STRATEGIC MARKET REPORT · JULY 2026

Wired for Intelligence

Singapore's Telecoms, System Integrators and Internet Infrastructure in the Age of AI

Telecommunications · Subsea Cables · Data Centres · AI & Cloud · System Integrators · Semiconductors

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Contents

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How big is Singapore's technology economy in 2026? The direct answer: the digital economy generated S$128.1 billion in value-added in 2024 — 18.6% of GDP — on IMDA's measurement, twenty-eight subsea cable systems land on the island, roughly 1.4GW of live data centre capacity runs at about 2% vacancy, and hyperscalers have committed well over S$30 billion in new cloud and AI investment since 2024. This strategic market report from Tech Directory SG maps the full stack — telecommunications, subsea cables, data centres, AI infrastructure, system integrators and semiconductors — for the business leaders, CIOs and procurement teams who have to compete from, or through, Singapore.

> **Report at a glance:** Digital economy: **S$128.1B value-added, 18.6% of GDP (2024)** · Subsea cables: **28 systems live, 40+ expected by 2028** · Data centres: **~1.4GW live at ~2% vacancy** · Big-tech AI commitments since 2024: **AWS S$12B, Microsoft US$5.5B, Google US$5B, OpenAI S$300M+** · Semiconductors: **~10% of global chip output; Micron's US$24B megafab is Singapore's largest-ever semiconductor investment**. Full 21-page PDF available for download.

Executive summary

Singapore enters the second half of 2026 with a claim few economies of any size can make: its digital economy is now the single most important growth engine of the nation. According to IMDA's Singapore Digital Economy Report 2025, the digital economy generated S$128.1 billion in value-added in 2024 — 18.6% of GDP — having compounded at 12% annually since 2019, nearly twice the pace of the overall economy. That output rests on a physical foundation this report examines in depth: the subsea cables, data centres, telecom networks, system integrators and semiconductor plants that make a city-state of six million people a disproportionate node in the global digital economy.

The infrastructure position remains formidable. Twenty-eight subsea cable systems land in Singapore today, carrying more than 99% of its international traffic, with the EDB expecting more than 40 systems by 2028 and the Digital Connectivity Blueprint targeting a doubling of landings within the decade. Domestically, Singapore closed 2025 as one of the first countries in the world with nationwide 5G Standalone coverage, and IMDA is co-funding an upgrade of the National Broadband Network to 10Gbps for over half a million households by 2028. The data centre estate — roughly 1.4GW of live IT capacity at a vacancy rate of about 2%, the region's lowest — remains the scarcest and most contested digital asset in Asia.

What has changed most since 2024 is the sheer scale of AI-driven capital formation. AWS is investing an additional S$12 billion to 2028; Microsoft announced US$5.5 billion in April 2026; Google has built out a US$5 billion campus; OpenAI chose Singapore for its first Applied AI Lab outside the United States, backed by a commitment exceeding S$300 million; and Salesforce is deploying US$1 billion. On the hardware side, Micron alone announced a US$7 billion HBM advanced-packaging facility in January 2025 and a US$24 billion NAND megafab in January 2026 — the largest semiconductor investment in Singapore's history. EDB's 2025 investment commitments of S$14.2 billion in fixed assets, S$12.1 billion of it manufacturing-related and heavily AI-chip-driven, confirm the trend.

The strategic tension is equally clear: Singapore is capacity-constrained by design. Power, land and water limits mean the state now allocates data centre capacity like spectrum — through competitive calls tied to green performance — while training-scale AI workloads spill over into Johor (487MW live as of mid-2025, on

trackers' counts approaching 850MW completed by early 2026, with a multi-gigawatt pipeline) and Batam (a 360MW AI campus hosting up to 170,000 GPUs from 2027). Far from eroding Singapore's role, this SIJORI division of labour is entrenching it: the high-value orchestration layer — connectivity, interconnection, inference, governance, regional headquarters — concentrates in Singapore.

The telecom sector tells a harder story. Networks are world-class, but retail economics are brutal: mobile ARPU has fallen roughly 36–41% since 2017 on analyst estimates, and the collapse of Simba's S$1.43 billion acquisition of M1 in May 2026 — after IMDA suspended its review amid a spectrum investigation — leaves four mobile operators locked in a price war. The growth story has migrated decisively to enterprise: 5G network slicing at Tuas Port, private networks, IoT, cybersecurity, GPU-as-a-service and data centres now define operator strategy, exemplified by Singtel's pivot into Digital InfraCo/Nxera and its S$13.8 billion enterprise-value consortium acquisition of ST Telemedia GDC with KKR.

For system integrators and hardware vendors, the AI cycle is an unambiguous tailwind: NCS booked a record S$3.8 billion in orders in FY2026; government ICT demand runs at roughly S$3.3 billion a year; and Singapore's fabs — about 10% of global chip output and a fifth of global semiconductor equipment production — are riding the AI memory supercycle, with electronics output up 12.7% in 2025. The closing sections set out the strategic implications and recommended actions for operators, integrators, vendors and enterprise leaders.

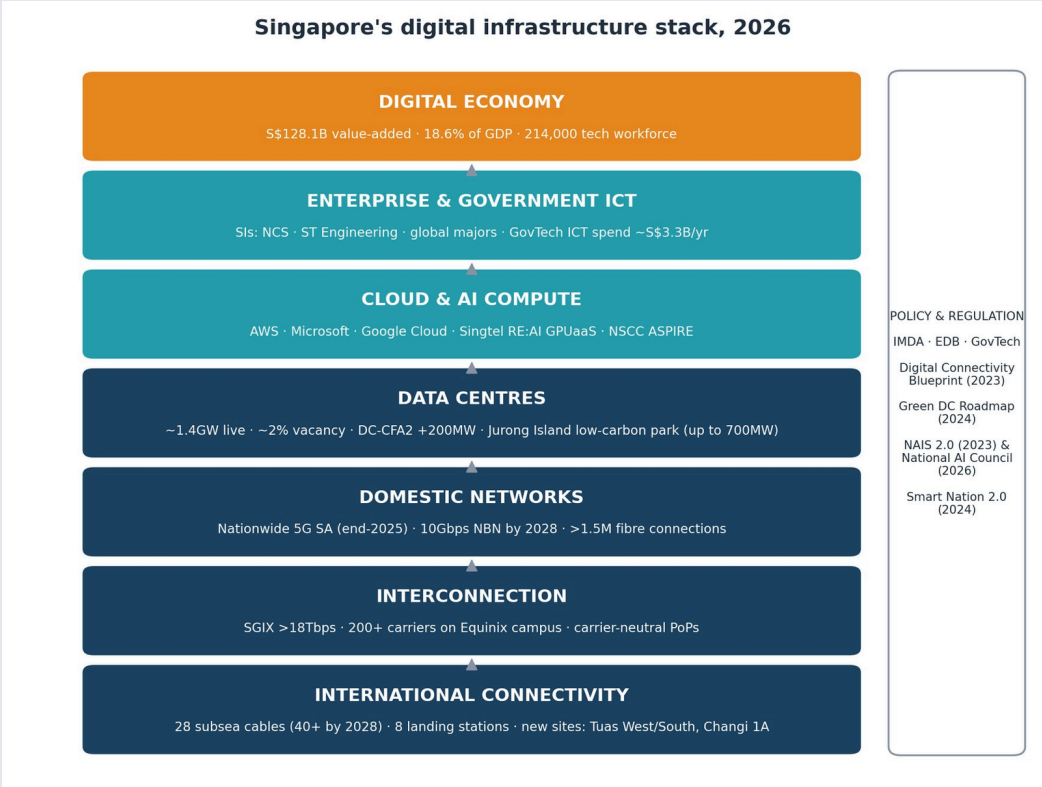


Figure 1 — Singapore's digital infrastructure stack, 2026. Compiled from IMDA, EDB, DC Byte and operator disclosures. Tech Directory SG.

1. The macro picture: a digital economy punching above its weight

The headline numbers from IMDA's Singapore Digital Economy Report 2025 (published October 2025) frame everything else in this report. Digital economy value-added reached S$128.1 billion in 2024, or 18.6% of GDP, up roughly S$12 billion in a single year and up from 14.9% of GDP in 2019. Two-thirds of that value is created outside the information and communications sector itself — finance, wholesale trade and manufacturing are the biggest digitalised contributors — which is precisely what a mature digital economy should look like: technology as a production input everywhere, not an enclave.

The labour market data reinforce the point. Singapore's tech workforce grew 2.7% in 2024 to about 214,000 people even as global tech employment contracted, with AI & Data and Cybersecurity the fastest-growing job families. Median resident tech wages of S$7,950 a month — versus S$4,860 economy-wide — explain why every ministry-level skills programme now routes through AI. Enterprise adoption is inflecting fast: AI adoption among SMEs more than tripled in a year, from 4.2% in 2023 to 14.5% in 2024, while adoption among larger enterprises jumped from 44% to 62.5%. Nearly three-quarters (73.8%) of workers report using AI tools at work, with 84% of adopting firms relying on off-the-shelf generative AI.

