

The Indonesian Telecommunication Sector Reorganization and its Key Trends Going Forward

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Executive Summary

The Indonesian telecommunication sector has undergone a series of "evolutions" predominantly caused by digitalization, driven largely by increasing data consumption. This has triggered a set of "assets reorganization" activities marked by consolidations, mergers and acquisitions (M&A) and divestments and the creation of infra-co.

Some of these activities are propelled by capital markets that have seen an increase in activity in the infrastructure private investment and higher cost of funds. More importantly, however, central to these is the convergence of telecommunication services that has now been largely driven by data connectivity and the demand for high-speed, high-quality and affordable communication.

		A deo	ade ago			Today		Key Trends			
		7 MNOs are operating in the Indonesian Telecommunication market			Potentially only 3 major MNOs in the market			Fiber optics become key players in the future of telecommunication			
Key Areas Affected		MNOs spent to build / acquire backbone business – towers and fibers			conso co an	oone assets get blidated into infra- id shared across rent players		Bringing contents closer to population i.e. localization will see more use case of EDGE			
		MNOs earned money from voice, SMS, VAS and various other mobile services			Everything is driven by data consumptions			data center Telco players will need to enhance their offerings and move			
		Mobile and fixed broadband are an entirely separate set of services		mob		y lines between le and fixed ectivity		toward techco and more sharing of backbone infrastructure			
	External Factors										
ers	End of low interestDrop in ARPUrate eraof users stage				Entry of new players incl. StarLink		Entry of technology such as DWDM / WDM				
Drivers	Internal Factors										
		The need to venture into higher margin value-added services				the % of revenue gacy business		eed of high capex spend o sustain growth			



A Review of Telecommunication Sector Landscape in Indonesia

The Indonesian telecommunication sector has long been "mobile-centric," primarily driven by mobile use as a more affordable and practical connectivity option. Before the wave of consolidation that occurred nearly a decade ago (sometime in 2015-16), there were 7 mobile network operators (MNOs) in Indonesia, namely Hutchison 3, XL Axiata, Indosat Ooredoo Hutchison, Sampoerna, Telkomsel, SmartFren and Bakrie Telecom.

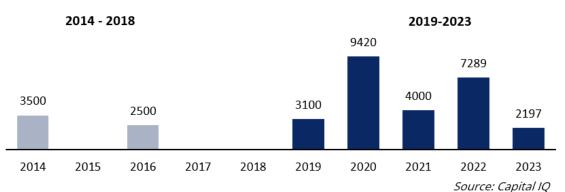
Today, due to this wave of consolidation among these players (as detailed out in the table below) we are left with four key major MNOs. Soon, the country may only have three MNOs, as there is a potential merger between SmartFren and XL Axiata.

Year	Target	Buyer	Deal Size
2014	Bakrie Telecom	SmartFren	US\$ 154.38 million
2014	Axis Telekom	XL	US\$ 865 million
2022	Hutchison 3	Indosat	US\$ 1.1 billion
2024 (pending)	SmartFren	XL Axiata	US\$ 3.5 billion

In addition to the wave of M&As among the MNOs, the Indonesian telecommunication sector has also witnessed a rise in divestments of telecommunication infrastructure assets, including telecommunication towers, data centers to fiber optics assets.

This trend it highlighted by the recent announced divestment Telkom Sigma, a subsidiary of Telkom Indonesia (a state-owned enterprise telecommunication company), and the proposed divestment of Indosat Ooredoo's Fiber Optic and Marine Cable businesses.

This shift further underscores the ongoing reorganization of the Indonesian telecom sector.



Indonesia Towers Divestments

Amidst these ongoing consolidations and divestments, we have also observed key emerging trends (discussed in further details below), including the rise of fixed-mobile convergence (FMC) in the Indonesian telecommunication landscape. This trend is exemplified by XL Axiata's acquisition of Link Net, a major Indonesian fixed broadband player (initially owned by First Media, a subsidiary controlled by the Lippo Group and has been invested by a global PE, CVC), and the recent merger of Telkom's subsidiaries – IndiHome (a fixed broadband service provider) and Telkomsel (one of the major MNO operators).

Underlying these corporate actions, is the significant increase in data consumption driven by digitalization and consumers' contents consumption. This has made it strategically imperative



for Indonesian telecommunication players to provide better quality and high-speed internet connections to grow their market share.

Specifically, in Indonesia, the fixed broadband communication segment has ample room to grow. The country currently has the lowest fixed-broadband penetration at less than 20%, significantly below Southeast Asia's average of 40%, highlighting a significant opportunity for expansion and fiber optics investment in Indonesia. (DBS, 2023)

Furthermore, the services provided today are sub-standard, with average speeds that users typically get from the current fixed broadband internet service providers (ISPs) being only 31.42 Mbps, a far cry from the SEA internet speed of about 77.5 to 284.93 Mbps. (Ookla, Q2 2024)

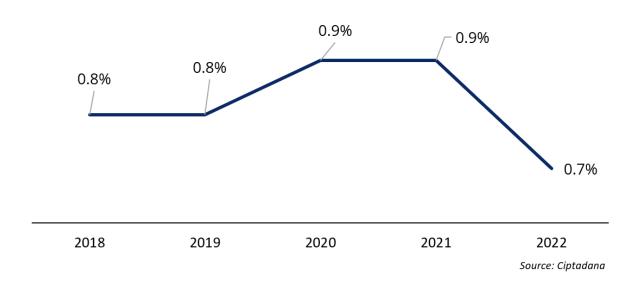
This underscores the pressing need for improved broadband infrastructure and services in Indonesia, which could further drive the adoption of fixed-mobile convergence and accelerate 5G development to meet the growing demands of its digital population.

