

Singapore Telecom Sector

Better than it appears

SINGAPORE | TELECOMUNICATIONS | SECTOR UPDATE & INITIATION

- Impact of TPG Telecom entrance into Singapore is contained
- Enterprise segment a growth driver for telcos
- CAPEX for 5G should be gradual and not be a cause for concern
- We Initiate the telecommunications sector with an OVERWEIGHT rating

Investment Thesis:

- 1. Impact of TPG's entrance into Singapore is contained. TPG is slated to become Singapore's 4th mobile network operator (MNO). Due to a delay indoor network rollout, commercial launch should commence 2H19 rather than the targeted end FY18 launch. TPG has announced a 5% market share target in mobile subscribers (~ 260k subs). This also equates to less than S\$50mn in EBITDA. TPG announced CAPEX of S\$200-300mn for the mobile network rollout and had thus far spent less than S\$100mn. As a comparison, StarHub to date has spent approximately \$600mn in maintaining and improving its 4G network. We believe this low level of CAPEX will affect coverage, reliability and overall quality of the network. It will prevent consumers from switching completely away from incumbent networks. Also, TPG Singapore will have much less financial resources to tap on once merger of TPG Australia and VHA results in segregation of balance sheets. TPG is offering free trials for the first 20k customers that register interest with them. We do not view this as a major threat to the incumbents. It only represents 0.38% of total post-paid customers and even less significant on revenue, as these are the most price-sensitive segment.
- 2. Enterprise provides a growth driver for the telcos. The enterprise segment is benefitting from the resumption of smart nation projects and demand from businesses especially from small & medium enterprise (SME), hospitality and financial services. Companies are requiring more connectivity, data centre and cloud solution, managed security and network services. We believe Singtel and StarHub is well positioned to take advantage of this growth.
- 3. CAPEX for 5G not a cause for concern. There is much anticipation over the commencement of the 5th generation network. We estimate that this rollout will take place in 2020. However, we do not expect a nationwide rollout by individual operators. There is little incentive or applications available for consumers to pay for such an upgrade. We expect the network rollout to be in phases and tailored to enterprise customers. As a result, CAPEX activities should be gradual. Spectrum rights bidding should be at rational levels, we do not expect an intense bidding process like what we observed for the bidding of 3G spectrum rights.

Investment Actions

Singtel: (i) We expect a turnaround in associates largely driven by a recovery in Telkomsel, (ii) TPG Telecom is unlikely to pose a serious threat to the incumbents, (iii) Enterprise business will benefit from resumption of smart nation initiatives. We initiate coverage on Singtel with a BUY rating and a target price of \$\$3.40.

StarHub Limited: (i) Pay-tv business cost structure could improve; (ii) Anticipating growth in enterprise fixed, (iii) \$\$210mn restructuring exercise will help cushion decline in mobile and pay-tv; (iv) TPG Telecom is unlikely to pose a serious threat to the incumbents. **We initiate coverage on StarHub with an ACCUMULATE rating and a target price of \$\$1.88.**

M1 Limited: (i) Shareholders should accept the VGO; (ii) M1 is most exposed to TPG Telecom's entrance to the Singapore market; (iii) Mobile postpaid & fixed services revenue is growing at healthy numbers. We initiate coverage on M1 with an ACCEPTANCE OF OFFER to the VGO of \$\$2.06



4 January 2019

Singtel Limited BUY (Initiation)

TOTAL RETURN	25.0%
TARGET PRICE	SGD 3.40
FORECAST DIV	SGD 0.175
CLOSING PRICE	SGD 2.860
BLOOMBERG CODE	ST SP

StarHub Limited ACCUMULATE (Initiation)

	-	•
BLOOMBERG CODE		STH SP
CLOSING PRICE		SGD 1.700
FORECAST DIV		SGD 0.086
TARGET PRICE		SGD 1.880
TOTAL RETURN		15.0%

M1 Limited NEUTRAL (Initiation)

BLOOMBERG CODE	M1 SP
CLOSING PRICE	SGD 2.090
FORECAST DIV	SGD 0.108
TARGET PRICE	SGD 2.060
TOTAL RETURN	3.7%

Alvin Chia Research Analyst (+65 6212 1852) Alvinchiawy@phillip.com.sg

Ref. No.: SG2019_0002



Singapore Mobile Sector

At present there are two underlying trends in the mobile sector:

- 1. Emergence of MVNOs: In total there are 4 MVNOs, Circles.Life collaborates with M1, Zero and Zero1 are working with Singtel, MyRepublic is partnered with StarHub. These MVNOs lease the mobile network from the MNO. As a result, they have the same network quality and reliability as the MNO. These MVNOs compete in the price-sensitive space and generally offer competitive price plans. The MNO charges the MVNO at a wholesale rate for using their network (Figure 3). Circles.Life intends to grab a market share of 5%.
- 2. Higher adoption of SIM-only plans: We expect a higher rate of adoption of SIM-only plans due to the longer replacement lifecycle of smartphones. Traditional bundled plans normally command a higher premium the introduction of SIM-only plans reduces profitability (Figure 5).

Figure 3: MVNOs in Singapore

MVNOs In Singapore	Ciı	cles.Life	Zero	Zero1	M	yRepublic	
Plans	FLEXI	Base	Zero x	Zero1	Smart 35	Mega 55	Xtra 85
Price	\$0	\$28	\$59.95	\$29.99	\$35	\$55	\$85
Data	1 GB	6 GB	Unlimited	Unlimited	9 GB	18 GB	30 GB
Voice (mins)	30	100	Unlimited	200	1,000	1,000	1,000
SMS	10	Pay-as-you-go	200	200	1,000	1,000	1,000
MNO Partner		M1	Sin	gtel		StarHub	

Source: PSR, Company

The MVNOs strategy is to target niche markets in Singapore. It essentially targets the most price-sensitive segments. Their presence has undoubtedly weighed down on the telco sector with their competitive pricing strategy and by offering larger data plans to its customers. However some earnings will flow back to their MNO partner. Zero & Zero1 targets consumers who are always on the move with their large amount of data. Circles.Life being the oldest MVNO in town has managed to add subscriber base to its MVNO partner M1. MyRepublic, the newest operator, has managed to increase postpaid subscriber for StarHub since its launch in early 2018. MNOs do not disclose the commercial arrangements with MVNO partner.

SIM- Only Plans vs traditional bundled plans

As seen in figure 5, customer spend is substantially lower in the lifetime of a contract under the SIM-Only plan as compared to traditional handset plans. As such, net revenue will be weighed down by the higher adoption of SIM-Only plans.

The telcos have reacted to these shifts by offering greater options in the SIM-Only space and handset leasing services to cope with the change in consumer preference. We expect continued weakness from the mobile segment in the medium term.

Figure 1: Singapore Mobile revenues already declining pre-TPG



Source: PSR, Company

Figure 2: Post-paid ARPU (SFRS 15 impact)



Source: PSR, Company



Figure 5: SIM-Only plans vs traditional bundled plans

-		-				
	Sin	Singtel StarHub		I	M1	
Name	SIM Only + 5GB	Combo 3	SIM Only	2 -Year plan	mySIM (3) 20	mySIM (e) 40
Price	\$20/mth	\$68.9/mth	\$25/mth	\$50/mth	\$20/mth	\$40/mth
Tenure	12 mths	24 mths	-	24 mths	12 mths	24 mths
Data	5 GB	3 GB	3 GB + 10 GB / 1 yr	3 GB + 10GB	5 GB	5 GB
Calls	150 Mins	Unlimited	100 Mins	100 Mins	100 Mins	100 Mins
SMS	500 SMS	Unlimited	-	-	100 SMS	100 SMS
Handset	-	iPhone Xs 64 GB	-	iPhone Xs 64 GB	-	iPhone Xs 64 G
Upfront handset cost	-	(\$728)	-	(\$842)	-	(\$930)
Telco revenues						
Customer spend across 24 mths	\$480	\$2,382	\$600	\$2,042	\$480	\$1,890
Handset cost*	-	(\$1,402)	-	(\$1,402)	-	(\$1,402)
Net revenue	\$480	\$980	\$600	\$640	\$480	\$488
	SIM -Only plans	Bundled plans				
Average net revenue	\$520	\$703				

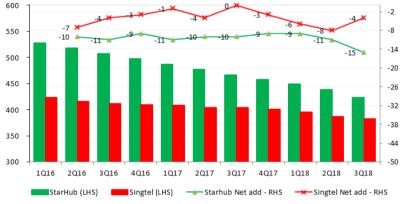
^{*} Assume 15% discount off list price in Apple stores

Source: PSR, Company

We observe a re-allocation of pre-paid customers to post-paid as the popularity of SIM-only plan increases (Figure 6 & 7). Higher spending prepaid customers now have SIM-Only plans as an alternative to using the pre-paid services. The decrease in pre-paid can also be explained by the removing of inactive numbers and lower foreign worker use. We expect the number of pre-paid customers to continue its decline in the medium term.