Consumer-side fundamentals remain near saturation. DataReportal's Digital 2026 Singapore report counts 5.78 million internet users (98.4% penetration), 9.79 million mobile connections (166% of population, 99.3% broadband-capable) and median fixed broadband speeds of 394 Mbps — among the fastest in the world and up 32.5% year on year as 10Gbps retail plans propagate.

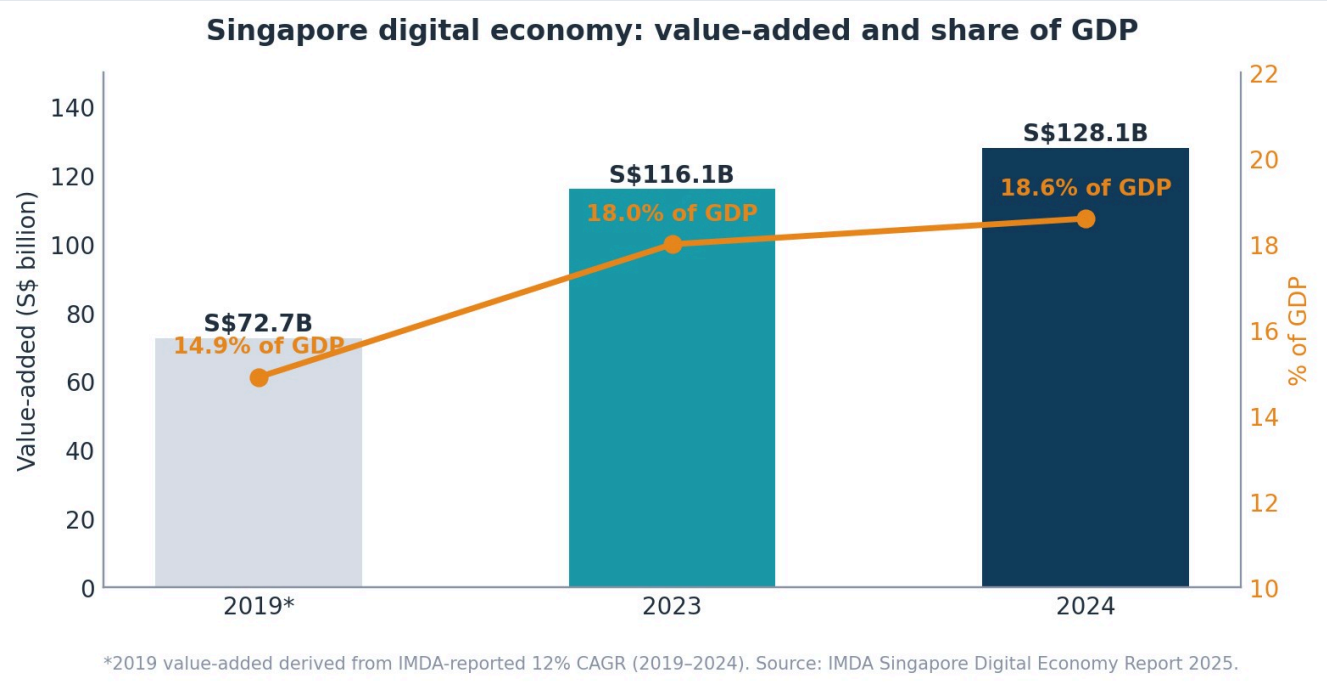


Figure 2 — Digital economy value-added and share of GDP. Source: IMDA Singapore Digital Economy Report 2025; 2019 value derived from IMDA's reported 12% CAGR.

Investment commitments corroborate the structural story. EDB secured S$14.2 billion in fixed asset investment commitments in 2025 (up 5.2% on 2024's S$13.5 billion), with S$12.1 billion tied to manufacturing — dominated, in EDB's own telling, by AI-chip and AI-server-related semiconductor plants.

These commitments are expected to generate about S$18 billion in annual value-added. A geopolitical footnote with strategic weight: in 2025, China's share of committed fixed asset investment (20.6%) surpassed the United States' (17.3%) for the first time — a reminder that Singapore's hub value lies precisely in serving both sides of a bifurcating tech world.

None of this happened by accident. Since 2022 the government has laid down an unusually coherent policy scaffolding — the Digital Connectivity Blueprint (June 2023) for cables, broadband and data centres; the National AI Strategy 2.0 (December 2023) and its 2026 refresh for compute, talent and governance; the Green Data Centre Roadmap (May 2024) and second Data Centre Call-for-Application (December 2025) for capacity allocation; Smart Nation 2.0 (October 2024) for public-sector digitalisation; and the Johor-Singapore Special Economic Zone agreement (January 2025) for regional overflow.

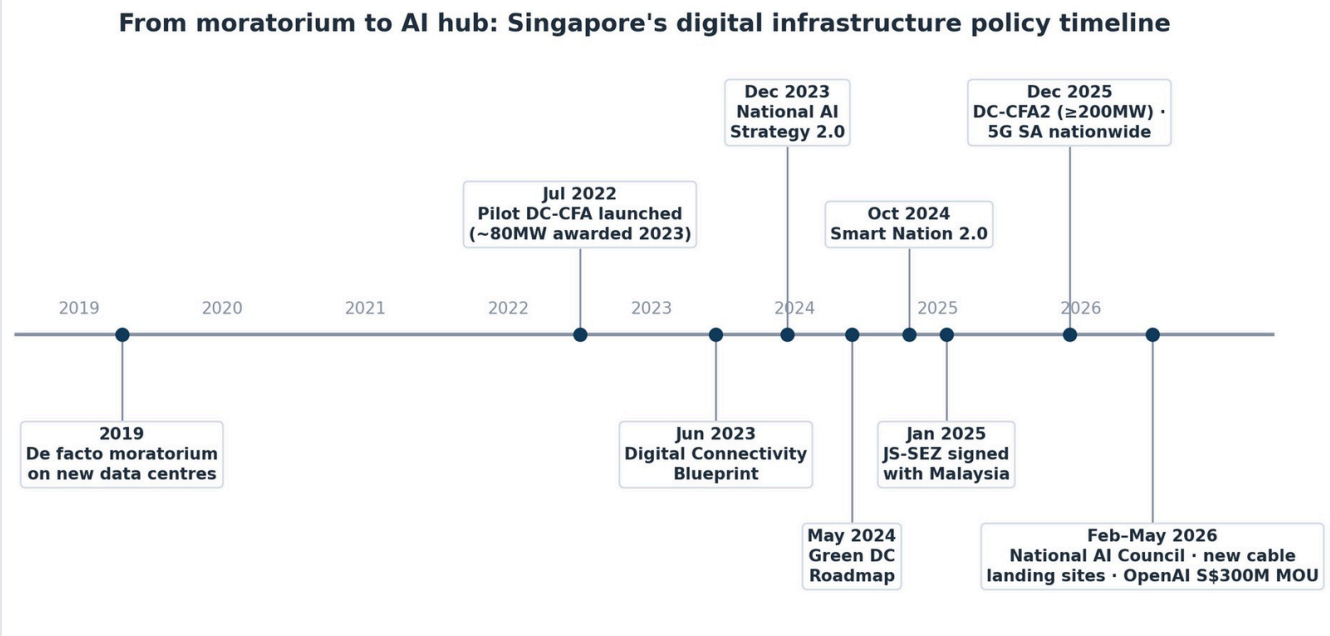


Figure 3 — From moratorium to AI hub: Singapore's digital infrastructure policy timeline, 2019–2026. Sources: IMDA, EDB, MDDI, Smart Nation Office announcements.

2. Telecommunications: world-class networks, unforgiving economics

2.1 Market structure and metrics

Singapore's telecom market is small in revenue but exceptional in quality. Mordor Intelligence sizes the market at US$14.6 billion in 2026, growing to US$17.58 billion by 2031 (a 3.78% CAGR), with data services generating over half of revenue; the sector contributes about 1.1% of GDP directly. IMDA's most recent published statistics count roughly 9.87 million mobile subscriptions at 166.8% population penetration, about 1.46 million residential wired broadband connections (93.2% household penetration, overwhelmingly fibre), and rapidly rising 5G adoption — GlobalData projects 5G will account for more than 95% of subscriptions by 2030. Four mobile network operators compete: Singtel, StarHub, M1 (Keppel) and Simba (ASX-listed Tuas Ltd), the disruptor formerly known as TPG Singapore.

