MOODY'S
INVESTORS SERVICE

OUTLOOK
31 October 2017

Rate this Research

Analyst Contacts

Nidhi Dhruv, CFA +65.6398.8315
VP-Senior Analyst
nidhi.dhruv@moodys.com

Annalisa Di Chiara +852.3758.1537
VP-Sr Credit Officer
annalisa.dichiara@moodys.com

Laura Acres +65.6398.8335
MD-Corporate Finance
laura.acres@moodys.com

Ian Chitterer +61.2.9270.1420
VP-Sr Credit Officer
ian.chitterer@moodys.com

Gloria Tsuen, CFA +852.3758.1583
VP-Senior Analyst
gloria.tsuen@moodys.com

Motoki Yanase +81.3.5408.4154
VP-Sr Credit Officer
motoki.yanase@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

Telecommunications - Asia Pacific

Outlook stable despite longer-term technological headwinds

Our outlook for the Asia-Pacific telecommunications industry is stable. This outlook reflects our expectations for fundamental business conditions in the industry over the next 12-18 months.

» **Three factors drive the stable outlook.** We expect year-on-year average revenue growth of about 2.0%-2.5% over the next 12-18 months, EBITDA growth of 0%-2% – although average margins will contract slightly next year – and capex as a percentage of revenue to remain elevated at around 25%.

» **Revenue growth continues to slow and will vary by country.** Organic revenue growth is slowing due to increasing mobile penetration rates, ongoing competition and technological headwinds. India (Baa3 positive) will be the only country in Asia where industry-wide revenue is declining due to unprecedented price competition spurred by a new entrant. In emerging countries, excluding India, we expect revenue growth of about 3.5% in 2018, lower than forecast GDP growth of about 5.8%. Revenue growth in developed markets will remain in line with expected GDP growth of around 1.5%.

» **EBITDA will be flat to slightly higher; margins to contract in 2018.** We expect year-on-year aggregate EBITDA growth of 0%-2%, similar to 2016, on the back of rising revenue. However, the portfolio's average EBITDA margin will contract to around 39%-40% over the next 12-18 months, reflecting intensifying competition, higher costs for providing data services and investments in margin-dilutive digital businesses.

» **Capital spending as a percentage of revenue will fall.** Capex to revenue will fall to around 25% in 2018 from 27% in 2016, which was in part inflated by Bharti Airtel Ltd.'s (Baa3 negative) higher capex including spectrum payments. Average capex will remain elevated for most operators as they continue to build out their 4G networks to handle larger volumes of data traffic. We don't expect meaningful capex towards 5G over the outlook period.

» **Headwinds from technological changes.** The telecom business continues to evolve due to technological changes and the internet of things, and companies need to diversify their revenue sources amid sustained declines in the traditional voice telephony and SMS businesses. We expect companies will continue to expand into digital media, advertising, and mobile payments to future-proof their revenue streams.

» **Leverage will hold steady and liquidity remains strong.** Average debt to EBITDA will remain relatively stable around 2.2x-2.4x in 2018 as incremental debt for capex and shareholder returns is offset by modest EBITDA growth. Liquidity will be strong with most companies' internal cash sources sufficient to cover their cash requirements over the next 12 months.

» **What would change the outlook.** A positive outlook would be likely if we expect revenue growth to outpace GDP growth, EBITDA margins to increase two to three percentage points, and capex-to-revenue to stabilize near 15%-18%. A negative outlook would be likely if we expect revenue growth to fall consistently below GDP growth, EBITDA margins to weaken more than three to four percentage points, and capex-to-revenue to consistently exceed 25%.

Since outlooks represent our forward-looking view on business conditions that factor into our ratings, a negative (positive) outlook suggests that negative (positive) rating actions are more likely on average. However, the industry outlook does not represent a sum of upgrades, downgrades or ratings under review, or an average of the rating outlooks of issuers in the industry, but rather our assessment of the main direction of business fundamentals within the overall industry.

