Indonesia telecommunications sector overview and market update

June 2026

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Regulatory information is current to 8th May 2026.

Industry overview

60%

industry revenue contributed by mobile services

97%

subscribers relying on prepaid services

Indonesia telecommunications market: structure and growth outlook

Indonesia is one of the largest telecommunications markets in Southeast Asia, underpinned by its large population and rising data consumption. Total telecommunications service revenue reached approximately USD17–18 billion in 2025[1], with close to 60% of industry revenue contributed by mobile services[2]. The market is expected to grow at a mid-single-digit compound annual growth rate (CAGR) through 2030, supported by continued network expansion, rising data usage per subscriber, and gradual but sustained growth in fixed broadband penetration[3].

However, beneath this growth, the market is shaped by structural constraints that differentiate Indonesia from more mature telecom markets. The mobile segment is heavily dominated by prepaid users, with approximately 97% of subscribers relying on prepaid services, leading to high customer churn and intense price-based competition[4]. This has contributed to average revenue per user (ARPU) remaining relatively low and largely stagnant, despite significant growth in data consumption. At the same time, Indonesia's archipelagic geography creates uneven infrastructure development and digital adoption across regions. Based on APJII Survey 2026, internet penetration is highest in Java, reaching approximately 85.95% and accounting for more than 58% of total users, while other regions such as Sumatra (78.24%), Kalimantan (80.40%), Sulawesi (72.58%), Bali and Nusa Tenggara (78.14%), and

[1,2,3] EMIS. (2025). Indonesia Telecommunications Sector Report 2025 – 2026. EMIS Insights - Indonesia Telecommunications Sector Report 2025-2026.
[4] Modern Diplomacy. (2025). Indonesia's Telco Crossroad: Challenges and Opportunities in the Global South.

Maluku and Papua (69.74%) are at lower penetration levels[5]. As a result, the telecommunications sector in Indonesia plays a dual role: beyond enabling digital services, it also functions as a critical infrastructure equaliser, requiring operators to balance commercial objectives with the need to expand connectivity and reduce persistent regional disparities.

Strategic direction

Indonesia's mobile network operators are pursuing a shared strategic ambition to strengthen nationwide digital connectivity and support Indonesia's digital-economy transformation. Collectively, the industry serves a broad and diverse customer base across urban centres and underserved frontier, outermost, and underdeveloped (*terdepan, terluar, tertinggal*/3T) regions, with growth strategies increasingly centred on customer-centric offerings and inclusive connectivity.

Across the sector, growth is anchored on three core pillars: **mobile, enterprise, and home**. These pillars span mass-market and premium consumer segments, business-to-business (B2B) and small and medium enterprise (SME) digital solutions, and fixed broadband supported by convergence and bundled offerings. Operators are balancing scale and quality by expanding service portfolios while improving network experience and operational efficiency.

Network and infrastructure strategies reflect a **pragmatic and phased evolution approach**. Operators are selectively deploying 5G in high-economic, demand-dense areas such as major metropolitan centres and industrial zones, while continuing to optimise and densify 4G networks to accommodate structurally rising data traffic nationwide. In parallel, operators have accelerated infrastructure related initiatives including tower spin-offs, fibre-asset separation, and selective data-centre asset optimisation not as a shift in strategic direction, but as an extension of a long-standing asset-light model to fund rising capital requirements while preserving balance-sheet flexibility.

This strategic repositioning has been reinforced by broader industry consolidation. On the policy side, the establishment of Danantara in early 2025 has driven restructuring and streamlining across major state-owned enterprises (SOEs), including Telkom Indonesia, while private-sector consolidation has

[5] APJII. (2026). Survey Penetrasi Internet Indonesia.

Telecom operators continue to invest heavily in core infrastructure, focusing on 4G densification and targeted 5G deployment in high-value areas

been strengthened through the XL Axiata–Smartfren merger, creating XLSmart. These developments underscore how scale-driven consolidation, infrastructure rationalisation, and disciplined capital allocation have become strategic necessities in Indonesia's increasingly capital-intensive telecommunications market.

Overall, the strategic direction of Indonesia's telco operators emphasises **sustainable growth, nationwide coverage, and long-term value creation**, with the shared objective of delivering reliable, affordable, and high-quality digital connectivity—while progressively enabling higher-value digital services as market readiness and ecosystem maturity continue to improve.

Major business and investment priorities

Indonesia's mobile network operators are collectively focused on **network strengthening, operational efficiency, and long-term value creation** amid continued growth in data demand and a more disciplined investment environment. Across the sector, priority is being placed on **post-consolidation network integration, site optimisation, and more efficient spectrum utilisation** to improve coverage quality, enhance capacity, and structurally reduce operating costs. These initiatives reflect a shift away from expansion-driven competition toward scale optimisation and efficiency-led performance improvement.

Operators are maintaining **significant investment in core digital infrastructure**, with continued 4G densification remaining central to meeting rapid traffic growth nationwide. In parallel, 5G deployment is being pursued in a **targeted manner**, prioritising high-economic urban centres, industrial zones, and enterprise-driven use cases where commercial returns are more clearly identifiable. Network modernisation efforts are increasingly complemented by **energy-efficient and green solutions**, underscoring the growing emphasis on cost efficiency, sustainability, and carbon-reduction objectives alongside network performance.