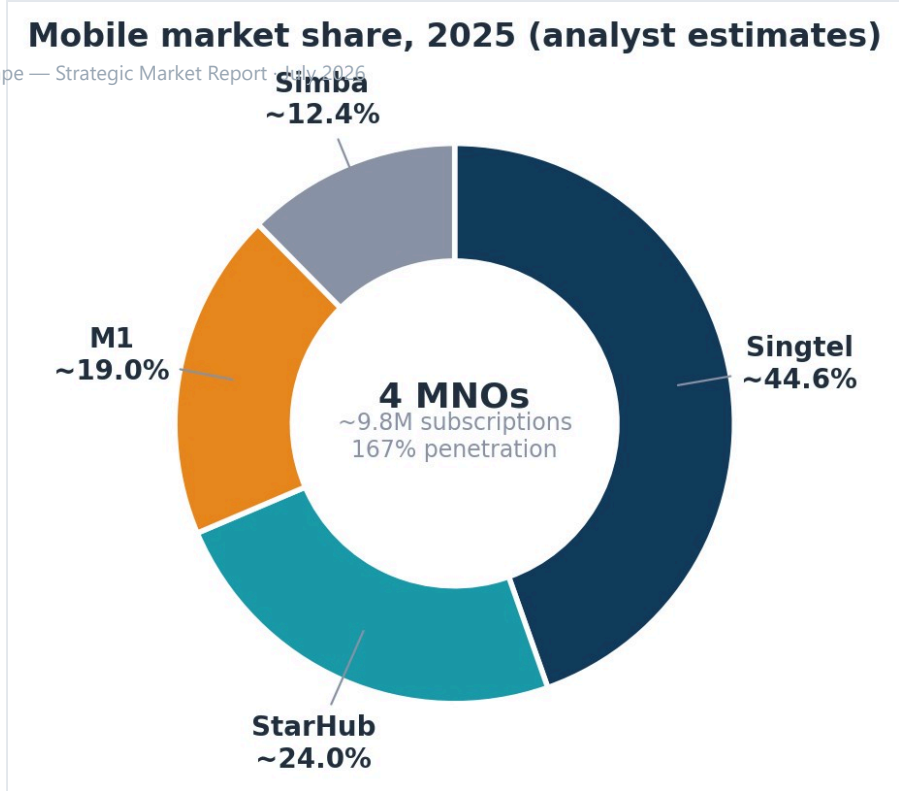


Figure 4 — Mobile market share, 2025 (analyst estimates; IMDA does not publish operator shares).

2.2 The 5G Standalone milestone — and what it enables

By end-2025 Singapore achieved nationwide 5G Standalone (SA) coverage, meeting IMDA's target and placing it among the first countries in the world to complete the transition for populated areas. The milestone is more than symbolic: SA unlocks network slicing, RedCap for enterprise IoT, and deterministic latency. Operators are now decommissioning transitional architecture — StarHub switched off 5G NSA on 31 May 2026, and all of M1's 5G sites run on SA. Singtel's February 2025 launch of "5G+" put the 700MHz band into service for the first time, lifting indoor and underground coverage by roughly 40% on the operator's measurements; Opensignal's December 2025 report gave Singtel ten national network-experience awards, seven of them outright.

The showcase enterprise deployment is Tuas Port, where Singtel and Ericsson are building fully automated 5G operations for PSA — network slicing carries real-time container tracking, crane telemetry and driverless AGV traffic across 3.5GHz, 2.1GHz and 700MHz layers. For maritime, port logistics and advanced manufacturing, Singapore has become the reference market for industrial 5G in Asia. Private 5G, IoT slices and satellite complements (Starlink holds an IMDA facilities-based operator licence, sold into maritime and enterprise rather than residential use) round out a B2B connectivity portfolio that did not exist commercially three years ago.

2.3 Operator scorecard

FY2026 results (year ended 31 March 2026) show Singtel executing a quiet transformation. Group revenue rose 0.8% to S$14.26 billion, but underlying net profit climbed 12.1% to S$2.77 billion and headline net profit jumped 39.5% to S$5.61 billion on S$2.84 billion of exceptional gains from paring its Bharti Airtel stake. The read-through for Singapore strategy: consumer mobile is now a cash engine to fund digital infrastructure —

Digital InfraCo revenue grew 12%, its Nxera data centre arm 16% — while enterprise services already generate more than half of Singtel Singapore's revenue. Singtel flagged "structural price competition" as Singapore consumer revenue fell 3%.

StarHub's FY2025 (calendar year) illustrates the mid-market squeeze: service revenue of S$2.0 billion, EBITDA of S$403.6 million, and net profit down 46.2% to S$86.4 million — dented by a one-off forfeiture tied to a returned 700MHz spectrum lot — with cybersecurity (+4.3%) and regional enterprise (+2.9%) the growth pockets. M1's telecom operations generated about S$806 million in the twelve months to April 2025, and Keppel booked a S$222 million accounting loss on the proposed divestment of the telco business it has been trying to exit. Simba remains the spoiler: FY2025 (ended July 2025) revenue rose 29% to S$151.3 million with a maiden full-year profit, mobile ARPU of just S$9.60, and a fibre broadband base that more than tripled year-on-year to over 46,000 customers by January 2026.

Operator	Scale (2025–26)	Latest financials	Strategic posture
Singtel	~4.5M mobile customers; ~44.6% share (Mar 2025, analyst est.)	FY26 revenue S$14.26B (+0.8%); underlying NP S$2.77B (+12.1%); DPS 18.5¢	Regional associates + Optus; pivot to Digital InfraCo/Nxera DCs, GPUaaS, enterprise; NCS as SI arm
StarHub	~2.21M mobile subs; ~24% share (est.)	FY2025 service revenue S$2.0B; NPAT S$86.4M (−46.2%, one-off hit)	Converged consumer + regional enterprise; cybersecurity (Ensign); DARE+ transformation
M1 (Keppel)	~2M users; ~19% share (est.)	Telecom revenue ~S$806M (12m to Apr 2025); S$222M loss booked on failed sale	In play after collapsed Simba deal; Keppel retains enterprise arm; 90-day efficiency plan
Simba (Tuas Ltd)	~1.41M services (Jan 2026); ~12.7% share	FY2025 revenue S$151.3M (+29%); maiden profit; ARPU S$9.60	Price disruptor; expanding into fibre broadband (>46k customers); lean digital-first model

2.4 The consolidation that wasn't

The defining corporate drama of the past year was the attempted sale of M1's telecom business to Simba, agreed in August 2025 at an enterprise value of S$1.43 billion. On 18 May 2026, IMDA suspended its review of the merger pending an investigation into Simba's alleged use of radio frequency bands not assigned to it — a potential breach of the Telecommunications Act and its licence conditions. Days later, on 21 May 2026, the share purchase agreement lapsed at its long-stop date and the deal formally collapsed. Keppel has since activated a 90-day efficiency plan at M1 and is exploring alternatives, with sell-side analysts tipping StarHub as the most natural — though unconfirmed — counterparty. The practical consequence: four mobile network operators persist, mobile ARPU roughly 36–41% below 2017 levels on Maybank's estimates, and a price war with no structural end in sight.

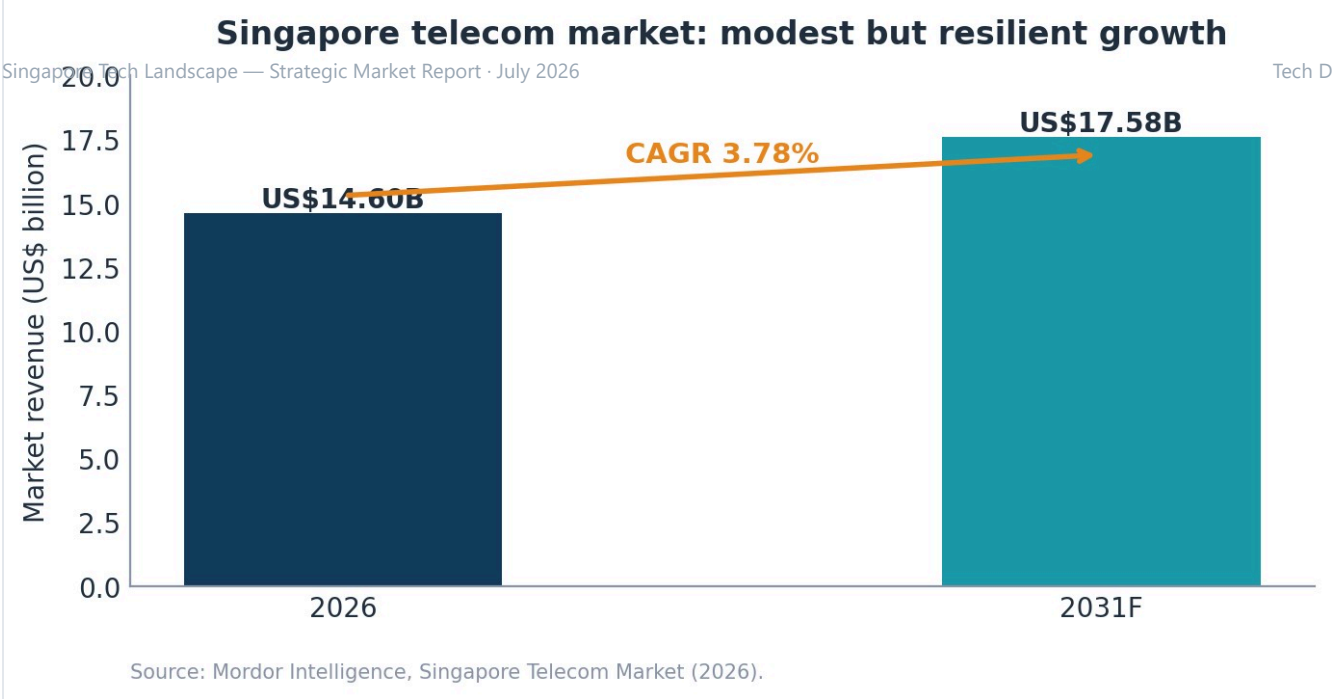


Figure 5 — Telecom market revenue outlook. Source: Mordor Intelligence (2026).