Revenue growth continues to slow and will vary by country

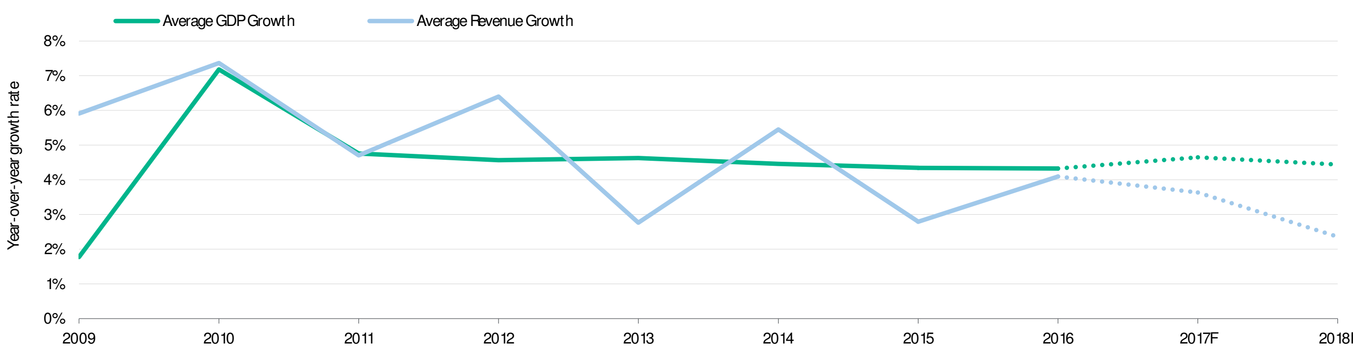
Revenue growth is one of the drivers of the Asia-Pacific telecommunications industry's stable outlook. We expect the rated portfolio's average year-on-year revenue growth to be 2.0%-2.5% over the next 12-18 months (Exhibit 1).

Year-over-year average revenue growth will be slower than the 3.5% growth rate in 2016 as increasing mobile penetration rates and lower pricing resulting from increasing competition mute organic revenue expansion.

India (Baa3 positive) will be the only country in Asia where industry revenue is declining due to unprecedented price competition spurred by a new entrant in late 2016. In emerging countries, excluding India, we expect revenue growth of about 3.5% in 2018, lower than the forecast GDP growth of about 5.8%. Revenue growth in developed markets will remain in line with expected GDP growth of around 1.5%.

Exhibit 1

Asia-Pacific telcos' year-over-year organic revenue growth is slowing



Sources: Moody's Financial Metrics, Moody's Investors Service estimate

In India, organic revenue will remain under pressure over the next 12-18 months, reflecting heightened competitive intensity, revamping of pricing plans and ongoing pricing pressures. However, Bharti Airtel Limited's (Baa3 negative) strengthening subscriber market position through industry consolidation - as well as the exit of players like Reliance Communications Limited (Ca Negative) - will help offset some negative pricing pressure over the next 12-18 months.

Indonesian operators Telekomunikasi Selular (P.T.) (Telkomsel, Baa1 stable) and Indosat Tbk. (P.T.) (Baa3 stable) will lead the sector with revenue growth of 6.5%-7.0% in 2018, reflecting modest competition and growing smartphone penetration.

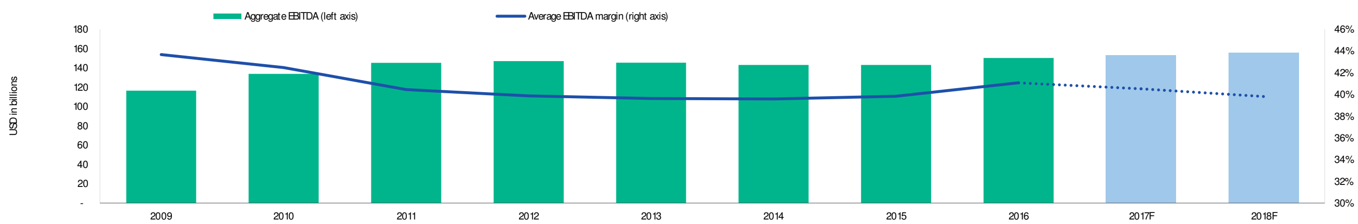
We expect Malaysian operator Axiata Group Berhard's (Baa2 stable) revenue growth to be a mid-single-digit percentage, supported by the steady performance of XL Axiata Tbk (P.T.) (Ba1 positive) in Indonesia, as well as continued solid growth at **Ncell Private Limited** in Nepal, **Robi Axiata Limited** in Bangladesh and **Dialog Axiata PLC** in Sri Lanka. Growth at its overseas operations will help offset the weaker operating performance of **Celcom**, stemming from intense competition in Malaysia.