Beyond connectivity, operators are deepening their push into **enterprise and digital services**, including cloud, cybersecurity, internet of things (IoT),

Operators are reinforcing financial discipline while leveraging convergence strategies to enhance customer value and retention

$10-11Bn

estimated to be mobile services's revenue in 2025

350 Mn

active cellular connection

data analytics, and managed services, targeting large corporates, SMEs, and public-sector customers. These offerings are positioned as higher-value growth engines that leverage existing network assets while supporting Indonesia's broader digital-transformation agenda, particularly as growth in traditional connectivity revenues becomes more volume-driven and margin-constrained.

At the same time, operators continue to focus on **financial discipline and synergy realisation**, particularly following industry consolidation and infrastructure rationalisation efforts. Efficiency gains and cost savings are being partly reinvested to support growth initiatives, notably **fixed-mobile convergence strategies** that bundle mobile and home broadband services. These converged offerings are aimed at strengthening customer stickiness, supporting ARPU resilience, and reducing churn, while reinforcing each operator's competitive positioning in an increasingly convergent telecommunications landscape.

Mobile services development

Mobile services remain the primary revenue engine of Indonesia's telecoms industry, generating an estimated USD10–11 billion in revenue in 2025. This positions Indonesia among the largest mobile markets in Asia Pacific by revenue scale[6]. The revenue base is supported by one of the region's largest mobile user ecosystems, with more than 350 million active cellular connections in early 2025, equivalent to mobile penetration of above 120%[7]. This elevated penetration reflects widespread multi-subscriber identity module (SIM) ownership rather than untapped subscriber growth, reinforcing the structurally mature nature of Indonesia's mobile market.

From a technology perspective, 4G continues to serve as the commercial backbone of Indonesia's mobile networks. Most of the nationwide traffic is still carried over long-term evolution (LTE) networks due to their extensive coverage, cost efficiency, mature device ecosystem, and suitability for Indonesia's prepaid dominated mass market. By 2025, total mobile subscriptions reached slightly over 330 million, with 4G accounting for many active connections, while 3G and earlier technologies have largely been phased out, leaving only a marginal legacy user base[8].

[6] PwC GEMO 2026-2030.
[7] Data Reportal. (2025). Digital 2025: Indonesia.
[8] PwC GEMO 2026-2030.

$2.7-3Bn

estimated to be fixed broadband's revenue in 2025

At the same time, 5G adoption momentum improved during 2024–2025, supported by incremental network expansion in major cities and increasing penetration of 5G-enabled devices. However, its overall commercial contribution remained constrained in 2025. Limited spectrum availability, selective urban-focused deployment, and high capital intensity have kept 5G monetisation largely concentrated in premium consumer segments and targeted enterprise or industrial applications, with mass-market adoption remaining limited. Consequently, mobile revenue growth continues to be anchored primarily on 4G-led volume expansion, while 5G is positioned as a longer-term value enhancement layer rather than an immediate substitute for existing revenue streams.

Government-led programmes have played an important complementary role in supporting this network evolution. Initiatives delivered through the Telecommunication and Information Accessibility Agency (*Badan Aksesibilitas Telekomunikasi dan Informasi*/BAKTI) have been instrumental in extending 4G coverage to underserved and remote regions, including the deployment of more than 6,600 base tranceiver station (BTS) sites across 3T areas by 2024–2025 (note: BAKTI is a **government agency under Indonesia's Ministry of Communication and Digital Affairs - formerly Kominfo**). In parallel, regulatory preparations for the release of additional mid-band spectrum, including the 2.6 gigahertz (GHz) frequency band, are gradually laying the foundation for broader and more economically viable 5G deployment over the medium term. Taken together, these developments reinforce a balanced policy and investment approach that sustains universal connectivity today while enabling higher-value digital services as market readiness and commercial conditions continue to evolve.

Fixed broadband development

Within the fixed segment, broadband services emerged as one of the more resilient growth areas of Indonesia's telecoms industry in 2025. Fixed broadband service revenues are projected to increase from approximately USD2.7–3.0 billion in 2025 to around USD4.0–4.5 billion by 2030[9], supported by rising household penetration and increasing demand for higher-capacity

[9] PwC GEMO 2026-2030.

16-17Mn

subscriptions reached in 2025

data services. Total fixed broadband subscriptions reached around 16–17 million in 2025 and are expected to exceed 21 million by the late 2020s[10].

The evolution of Indonesia's fixed broadband market is increasingly shaped by access-technology differentiation, reflecting the country's diverse geography and income distribution.

FWA segment is led by major mobile operators, including Telkomsel (Orbit), XL Axiata (XL SATU Lite), and Indosat Ooredoo Hutchison (HiFi Air).

Fixed Wireless Access (FWA) delivers broadband connectivity using mobile networks, primarily 4G LTE and, increasingly, early-stage 5G. In Indonesia, FWA has remained a complementary but steadily expanding part of the fixed broadband landscape. Household penetration increased modestly between 2024 and 2025, reflecting adoption from a low base. While FWA still accounts for a relatively small share of total fixed broadband connections, it is expected to be the fastest-growing fixed access segment through 2030, reinforcing its role as a targeted, wireless-led solution rather than a substitute for fibre. Market development has been led primarily by Telkomsel (*Orbit*), XL Axiata (*XL SATU Lite*), and Indosat Ooredoo Hutchison (*HiFi Air*), which leverage nationwide mobile networks and position FWA within broader fixed–mobile convergence strategies.