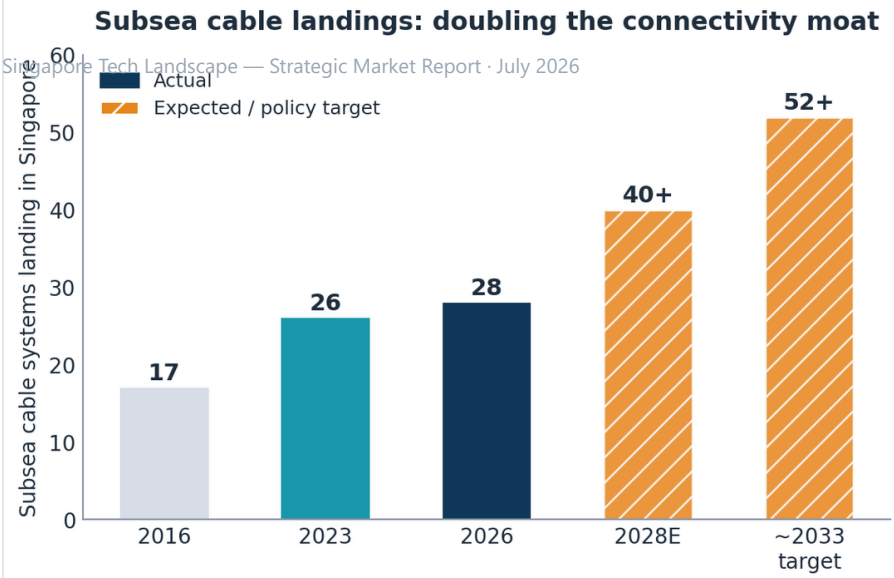
2.5 Fixed networks: the 10Gbps refresh

The National Broadband Network remains structurally separated under NetLink NBN Trust, which reported FY2026 revenue of S$413.4 million and passes effectively every home with more than 1.5 million residential fibre connections at 99.99% availability. The strategic move is IMDA's investment of up to S$100 million to upgrade the NBN for symmetric 10Gbps services, with mass-market 10Gbps retail plans already in market and more than 500,000 households expected on up-to-10Gbps plans by 2028. The stated rationale is explicitly AI-era: home-based inference, immersive media and enterprise edge workloads. For operators, the upgrade resets the broadband marketing battleground even as it compresses per-gigabit economics further.

3. Subsea cables: the connectivity moat

3.1 Position and policy

Everything digital in Singapore ultimately rides on wet infrastructure: more than 99% of the country's international traffic transits subsea cables. Twenty-eight systems land in Singapore as of 2026 — up from 26 at the Digital Connectivity Blueprint's mid-2023 baseline — with at least 13 more in various stages of development and the EDB expecting Singapore to be connected to more than 40 cables by 2028. Eight cable landing stations serve the country across Changi, Tanah Merah, Katong and Tuas, operated by Singtel, StarHub, Telstra, Matrix Networks and Telin. The Blueprint's targets are unambiguous: double subsea cable landings within a decade, double the number of landing sites from three, and catalyse at least S$10 billion of mostly private cable investment. In February 2026, IMDA operationalised the expansion by designating new landing sites — Changi Site 1A, Tuas West and Tuas South — in its updated deployment guidelines.



Sources: IMDA (2016, 2023 baseline); CSIS (2025); EDB expectation of 40+ systems by 2028; Digital Connectivity Blueprint target to double landings within a decade.

Figure 6 — Subsea cable landings: doubling the connectivity moat. Sources: IMDA; EDB; CSIS (2025); Digital Connectivity Blueprint.

3.2 A construction supercycle reaches Singapore

2025 was the busiest ready-for-service year in Singapore's cable history. SJC2 — 10,500km and 126Tbps across eleven Asian landings, with Singtel and Telin in the consortium — finally went live on 16 July 2025, roughly five years late after pandemic and Chinese permitting delays around Hong Kong waters. Bifrost, the Keppel/Meta/Telin system, reached ready-for-service on 2 October 2025 as the first cable to connect Singapore directly to the US West Coast via the Java and Celebes Seas. SEA-H2X and NTT-led MIST were commissioned in 2025 as well, and Reliance Jio's IAX brought a new direct India route into Tuas. Echo (Google/Meta, 144Tbps design) is targeted to complete its Singapore segment in mid-2026, and the Singtel-co-led Asia Link Cable is slated for 2026 after slipping from late 2025.

The pipeline behind them is even larger. Meta and SoftBank's Candle — announced in late 2025 at 570Tbps design capacity across 8,000km linking Japan, Taiwan, the Philippines, Indonesia, Malaysia and Singapore — targets 2028. AUG East, a Singtel-chaired consortium that includes AWS and Microsoft, will add 8,900km to Japan by around 2029, and I-2SEA (Lightstorm, Microsoft, Singtel, Tata Communications) adds another India–Singapore trunk. Notably, hyperscalers now anchor nearly every new system — a structural shift from carrier-consortium economics to content-provider economics. One caveat for planners: Meta's 50,000km Project Waterworth has no confirmed Singapore landing, a reminder that mega-routes can bypass as well as bless.

System	Key owners	Route / notes	Design capacity	Status
SJC2	Consortium incl. Singtel, Telin, Meta, KDDI, China Mobile	SG–HK–Japan–Korea, 11 landings, 10,500km	126 Tbps	RFS 16 Jul 2025
Bifrost	Keppel / Meta / Telin	First direct SG–US West Coast via Indonesia	n.d. (5 fibre pairs)	RFS 2 Oct 2025
Echo	Google / Meta	SG–Guam–US (Eureka, CA), avoids South China Sea	144 Tbps	SG segment mid-2026
Asia Link Cable	Singtel + China Telecom Global et al.	HK–SG trunk + PH/Brunei/Hainan, 6,000km, US$300M	8 FP × 18 Tbps	Expected 2026
SEA-H2X	China Mobile Intl, China Unicom, Converge	SG–HK/PH/China, ~6,000km	>200 Tbps	RFS 2025
MIST	NTT-led Orient Link	Malaysia–India–Singapore–Thailand, 8,100km	>216 Tbps	Commissioned Jun 2025
IAX	Reliance Jio-led	Mumbai/Chennai–Tuas, 12 landings	n.d.	Launched 2025
INSICA	Singtel / Telin	Tuas–Batam DC-to-DC, 100km, 24 fibre pairs	Up to 20 Tbps/FP	RFS Q4 2026
Candle	Meta, SoftBank, TM, XLSmart et al.	Japan–Taiwan–PH–Indonesia–Malaysia–SG, 8,000km	570 Tbps (24 FP)	RFS 2028
AUG East	Singtel-chaired; incl. AWS, Microsoft	Singapore–Japan, 8,900km	n.d.	Completion ~Q3 2029

3.3 Cables as a business: the Keppel proof point

Bifrost has become the template for infrastructure investors. By July 2026 Keppel had monetised all five fibre pairs through IRU (indefeasible right of use) sales — the final pairs going to Telstra International, a global technology company and a hyperscaler — for a total contract value of about US$1.3 billion including 25-year O&M, which Keppel says translates to a roughly 30% project IRR. Pairing cable IRUs with data centre campuses (Keppel), integrating cable landing stations directly into AI-ready facilities (Singtel's Nxera DC Tuas), and DC-to-DC systems like INSICA linking Singapore to Batam GPU farms all point the same way: subsea connectivity is being re-priced as the scarce complement to AI compute, not a commodity adjunct to it.

3.4 Resilience moves to the top of the agenda

The fragility of chokepoints was demonstrated on 6 September 2025, when cuts to SMW4 and IMEWE near Jeddah disrupted roughly a quarter of Asia–Europe–Middle East traffic and degraded cloud latency for weeks. Closer to home, the Singapore and Malacca Straits carry 80,000–90,000 vessels a year over a dense cable field, and Asia-Pacific repairs take up to 30 days just to commence (versus about 15 in North America), with Indonesian cabotage permitting historically adding months. The response has been institutional: ASEAN digital ministers endorsed Enhanced Guidelines for Submarine Cable Resilience and Repair in January 2026 — an initiative Singapore co-drove; the ITU/ICPC International Advisory Body on Submarine Cable Resilience, whose membership includes IMDA's chief executive, approved its landmark report in 2026; and IMDA ran a

regional repair-and-protection workshop with Australia in June 2026. For carriers and maintenance providers, resilience budgets — diverse routing, spare capacity, repair tonnage — are now board-level line items across the region.