Pay - TV sector

Figure 8: Declining pay-Tv Subscribers (`000)



Source: Company

The pay-tv market in Singapore is operating under challenging conditions. Industry subscribers has contracted approximately 8% YoY (or 65k) as consumers turn to cheaper Over-The-Top (OTT) players such as Netflix, Amazon video and Hulu Plus. OTT players have been disrupting the pay-tv business since early 2016 and changing the way consumer consume content with videos on demand at a lower price. We expect the pay-tv market to further contract by 7% in 2019.

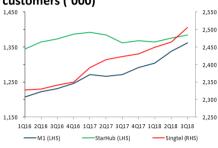
The pay-tv business model is under pressure from declining ARPU and declining subscribers, whilst content-cost is fixed. We believe StarHub recognises that the business model is broken and is renegotiating with content providers to switch from a fixed-cost model to a variable cost model. Singtel is taking another approach from StarHub, they are closely reviewing the content available on their platform to phase out unpopular channels.

Figure 4: MVNOs timeline

Date	Description
Jul-15	Circles.Life Launch
Nov-16	TPG vs MyRepublic for 4th MNO in SG
Dec-16	TPG won bidding for 4th MNO
Dec-17	Zero launch
Feb-18	Zero 1 launch
May-18	MyRepublic launch

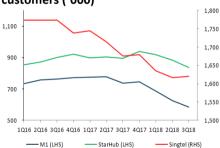
Source: Company, PSR

Figure 6: Increasing post-paid customers (`000)



Source: PSR, Company

Figure 7: Decreasing Pre-paid customers (`000)



Source: PSR, Company



Enterprise Sector

The enterprise segment comprises of services such as artificial intelligence, cyber security, data analytics, internet of things (IOT), network services, data centre & cloud, managed services, enterprise mobility.

The enterprise segment is benefitting from the resumption of smart nation projects and demand from businesses especially from small & medium enterprise (SME), hospitality and financial services. Companies are requiring more connectivity, data centre and cloud, managed security and network services. We believe Singtel and StarHub is well positioned to take advantage of this growth.

StarHub is undertaking a massive investment in the enterprise segment. Starhub expanded its enterprise segment by an average rate of 7.2% p.a. since FY16 and 13% YoY in the 3Q18. This is driven mainly by its managed services segment offsetting declines in the traditional data & internet and voice services. The performance in managed services is largely driven by the consolidation of acquisitions Accel Systems and D'Crypt. In addition, to tap on the growing demand for cyber-security StarHub and a Temasek wholly-owned subsidiary has formed a joint-venture company named Ensign InfoSecurity Pte Ltd. Ensign is a pure-play cyber-security company. It aspires to be a global cyber security platform to address the demand in both Singapore and global market. Expected revenue is in excess of S\$100mn annually. StarHub has a 40% (\$36mn) stake in Ensign.

We continue to see Singtel's enterprise segment come under pressure we believe some market share is being taken away by StarHub and other smaller players. Singtel's managed services revenue shrunk by 3.7% YoY. We believe Singtel is losing its ability to price at a premium because of new entrants like StarHub and other companies.





Investment Thesis:

- Impact of TPG's entrance into Singapore is contained. TPG is slated to become Singapore's 4th mobile network operator (MNO), due to a delay indoor network rollout commercial launch should commence 2H19 instead of the targeted end FY18 launch. TPG has announced its target of 5% in the mobile market space in Singapore, this equates to less than S\$150m in EBITDA. TPG announced CAPEX of S\$200-300m for the mobile network rollout and have thus far spent less than S\$100m. As a form of comparison StarHub to date have spent approximately \$600m in maintaining and improving its 4G network. This has led us to believe TPG's entrance is unlikely to pose a serious threat to the incumbents. The low level of CAPEX should prevent consumers from being too eager to switch to the new player in town due to network reliability, coverage and quality. In addition, TPG Singapore will have less firing power after the merger of TPG Australia and VHA as the entities will have separate balance sheets. TPG is giving free trials for the first 20,000 customers that register their interest with them. We do not view this as a major threat to the incumbents as it only represents 0.38% of total post-paid customers and even less significant on revenue as these customers are in the price-sensitive space.
- Enterprise provides a growth driver for telcos. The enterprise segment is benefitting from the resumption of smart nation projects and demand from businesses especially from small & medium enterprise (SME), hospitality and financial services. Companies are requiring more connectivity, data centre and cloud, managed security and network services. We believe Singtel and StarHub is well positioned to take advantage of this growth.
- 3. CAPEX for 5G not a cause for concern. There is much anticipation with regards to the commencement of the 5th generation network; we estimate that this rollout will take place in 2020. However, we do not expect a nationwide rollout as the use case for consumer is still small at this moment. We expect the network rollout to be in phases and tailored to enterprise use cases, as a result CAPEX activity should be gradual. Spectrum rights bidding should be at rational levels, we do not expect an intense bidding process like what we observed for the bidding of 3G spectrum rights.



M1 Limited

ACCEPT THE VGO

SINGAPORE | TELECOMUNICATIONS | INTIATION

- We think shareholders should accept the VGO
- M1 is most exposed to TPG Telecom's (TPG) entrance to the Singapore market
- Mobile postpaid & fixed services revenue is growing at healthy numbers
- We initiate coverage with acceptance of offer at \$\$2.06

Company Background

M1 limited was listed in 2002 on the Singapore Exchange and is one of the three major full service telecommunication providers in Singapore. M1 was the first operator in Singapore to commercially launch 3G services in 2005, first true island-wide wireless broadband service in 2006 and the first operator in South East Asia to offer nationwide 4G service in 2012. Singapore mobile segment accounts for more than 80% of M1's revenue.

Investment Merits

- 1. Voluntary general offer (VGO). Keppel Corp and Singapore Press Holdings via a special purpose vehicle Konnectivity made a VGO for all M1 shares at \$2.06/share. Deemed interest of both parties is currently at 33.27%. Earliest possible close of offer is at 10 January 2019. The VGO is still pending IMDA approval. We expect the VGO to be successful as IMDA is unlikely to reject the VGO and the minimum acceptance required is 17% not subjected to Axiata's acceptance.
- 2. M1 is most exposed to TPG Telecom's entrance to the Singapore market. TPG is slated to commence operations mid-2019. M1 will be most exposed to the entrance of TPG's as ~ 80% of its revenue is derived from Singapore mobile.
- 3. Consistent growth in mobile postpaid customers & increasing contribution from fixed services. We believe Circles.Life M1's MVNO (Mobile Virtual Network Operator) has contributed significantly to postpaid customers through its innovative price plans. Postpaid customers grew 7.1% YoY as per latest results release and an average of 4.4% since FY16. The growth in postpaid customers has tapered the effect of industry shrinking ARPU (Average Revenue Per User). Fixed services grew 26% YoY to \$38m and an average of 20% since FY16.

We initiate coverage with acceptance of offer.