Operating conditions in mature markets, such as Korea and Japan, are generally stable although price competition continues to be intense. For Australia, structural changes in the market relating to the separation of Telstra Corporation Limited's (A2 stable) regulated wholesale business and the roll-out of National Broadband Network (NBN) continue to distort revenue growth. Revenue fell in the fiscal year ended June 2017 due to the Australian Competition and Consumer Commission's reduction of wholesale prices for receiving calls and SMS messages across Australia.

EBITDA will be flat to slightly higher; margins to contract in 2018

EBITDA generation and margins also drive the industry outlook. We expect year-on-year aggregate EBITDA growth of 0%-2% during the outlook period, similar to 2016, on the back of higher revenue. However, the portfolio's average EBITDA margin will contract to around 39%-40% over the next 12-18 months, reflecting intensifying competition, higher costs for providing data services and investments in margin-dilutive digital businesses (Exhibit 2).

Exhibit 2
Asia-Pacific telcos' EBITDA will be broadly steady over the next 12-18 months



Sources: Moody's Financial Metrics, Moody's Investors Service estimate

Profitability for Indian operators will remain under pressure over the next 12-18 months as pricing competition remains fierce. Although EBITDA contraction will be less severe for incumbents such as Bharti given its larger scale, we still expect the company's organic EBITDA to contract around 10% year-over-year to March 2018. In the longer term we expect Bharti's profitability will benefit from operational and capital-spending synergies after completing its announced acquisitions. Moreover, Bharti will be a key beneficiary as the smaller players are forced out of the market – most recently Reliance Communications – and pricing stabilizes as competitive dynamics ultimately result in a three-player market.

We expect competition to also intensify in Singapore and Australia with the entrance of a fourth mobile operator. In 2018, **TPG Telecom Limited** is expected to launch services in Australia and Singapore, which would spur industry-wide price competition. While we expect Singapore Telecommunications Limited (A1 stable) and its Australian subsidiary Singtel Optus Pty Limited (A2 stable) to be able to defend market share and compete effectively, their EBITDA margins would decline modestly amid increased competition.

In Japan, we expect a marginal increase in SoftBank Group Corp.'s (Ba1 stable) consolidated operating margin will be supported by a recovery in profitability of Sprint Corporation (B2 stable), its 83%-owned US subsidiary. SoftBank's domestic operation will have a limited margin upside given competition and pricing pressure.

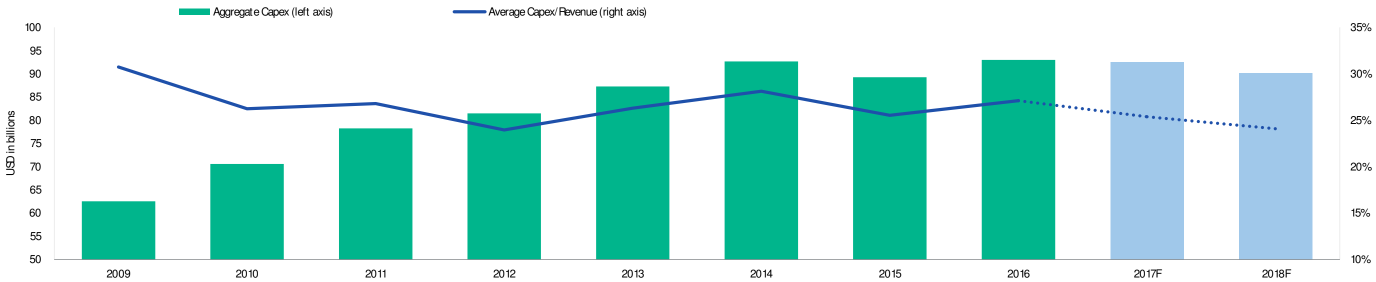
Indonesian telco operators' EBITDA margins will fall slightly over the next two years because of the increasing contribution of lower-margin data services to revenue. Still, we expect Telkomsel, Indosat and XL Axiata to maintain relatively strong margins and absolute EBITDA growth through further cost controls, including better management of network-related costs, such as lower rentals on renewed tower leases.