4. Data centres: scarcity by design, growth by allocation

4.1 The tightest major market in Asia

Singapore crossed 1GW of operational IT capacity in 2024 and now runs at roughly 1.4GW live across 70-plus facilities — fifth in Asia-Pacific by capacity behind mainland China, Japan, Australia and India, and among the top ten markets globally. What makes it exceptional is utilisation: vacancy of about 2% is the lowest in the region, wholesale rates command a premium at around US$120/kW/month for tier-one space, and Cushman & Wakefield ranks its land the most expensive for data centres in Asia-Pacific. The scarcity is deliberate. After a de facto moratorium on new builds from 2019, the state re-opened supply through a pilot Data Centre Call-for-Application in 2022 that provisionally awarded about 80MW to four operators — Equinix, Microsoft, GDS and an AirTrunk–ByteDance consortium — establishing the principle that capacity, like spectrum, is allocated competitively against policy criteria.

The Green Data Centre Roadmap (May 2024) set the current framework: at least 300MW of additional near-term capacity, plus 200MW or more reserved for operators using green energy pathways such as fuel cells with carbon capture, low-carbon hydrogen and bioenergy, with existing stock pushed toward PUE ≤1.3 within a decade. In December 2025 the second Call-for-Application (DC-CFA2) opened for at least 200MW — requiring at minimum 50% green-pathway power, Green Mark Platinum certification, and design PUE ≤1.25 — and closed on 31 March 2026, with winners not yet announced as of this writing. The boldest stroke came in October 2025: EDB and JTC reserved about 20 hectares on Jurong Island for Singapore's largest low-carbon data centre park, with potential for up to 700MW powered by new-energy projects on the island. MTI has stated the 300MW growth tranche is consistent with national emissions peaking by 2028; data centres consumed about 7% of national electricity in 2020, and unofficial projections put the share near 11% by 2030 — hence the parallel bets on 6GW of low-carbon electricity imports by 2035, the world-first SS 697 tropical data centre standard (raising operating temperatures to 26°C+), and small modular reactor feasibility studies commissioned by EMA.

Framework	Capacity	Key requirements / status
Pilot DC-CFA (2022–23)	~80MW	Awarded 2023 to Equinix, Microsoft, GDS, AirTrunk–ByteDance; facilities going live 2026–2028
Green DC Roadmap (May 2024)	≥300MW + ≥200MW green	PUE ≤1.3 for existing stock within 10 years; green-energy pathways defined (H2, fuel cells + CCS, bioenergy, BIPV)
DC-CFA2 (Dec 2025)	≥200MW (more via green innovation)	≥50% green-pathway power; Green Mark Platinum; PUE ≤1.25 at full load; closed 31 Mar 2026 — awards pending
Jurong Island low-carbon park (Oct 2025)	Up to 700MW potential	~20ha reserved by EDB/JTC; co-located with ~300ha earmarked for hydrogen/ammonia/battery projects

4.2 Operators, deals and the AI premium

Consolidation and AI-readiness define the operator landscape. The largest transaction in Singapore digital-infrastructure history was agreed in February 2026: a KKR-led consortium with Singtel is acquiring the remaining 82% of ST Telemedia Global Data Centres at an enterprise value of S$13.8 billion (S$6.6 billion for the stake), taking KKR to 75% and Singtel to 25% of a platform with 2.3GW of design capacity across twelve markets. Blackstone completed its A$24 billion acquisition of AirTrunk in December 2024 and backed AirTrunk's second Singapore campus with a roughly S$2.3 billion green loan in August 2025. Keppel DC REIT acquired the SGP7/SGP8 assets for S$1.38 billion. Google has completed its fourth Singapore data centre, taking cumulative investment past US$5 billion; Microsoft, AWS and Meta all operate or are expanding owned capacity.

The emblem of the AI era is Singtel Nxera's DC Tuas, opened in early 2026: 58MW at a design PUE of 1.23–1.25, large-scale direct-to-chip liquid cooling, an integrated cable landing station, and more than 90% of capacity pre-committed before opening. Nxera's regional capacity is set to double from 200MW toward 400MW+ as Batam and Johor sites land in 2026. The strategic sorting is now explicit: latency-sensitive, governance-heavy AI inference and enterprise workloads stay in Singapore; massive training clusters go where power and land are cheap — across the border.

4.3 SIJORI: one market, three jurisdictions

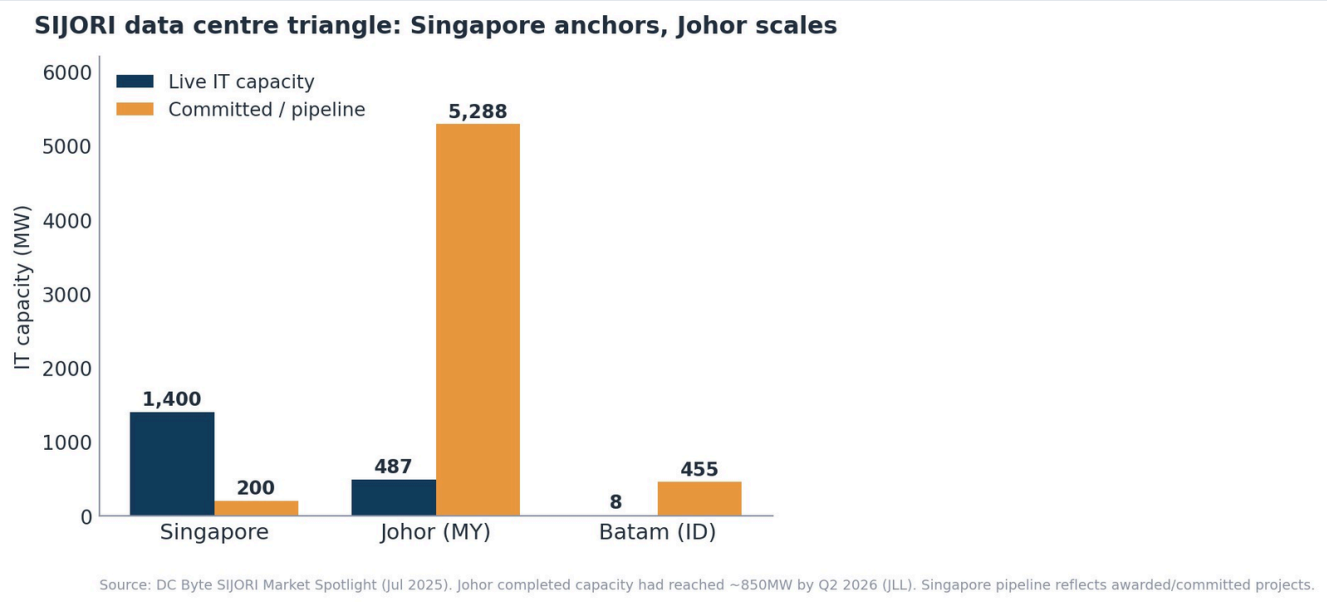


Figure 7 — The SIJORI data centre triangle. Source: DC Byte SIJORI Market Spotlight (Jul 2025); JLL puts Johor completed capacity at ~850MW by Q2 2026.

Johor has become Southeast Asia's fastest data centre build-out in history: from a near-standing start in 2021 to 487MW live by mid-2025 on DC Byte's count — approaching 850MW completed with a further 1.8GW under construction by JLL's Q2 2026 reading — and a total planned pipeline touching 5.8GW. Sedenak Tech Park alone hosts over half the state's live capacity; anchor tenants and builders include DayOne (ex-GDS International), AirTrunk, Bridge, Princeton Digital, Microsoft and Oracle (a US$6.5 billion cloud-region commitment), while YTL's green campus hosts Nvidia GB200-class supercomputing. The Johor-Singapore Special Economic Zone agreement signed in January 2025 formalises the complementarity — and

Johor's growing pains prove the constraint thesis: regulators estimate approved facilities could demand 675 million litres of water a day against roughly 142 million sustainably suppliable, prompting an approximately 18-month pause on new water-cooled approvals from November 2025, while Malaysia's July 2025 tariff rebasing lifted data centre power costs by an estimated 10–14%.

Batam is scaling the same way for AI training: an aggregate pipeline of 463MW (DC Byte), Oracle's Indonesia North cloud region, and — most strikingly — the Firmus/Nvidia/DayOne "AI factory" campus targeting 360MW and up to 170,000 GPUs through 2027–28, with operations from Q1 2027. Singtel and Telin's INSICA cable (RFS Q4 2026) will hard-wire Batam's GPU farms into Singapore's ecosystem with 24 dedicated fibre pairs. The strategic geometry is now legible: Singapore supplies interconnection, capital, governance and demand; Johor and Batam supply megawatts; and the whole triangle competes as a single AI region against Tokyo, Sydney and Mumbai.