4 January 2019

NEUTRAL (Initation)

CLOSING PRICE SGD 2.090
FORECAST DIV SGD 0.108
TARGET PRICE SGD 2.060
TOTAL RETURN 3.7%

COMPANY DATA

O/S SHARES (MN):	926
MARKET CAP (USD mn / SGD mn):	1,935
52 - WK HI/LO (SGD) :	1.51
3M Average Daily T/O (mn):	1.95

MAJOR SHAREHOLDERS (%)

Axiata Investments Singapore Ltd	28.7%
Keppel Corp Ltd	19.3%
Singapore Press Holdings Ltd	13.5%

PRICE PERFORMANCE (%)

	1M TH	3 M T H	1YR
COMPANY	(0.5)	(0.5)	25.5
STIRETURN	(2.3)	(6.0)	(8.1)

PRICE VS. STI



Source: Bloomberg, PSR

KEY FINANCIALS

Y/E Dec, SGD mn	FY 16	FY 17	FY 18 e	FY 19 e
Revenue	1,061	1,071	1,076	1,033
EBITDA	342	312	303	302
Net Profit	178	150	133	125
Dividend Yield	6%	5%	5%	3%
ROE (x)	37%	31%	28%	17%
ROA (x)	13%	10%	9%	6%

Source: Company, PSR

VALUATION METHOD

EV/EBITDA Multiple

Alvin Chia (+65 6212 1852)

Research Analyst

alvinchiawy@phillip.com.sg

Financials

Income Statement					
Y/E Dec, SGD 'Mn	FY15	FY16	FY17	FY18e	FY19e
Revenue	1,157	1,061	1,071	1,076	1,033
Operating Profit	217	180	171	161	105
EBITDA	342	312	303	302	260
Depreciation & Amortisation	118	127	130	139	153
EBIT	223	185	173	162	106
Net Finance Inc/(Exp)	(5)	(7)	(10)	(10)	(9)
Profit before tax	218	179	163	153	97
Taxation	(40)	(29)	(30)	(28)	(17)
Net profit, reported	178	150	133	125	79

Per share data (SGD Cents)					
Y/E Dec	FY15	FY16	FY17	FY18e	FY19e
EPS, reported	19.1	16.1	14.3	13.5	8.6
DPS	15.3	12.9	11.4	10.8	6.8
RVPS	44 1	43 3	46.2	48 9	50.6

Cash Flow					
Y/E Dec, SGD 'Mn	FY15	FY16	FY17	FY18e	FY19e
<u>CFO</u>					
Profit before tax	218	179	163	153	97
Adjustments	125	143	147	149	162
WC changes	(60)	53	(18)	(9)	9
Cash generated from ops	284	374	292	293	268
Tax paid	(40)	(33)	(24)	(28)	(17)
Others	(5)	(6)	(9)	(9)	(9)
Cashflow from ops	239	335	259	256	242
CFI					
CAPEX, net	(133)	(141)	(132)	(120)	(150)
Others	(9)	(80)	(28)	(25)	(65)
Cashflow from investments	(142)	(220)	(161)	(145)	(215)
CFF					
Share issuance, net	15	1	-	-	-
Loans, net of repayments	52	47	49	54	9
Dividends	(177)	(142)	(103)	(100)	(64)
Others	-	(19)	(9)	-	-
Cashflow from financing	(110)	(114)	(63)	(46)	(55)
Net change in cash	(13)	1	35	65	(28)
CCE, end	10	11	46	111	83

CCE, ena	10	11	46	
Source: Company, Phillip Securities	Research	(Singapore) Estimates	

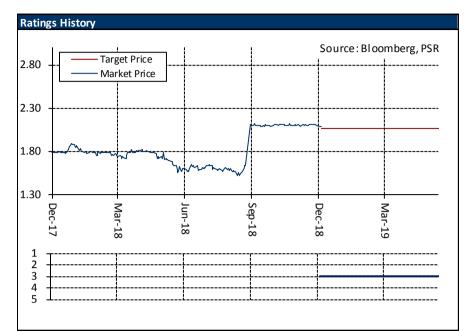
Y/E Dec, SGD 'Mn	FY15	FY16	FY17	FY18e	FY19e
ASSETS					
PPE	714	742	762	761	777
Others	112	177	187	194	239
Total non-current assets	825	919	949	955	1,016
Accounts receivables	166	166	163	165	159
Cash	10	11	46	111	83
Inventories	52	23	50	38	38
Amt due from related parties	-	1	1	1	1
Total current assets	260	227	320	374	340
Total Assets	1,086	1,147	1,269	1,329	1,356
LIABILITIES					
Accounts payables	146	165	209	190	193
Short term loans	354	151	-	-	-
Amt Due to related parties	-	-	-	-	-
Tax payable	37	25	29	29	29
Total current liabilities	562	375	270	250	253
Long term loans	-	250	450	504	513
Deferred tax liabilites	111	118	121	121	121
Total non-current liabilities	111	368	571	625	633
Total Liabilities	673	743	840	875	887
EQUITY					
Non-controlling interests	-	-	-	-	-
Shareholder Equity	413	403	429	454	470

Y/E Dec	FY15	FY16	FY17	FY18e	FY19e
P/E (X)	14.3	12.2	12.5	15.5	24.4
P/B (X)	6.2	4.5	3.9	4.3	4.1
EV/EBITDA (X)	8.5	7.1	6.8	7.7	9.1
Growth & Margins					
Growth					<u> </u>
Revenue	-	-8.3%	1.0%	0.5%	-4.0%
EBITDA	-	-8.7%	-3.0%	-0.2%	-14.0%
EBIT	-	-17.0%	-6.8%	-6.0%	-34.6%
Net profit, adj.	-	-16.2%	-11.4%	-5.4%	-36.6%
<u>Margins</u>					
Gross margin	18.8%	17.0%	16.0%	14.9%	10.1%
EBITDA margin	29.5%	29.4%	28.3%	28.1%	25.1%
EBIT margin	19.3%	17.5%	16.1%	15.1%	10.3%
Net profit margin	15.4%	14.1%	12.4%	11.6%	7.7%
Key Ratios					
ROE (%)	43%	37%	31%	28%	17%
ROA (%)	16%	13%	10%	9%	6%
Dividend Payout (%)	80%	80%	80%	80%	80%
Dividend Yield (%)	7.3%	6.2%	5.4%	5.2%	3.3%

^{*}Forward multiples & yields based on current market price; historical multiples & yields based on historical market price.

Valuation Ratios





PSR Rating System	m	
Total Returns	Recommendation	Rating
> +20%	Buy	1
+5% to +20%	Accumulate	2
-5% to +5%	Neutral	3
-5% to -20%	Reduce	4
< -20%	Sell	5

Remarks

We do not base our recommendations entirely on the above quantitative return bands. We consider qualitative factors like (but not limited to) a stock's risk reward profile, market sentiment, recent rate of share price appreciation, presence or absence of stock price catalysts, and speculative undertones surrounding the stock, before making our final recommendation



StarHub Limited

Anticipating growth in enterprise

SINGAPORE | TELECOMUNICATIONS | INITIATION

- Anticipating growth in enterprise from resumption of smart nation initiatives
- Pay-tv business could improve with better cost management initiatives
- TPG Telecom is unlikely to pose a serious threat to the incumbents
- \$210mn restructuring exercise will help cushion the decline in mobile and pay-ty
- We initiate with an ACCUMULATE rating with a target price of \$\$1.88.

Company Background

StarHub Limited was listed on the Singapore Exchange mainboard since 2004 and is the 2nd largest telecommunications provider by market capitalisation in Singapore. StarHub offers communications, entertainment and digital solutions through its extensive fibre and wireless infrastructure. StarHub develop and deliver to corporate and government client solutions such as artificial intelligence, cyber security, data analytics, internet of things and robotics. OpenSignal's state of Mobile network awarded StarHub for the fastest 3G & 4G network in Singapore.