Fiber to the Home (FTTH) remains the structural backbone of Indonesia's fixed broadband market, providing high capacity, service stability, and long-term scalability. FTTH subscriptions increased from approximately 12 million households in 2024 to over 13 million in 2025, with growth concentrated in urban and peri-urban areas[11]. Although FTTH's growth rate is slower than FWA in percentage terms, this largely reflects its much larger installed base. FTTH continues to play a critical role in supporting rising video consumption, cloud usage, and other data-intensive digital services. Market leadership remains highly concentrated, with Telkom Group (IndiHome) maintaining a dominant position, followed by other key players, including Biznet, XL Satu, and PLN Iconnet. In particular, PLN Iconnet benefits from a structurally advantaged model by leveraging PLN's nationwide electricity infrastructure, allowing for lower deployment costs and faster rollout to expand its coverage. Meanwhile, MyRepublic, CBN, and Oxygen contribute to competitive intensity through more targeted geographic expansion and differentiated service offerings.

[10,11] PwC GEMO 2026-2030.

Looking ahead, FTTH subscriptions are projected to reach close to 19 million by 2030, anchoring Indonesia's fixed broadband ecosystem[12].

By contrast, cable modem fixed broadband remains a niche, urban-focused segment. The segment has remained broadly stable at around 0.5–0.7 million subscriptions[13]. Rather than pursuing large-scale expansion, cable broadband increasingly functions as a complementary solution alongside FTTH and FWA, focused on capacity upgrades, customer retention, and revenue optimisation within dense metropolitan areas.

Telecommunication sector-specific insight

- Industry consolidation has reduced competition to three major mobile players.
- Mobile data dominates Indonesia's telecom revenue, while enterprise information technology (IT) and cloud services are among the fastest-growing segments.
- 5G adoption remains gradual, with commercial focus centered on targeted use cases rather than nationwide rollout.
- ARPU pressure persists, especially outside Java, making efficiency, bundling, and convergence critical for profitability.
- Regulatory and government support: Strong alignment between government policy and digital inclusion priorities continues to underpin sustained network investment.

[12, 13] PwC GEMO 2026-2030.

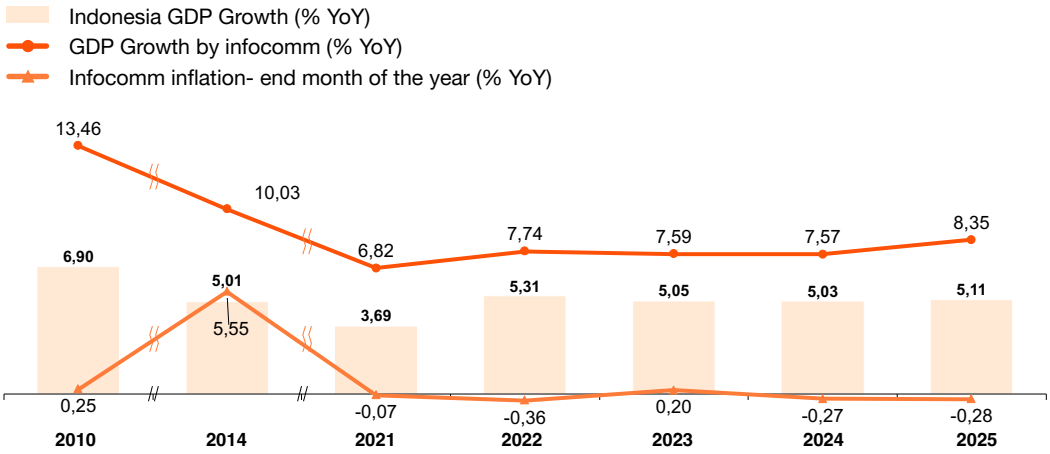
The current economic engines of telecommunication

ICT industry contributed

4.40%

to Indonesia Economy in 2025, growing 8.35% YoY

The original telecommunication playbook



In 2025, Indonesian's economy grew by 5.11% year-on-year (YoY), with the contribution of the information and communication technology (ICT) sector clearly reflected in its performance within the national gross domestic product (GDP). Between 2010 and 2025, both the sector's growth rate and its share of national GDP have shown a notable decline. In 2025, the ICT sector contributed 4.40% of the national GDP, ranking as the seventh-largest contributor and grew by 8.35% YoY, a moderate pace compared to the typical 6–8% range observed over the previous five years. This stands in sharp contrast to 2010, when the ICT sector posted a stronger growth of 13.46% YoY and contributed 6.48% of the national GDP[14]. Even as ICT sector continues to

[14] Indonesia Central Bureau of Statistics. (2026). 2010 Indonesia GDP Growth.

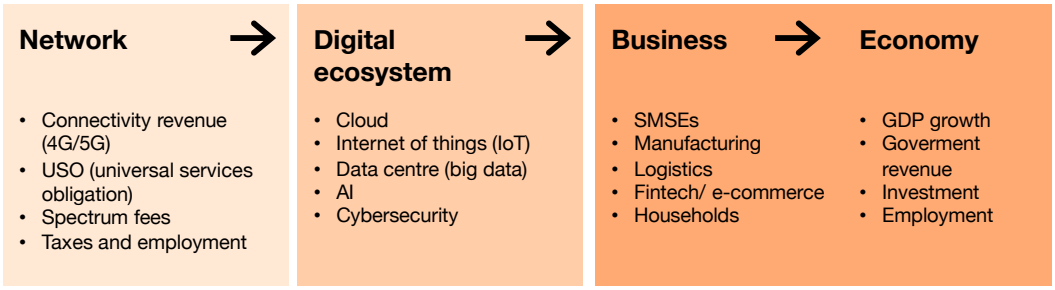
Revenue grew

26%

while users expanded by 25%

Lower inflation in ICT shows a flat pricing and intense competition

expand its role as essential infrastructure, the decline in its growth rate and proportional economic share offers compelling evidence of the sector's evolving function, gradually shifting from a direct economic contributor to an indirect enabler that increasingly influences the broader economy.