Capital spending as a percentage of revenue will fall

The third outlook driver is average capital intensity. Capex will remain high for most operators as they continue to build out their 4G networks to handle larger volumes of data traffic. All companies will also continue to invest in spectrum, which has been relatively expensive in emerging countries.

Average capex to revenue will fall to around 25% in 2018 from 27% in 2016, which was in part inflated by Bharti Airtel's spectrum payments (adjusted capex/revenue of 46%). Bharti's capex to revenue will normalize over the next 12-18 months, barring any significant debt-funded acquisitions or spectrum purchases.

Exhibit 3
Aggregate capex to fall slightly but remains high; capital intensity will fall over 2017-18



Sources: Moody's Financial Metrics, Moody's Investors Service estimate

Capital spending over the outlook period will be driven by China Mobile Limited (A1 stable) given its sheer size (representing around 35% of aggregate sector revenues). However, its capital intensity will decline in both 2017 and 2018 because the company has completed its 4G network which already provides coverage for 1.3 billion people. Meaningful investment in 5G will likely only start in 2019.

In Korea, KT Corporation (A3 stable) and SK Telecom Co., Ltd. (SKT, A3 stable) will also have stable capex in 2017 and 2018. The companies' 4G networks are complete while 5G investments have yet to start meaningfully. In 2018, KT will demonstrate its pilot 5G technologies at the PyeongChang Winter Olympics in Korea, while SKT will also pilot its 5G technologies around similar timing. Similar to China, significant capital spending for 5G will likely start only in 2019.

In Japan, SoftBank's adjusted capex will increase in fiscal 2017 ending March 2018 following restrained spending in fiscal 2016. Capex for fiscal 2016 had declined 23% from the level in fiscal 2015. The fall and rise in SoftBank's capex over the three years is due to factors related to the domestic telecom segment and we expect SoftBank's domestic capital spending will not increase significantly for the next 24 months, similar to Nippon Telegraph and Telephone Corporation (NTT, Aa3 stable).

The advent of 5G is at different stages across the region, with developed countries likely investing in 5G spectrum and capex over the next couple of years. Meanwhile, emerging market countries remain focused on expanding 4G networks and capacity.

Headwinds from technological changes – but revenue diversification underpins modest revenue growth

The telecom business continues to evolve due to technological changes and the internet of things (IoT), and companies are looking to diversify their revenue sources amid sustained declines in the traditional voice telephony and SMS businesses. We expect companies will continue to expand into digital media and advertising, and mobile payments in an attempt to future-proof their revenue streams.

While 4G remains China Mobile's main revenue driver, the company has been growing its wireline broadband business, which although representing only 4% of the company's service revenues, grew 40% in 2016 due to customer growth and increasing fiber-to-the-home utilization. At the same time, China Mobile derived 8% of its service revenues from digital-related services in 2016 and the segment grew 12% year on year in 1H 2017. This segment will continue to gain momentum driven by mobile payments, IoT smart connections, video, and reading services.