Investment Merits

- 1. Pay-Tv business could improve. The Pay-tv business is operating in a challenging environment. StarHub's management is in the midst of renegotiating with content providers to switch from a fixed cost model to a variable cost model. If successful this could help the pay-tv business to improve with a better cost structure to alleviate margin pressures.
- 2. Anticipating growth in enterprise fixed. Enterprise fixed has been growing at an average rate of 7.2% p.a. since FY16. We expect this growth to continue as StarHub focuses its efforts on enterprise to help offset the weakness in mobile and pay-tv. The resumption of smart nation projects should give StarHub more opportunities. StarHub bets big on its enterprise business with the consolidation Accel Systems and D'Crypt and a new joint venture with Certis Cisco to form a pure-play cybersecurity company.
- 3. \$210mn restructuring exercise will help cushion the decline in mobile and pay-tv. The cost savings is projected to be over 2019 to 2021 and will be driven by staff reduction and cost reductions in procurement, leasing, repairs and maintenance and distribution. A portion of savings will be channelled to investment opportunities. We expect the exercise to offset the declines in mobile and pay-tv, this should help stabilise earnings.
- **4. TPG Telecom is unlikely to pose a serious threat.** TPG announced CAPEX of \$\$200-300mn for the mobile network rollout and have thus far spent less than \$\$100mn. The low level of CAPEX should prevent consumers from being eagerly switching to the new player in town due to network reliability, coverage and quality issues. In addition, the price-sensitive segments where TPG is likely to compete in is filled with MVNOs with far superior network than TPG. TPG is giving free trials for the first 20,000 customers that register their interest with them. The 20,000 only represent 0.38% of total post-paid customers and even less significant on revenue as this customers are in the price-sensitive space. This has led us to believe TPG's entrance is unlikely to pose a serious threat to the incumbents.

We initiate coverage on StarHub with a ACCUMULATE rating and a target price of \$\$1.88. Our target price is based on FY19e 6X EV/EBITDA. We gave a 35% discount to StarHub's regional peers as we take a conservative view of the mobile and pay-tv business.



4 January 2019

ACCUMULATE (Initiation)

CLOSING PRICE SGD 1.710
FORECAST DIV SGD 0.086
TARGET PRICE SGD 1.880
TOTAL RETURN 15.0%

COMPANY DATA

O/S SHARES (MN):	1,731
MARKET CAP (USD mn / SGD mn):	2,959
52 - WK HI/LO (SGD) :	1.58
3M Average Daily T/O (mn):	2.37

MAJOR SHAREHOLDERS (%)

STT Communications Ltd	55.8%
Nippn Telegraph & Telephone Corp	9.9%
BlackRock Inc	5.0%

PRICE PERFORMANCE (%)

	1M TH	3 M T H	1Y R
COMPANY	(8.9)	(4.0)	(35.1)
STIRETURN	(2.3)	(6.0)	(8.1)

PRICE VS. STI



Source: Bloomberg, PSR

KEY FINANCIALS

Y/E Dec, SGDmn	FY 16	FY 17	FY 18 e	FY 19 e
Revenue	2,397	2,401	2,307	2,259
EBITDA	713	690	614	651
Net Profit	372	341	250	253
Dividend Yield	5.4%	7.1%	6.0%	7.4%
ROE (x)	175%	73%	69%	56%
ROA (x)	19%	16%	11%	11%

Source: Company, PSR

VALUATION METHOD

EV/EBITDA Multiple

Alvin Chia (+65 6212 1852)

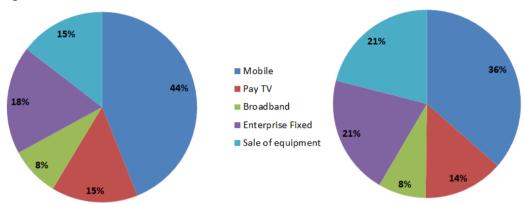
Research Analyst

alvinchiawy@phillip.com.sg



Revenue Breakdown

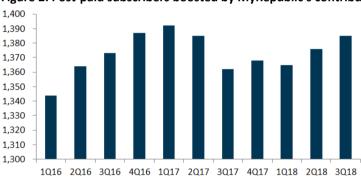
Figure 1: FY17 vs FY18e revenue breakdown



Source: PSR, Company

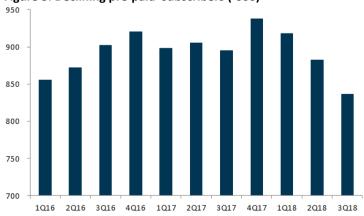
Mobile segment

Figure 2: Post-paid subscribers boosted by MyRepublic's contribution (`000)



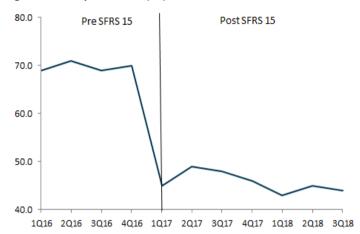
Source: PSR, Company

Figure 3: Declining pre-paid subscribers (`000)



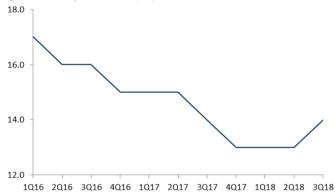
Source: PSR, Company

Figure 5: Post-paid ARPU (S\$)



Source: PSR, Company

Figure 6: Pre-paid ARPU (S\$)



Source: PSR, Company

Latest post-paid subscriber numbers grew 1.7% YoY or 23k. We believe the addition was boosted by StarHub's MVNO partner MyRepublic after its commercial launch in May 2018. The mobile segment is facing several structural changes. Smartphone replacement cycles are getting longer, resulting in the rise in popularity of SIM-Only plans. These SIM-Only plans are low ARPU products. To make matters worse, the price sensitive market is filled with MVNOs competing for market share; this puts further pressure on ARPU. We expect mobile ARPU to continue its weakness in the medium term as the market braces for the entry of TPG. The market should rationalise upon digesting the strategies of TPG telecom. (See sector report for a detailed explanation on SIM-only plans & MVNOs)

That being said, we think TPG will not pose a serious threat to the incumbents. TPG announced CAPEX of S\$200-300m for the mobile network rollout and have thus far spent less than S\$100m. The low level of CAPEX should prevent consumers from being too eager to switch to the new player in town due to network reliability, coverage and quality issues. In addition, the price sensitive market where TPG is likely to compete in is filled with MVNOs with far superior network than TPG. Key risk to this view is if TPG significantly ramp up spending on their 4G network in 1H19. Nevertheless we have factored in a 5% decline in post-paid subscribers across the 3 telcos. The decline is ~2% of total revenue, which is partially offset by growth in enterprise.

Figure 4: MVNO & TPG timeline

Date	Description
Jul-15	Circles.Life Launch
Nov-16	TPG vs MyRepublic for 4th MNO in SG
Dec-16	TPG won bidding for 4th MNO
Dec-17	Zero launch
Feb-18	Zero 1 launch
May-18	MyRepublic launch

Source: PSR. Company

Broadband

Figure 7: Recovering broadband subscribers (`000)

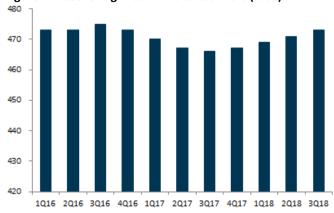
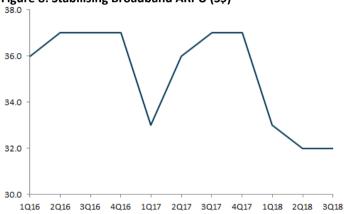


Figure 8: Stabilising Broadband ARPU (S\$)



Source: PSR, Company

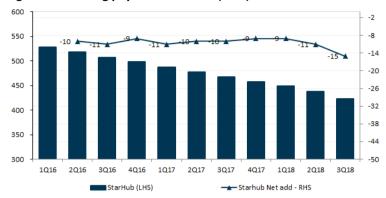
Source: PSR, Company

The broadband business is expected to face sustained competition due to the high broadband penetration in the market. StarHub differentiate itself by offering advanced Wi-Fi and mesh routers that enhances user experience. We expect broadband ARPU to be range bound as we do not foresee large movements in prices.

StarHub announced in November 2018 that it plans to cease providing broadband and Pay-tv services using the Hybrid Fibre Coaxial (HFC) network by June 2019. This date is earlier than the proposed disconnection in 2020. This means all existing broadband and pay-tv subscribers will be transferred to the National Broadband Network (NBN) as a result StarHub will decommission its HFC network after June 2019. In light of this, we expect to see a spike in cost of services in FY19. StarHub is to incur approximately \$\$14mn in fibre leasing cost per annum.