In the past, telecommunication was once seen primarily as a direct contributor to the economy. Its value flowed from short message service (SMS) and voice revenues, infrastructure investments such as towers, 2G–5G rollouts, cables, and satellites, alongside job creation and government revenue, with growth measured by expanding coverage, greater capacity, and more reliable networks[15]. Over time, however, that pace has visibly slowed. ARPU has remained stagnant and even declined, despite a sharp rise in network usage. Between 2021 and 2025, revenue grew by 16% while user numbers expanded by 25%, pulling ARPU down by 8.8%, from USD2.73 per month in 2021 to USD2.49 per month in 2025. Looking further back to 2010, the cumulative decline reaches 38%[16].

This pattern mirrors the information and communication sector's inflation, which stayed negative or near zero from 2021 to 2025, even as national inflation continued to climb. Telecommunication tariffs have barely moved or often fallen while prices in other sectors kept rising. Flat pricing, intense competition, and a shifting user base have continued to weigh on ARPU, and when adjusted for national inflation, the real decline becomes far steeper than nominal figures suggest. Together, these dynamics reinforce telecommunication's evolving role as a basic utility, much like electricity and water with little room for price increases[17].

[15] International Telecommunication Union. (2010). Measuring the information society.
[16] Fitch BMI. (2026). Monthly ARPU.
[17] PwC. (2026). Perspectives from the Global Telecom Outlook, 2025–2029.

AI, cybersecurity, and digital sovereignty as the next major growth engines

Cloud expected grow

~14%

CAGR (2026-2031) driven by rapid AI development

The new role of telecommunication

Today, the role of telecommunications has expanded significantly beyond its traditional function. It is no longer merely a standalone growth driver, but rather a foundational infrastructure enabling other industries to thrive. High-speed connectivity underpins the platform economy, broadening market access, supporting global supply chains, and attracting foreign investment[18]. While ARPU remains relatively flat, the broader economic value enabled by artificial intelligence (AI), cloud, and digital services continues to grow[19]. Looking ahead, cybersecurity is rapidly emerging as a strategic priority amid escalating cyber threats, geopolitical fragmentation, widening technological divides, and increasing demands for digital sovereignty, while AI is set to become the key driver of future cyber resilience[20]. These factors are increasingly positioned as the next major growth engines for the sector[21]

Driven by rapid AI development, Indonesia's cloud market is expected to grow significantly. This growth is supported by ongoing enterprise digitalisation (particularly in e-commerce and financial technology), substantive hyperscaler investments from players such as AWS, Microsoft, Google, and Oracle, and government initiatives (including Digital Indonesia 2025). The market is expected to grow from ~USD2.46 billion in 2025 to ~USD5.5 billion by 2031 (reflecting ~14% CAGR). Within this growth, the market structure is also evolving in line with shifting demand patterns:

- **By service model**, Software-as-a-Service (SaaS) leads with approximately 45% market share, while Platform-as-a-Service (PaaS) is the fastest-growing segment (~15% CAGR).

- **By deployment model**, public cloud dominates (~66% share), although hybrid cloud adoption is also accelerating at around 15% CAGR.

- **By organisation size**, large enterprises account for roughly 72% of demand, while small and medium enterprises are growing rapidly (~15% CAGR).

[18] Economic research institute for ASEAN and East Asia (ERIA). (2023). Accelerating digital transformation in Indonesia.
[19] PwC. (2026). Perspectives from the Global Telecom Outlook, 2025–2029.
[20] World Economic Forum. (2026). Global Cybersecurity Outlok 2026
[21] OECD. (2026). Exploring possible AI trajectories through 2030.

- **By end-use industry**, the banking, financial services, and insurance (BFSI) sector represents the largest segment (~27%), while healthcare is the fastest growing (~16% CAGR)[22].

As cloud adoption scales, it is increasingly translating into infrastructure demand. Southeast Asia is emerging as a global data centre hotspot (~20% CAGR by 2028)[23]. This growth is not driven by cloud migration alone, but increasingly shaped by AI workloads, data sovereignty requirements, and geopolitical competition between US and Chinese technology ecosystems.

However, this rapid growth is not without constraints. Southeast Asia's expansion is characterised by accelerated buildout under structural limitations, including high temperatures, limited grid capacity, and resource pressures. Unlike more mature markets such as the US and Europe, the region is developing AI-grade infrastructure in environments where power systems and cooling capabilities were not originally designed for hyperscale demand.

Within this regional landscape, countries are taking on distinct roles. Singapore remains the region's Tier 1 hub with roughly 1 gigawatt (GW) of operational data centre capacity, serving as a command node for latency-sensitive workloads, hyperscale regional headquarters, and mature regulatory frameworks despite capacity constraints. Malaysia (Johor) is emerging as the region's primary scale-out hub, leveraging lower costs, available land, and proximity to Singapore. Malaysia now has hundreds of data centres operating, with a large pipeline under construction and planning. The country's policy is increasingly AI-focused, with approvals prioritised for AI-related projects. However, energy remains a key constraint in Malaysia. The country's high reliance on fossil fuels, combined with the intensive power needs of AI data centres, creates tension with decarbonisation goals. While Indonesia's data centre growth is demand-driven, supported by its large digital economy and hyperscaler investments, it remains constrained by infrastructure (grid reliability, permitting) and energy challenges.