Japanese companies are also already seeking to increase their service-related fees, such as from mobile content and e-commerce. These new services help boost data communication in the mature mobile market and bring additional profit for the companies. SoftBank aims to expand these services by leveraging its Yahoo! Japan platform. NTT DOCOMO, INC. (DOCOMO, Aa3 stable), a mobile arm of NTT, is expanding "smart life" and "other" segments that cover content and services business.

We also expect Singtel to continue investing in its Group Digital Life businesses and other allied mobile services, although these businesses have lower margins than the company's core telephony business.

In Korea, SKT has invested in new platform businesses in lifestyle, media, and IoT in recent years. Although these businesses contribute to SKT's revenue, competition is fierce and investments are needed to increase their profitability.

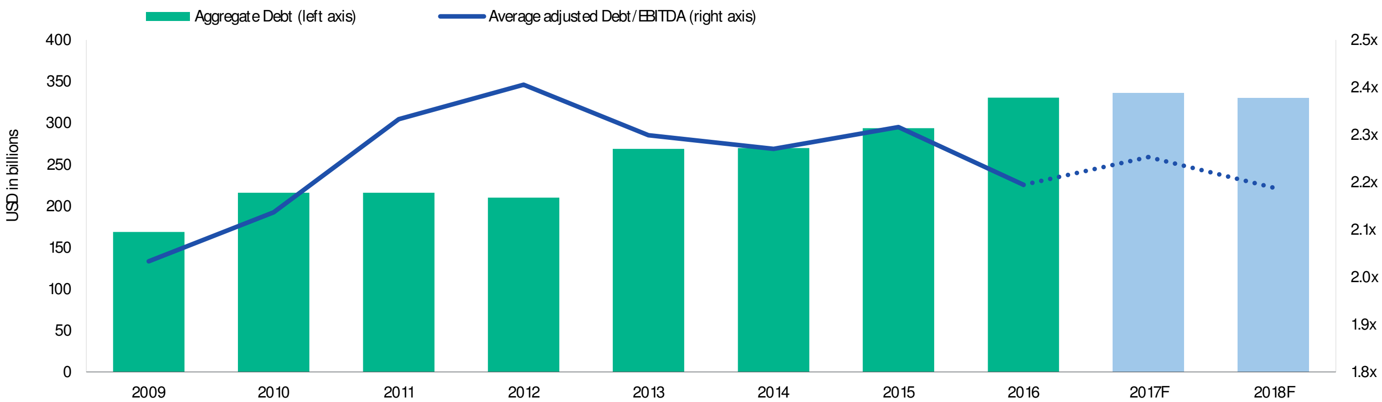
Leverage will hold steady and liquidity is excellent

Despite high levels of spending, we expect leverage to be stable in the outlook period, implying that the companies are generally able to fund capital spending with cash and operating cash flow.

Average debt to EBITDA will remain relatively unchanged around 2.2x-2.4x in 2018 – similar to 2016 – as incremental debt for capital spending and shareholder returns is offset by modest growth in EBITDA (Exhibit 4).

Exhibit 4

Adjusted debt/EBITDA rises slightly in 2017 but will fall in 2018



Sources: Moody's Financial Metrics, Moody's Investors Service estimate

Bharti and Softbank are more levered relative to their comparably rated peers. Even as these companies invest for future growth, any material increase in debt (without a material expansion of EBITDA) will weigh on the companies' cash-flow profile and ratings.