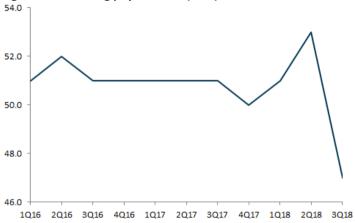
Pay - TV segment

Figure 9: Declining pay-Tv subscribers (`000)



Source: Company, PSR

Figure 10: Declining pay-tv ARPU (`000)



Source: Company, PSR

The pay-tv business model is broken. The segment is being heavily disrupted by Over-The-Top (OTT) players such as Netflix, Amazon video and Hulu Plus. OTT players have been changing the way people consume content with videos on demand, original content and cheaper monthly subscriptions. These cheaper alternative players have cost StarHub 100K subscribers since 2016. We have factored in a decline of ~6% in subscribers for FY19e in our model.

The pay-tv business model is under pressure from declining ARPU and declining subscribers, whilst content-cost is fixed. We believe StarHub recognises that the business model is broken and is renegotiating with content providers to switch from a fixed-cost model to a variable cost model. If successful, the pay-tv business could improve as this manages the costs to help alleviate margin pressures.



Enterprise fixed

The enterprise fixed business comprises of 3 main segments, data & internet, managed services and voice services. Managed services include analytics, cloud, ICT solutions, facility management and cybersecurity services.

The enterprise segment is benefitting from the resumption of smart nation projects and demand from businesses especially from small & medium enterprise (SME), hospitality and financial services. Companies are requiring more connectivity, data centre and cloud, managed security and network services. We believe Singtel and StarHub is well positioned to take advantage of this growth.

StarHub is undertaking a massive investment in the enterprise segment. Starhub expanded its enterprise segment by an average rate of 7.2% p.a. since FY16 and 13% YoY in the 3Q18. This is driven mainly by its managed services segment offsetting declines in the traditional data & internet and voice services. The performance in managed services is largely driven by the consolidation of acquisitions Accel Systems and D'Crypt. In addition, to tap on the growing demand for cyber security StarHub and a Temasek wholly-owned subsidiary has formed a joint-venture company named Ensign InfoSecurity Pte Ltd. Ensign is a pure-play cyber security company. It aspires to be a global cyber security platform to address the demand in both Singapore and global market. Expected revenue is in the excess of S\$100mn annually. StarHub has a 40% (\$36mn) stake in Ensign.

We expect enterprise to be a key growth driver. We think StarHub is well positioned for the opportunity in the cyber-security and managed services space and we are optimistic that there is market demand to support this growth given the resumption of government smart initiatives and the growing demand in SME, hospitality and financial services.





Investment Merits

- Pay-Tv segment could improve. Management is in the midst of renegotiating with content providers to switch from a fixed cost model to a variable cost model. If successful this could help the Pay-tv segment alleviate margin pressure.
- Seeking growth in enterprise fixed. Enterprise fixed has been growing at an average rate of 7.2% p.a. since FY16. We expect this growth to continue as StarHub focuses its efforts on enterprise to help offset the weakness in mobile and pay-tv. The resumption of smart nation projects should give StarHub more opportunities. StarHub bets big on its enterprise business with the consolidation Accel Systems and D'Crypt and a new joint venture with Certis Cisco to form a pure-play cyber security company.
- \$210m restructuring exercise will help cushion the decline in mobile and Pay-tv. The cost savings is projected to be over 2019 to 2021 and will be driven by staff reduction and cost reductions in procurement, leasing, repairs and maintenance and distribution. A portion of savings will be channelled to investment opportunities. We expect the exercise to offset the declines in mobile and pay-ty, this should stabilise earnings.
- TPG Telecom is unlikely to pose a serious threat. TPG announced CAPEX of S\$200-300m for the mobile network rollout and have thus far spent less than S\$100m. The low level of CAPEX should prevent consumers from being too eager to switch to the new player in town due to network reliability, coverage and quality issues. In addition, the price sensitive market where TPG is likely to compete in is filled with MVNOs with far superior network than TPG. This has led us to believe TPG's entrance is unlikely to pose a serious threat to the incumbents. TPG is giving free trials for the first 20,000 customers that register their interest with them. The 20,000 only represent 0.38% of total post-paid customers and even less significant on revenue as this customers are in the price-sensitive space.

Valuation

We initiate coverage on StarHub with an ACCUMULATE rating and a target price of S\$1.88. Our target price is based on FY19e 6X EV/EBITDA. We gave a 35% discount to StarHub's regional peers as we take a conservative view of the mobile and pay-tv business.

Figure 11: Sector valuations of telecommunication peers

Company	1 Mth	3 Mth	YTD	Share Px	Market Cap	PE	P/BV	Dividend	ROE	TTM 12	FY19	EBITDA	EV
	Perf.	Perf.	Perf.	local	(US\$mn)	FY18	FY18	Yield (%)	FY18	EV/EBITDA	EV/EBITDA	Margin (%)	(US\$mn)
<u>India</u>													
Bharti	-7.0%	-22.1%	2.0%	310.5	17,667	208.0	1.8	2.5	0.9%	9.4	9.2	36.2	35,171
Vodafone Idea	-9.5%	-52.9%	-51.3%	35.8	4,445	N.M.	0.4	N.A.	-15.1%	37.0	26.2	21.4	19,616
<u>Indonesia</u>													
Telkom	-10.0%	2.8%	-6.3%	3700.0	25,392	18.4	4.0	4.5	20.4%	7.0	6.5	50.2	29,002
Indosat	-15.2%	-65.1%	-73.7%	1660.0	625	N.M.	0.7	4.4	-11.5%	4.4	3.9	43.0	2,299
XL Axiata	-14.6%	-19.8%	-11.4%	2020.0	1,496	196.5	1.0	N.A.	0.0%	5.6	4.0	37.6	2,882
<u>Thailand</u>													
AIS	4.0%	-15.5%	18.4%	174.0	16,075	16.9	10.2	4.2	66.1%	9.5	8.5	44.6	19,344
DTAC	-1.6%	-3.3%	15.2%	43.5	3,201	51.1	3.8	2.9	4.0%	4.3	5.0	38.6	3,852
<u>Philippines</u>													
Globe	-5.8%	16.5%	24.8%	1889.0	4,780	14.0	3.7	4.8	25.1%	6.5	6.1	40.7	7,134
PLDT INC	-3.3%	-21.2%	-15.5%	1158.0	4,758	11.1	2.3	5.5	6.9%	6.7	5.8	38.9	7,306
<u>Malaysia</u>													
Axiata group	1.1%	-30.0%	-15.5%	3.8	8,361	41.1	1.8	2.2	-15.2%	11.3	6.1	37.6	12,975
Digi	-4.3%	-3.9%	-8.4%	4.5	8,349	22.8	50.6	4.4	248.9%	13.3	12.5	45.4	8,863
ASTRO	-15.7%	-34.8%	-48.8%	1.3	1,673	12.1	11.3	6.0	82.4%	5.0	6.0	40.0	2,393
MAXIS	-3.9%	-4.0%	-9.2%	5.5	10,280	21.8	5.9	3.7	29.3%	N.A.	12.1	53.5	11,942
<u>Singapore</u>													
M1	-0.6%	20.1%	6.1%	2.1	1,416	14.9	3.9	5.5	30.8%	7.6	7.8	28.2	1,684
Singtel	-0.3%	-15.4%	-21.9%	2.9	34,071	14.4	1.6	6.1	10.8%	12.8	11.0	40.1	41,353
	-3.8%	-12.5%	-8.0%		142,587	18.3	6.5	4.4	32.2%	9.8	9.4	42.3	24,991
StarHub	-8.0%	-26.1%	-39.3%	1.70	2,154	13.8	8.1	9.4	69.6%	7.6	6.0	25.6	2,846

Source: Bloomberg, PSR

Balance Sheet

Dividend Payout (%)

Dividend Yield (%)



Financials

Income Statement					
Y/E Dec, SGD 'Mn	FY15	FY16	FY17	FY18e	FY19e
Revenue	2,444	2,397	2,401	2,307	2,259
Operating Profit	441	425	334	330	297
EBITDA	713	690	614	651	659
Depreciation & Amortisation	271	265	280	321	361
EBIT	441	425	334	330	297
Net Finance Inc/(Exp)	(18)	(26)	(30)	(29)	(28)
Profit before tax	440	410	304	304	273
Taxation	(68)	(69)	(55)	(51)	(46)
Net profit, reported	372	341	250	253	227