[22] Indonesia Cloud Market Size and Analysing (2026-2030), (2025), Mordor Intelligence.
[23] Harnessing ASEAN's Data Center Boom (2025), ARC group.

Beyond infrastructure buildout, a more complex dynamic is emerging. Southeast Asia is witnessing the coexistence of competing US and Chinese cloud ecosystems, creating a structurally fragmented landscape shaped by export controls, semiconductor access, and evolving data sovereignty regulations.

As a result, infrastructure decisions are becoming increasingly strategic. Data centre location is no longer purely an economic consideration, but one that determines access to AI models, cloud platforms, and technology standards, leading enterprises to operate in multi-stack environments and navigate differentiated regulatory requirements across markets[24].

[24] AI Ecosystem Across Asia (2026), Digital in Asia.

Indonesia has opportunities to develop strong, sustainable national capabilities

Strengthening Indonesia's capacity in ICT infrastructure and digitalisation

As Indonesia advances toward becoming a leading digital economy, the path forward requires for a deeper examination of the foundations that support the nation's digital future on how Indonesia is positioned in the global technology ecosystem, where dependencies exist, and where opportunities lie to build lasting national capability.

The global context for Indonesia strategy

The evolving global landscape introduces new dynamics that are reshaping technology supply chains worldwide, with notable implications for Indonesia's ICT sector. Rising tensions among major powers continue to influence the flow of global technology, creating both challenges and opportunities for the country to navigate carefully:

- Cost escalation: Prices for fibre optic cables, optical components, and network hardware are becoming increasingly unpredictable as global supply chains realign along geopolitical lines.

- Delivery disruptions: Lead times for critical infrastructure components are growing less reliable, slowing network expansion and modernisation efforts.

- Data sovereignty considerations: Reliance on foreign-controlled cloud and cybersecurity systems introduces ongoing concerns around data protection, external oversight, and unilateral changes in foreign provider policies.

- Limited access to advanced technologies: Intensifying competition between major powers is gradually narrowing Indonesia's access to leading-edge technologies, limiting opportunities for technology transfer, and complicating the deployment of security-sensitive infrastructure.

These external dynamics make it timely to reassess the structural foundations of Indonesia's digital economy and identify pathways toward greater national capability.

Understanding Indonesia's position in the global technology value chain

Today, Indonesia depends largely on foreign technology across multiple layers of its digital infrastructure from semiconductors and cloud systems to artificial intelligence and cybersecurity. The country's role in the global technology landscape has, to date, been primarily that of an adopter rather than a producer of core technologies. As a result, much of the economic value generated by the technology sector intellectual property, platform economics, network effects, and recurring revenue streams tends to flow outward to international firms rather than being retained domestically.

This pattern is reflected across multiple layers of the Indonesian economy. Businesses built on foreign platforms operate within pricing structures, algorithms, and policy frameworks shaped abroad, often guided by priorities determined outside Indonesia. Under these conditions, while the national economy continues to grow, the highest-value activities within the digital economy tend to occur elsewhere. Without deliberate intervention, the gap between Indonesia and technology-producing nations risks widening over time, presenting a clear opportunity for strategic action.

Strengthening Indonesia's strategic technology foundations

Indonesia's technology dependency starts at the foundation of the value chain. With limited capability in semiconductor design, fabrication, and packaging, the country sources nearly all its chips, from smartphones to defence systems from the U.S., Taiwan, South Korea, Japan, and China[25]. Regional peers like Malaysia, Vietnam, and Thailand have established meaningful semiconductor footholds, while Indonesia has yet to do the same, limiting its ability to independently produce or inspect the chips in its critical infrastructure[26].

The same pattern extends to the network layer, where the growing presence of U.S. and Chinese technology firms has driven connectivity gains but positioned Indonesia as a consumer market between two major ecosystems with limited room for technology transfer or domestic innovation[27]. Strengthening these

[25] LPEM FEB UI. (2025). Indonesia's semiconductor industry.
[26] Career candour. (2026). Indonesia once had a semiconductor foothold and lost it.
[27] KBA 13 insight. (2026). Indonesia's Strategic Path in the US–China.

Clear strategic direction has set by Government key priorities for Indonesia digital future

foundations, from chips to networks, presents a strategic opportunity for long-term national capability through diversified partnerships, stronger domestic participation, and clearer pathways for local development[28].

Indonesia's national digital strategy and priorities

Recognising these dynamics, Indonesia has set a clear strategic direction for its digital future. Heading into 2026, the country is accelerating digital transformation through the newly rebranded Ministry of Communication and Digital Affairs (*Kementerian Komunikasi dan Digital*/Komdigi), guided by the National Medium-term Development Plan (*Rencana Pembangunan Jangka Menengah Nasional*/RPJMN) 2025–2029 and the Indonesia Digital Vision 2045[29].

Key priorities include expanding 5G coverage across major cities, strengthening digital infrastructure through SATRIA-2 and nationwide fibre networks, integrating government services via INA Digital (GovTech)[30], implementing the Personal Data Protection (PDP) Law, advancing the National AI Strategy, and reinforcing cybersecurity resilience following recent incidents such as the temporary national data centre (PDNS) breach. Together, these initiatives form a strong foundation upon which deeper national capability can be developed[31].