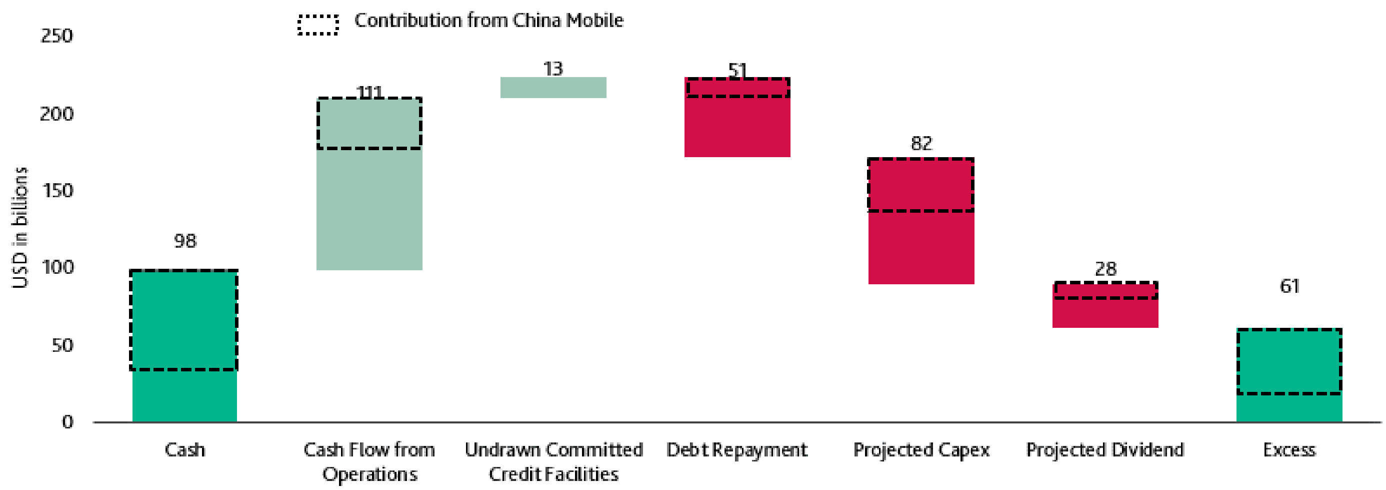
Organic deleveraging is unlikely for Indian operators over the next 12-18 months, with competitive intensity unlikely to reduce until consolidation activity concludes and market shares are redistributed. Bharti's leverage (inclusive of deferred spectrum payments incurred over 2015 and 2016) is likely to remain elevated around 3.7x barring any further significant reduction in debt from additional efforts to monetize its assets.

Liquidity for the sector will be strong with most companies' internal cash sources sufficient to cover their cash requirements over the next 12 months.

The inclusion of China Mobile's large cash balance of around $57 billion (as of 30 June 2017) skews this analysis. However, as shown in Exhibit 5, even when we exclude China Mobile, the rated portfolio has a small surplus.

We expect a few companies, including Indosat, Bharti, and NTT and its mobile arm NTT DOCOMO, to tap the bank or bond markets to fund upcoming debt maturities or capital spending. However, refinancing pressure is limited given these companies' track record of strong access to funding.

Exhibit 5
Rated Asia-Pacific telecom companies will maintain good liquidity through 2018



Sources: Moody's Financial Metrics, Moody's Investors Service estimate

What would change the outlook

A positive outlook would be likely if we expect revenue growth to outpace GDP growth, EBITDA margins to increase by two to three percentage points, and capex-to-revenue to stabilize near 15%-18%.

A negative outlook would be likely if we expect revenue growth to fall consistently below GDP growth, EBITDA margins to weaken more than three to four percentage points, and capex-to-revenue to consistently exceed 25%.