Per share data (SGD Cents)					
Y/E Dec	FY15	FY16	FY17	FY18e	FY19e
EPS, reported	21.5	19.8	14.4	14.6	13.1
DPS	20.0	20.0	17.0	13.0	11.0
RVPS	10.8	113	197	21 3	23.4

Y/E Dec, SGD 'Mn	FY15	FY16	FY17	FY18e	FY19e
<u>CFO</u>					
Profit before tax	440	410	304	304	273
Adjustments	234	258	310	347	386
WC changes	(37)	(64)	(32)	(8)	(9)
Cash generated from ops	637	604	583	643	650
Tax paid	(93)	(54)	(65)	(51)	(46)
Cashflow from ops	545	551	517	592	604
CFI					
CAPEX, net	(329)	(367)	(296)	(400)	(400)
Others	29	(23)	(31)	3	3
Cashflow from investments	(300)	(389)	(327)	(397)	(397)
CFF					
Share issuance, net	-	-	-	-	-
Loans, net of repayments	-	300	10	320	313
Dividends	(346)	(346)	(294)	(225)	(190)
Others	11	297	164	51	158
Cashflow from financing	(335)	(50)	(130)	(174)	(32)
Net change in cash	(91)	112	60	21	176
CCE, end	173	285	345	367	542

balance sneet					
Y/E Dec, SGD 'Mn	FY15	FY16	FY17	FY18e	FY19e
ASSETS					
PPE & IA	1,278	1,382	1,428	1,506	1,545
Others	28	74	92	92	92
Total non-current assets	1,306	1,455	1,519	1,598	1,637
Accounts receivables	153	172	202	168	172
Cash	173	285	345	367	542
Inventories	54	50	72	56	56
Amt due from related parties	26	22	31	31	31
Others	197	212	184	184	184
Y/E Dec, SGD 'Mn FY15 ASSETS PPE & IA 1,278 Others 28 Total non-current assets 1,306 Accounts receivables 153 Losh 173 Inventories 54 Amt due from related parties 26 Others 197 Total current assets 604 Total Assets 1,909 LIABILITIES Accounts payables 687		741	833	805	985
Total Assets	1,909	2,196	2,352	2,403	2,622
LIABILITIES					
Accounts payables	687	708	737	679	675
Short term loans	138	10	120	130	153
Amt Due to related parties	123	67	65	65	65
Tax payable	81	71	72	72	72
Total current liabilities	1,028	856	993	946	964
Long term loans	550	978	858	928	1,091
Deferred tax liabilites	120	145	133	133	133
Others	22	20	22	22	22
Total non-current liabilities	694	1,146	1,014	1,084	1,248
Total Liabilities	1,722	2,001	2,007	2,030	2,212
Non-controlling interests Shareholder Equity	188	195	4 341	4 368	4 405
Valuation Ratios					
Y/E Dec	FY15	FY16	FY17	FY18e	FY19e
P/E (X)	17.2	14.2	19.7	11.7	13.4
P/B (X)	34.1	24.9	14.5	8.0	7.5
EV/EBITDA (X)	9.7	10.3	11.5	10.9	10.8
Growth & Margins					
Growth					
Revenue	-	-1.9%	0.2%	-3.9%	-2.1%
EBITDA	-	-3.2%	-11.0%	6.0%	1.2%
EBIT	-	-3.7%	-21.5%	-1.2%	-9.7%
Net profit, adj.	-	-8.3%	-26.9%	1.3%	-10.2%
<u>Margins</u>					
Gross margin	18.1%	17.7%	13.9%	14.3%	13.2%
EBITDA margin	29.2%	28.8%	25.6%	28.2%	29.2%
EBIT margin	18.1%	17.7%	13.9%	14.3%	13.2%
Net profit margin	15.2%	14.2%	10.4%	11.0%	10.1%
Key Ratios					
ROE (%)	198.5%	175.2%	73.3%	68.6%	56.0%
ROA (%)	19.5%	15.5%	10.6%	10.5%	8.7%

92.9%

5.4%

101.4%

7.1%

117.7%

6.0%

89.0%

7.6%

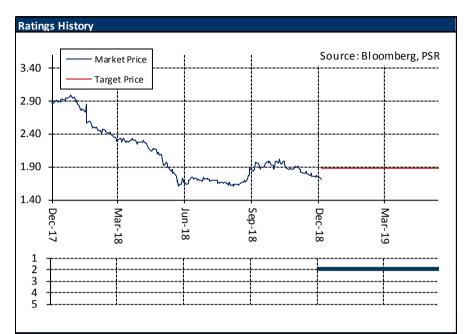
83.9%

6.3%

Source: Company, Phillip Securities Research (Singapore) Estimates

^{*}Forward multiples & yields based on current market price; historical multiples & yields based on historical market price.





PSR Rating Syste	m	
Total Returns	Recommendation	Rating
> +20%	Buy	1
+5% to +20%	Accumulate	2
-5% to +5%	Neutral	3
-5% to -20%	Reduce	4
< -20%	Sell	5

Remarks

We do not base our recommendations entirely on the above quantitative return bands. We consider qualitative factors like (but not limited to) a stock's risk reward profile, market sentiment, recent rate of share price appreciation, presence or absence of stock price catalysts, and speculative undertones surrounding the stock, before making our final recommendation





Singapore Telecommunications Limited

Turnaround in associates

SINGAPORE | TELECOMUNICATIONS | INITIATION

- We expect a turnaround in associates largely driven by recovery in Telkomsel
- TPG Telecom is unlikely to pose a serious threat to the incumbents
- Enterprise business will benefit from resumption of smart nation initiatives
- We initiate coverage on Singtel with a BUY rating and a target price of \$\$3.40.

Company Background

Singtel is the largest mobile network operator in Singapore and is a leading telecommunications company in the region. Singtel provide a diverse range of services including fixed, mobile, internet, television, info-communications technology and digital solutions. The group structure consists of Consumer, Group Enterprise and Group Digital Life. Optus a subsidiary of Singtel is the 2nd largest telecommunications company in Australia. Singtel is also invested in leading companies in the region such as Bharti Airtel (India, South Asia & Africa), Telkomsel (Indonesia), Globe Telecom (Philippines) and Advanced Info Service (Thailand).

Investment Merits

- We expect a turnaround in associates. In our opinion, the weakness in Singtel's associates is coming to an end. The recovery is mainly driven by the improving operating conditions of Telkomsel which represents ~57% of associate earnings. We note that Airtel will still experience near-term weakness due to stiff competition from Reliance Jio. However, we expect the industry to rationalise in the medium term as the industry is facing losses. Furthermore, the industry has massively consolidated from 10 to 4 existing operators. Another tailwind for the sector will be a recovery in emerging market currencies as the interest rate hiking cycle from the U.S. is slowing down.
- Enterprise business will benefit from the resumption of smart nation projects. Management is keeping their guidance for ICT revenue to increase by mid-single digit. This could only mean recovery after the resumption of smart nation projects. The enterprise segment is benefitting from the resumption of smart nation projects as well as growth in small & medium enterprise (SME), hospitality and financial services. The demand for connectivity, data centre and cloud, managed security and network services is driving this growth. We believe Singtel is well positioned to take advantage of this growth.
- TPG Telecom is unlikely to pose a serious threat. TPG Telecom (TPG) announced CAPEX of \$\$200-300mn for the mobile network rollout and have thus far spent less than \$\$100mn. The low level of CAPEX should prevent consumers from being too eager to switch to the new player in town due to network reliability, coverage and quality issues. In addition, the price sensitive market where TPG is likely to compete in is filled with MVNOs with far superior network than TPG. TPG is giving free trials for the first 20,000 customers that register their interest with them. The 20,000 only represent 0.38% of total post-paid customers and even less significant on revenue as these customers are in the price-sensitive space. This has led us to believe TPG's entrance is unlikely to pose a serious threat to the incumbents.