Bridging the gap between vision and capability

While Indonesia's national vision is ambitious and well-defined, an opportunity remains to better align it with the current structure of the industry. Across each strategic priority, a consistent pattern emerges: local players play important roles in operating, deploying, and reselling foreign technology, yet relatively few are positioned to design, build, or own the underlying core platforms.

For instance, sovereign cloud initiatives often house local data within infrastructure powered by foreign software. Cybersecurity strategies frequently rely on foreign-developed products. AI governance frameworks may oversee models created in international laboratories. And talent development

[28] CSIS Indonesia. (2024). Navigating US-China Technology competition: An Indonesia perspective.
[29] Bappenas. (2019). Indonesia emas 2045.
[30] Satu Data Indonesia. (2026). Key of Digital Public Infrastructure implementations.
[31] BSSN. (2025). Indonesia cybersecurity strategy.

programmes prepare the next generation to operate systems they did not design or have the ability to fully modify.

To realise the full potential of Indonesia's digital vision, the next stage of development calls for a gradual shift from technology deployment toward technology origination. This is the space where national stakeholders, including state-owned enterprises and strategic industry players, can play a transformative role in building the sovereign capability needed to support Indonesia's long-term digital ambitions.

Regulatory and tax considerations in an evolving Indonesian telecom landscape

Telecommunication regulatory outlook

In Indonesia, telecommunications business activities are primarily classified into three categories: telecommunications network operation, telecommunications service provision, and special telecommunications. This classification is regulated primarily under Law No. 36 of 1999 on Telecommunication (as amended) and the sectoral classification sits within the broader risk-based business licensing framework under Government Regulation No. 28 of 2025 on the Implementation of Risk-Based Business Licensing (**Government Regulation No. 28/2025**), under which licensing requirements are calibrated to the actual scope and risk level of each business activity.

In general, telecommunications businesses seeking to commence commercial operations in Indonesia must secure certain business licences issued by the Ministry of Investment and Downstream Industry/Investment Coordinating Board and the Ministry of Communication and Digital Affairs. The key licences include a sectoral telecommunications licence reflecting the applicable activity classification and, where relevant, operational permits tied to specific activities such as spectrum use, numbering, or satellite landing rights, complemented by mandatory basic requirements covering spatial, environmental, and building aspects wherever physical infrastructure is deployed.

Between 2024 and 2026, Indonesia's telecommunications regulatory landscape has continued to evolve. First, spectrum policy reforms, including new allocations to support 4G and 5G deployment and the roll-out of a national spectrum framework, reflect the Government of Indonesia's push for nationwide broadband coverage and long-term spectrum planning. Second, the introduction of mandatory technical standards for Land Mobile Radio (LMR), together with tighter device certification requirements, has elevated technical conformity from a procedural step to a substantive condition for lawful operation. Third, the biometric-based SIM card registration regime scheduled for 2026 marks the most significant shift of subscriber identity regulation in nearly a decade, drawing licensing, consumer identity, and data governance into a single compliance framework.

Data centre and cloud computing regulatory outlook

Indonesia does not currently regulate data centres or cloud computing as standalone licensed business activities. Instead, operators in these segments are supervised as Electronic System Providers (*Penyelenggara Sistem Elektronik*/**PSE**) under the broader information and communications technology framework. In practice, this means the licensing analysis does not start with the physical or on-premise infrastructure, but with the function the business performs. Whether a company offers hosting, data processing, data communications, or cloud services will determine its business classification and the scope of its compliance obligations. As in the telecommunications sector, these activities also fall under the Risk-Based Business Licensing framework set out in Government Regulation No. 28/2025, meaning data centre and cloud operators must secure the relevant authorisations before offering their services.

One of the key regulatory requirements for data centre businesses in Indonesia relates to the location of their physical on-premise infrastructure. Under the prevailing regulations, public PSEs are required to locate their data and data centres within Indonesia. In contrast, private PSEs are generally permitted

to store and process data offshore, provided that their systems remain accessible to Indonesian regulators for supervisory purposes. Notwithstanding the foregoing, certain regulated sectors impose stricter data localisation requirements. In the financial services sector, for example, private PSEs under the supervision of Financial Services Authority (*Otoritas Jasa Keuangan*/**OJK**) and/or the Central Bank of Indonesia (Bank Indonesia/**BI**) are required to process and store certain financial and payment data domestically, unless prior approval is obtained from the relevant authority.

Emerging ICT regulatory areas

AI

AI is one of the most rapidly evolving frontiers within Indonesia's information and communications technology regulatory landscape. At present, Indonesia has yet to introduce an overarching AI law, and the existing AI-related instruments remain largely "soft law" in nature, setting out ethical principles and general business standards for the digital sector. A significant development on the horizon is the Draft Presidential Regulation on the Ethics of Artificial Intelligence, anticipated to take effect in 2026, which is expected to introduce more robust requirements around governance, accountability, and human oversight across all sectors deploying AI.

In parallel, the OJK issued an AI governance guide for the banking sector in 2025, intended to serve as a minimum reference for banks in developing and implementing AI systems responsibly. While the current regulatory framework may appear relatively lenient, businesses should not overlook the broader compliance ecosystem that already governs AI deployment, including data privacy, consumer protection, and intellectual property laws, all of which are well-established in Indonesia. For example, any business leveraging AI to process personal data must comply with Law No. 27 of 2022 on Personal Data Protection (**PDP Law**), regardless of whether AI-specific regulations apply.