Appendix: Rated Asia-Pacific telecommunications companies

Company Name	Country	Business Model	Rating	Outlook	12 months ended	Net Sales (USD millions)	EBITDA Margin %	RCF/ Debt	Debt/ EBITDA	(FFO + Interest)/ Interest	(EBITDA-CAPEX)/ Interest
Axiata Group Berhad	Malaysia	Wireless	Baa2	Stable	30-Jun-17	5,418	45.8%	28.1%	2.4x	6.4x	1.0x
Banglalink Digital Communications Limited	Bangladesh	Wireless	Ba3	Stable	30-Jun-17	606	43.6%	58.3%	1.5x	7.9x	3.4x
Bharti Airtel Ltd.	India	Diversified	Baa3	Negative	30-Jun-17	13,829	43.1%	20.9%	3.5x	4.9x	0.2x
China Mobile Limited	Hong Kong	Wireless	A1	Stable	30-Jun-17	106,745	45.7%	136.5%	0.5x	47.0x	42.5x
Dr. Peng Telecom & Media Group Co., Ltd.	China	Diversified	Ba2	Stable	30-Jun-17	1,280	45.5%	56.6%	1.7x	19.5x	-0.2x
HKT Trust and HKT Limited	Hong Kong	Diversified	Baa2	Stable	30-Jun-17	4,264	42.2%	19.3%	3.1x	10.8x	4.6x
Indosat Tbk. (P.T.)	Indonesia	Wireless	Baa3	Stable	30-Jun-17	2,289	51.7%	39.8%	1.9x	5.9x	3.0x
KT Corporation	Korea	Diversified	A3	Stable	30-Jun-17	20,184	24.1%	56.2%	1.6x	15.4x	4.7x
Nippon Telegraph and Telephone Corporation	Japan	Diversified	Aa3	Stable	30-Jun-17	105,493	29.6%	40.4%	2.0x	26.5x	12.0x
NTT DOCOMO, INC.	Japan	Wireless	Aa3	Stable	30-Jun-17	42,371	32.2%	149.6%	0.4x	93.9x	57.1x
Pakistan Mobile Communications Limited	Pakistan	Wireless	B1	Stable	30-Jun-17	1,409	45.6%	46.8%	1.6x	12.2x	5.9x
PLDT Inc.	Philippines	Diversified	Baa2	Stable	30-Jun-17	3,247	54.3%	25.1%	2.4x	8.5x	5.6x
Reliance Communications Limited	India	Diversified	Ca	Negative	31-Mar-17	2,907	27.3%	2.7%	9.2x	1.3x	0.5x
Singapore Telecommunications	Singapore	Diversified	A1	Stable	30-Jun-17	12,238	40.9%	20.6%	2.2x	13.4x	6.4x
SingTel Optus Pty Limited	Australia	Diversified	A2	Stable	31-Mar-17	6,458	36.9%	34.0%	1.8x	11.7x	5.3x
SK Telecom Co., Ltd.	Korea	Diversified	A3	Stable	30-Jun-17	15,069	31.5%	36.2%	1.9x	13.3x	4.3x
SoftBank Group Corp.	Japan	Diversified	Ba1	Stable	30-Jun-17	82,312	33.5%	15.3%	5.7x	5.6x	2.8x
Telekom Malaysia Berhad	Malaysia	Wireline	A3	Stable	30-Jun-17	2,828	37.2%	29.0%	2.2x	9.7x	1.7x
Telekomunikasi Indonesia (P.T.)	Indonesia	Diversified	Baa1	Stable	30-Jun-17	9,344	55.7%	47.9%	0.9x	13.6x	9.4x
Telekomunikasi Selular (P.T.)	Indonesia	Wireless	Baa1	Stable	30-Jun-17	6,909	60.6%	121.8%	0.2x	212.4x	204.6x
Telstra Corporation Limited	Australia	Diversified	A2	Stable	30-Jun-17	19,533	43.6%	23.6%	1.7x	10.1x	5.8x
XL Axiata Tbk (P.T.)	Indonesia	Wireless	Ba1	Positive	30-Jun-17	1,616	52.9%	37.2%	2.5x	6.2x	0.5x

Source: Moody's Investors Service

Moody's Related Research

Sector Comment

» India Telecommunication Sector: Reduction in termination charges has mixed near-term impact on operators, but longer-term effect will be muted, 21 September 2017

Issuer Comment

» For Reliance Communications, Cancellation of Aircel Merger Is Credit Negative, 5 October 2017

Announcement

» Bharti's acquisition of Tata's consumer telecom business is credit positive, 16 October 2017

Issuer In-Depths

» Singapore Telecommunications Limited: NetLink Trust IPO proceeds unlikely to alleviate Singel's elevated leverage, 25 July 2017

» Indosat Tbk. (P.T.): Continued Strong Financial Performance Drives Upgrade to Investment Grade Baa3, 15 May 2017

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

REPORT NUMBER 1095565

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

MOODY'S INVESTORS SERVICE