5. The AI layer: national strategy meets hyperscale capital

5.1 Policy: from NAIS 2.0 to a National AI Council

Singapore's National AI Strategy 2.0 (December 2023) set the vision — "AI for the Public Good" — and the targets, notably tripling the AI practitioner pool to 15,000, backed by more than S$1 billion over five years committed at Budget 2024 for compute, talent and industry development. The machinery has kept compounding since: Budget 2025 added the up-to-S$150 million Enterprise Compute Initiative, giving companies subsidised access to AWS, Google, Microsoft and Oracle compute and expertise; January 2026 brought a further S$1 billion-plus National AI R&D Plan for 2025–2030; and Budget 2026 launched sectoral "AI Missions" in advanced manufacturing, connectivity, financial services and healthcare, a 400% tax deduction on qualifying AI spending, and a new "Kampong AI" innovation campus at one-north — all nested within a S$37 billion RIE research budget. Governance was elevated in February 2026 with a National AI Council chaired by the Prime Minister, and the strategy itself was refreshed in May 2026 with ten updated priorities. Public compute scales in parallel through NSCC's ASPIRE 2A+ (Nvidia H100-based) with a next-generation ASPIRE 2B system signalled in the official strategy update.

5.2 The capital wave

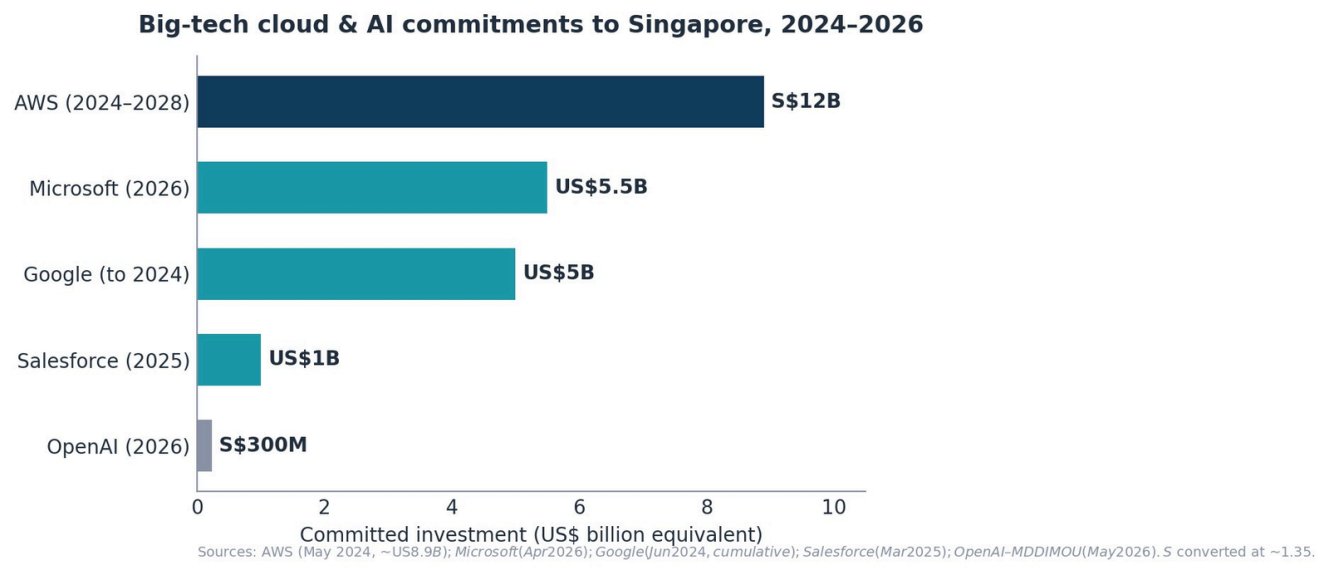


Figure 8 — Big-tech cloud and AI commitments to Singapore, 2024–2026. Sources: company announcements (AWS May 2024; Salesforce Mar 2025; Microsoft Apr 2026; Google Jun 2024; OpenAI–MDDI May 2026).

The hyperscaler commitments are historic in aggregate. AWS's additional S$12 billion (2024–2028) takes its cumulative Singapore investment past S$23 billion; Microsoft's US$5.5 billion (April 2026) funds cloud and AI infrastructure plus a national skilling programme; Google's campus build-out stands at US$5 billion; Salesforce is investing US$1 billion around its Agentforce push. The most symbolically loaded arrival is OpenAI: having opened its first Asian office in Singapore in late 2024, it signed an MOU with MDDI in May 2026 worth more than S$300 million, establishing its first Applied AI Lab outside the United States with 200-plus technical roles. Add Singtel's RE:AI sovereign AI cloud and Nvidia GPU-as-a-service (launched October 2024, expanding region-wide through Nxera's AI-ready data centres), and Singapore now offers enterprises every tier of AI compute — hyperscale, sovereign and national-supercomputing — inside one jurisdiction.

5.3 Sovereign models and trusted-AI leadership

Singapore's answer to model concentration is regional and pragmatic. The S$70 million National Multimodal LLM Programme has produced two families: SEA-LION, AI Singapore's Southeast Asia-tuned open models — whose v4 generation went multimodal in August 2025, with the Qwen-based 32B variant ranked the top open model under 200B parameters on the SEA-HELM regional benchmark — and MERaLiON, an audio-first model trained on 260,000 hours of speech for the region's languages and code-switching. On assurance, Singapore has parlayed early moves (Model AI Governance Framework for Generative AI, May 2024; the NTU Digital Trust Centre designated as the national AI Safety Institute) into international convening power: the "Singapore Consensus" on global AI safety research priorities emerged from its April 2025 conference, and the government is operationalising trust at home — including a registry of AI agents for 150,000 public officers announced in June 2026. For vendors, alignment with AI Verify-style assurance is becoming a de facto qualification for public-sector and regulated-industry work.

6. System integrators and enterprise ICT: the delivery engine

6.1 Demand: government as anchor client

Government remains the single largest and most predictable ICT buyer. GovTech's most recent headline procurement announcement — up to S$3.3 billion for FY2024, with over 60% (S$2.1 billion) directed at digital-infrastructure modernisation — extends a run of S$3.3–3.8 billion annual envelopes. The FY2024/25 annual report and the June 2026 announcement of an AI-agent registry for 150,000 public officers signal where money is flowing: cloud (over 80% of eligible government systems already run on commercial cloud), AI agents, and cybersecurity. Procurement mechanics matter to bidders: dynamic contracting and "Tender Lite" have lowered entry friction, and the majority of opportunities are structured to be open to SMEs.

Private-sector demand is compounding faster. Mordor Intelligence sizes Singapore's systems-integration market at US$4.73 billion in 2025, growing at an 18.4% CAGR to US$11 billion by 2030, and the broader IT services market at US$29.8 billion in 2025 rising to US$65.8 billion by 2030 — aggressive projections that nonetheless capture the direction: every AI platform investment described in Section 5 converts into multi-year integration, data-engineering, security and managed-services revenue downstream.

6.2 The competitive set

NCS, Singtel's IT-services arm and the incumbent heavyweight in government systems, posted its strongest year on record in FY2026: revenue up 7%, EBIT up 30% (excluding a one-off), record bookings of S$3.8 billion and a book-to-bill of 1.2, on a base of roughly 14,000 staff. Its S$130 million, three-year AI programme (July 2025) — spanning an internal Sunshine.AI delivery suite and Asia-Pacific expansion — is the clearest statement yet that regional SIs see AI-native delivery as existential. ST Engineering's digital business (cloud, AI/analytics, cybersecurity) grew 39% to S$645 million in 2024, comfortably beating its own target, and landed a S$200 million contract for an island-wide AI-powered camera system in 2025. Global majors — Accenture, IBM, TCS, Fujitsu, NEC and others — remain deeply embedded, and Kyndryl chose Singapore for its ASEAN AI Innovation Lab in June 2025. The pattern across all of them: pivot from headcount-led implementation to outcome-based, AI-embedded managed services, with sovereign-cloud and assurance skills as differentiators.

6.3 What buyers should expect

- **Pricing is migrating** from time-and-materials toward outcome- and consumption-based structures as SIs industrialise delivery with their own AI agents — reference NCS's Sunshine.AI or the hyperscalers' partner programmes under the Enterprise Compute Initiative.
- **The talent market has repriced:** with median tech wages near S$8,000 and AI & Data the fastest-growing job family, rate-card inflation lands in every renewal; buyers gain leverage by contracting around reusable AI assets rather than bodies.
- **Assurance is procurement-relevant:** AI Verify alignment, data-residency options on sovereign GPU clouds, and demonstrable model governance increasingly separate qualified bidders in regulated sectors.

7. Hardware and semiconductors: the silicon substrate

7.1 An outsized manufacturing base

Singapore's quiet superpower is that it manufactures the physical layer of the AI economy at scale. On EDB's figures the country accounts for about 10% of global semiconductor output, roughly 5% of global wafer-fab capacity and about 20% of global semiconductor-equipment production, employing more than 35,000 people; a SingStat supply-use study put semiconductor industry output at S$158.6 billion with S$60.3 billion of value-added as far back as 2022. The AI memory supercycle is visible in the run-rate: electronics cluster output grew 12.7% in 2025 (with the fourth quarter up 25.1%), and electronics led June 2026's 13% year-on-year jump in non-oil domestic exports. Globally, SEMI reports semiconductor-equipment billings hit US$135.1 billion in 2025 (+15%), with the Southeast Asia-inclusive "rest of world" segment up 25% — much of it flowing through Singapore-based toolmakers' operations.