Ultimately, even in the absence of a dedicated AI statute, businesses cannot afford to wait for regulation to catch up; they must proactively establish robust internal AI governance frameworks that embed compliance, ethics, and accountability into every stage of AI deployment, ensuring they are well-

positioned to innovate responsibly and stay ahead of an increasingly complex regulatory curve.

PDP

The PDP Law establishes a comprehensive legal baseline for personal data protection in Indonesia, covering key areas such as the lawful basis for personal data processing, rights of data subjects, the obligations of data controllers and processors, and enforcement mechanisms. However, its implementation remains in a transitional phase, as several implementing regulations have yet to be issued and the dedicated Data Protection Authority has not been formally established.

In practice, the PDP Law's reach extends across a wide range of data-intensive sectors. The telecommunications and broader digital services industry offers a clear example: from targeted advertising and AI-based customer analytics to cross-platform personalisation, operators and digital service providers must ensure that every processing activity involving subscriber or user data is supported by a valid lawful basis under the PDP Law. This illustrates how personal data protection compliance is becoming structurally embedded in modern digital business models, from cloud and telecommunications to advanced technologies that rely on large-scale personal data processing.

Looking ahead, several early signals point to a significant strengthening of Indonesia's personal data protection regulatory framework. These include the forthcoming Presidential Regulation on the Data Protection Authority and emerging technologies, the inclusion of the PDP Law Amendment Bill in the National Legislation Programme [32], and the anticipated finalisation of the Draft Government Regulation on the Implementing Regulation of the PDP Law, which is expected to set out detailed rules on data processing, breach management, cross-border data transfers, sanctions, and the formal establishment of Indonesia's Data Protection Authority. Together, these developments signal a clear regulatory trajectory: personal data protection in Indonesia is steadily evolving from a foundational legal baseline into a more mature, enforceable, and institutionally supported regime.

[32] House of Representatives of the Republic of Indonesia, "RUU tentang Perubahan atas Undang-Undang Nomor 27 Tahun 2022 tentang Pelindungan Data Pribadi," Prolegnas Periodik.

Cybersecurity

Unlike many jurisdictions that anchor their cybersecurity regime in a single overarching statute, Indonesia's current regulatory framework remains siloed and institution-driven, shaped largely by the National Cyber and Crypto Agency (*Badan Siber dan Sandi Negara*/**BSSN**) through a series of sectoral and operational regulations. The prevailing framework draws from several instruments, including Government Regulation No. 71 of 2019 on the Implementation of Electronic Systems and Transactions, which requires PSEs to implement technical and organisational safeguards; BSSN Regulation No. 8 of 2020 on Security Systems in the Implementation of Electronic Systems, which regulates risk-based technical security standards; BSSN Regulation No. 1 of 2024 on Cyber Incident Management; and Presidential Regulation No. 47 of 2023 on the National Cybersecurity Strategy and Cyber Crisis Management. Taken together, these instruments reflect a meaningful shift toward a broader emphasis on organisational readiness, incident reporting, and coordinated crisis response. Despite the absence of a consolidated Cybersecurity Law, the existing sectoral and operational obligations continue to function as enforcement instruments for PSEs, operators of vital information infrastructure, and entities in systemically important sectors to establish cybersecurity safeguards.

The inclusion of the Cybersecurity and Cyber Resilience Bill in the National Legislation Programme provides a degree of directional certainty, even as its enactment timeline remains open. In parallel, the recently issued National Cybersecurity Action Plan 2024–2028 is already setting out the national strategy across several priority areas, including governance, risk management, vital information infrastructure protection, and international cooperation.

Regulatory key insights

Indonesia's technology, media, and telecom (TMT) sector regulations are steadily evolving, signalling that sustained compliance demands more than ever before. Market entry remains accessible, yet staying compliant over the long run is becoming a far more complex exercise.

Sectoral boundaries are blurring under common electronic system and data governance rules, and oversight is expanding across multiple regulators, with the Data Protection Authority soon adding another layer. In this regard, precise activity classification, ongoing compliance monitoring, and lifecycle licensing management have moved from operational routines to strategic priorities, positioning regulatory compliance as one of the true drivers of long-term sustainability for TMT sector businesses.

Telecommunication tax considerations

Over the past two years, the Indonesian telecommunications sector has experienced a significant wave of structural transformation and portfolio rationalisation driven by intensifying market competition, sustained data-traffic growth, rapid digital transformation, and the need to enhance operational efficiency and capital structure resilience. Industry players (including state-owned and private telecommunications groups) have been actively reshaping their corporate structures.

This restructuring trend has been particularly pronounced among SOE-affiliated players under Danantara, alongside industry consolidations and internal reorganisations by private operators such as Indosat Ooredoo Hutchison (IOH) and the combined XL–Smartfren group. Transactions have taken multiple forms, including mergers and business combinations, intra-group reorganisations, infrastructure spin-offs, asset rationalisation, and holding company streamlining. Across the industry, these initiatives are aimed at concentrating resources on core connectivity and digital businesses, while optimising ownership and operational control over capital-intensive infrastructure such as towers, fiber networks, and data centres.

Within the SOE segment, Danantara has played a central role in driving a systematic streamlining agenda, including the consolidation and reduction of subsidiaries within large SOE groups such as Telkom. This reflects a broader policy objective to create fewer, larger, and more focused entities with clearer mandates, stronger governance, and improved accountability. For the telecommunications sector, this has translated into a sharper separation between service operations and infrastructure assets, elimination

of overlapping functions, and more disciplined capital allocation aligned with clearly defined performance targets.