We initiate coverage on Singtel with a BUY rating and a target price of \$\$3.40. Our target price is based on FY19e 7X EV/EBITDA of its Singapore and Australia business and the valuation of its associates. We gave a 20% discount to Singtel's regional telecommunication peers as we take a conservative approach in Singtel's valuation.



4 January 2019

BUY (Initiation)

CLOSING PRICE SGD 2.860 **FORECAST DIV** SGD 0.175 TARGET PRICE SGD 3.400 TOTAL RETURN 25.0%

COMPANY DATA

D/S SHARES (MN):	16,329
MARKET CAP (USD mn / SGD mn):	46,701
52 - WK HI/LO (SGD) :	2.85
BM Average Daily T/O (mn):	18.31

MAJOR SHAREHOLDERS (%)

Temasek Holdings Pte Ltd	52.4%
Vanguard Group	1.5%
Templeton Global Advisors	1.1%

PRICE PERFORMANCE (%)

	1M TH	3 M T H	1Y R
COMPANY	(4.3)	(8.8)	(15.4)
STIRETURN	(2.3)	(6.0)	(8.1)

PRICE VS. STI



Source: Bloomberg, PSR

KEY FINANCIALS

112111111111111111111111111111111111111				
Y/E Dec, SGD mn	FY 17	FY 18	FY 19 e	FY20e
Revenue	16,711	17,532	17,302	18,359
EBITDA	4,998	5,089	5,243	6,770
Net Profit	3,831	5,430	3,199	4,584
Dividend Yield	4.4%	6.1%	6.1%	6.1%
ROE (x)	13.6%	18.3%	10.7%	14.4%
ROA (x)	7.9%	11.3%	6.6%	9.0%

Source: Company, PSR

VALUATION METHOD

Sum Of Parts

Alvin Chia (+65 6212 1852)

Research Analyst

alvinchiawv@phillip.com.sg



Group Consumer

Group consumer comprises the consumer businesses across Singapore and Optus (Australia), as well as the group's investments, mainly, AIS and Intouch (Thailand), Bharti Airtel (India, Africa and Sri - Lanka), Globe (Philippines), and Telkomsel (Indonesia). It focuses on a range of services from mobile, pay-tv, fixed broadband, voice and equipment sales.

Singapore

Mobile segment

Figure 1:Increasing Post-Paid subscribers (`000)



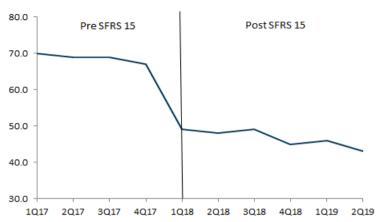
Source: PSR, Company

Figure 2:Declining Pre-Paid subscribers (`000)



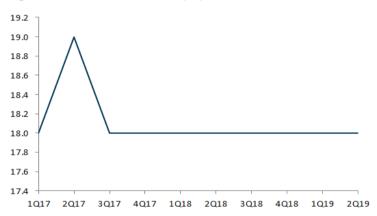
Source: PSR, Company

Figure 3: Declining Post-Paid ARPU (S\$)



Source: PSR, Company

Figure 4: Stable Pre-Paid ARPU (S\$)



Source: PSR, Company

The Singapore mobile market has been under pressure since the pending entrance of TPG. ARPU have corrected in anticipation of TPG. Management has guided Singapore mobile service revenue to decline by mid-single digit. We view that the impact on TPG's entrance is overdone because TPG announced CAPEX of \$\$200-300m for the mobile network rollout and have thus far spent less than \$\$100mn. This has led us to believe TPG's entrance is unlikely to pose a serious threat to Singtel. The low level of CAPEX should prevent consumers from being too eager to switch to the new player in town due to network reliability, coverage and quality. In addition, TPG Singapore will have less firing power after the merger of TPG Australia and VHA as the entities will have separate balance sheets.

Structurally we see a shift in the mobile business as smart phone replacement cycles increase this has led to higher adoption of SIM-Only plans which are lower ARPU in nature. The entrance of MVNOs in the market has also weakened ARPU figures as the MVNOs compete in the price-sensitive space in the market giving higher data allowance to consumers. (See sector report for a detailed explanation on SIM-only plans & MVNOs)

Figure 5: MVNO & TPG's timeline

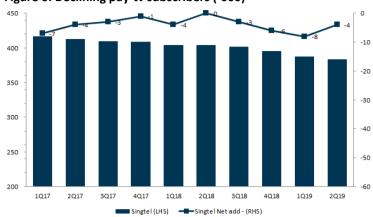
Date	Description
Jul-15	Circles.Life Launch
Nov-16	TPG vs MyRepublic for 4th MNO in SG
Dec-16	TPG won bidding for 4th MNO
Dec-17	Zero launch
Feb-18	Zero 1 launch
May-18	MyRepublic launch

Source: PSR, Company



Pay-Tv segment

Figure 6: Declining pay-tv subscribers (`000)



Source: PSR, Company

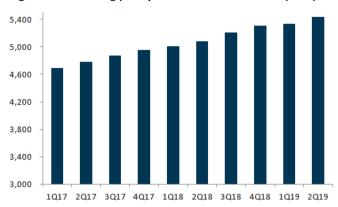
The pay-tv market in Singapore is operating under challenging conditions. Subscribers are turning to cheaper Over-The-Top (OTT) players such as Netflix, Amazon video and Hulu Plus. OTT players have been disrupting the pay-tv business since early 2016 changing the way people consume content with videos on demand at a lower price. As a result, Singtel subscribers contracted 39K (9%) since 2016.

We expect the pay-tv market to further contract by ~7% in FY19. The pay-tv business model is under pressure from declining ARPU and declining subscribers, whilst content-cost is fixed. Singtel is internally reviewing and phasing out unpopular content. This should help better manage costs and help alleviate margin pressures.



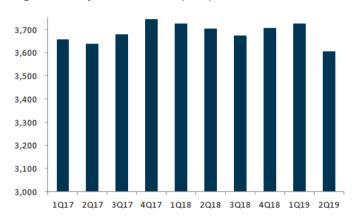
Australia (Optus)

Figure 7: Increasing post-paid subscribers 7% YoY (`000)



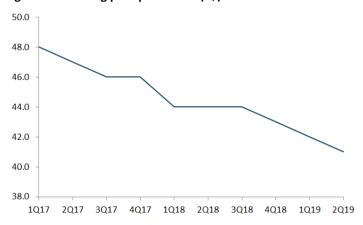
Source: PSR, Company

Figure 8: Pre-paid subscribers (`000)



Source: PSR, Company

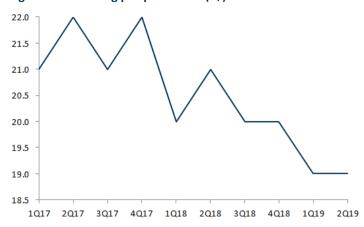
Figure 9: Declining post-paid ARPU (S\$)



Source: PSR, Company



Figure 10: Declining pre-paid ARPU (\$\$)



Source: PSR, Company

In Australia, TPG and Vodafone Hutchinson (VHA) are in talks for a proposed merger. The merged group pro forma enterprise value will add up to AU\$15bn. The combined group will command a market share of approximately 22% in the fixed-line broadband segment and $^{\sim}$ 20% in the mobile segment. This allows the group to be a more effective competitor to challenge the major incumbents Optus and Telstra. The Singapore mobile business of TPG will be separated before the proposed merger by way of an in-specie distribution of shares to existing TPG shareholders.

Optus currently contribute approximately 50% of group revenue. The consolidation in Australia means less competitive pricing in the market as a result this should benefit the sector as a whole when ARPU rationalises. The merger will exclude VHA from TPG's mobile business in Singapore as a result TPG will not have access to VHA balance sheet for extra firepower in Singapore. However, TPG gained significant cost savings from the synergies of the merger as it can now tap onto VHA mobile network infrastructure without spending the AU\$600m slated for the mobile network rollout initially planned.