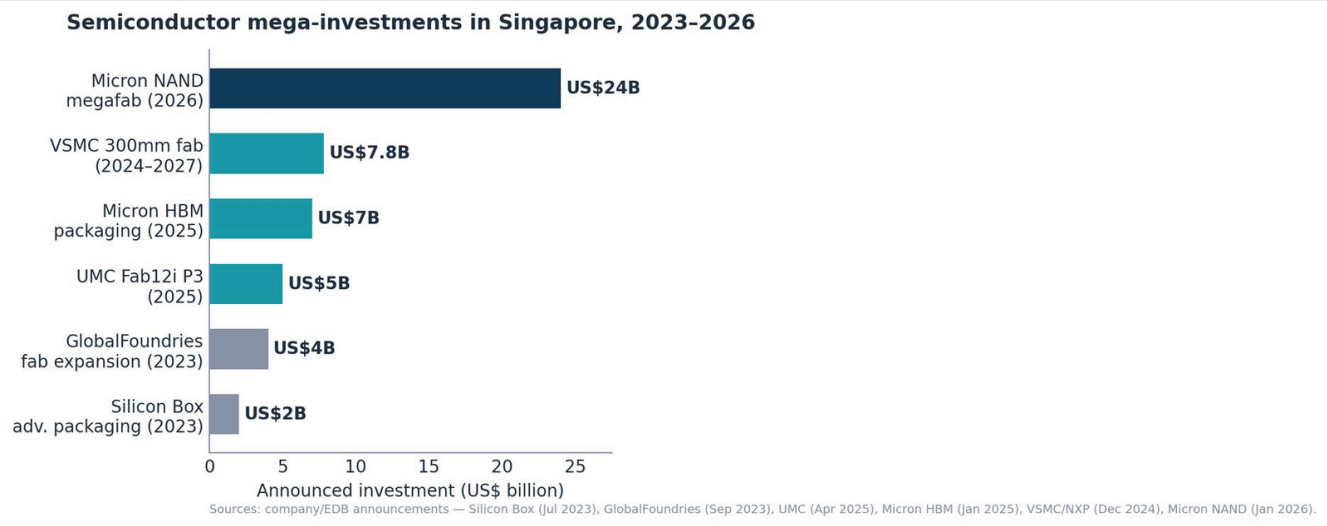


Figure 9 — Semiconductor mega-investments in Singapore, 2023–2026. Sources: EDB and company announcements.

The investment cadence since 2023 is unmatched in Singapore's industrial history. GlobalFoundries opened a US$4 billion expansion in September 2023; Silicon Box launched a US$2 billion panel-level advanced-packaging foundry the same year (shipping its 100-millionth unit by October 2025); UMC's US$5 billion Fab12i Phase 3 opened in April 2025 with production from 2026; VSMC — the Vanguard/NXP joint venture — broke ground on a US$7.8 billion 300mm fab in December 2024 for 2027 production; and Micron committed twice, first to a US$7 billion HBM advanced-packaging facility (January 2025, operations from 2026 — the first HBM packaging capacity in Singapore, feeding the AI accelerator supply chain), then to a US$24 billion NAND megafab announced in January 2026 with wafer output from 2H2028. Micron already makes about 98% of its NAND in Singapore. Upstream, Siltronic and Soitec have expanded wafer supply, and Applied Materials announced a new Tampines manufacturing-and-R&D campus in June 2026 under its "Singapore 2030" plan.

7.2 The Nvidia lens: entrepôt economics and export-control friction

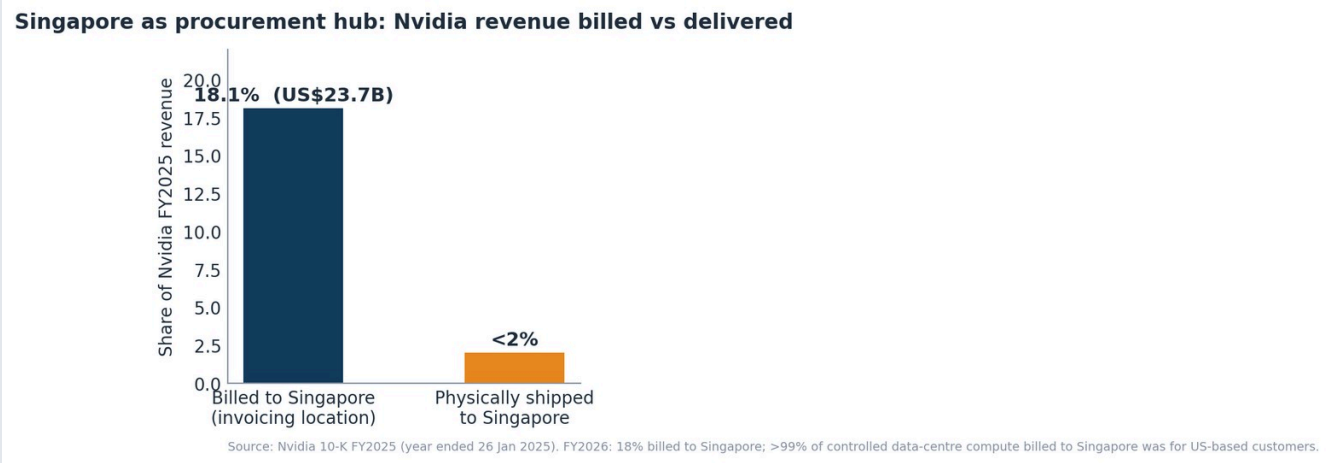


Figure 10 — Singapore as procurement hub: Nvidia revenue billed vs delivered. Source: Nvidia 10-K filings, FY2025–FY2026.

No statistic captures Singapore's role in AI hardware better than Nvidia's own disclosures: US$23.7 billion — 18.1% of Nvidia's FY2025 revenue — was billed to Singapore-addressed customers, while fewer than 2% of shipments physically entered the country; the FY2026 10-K repeats the 18% billing share and states that over 99% of controlled data-centre compute billed to Singapore served US-based customers. Singapore is, in short, the invoicing and logistics hub for the region's AI build-out — a lucrative but scrutinised position under US export controls. The February 2025 fraud case involving servers routed to Malaysia (expanded in July 2026 with charges against four companies and additional individuals, and some S$55 million in assets seized) triggered visible enforcement and an explicit government stance of cooperation with US authorities. For hardware channel players — Dell, Supermicro, HPE and their distributors all run substantial regional operations here — compliance capability is now a commercial moat, not overhead. In networking, the 5G vendor map set in 2020 still holds: Ericsson powers Singtel, Nokia powers the StarHub–M1 networks, with Huawei confined to niche deployments.

8. The regional hub equation

Singapore's competitive position is best understood as an orchestration premium. It cannot win on megawatts, hectares or wafer-fab labour costs; it wins by holding the layer where capital, connectivity, governance and talent intersect — and by exporting frameworks the region adopts. The evidence spans this report: ASEAN's enhanced cable-resilience guidelines and AI-governance guides were driven from Singapore; SEA-LION positions it as steward of regional language AI; the JS-SEZ converts a rival into a hinterland; and Singapore chairs ASEAN in 2027 with digital integration high on the agenda. Meanwhile the constraints that push workloads to Johor and Batam — and Johor's own water and power frictions — reinforce rather than undermine the model: scarce Singapore capacity commands premium pricing for inference and interconnection, while the overflow economy remains financed, connected and governed largely through Singapore institutions.

The risks are the mirror image. Cost and capacity ceilings could push not just training clusters but headquarters functions outward if allocation is too slow; the entrepôt role in AI chips invites geopolitical crossfire between US export controls and Chinese demand (recall that China overtook the US in committed

fixed-asset-investment share in 2025); a four-player telecom price war erodes the domestic investor base for network upgrades; and chokepoint geography makes cable resilience a national-security dependency that Singapore can shape but not unilaterally control. None of these is new to Singapore's policymakers — the policy timeline is, in effect, a record of pre-emptive answers — but each carries direct implications for corporate strategy, set out below.

9. Strategic implications and recommendations

For telecom operators and connectivity providers

- **Treat consumer mobile as a cash-generating utility** and redeploy capital to enterprise 5G (slicing, private networks, maritime/port verticals), GPU-as-a-service and data-centre-adjacent services — the Singtel Digital InfraCo playbook is the market-validated template.
- **Position for consolidation optionality:** the M1 endgame remains open after the failed Simba deal, and any resolution (StarHub combination, new entrant, or continued four-player war) resets wholesale, spectrum and enterprise pricing assumptions within 12–24 months.
- **Monetise resilience:** diverse subsea routes, IRU portfolios, restoration capacity and repair logistics are now premium products — Keppel's ~30% Bifrost IRR shows infrastructure investors will pay for de-risked connectivity.