Key Drivers Behind the Indonesian Telecommunication Evolution

From our research and analysis, the bouts of divestment and M&As that happen in the Indonesian telecommunication market are mainly driven by several external and internal factors including but not limited to the following:

External Factors

- 1. The end of the low interest-rate era, bringing about an increase in the cost of funds, has raised the bar for return on invested capital.
- 2. Heightened competition among the MNOs driving Average Rate per Users (ARPUs) downwards (shown by the decline in the ARPU/GDP Ratio in the chart below), while the number of subscribers remain stagnate.



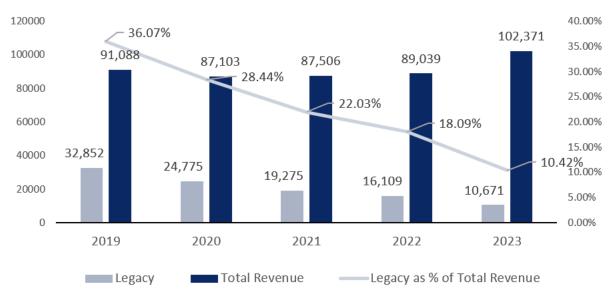
ARPU/GDP per capita 2018-2022



- 3. Technological change, including the use of DWDM (Dense Wavelength Division Multiplexing) / WDM (Wavelength Division Multiplexing) which essentially allows for a single fiber optic to cater for various data signals use has expanded the bandwidth capacity of a single fiber optic, making fiber optic use capacity more efficient.
- 4. The entry of new players in the market, especially with the recent entry of Starlink (the satellite internet entity belonging to Elon Musk), has intensified competition in the Indonesian telecommunication sector. Starlink offers an alternative way for consumers to access the internet; adding pressure to the already competitive landscape, though its reach is currently limited.

Internal Factors

- 1. The need for MNO players to seek new avenues for growth including providing higher value-added services, has become increasingly important.
- 2. Adding to this is also the decline in legacy revenue streams (voice calls, SMS) for mobile companies, which now only provide a meager portion of the overall revenue (see below illustration on the proportion of legacy revenue to the total revenue of Telkomsel)



Declining of Legacy Revenue 2019-2023

Source: Telkomsel

3. The high capital expenditure (capex) required to maintain competitiveness and/or to capture new markets has further driven the assets-reorganization. Combined with (1) and (2), this has triggered the slew of consolidation and divestment within the Indonesian telecommunication sector.

A confluence of these factors, coupled with the shift towards data-driven revenues, has resulted in the continuous shake up in the country's telecommunications sector.



What we will see in the future – blurring of industry: from convergence between fixed and wireless and between tech and telecommunication business

Driven by the rise of data consumptions and the strive for efficiency, the key trends in the telecommunication market in Indonesia will be mainly driven by the need to provide high quality communication more effectively i.e. higher quality and at lower price. Due to this reason, we likely to witness the key following trends:

1. Fiber optic investment in Indonesia will become crucial for the future of telecommunications, with FMC convergence and fiberization enabling high-quality, affordable internet

Driven by increasing need of data, fiber optic, with its ability to channel vast amounts of data efficiently and effectively and with its already proven technology, has been the clear winner. In addition, the use of DWDM and WDM technologies is a breakthrough that has increased the amount of bandwidth capacity that can be channeled by a single fiber optic network.

Adding to that, fiberization – which is basically connecting tower to the fiber optic cable becomes the key for 5G development in Indonesia. We have seen this done in major markets such as India and China. This also means there is a convergence whereby fixed broadband will generally empower the telecom tower. Hence Fiber optic is a clear winner of this transition and evolution.

2. EDGE Data Center will provide further content localization

With increased content consumption, placing content closer to users to reduce latency has become ever more important. Edge data centers (EDGE), which is essentially smaller sized data center closer to the population of end users and utilization of content delivery network (CDN), which is essentially network of servers with the goal of delivering content quickly, cheaply, reliably, and securely as possible, are crucial in this "localization" effort.

3. Telecommunication companies will evolve to become "techcos", whereas infrastructure companies will focus on deepening their infrastructure play, creating a more scalable back-end sharing economy

With the creation of "infra-co" companies, separating infrastructure ownership from operations, is supported by the rise of infrastructure investors, particularly infrastructure private equity funds, seeking exposure to digital infrastructure.

Whilst operating-co will focus on providing more value-added, higher return and technological based servicing. We can already see this happening in developed markets such as Singapore, where Singtel and StarHub have made acquisitions in the enterprise services sector to expand their offerings in this area.

We in <u>IGPI Singapore</u> have been active in the telecommunication sector in the region, working with not only key telecommunication clients across various spectrums, but also with various



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About the Authors

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About IGPI

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