Importantly, this restructuring trend has been accompanied by active regulatory and fiscal support from the Indonesian government, recognising telecommunications as a strategic enabler of national digital-economy growth. The Ministry of Finance and the Directorate General of Taxes (DGT) have taken steps to ensure that the tax framework does not become a structural barrier to genuine, business-driven reorganisations. A key milestone in this regard was the issuance of **Minister of Finance Regulation No. 1 of 2026 (PMK 1/2026)**, which refined and clarified the tax treatment of mergers, consolidations, spin-offs, and acquisitions.

Under PMK 1/2026, qualifying restructuring transactions may apply for the use of fiscal book value in the transfer of assets or shares, subject to DGT's approval and satisfaction of the business purpose test. This policy has been particularly relevant for telecommunications groups undertaking large-scale internal restructurings, infrastructure separations, or portfolio simplification programmes, as it significantly reduces immediate tax leakage that could otherwise arise from market-value-based transfers. By recognising commercial substance and long-term economic rationale, the regulation improves tax certainty and supports more effective execution of complex multi-step reorganisations. By recognising commercial substances and long-term economic rationale, the regulation improves tax neutrality and supports more effective execution of complex multi-step reorganisations.

Within this evolving landscape, PwC has been actively supporting telecommunications players across the restructuring lifecycle, particularly in relation to the assessment, structuring, and successful application of the book value facility, spanning both SOE-linked and private-sector groups. PwC's involvement typically includes advising on transaction design, evaluating eligibility for the book-value facility, documenting robust commercial rationales aligned with the business purpose test, and ensuring consistency between tax, regulatory, and corporate-governance requirements. PwC also frequently supports structured engagement with the DGT during the approval process,

reflecting deep familiarity with both the technical provisions and their practical interpretation.

In practice, PwC has assisted clients in articulating clear efficiency-driven and value-creation narratives, including how restructurings support post-transaction operational substance, business continuity, governance simplification, and achievement of defined financial and operational targets. This integrated approach has been critical in helping telecommunications groups manage tax and regulatory risks while executing strategic initiatives such as infrastructure spin-offs, internal mergers, and simplification of multi-layered corporate structures.

Overall, the recent restructuring wave in Indonesia's telecommunications sector reflects a convergence of industry-driven transformation and proactive public-policy support. For both SOE-affiliated operators under Danantara and private industry players, restructuring has become a key lever to deliver leaner structures, sharper strategic focus, and more effective execution—positioning the sector to sustainably meet connectivity, digital-services, and national-development objectives in an increasingly competitive landscape.

About us

PwC Indonesia is comprised of KAP Rintis, Jumadi, Rianto & Rekan, PwC Tax Indonesia, PwC Legal Indonesia, PT PwC Advis Indonesia and PT PricewaterhouseCoopers Consulting Indonesia, each of which is a separate legal entity and a separate member firm of the global PwC network in Indonesia. We provide assurance, tax, advisory, consulting, and legal services that focus on the industry to build public trust and enhance the values of our clients and stakeholders.

PwC Indonesia is a part of the Global PwC network with other PwC firms in Asia Pacific and in the world. We are a firm network in 136 countries with over 360,000 employees. In Indonesia, we comprised of more than 3,400 employees, including more than 90 partners and technical advisors. PwC is organised into lines of service, each staffed by highly qualified, experienced professionals who are leaders in their fields, providing:

Assurance provides assurance over any system, process or controls and over any set of information to the highest PwC quality.

- Financial statement audit
- Risk assurance:
    - Governance, risk, and compliance
    - Digital trust solutions
    - Internal audit

- Capital markets & accounting advisory services:
  - Accounting advisory services
  - Capital market services
  - Integrated financial reporting
- ESG reporting and assurance

Tax services optimises tax efficiency and contributes to overall corporate strategy through the formulation of effective tax strategies and innovative tax planning. Some of our value-driven tax services include:

- Corporate tax
- International tax
- Transfer pricing (TP)
- Mergers and acquisitions (M&A)
- VAT
- Tax disputes
- International assignments
- Customs
- Investment and corporate services
- Tax technology and strategy
- Carbon tax advisory

Deals Advisory implements an integrated suite of solutions covering deals and transaction support from deal strategy through to execution and post-deal services:

- Business recovery services
- Sustainable infrastructure advisory
- Economics & policy
- Corporate finance
- Valuation
- Deal strategy
- Delivering deal value
- Transaction services
- Environmental, social & governance (ESG) deals services
- Energy transition advisory
- Forensic investigations
- Financial crime solutions
- Forensic technology solutions
- Human rights impact assessments

Consulting helps organisations to work smarter and grow faster. We consult with our clients in order to build effective organisations, innovate and grow, reduce costs, manage risk and regulations, and leverage talent. Our aim is to support you in designing, managing, and executing lasting beneficial change:

- Digital transformation

- Risk
- Strategy

Legal services provide solutions of the highest quality through the provision of cutting edge legal solutions to support and facilitate legal developments in Indonesia. We work with you to understand your commercial objectives and offer you seamless end-to-end service across the lifecycle of your project. Our core value is providing legal services, putting the needs and priorities of our clients first, while continuously improving our approach and continuing to do business ethically. Our legal services include:

- M&A and corporate advisory
- Finance and financial regulation
- Capital markets
- Regulatory

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