasters	Hyperspectral AI (LEO), Optical/Radar SAR, C/Ku/Ka-Band (GEO)	Government Strategic Tech Partner: • Sub-National Data Provider: STAR.VISION launches satellites like Lampung-1 (AI hyperspectral LEO) for local agricultural, coastal, and disaster monitoring, with data governed under BRIN oversight. • National EO Fleet: IAMCAS partners with BRIN and private capital (PT URPI) to deploy a 19-satellite remote-sensing constellation. • Transponder Capacity: Regional broadcasters lease APSTAR/China Satcom transponders for regional fills (through PT NQI).

GROUND NETWORK & ORBIT DYNAMICS

Domestic ground gateways operated by PSN and Telkomsat unite SATRIA and Starlink traffic directly into Indonesia's Palapa Ring fiber backbone. Meanwhile, local operators leverage weather-resistant GEO satellites for baseline stability while using low-latency LEO constellations as dynamic speed boosters.

Rules of the Indonesian skies

Komdigi has kept every lever of control it needs.



6 Rules of Foreign & Market Entry

- 1 **100% Foreign Ownership Allowed:** Via local PT PMA entity under Positive Investment List
Perpres 10/2021 (amended Perpres 49/2021)
- 2 **Local Gateway/NOC:** Foreign entities must cooperate with a domestic telecom network provider
Permenkominfo 5/2021
- 3 **Reciprocity Requirement:** Foreign entry granted only if home nation offers reciprocal access
Permenkominfo 21/2021 (now superseded by Permenkomdigi 3/2025)
- 4 **Land-Roaming Restrictions:** Fixed satellite ISPs restricted to fixed registered points
Permenkominfo 13/20219 (amended by Permenkominfo 1/2021)
- 5 **3T Market Protection:** KPPU prohibition of predatory pricing & bundling in 3T areas
UU 5/1999; UU 36/1999; KPPU 2024 recommendation
- 6 **Landing Right & Compliance:** Must hold separate ISP/Closed Network operator license
Permenkomdigi 2/2025



7 Rules of Market & Operations

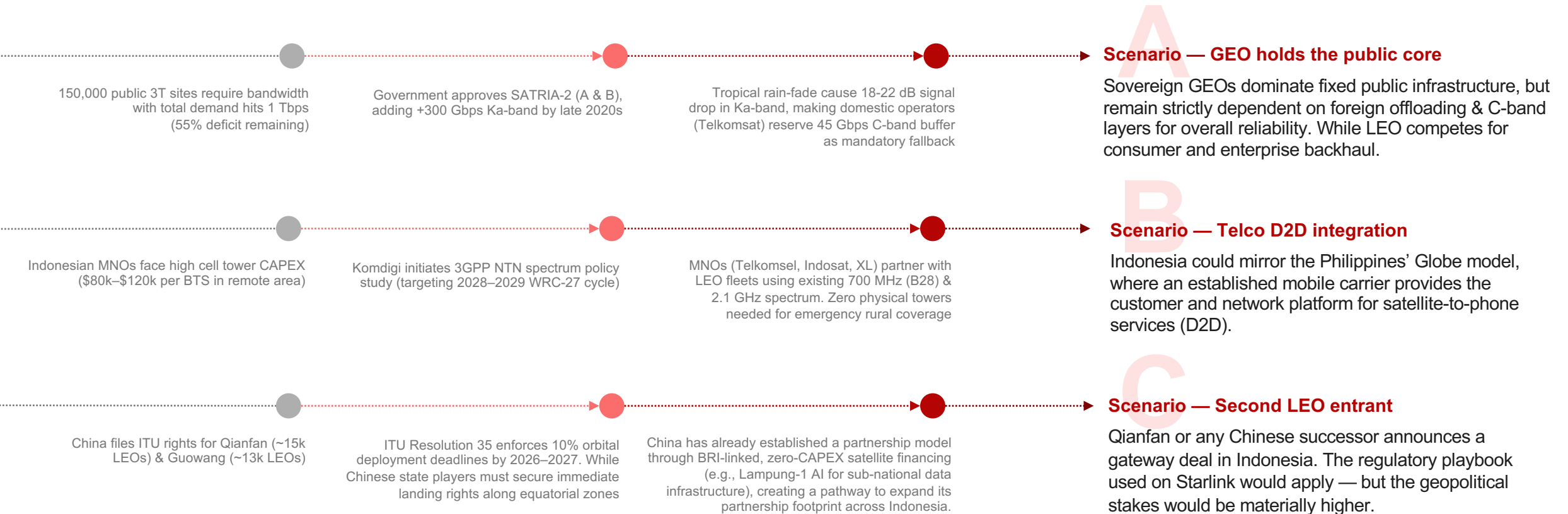
- 1 **Orbital Slot Priority:** Requires registration of satellite/orbit filings through Indonesian's regulatory
PP 53/2000; Permenkomdigi 3/2025
- 2 **Spectrum Allocation:** Must operate within Indonesia's allocated spectrum framework & requirements
Permenkominfo 12/2022; Permenkomdigi 3/2025
- 3 **USO / 3T Connectivity:** Gross revenue contribution to BAKTI for 3T rural access
Permenkominfo 10/2018
- 4 **Spectrum & Orbit Fees:** Operators incur spectrum and satellite-orbit usage fees
UU 36/1999; PP 53/2000; PP46/2021
- 5 **Data & Lawful Interception:** Indonesian data handling and lawful-access requirements
PP 71/2019; Permenkominfo 5/2020
- 6 **ISP / Service Licensing:** Requires the relevant service license, with service, tariff and cooperation obligations.
Permenkominfo 13/2019 (amended by Permenkominfo 1/2021)
- 7 **Government Procurement / PPP:** Large public connectivity programmes use the KBU/PPP framework
Perpres 38/2015

TAKEAWAY

Foreign ownership is liberated, but successful entry still requires a local regulatory anchor and operational compliance across the full satellite value chain.

Where this goes: a hybrid GEO-LEO market by 2031

Indonesia's geography rewards a layered approach and the state has every incentives to keep it that way.



BOTTOM LINE

GEO-HTS owns the public-sector mission; LEO owns the consumer upside; MEO/OneWeb holds the SLA enterprise middle. Jakarta's job is keeping all three under the same regulatory tent while hedging between US and Chinese constellation risk. That balance — not any single technology bet — is the strategic position.

About **Wellington Capital Advisory**

*Wellington is an independent advisory firm,
staffed by senior executives with decades of
cross-sector operational experience in Indonesia.*

*We assist both investors and company
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operational issues within their early-stage
enterprises.*

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