For data centre and cloud players

- **Compete on green credentials, not just capital:** DC-CFA2 made ≥50% green-pathway power and PUE ≤1.25 the entry ticket; early positions in hydrogen-ready Jurong Island capacity and tropical-standard operations will define the next allocation round.
- **Run a dual-market SIJORI strategy as default:** premium inference and interconnection in Singapore, training scale in Johor/Batam, stitched with dedicated fibre (INSICA-style) — single-market strategies are now structurally disadvantaged.

For system integrators and ICT vendors

- **Rebuild the P&L around AI-embedded, outcome-priced services;** the S$3.3B+/year public-sector pipeline is tilting to AI agents, cloud and cyber, and assurance (AI Verify alignment, sovereign-cloud delivery) is becoming a bid qualifier.
- **Exploit the Enterprise Compute Initiative and AI Missions as demand generators:** subsidised compute plus 400% tax deductions materially shorten enterprise AI sales cycles in 2026–27.

For hardware and semiconductor players

- **Anchor advanced-packaging and memory supply-chain roles now** — Micron's HBM facility and US$24B megafab will pull an ecosystem of toolmakers, materials and test capacity through 2028; EDB is demonstrably writing cheques.

- **Invest in export-control compliance as a market-access asset:** post-2025 enforcement makes provenance tracking, end-user verification and audit-ready logistics a prerequisite for the entrepôt trade — and a differentiator against regional rivals.

For enterprise technology leaders

- **Lock in scarce Singapore capacity early** (colocation vacancy ~2%; 10Gbps enterprise connectivity repricing) and architect for cross-border inference/training splits from day one.
- **Use Singapore's governance stack** — AI Verify, the GenAI framework, sovereign GPU options — to clear internal risk and regulatory review faster than peers; it is the cheapest compliance arbitrage in the region.

10. Outlook 2026–2030

The through-line of this report is that Singapore has converted scarcity into pricing power and policy into pipeline. The watch-list for the next 12–24 months is concrete: the DC-CFA2 winners (due from mid-2026) and the pace of Jurong Island's 700MW park; the resolution of M1 and with it the shape of telecom competition; the arrival of Echo, Asia Link Cable and INSICA and progress toward 40+ cables by 2028; Micron's HBM ramp in 2026–27 and megafab output from 2028; execution of the AI Missions and the first cohort of Enterprise Compute Initiative adopters; and, in the background, electricity-import and small-modular-reactor decisions that determine whether the 2030s bring another data centre growth tranche or a harder ceiling.

Base case: by 2030 Singapore's digital economy exceeds a fifth of GDP; live data centre capacity approaches 2GW with a multiple of that operating in its SIJORI hinterland under Singapore-centred commercial control; more than 40 cables land at five-plus sites; and the telecom sector completes its transformation into a digital-infrastructure industry whose consumer arm is incidental. The risks — power, geopolitics, price wars, and the ever-present possibility that the AI capital cycle cools — are real but visible, and Singapore's institutional habit of pre-committing answers before problems mature remains its most durable competitive advantage. For any business in connectivity, integration or hardware, the strategic question is not whether to be positioned in Singapore, but which layer of its stack to own.

About this report

This Strategic Market Report was researched and published by Tech Directory SG (TechDirectory.sg), Singapore's verified B2B technology vendor directory. Figures are as reported by the cited agencies, operators and research houses as of 16 July 2026; analyst estimates are flagged as such, and S$/US$ amounts are stated as announced by their sources. Notes on data quality: mobile market shares are analyst estimates (IMDA does not publish operator shares); Johor capacity varies by tracker and vintage (DC Byte July 2025 and JLL Q2 2026 are both cited); the 2019 digital-economy value is derived from IMDA's stated CAGR; and DC-CFA2 award outcomes were pending as of 16 July 2026. The failed Simba–M1 transaction is dated May 2026 per ASX filings.

Frequently asked questions

How big is Singapore's digital economy?

Singapore's digital economy generated S$128.1 billion in value-added in 2024, equal to 18.6% of GDP, according to IMDA's Singapore Digital Economy Report 2025. It has compounded at roughly 12% a year since 2019 — nearly twice the pace of the overall economy — and two-thirds of that value is created outside the ICT sector itself.

How many subsea cables land in Singapore?

Twenty-eight subsea cable systems land in Singapore as of 2026, served by eight cable landing stations, and they carry more than 99% of the country's international traffic. The EDB expects more than 40 systems by 2028, and the Digital Connectivity Blueprint targets a doubling of landings within the decade.

How much data centre capacity does Singapore have?

Singapore runs roughly 1.4GW of live IT capacity across more than 70 facilities at about 2% vacancy — the lowest in the region. New supply is allocated through competitive government calls: the DC-CFA2 tender offers at least 200MW (awards pending as of July 2026), and a Jurong Island low-carbon park could add up to 700MW.

What is the SIJORI data centre triangle?

SIJORI refers to Singapore, Johor (Malaysia) and the Riau Islands (Batam, Indonesia) operating as one cross-border data centre market. Singapore supplies interconnection, capital, governance and inference capacity; Johor (487MW live by mid-2025, approaching 850MW by Q2 2026, with a 5.8GW pipeline) and Batam (a planned 360MW AI campus with up to 170,000 GPUs) supply training-scale megawatts.

How much are hyperscalers investing in Singapore?

Since 2024, AWS has committed an additional S$12 billion to 2028, Microsoft US$5.5 billion, Google over US$5 billion in cumulative campus build-out, Salesforce US$1 billion, and OpenAI more than S$300 million for its first Applied AI Lab outside the United States — collectively well over S$30 billion in cloud and AI commitments.

Who are Singapore's four mobile network operators?

Singtel (~44.6% share), StarHub (~24%), M1 owned by Keppel (~19%) and Simba, owned by ASX-listed Tuas Ltd (~12.7%), on 2025 analyst estimates. Singapore reached nationwide 5G Standalone coverage by end-2025, but mobile ARPU is roughly 36–41% below 2017 levels amid a four-player price war.

Why did the Simba–M1 merger collapse?

IMDA suspended its review of Simba's S$1.43 billion acquisition of M1 on 18 May 2026, pending an investigation into Simba's alleged use of radio frequency bands not assigned to it. The share purchase

agreement then lapsed at its long-stop date on 21 May 2026, formally ending the deal. Keppel has since activated a 90-day efficiency plan at M1 and is exploring alternatives.

What share of global semiconductor output does Singapore produce?

Singapore accounts for about 10% of global semiconductor output, roughly 5% of global wafer-fab capacity and about 20% of global semiconductor-equipment production on EDB's figures. Micron's US$24 billion NAND megafab, announced in January 2026, is the largest semiconductor investment in Singapore's history.

Appendix: key sources

Figures in this report are drawn from the following primary and analyst sources (accessed July 2026).

- IMDA — Singapore Digital Economy Report 2025 — https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/press-releases/2025/singapore-digital-economy
- IMDA — Digital Connectivity Blueprint; Green Data Centre Roadmap (May 2024); DC-CFA2 factsheet (Dec 2025); submarine cable deployment guidelines (Feb 2026) — https://www.imda.gov.sg
- EDB — Year 2025 in Review (Feb 2026) and semiconductor industry pages — https://www.edb.gov.sg
- MDDI / Smart Nation — National AI Strategy 2.0, 2026 update, OpenAI MOU (May 2026), Smart Nation 2.0 — https://www.smartnation.gov.sg
- GovTech — FY2024 ICT procurement announcement; Annual Report FY2024/25 — https://www.tech.gov.sg
- Singtel — FY2026 results and Nxera/RE:AI announcements (May 2026) — https://www.singtel.com
- StarHub FY2025 results; Keppel FY2025 results and Bifrost fibre-pair announcements — https://www.starhub.com
- Tuas Ltd (Simba) FY2025/H1 FY26 results; NetLink NBN Trust FY26 results
- AWS, Microsoft, Google, Salesforce and OpenAI Singapore investment announcements (2024–2026)
- Nvidia 10-K filings FY2025 and FY2026 (SEC) — https://www.sec.gov
- KKR/Singtel–ST Telemedia GDC transaction release (Feb 2026); Blackstone–AirTrunk (2024–25)
- DC Byte — SIJORI Market Spotlight (Jul 2025); Cushman & Wakefield APAC data centre updates; JLL Malaysia (Q2 2026)
- Mordor Intelligence — Singapore telecom, systems-integration and IT services market reports (2025–26) — https://www.mordorintelligence.com
- DataReportal — Digital 2026 Singapore — https://datareportal.com
- CSIS — The Strategic Future of Subsea Cables: Singapore case study (Sep 2025) — https://www.csis.org
- Opensignal — Singapore mobile network experience report (Dec 2025) — https://www.opensignal.com
- SEMI — global semiconductor equipment billings, 2025 — https://www.semi.org