The Australian market is not spared to the adoption of SIM-Only plans. SIM-Only plans attributed approximately 25% of post-paid plans in Optus. We have since observed dilution in ARPU since FY17. However, Optus post-paid subscriber is growing at 7% YoY in 2Q19 offsetting the declines in ARPU. We believe ARPU will stabilize as there is less competition in the market with the proposed merger.

Associates

Singtel's associates represent ~ 38% of earnings. We think that associates will turnaround mainly driven by the recovery of Telkomsel (~57% of associate earnings).

Telkomsel (Indonesia) - 35% Stake

Telkomsel (TSEL) is the largest wireless carrier in Indonesia with 167mn customers. Indonesia has a population of 264mn and a mobile penetration rate of 142%. It is headquartered in South Jakarta. Major telecommunication players include Indosat Ooredoo, 3, XL Axiata.

Starting late 2017 the Indonesian government ordered all prepaid mobile phone subscribers to re-register their SIM cards in an effort to clean up the data bank and combat misuse of SIM cards, while protecting registered SIM card holders. Following the re-registration we observed intense competition during 1H18. The market has thus rationalised and is experiencing an upward trend in data pricing. Post-Lebaran TSEL is able to hike data prices 4-11%. We think this trend is likely to continue. In addition, the growth in data use could be substantial as TSEL subscribers are still using traditional voice calls for their daily communication, this upside can be captured from the conversion of voice to data. 4G smartphone penetration in Indonesia is at 73% suggesting room for growth.

Bharti Airtel (India) - 40% Stake

Bharti Airtel (Airtel) is an Indian global telecommunications services company based in New Dehli, India. It operates in 20 countries across South Asia and Africa. Airtel has approximately 429mn subscribers as of 2018. Major competitors include Vodafone Idea Limited, Reliance Jio (Jio) and BSNL Mobile.

The operating environment remains challenging in India because Jio has lowered price plans to unnatural levels and is willing to burn cash in order to achieve its goal of 50% market share. We expect performance from Airtel to remain weak in the near term.

Advanced Info Service (Thailand) - 23% Stake

Advanced Info Service (AIS) is Thailand's largest mobile operator with 40mn subscribers; Thailand has a population of 69mn. AIS is controlled by Intouch Holdings headed by Temasek Holdings after the acquisition of Shin Corporation. Major players in Thailand comprises of TrueMove, dtac, MY.

Globe Telecom (Philippines) - 47% Stake

Globe is one of the largest mobile, fixed line, and broadband player in the Philippines. Mobile subscribers reached 65mn in 2018. Smart communications is Globes main competitor with a similar size in subscriber base. China Telecom will be the nation's 3rd telecommunications provider as announced in 2018.

Singapore Post - 22% Stake

Singpost provides logistics services in the domestic market. It provides global delivery services products includes postal, agency and financial services. These services are delivered through its post offices, Self-service Automated Machines (SAMs) and its internet portal.



Group Enterprise

Group enterprise comprises the business groups across Singapore, Australia, USA and Europe. Services include mobile, equipment sales, fixed voice, data, managed services, cloud computing, cyber security, IT services and consulting.

Singapore

The enterprise business is benefitting from the resumption of smart nation projects as well as growth in small & medium enterprise (SME), hospitality and financial services. The demand for connectivity, data centre and cloud, managed security and network services is driving this growth.

Trustwave Holdings is Singtel's subsidiary that provides cyber-security services. It aims to protect data and reduce security risk through its cloud, manged security services, integrated technologies and a team of security experts. Trustwave enables businesses to transform how businesses manage information and compliance programs. There are approximately 3mn businesses that subscribe to trust wave's services. The headquarters for Trustwave is located in Chicago they services clients in 96 different countries.

NCS Pte Ltd (NCS) is Singtel's subsidiary and is a regional ICT solutions provider with 18 offices across 10 countries. NCS enables customers to gain competitive edge through its services including consulting, development and integration, managed services, and technology solutions. Its portfolio of clients ranges from homeland security, education, defence, transportation and logistics, airport and aviation, healthcare and life sciences, financial services, manufacturing, telecommunications and utilities.

We note that ICT sales are lumpy in nature due to the large contract sizes. We observed declines in traditional legacy services such as voices. Trustwave Holdings was impacted by decline in traditional license maintenance and commodisation of the payment card industry (PCI) data security business resulting in lower sales in the United States.



Group Digital Life

Group Digital life focuses on three key businesses, digital marketing (Amobee), regional premium OTT video (HOOQ) and advanced analytics and intelligence capabilities (DataSpark).

Amobee

Amobee focuses on digital marketing. The Amobee platform is an Omni-channel interface that allows automated planning and buying across TV, digital and social in a unified manner. The platform is equipped with AI and algorithms, data analytic tools, and real time reports to help understand and optimally influence consumer's decision journey across any screens. By combining TV, digital and social on a single platform, Amobee serves leading global brands and agencies including Airbnb, Lexus and Kellogg's. Amobee enables users to plan and activate across 150 integrated partners with the likes of Facebook, Instagram, Pinterest, Snapchat and Twitter.

Global digital ad spend is expected to double to US\$427bn by 2022 from about US\$232bn, traditional advertising is progressively switching to online channels and devices. We view that Amobee is well positioned to capture growth. Amobee is expected to grow its operating revenue by high single digit and be EBITDA positive for FY19.

In FY18, Amobee contributed 6% or S\$1bn in revenue to the group. In recent earnings call management guided lower numbers for Amobee; this is due to lower revenue from the media business as customers shift their spending from managed to self-served platforms. However, we note that there is growth in programmatic and email business but is insufficient to offset the decline in media.

HOOQ

HOOQ is Asia's first premium video on demand streaming service. It is a joint venture of Sony Pictures Entertainment, Warner Media and Singtel. HOOQ offers access to more than 35,000 hours of Hollywood and local content to customers across Indonesia, India, the Philippines, Thailand and Singapore.

HOOQ is EBITDA negative however it has managed to double its revenue from the same quarter last year as it continued to ramp up its business through new distribution partnerships in India and Indonesia. HOOQ also released a six-part series crime thriller, Brata, which is co-produced with Telkomsel.

DataSpark

Data Spark is a mobility intelligence company that aspires to deliver mobility intelligence in every application for every interaction. DataSpark uses analytical tools and give insights into where, when, why, and how people move to help business make smarter decisions.





Investment Merits

- 1. We expect a turnaround in associates. In our opinion, the weakness in Singtel's associates is coming to an end. The recovery is mainly driven by the improving operating conditions of Telkomsel which represents ~57% of associate earnings. We note that Airtel will still experience near term weakness due to stiff competition from Reliance Jio. However we expect as the industry to rationalise in the medium term as the industry is facing losses. Furthermore, the industry has massively consolidated from 10 to 4 existing operators. Another tailwind for the sector will be a recovery in emerging market currencies as the interest rate hiking cycle from the U.S. is slowing down.
- 2. Enterprise business will benefit from the resumption of smart nation projects. Management is keeping their guidance for ICT revenue to increase by mid-single digit. This could only mean recovery after the resumption of smart nation projects. The enterprise segment is benefitting from the resumption of smart nation projects as well as growth in small & medium enterprise (SME), hospitality and financial services. The demand for connectivity, data centre and cloud, managed security and network services is driving this growth. We believe Singtel is well positioned to take advantage of this growth.
- 3. TPG Telecom is unlikely to pose a serious threat. TPG Telecom (TPG) announced CAPEX of S\$200-300mn for the mobile network rollout and have thus far spent less than S\$100mn. The low level of CAPEX should prevent consumers from being too eager to switch to the new player in town due to network reliability, coverage and quality issues. In addition, the price sensitive market where TPG is likely to compete in is filled with MVNOs with far superior network than TPG. TPG is giving free trials for the first 20,000 customers that register their interest with them. The 20,000 only represent 0.38% of total post-paid customers and even less significant on revenue as this customers are in the price sensitive space. This has led us to believe TPG's entrance is unlikely to pose a serious threat to the incumbents.

Valuation

We initiate coverage on Singtel with a BUY rating and a target price of S\$3.40. Our target price is based on FY19e 7X EV/EBITDA of its Singapore and Australia business and the valuation of its associates. We gave a 20% discount to Singtel's regional peers as we take conservative approach in Singtel's valuation.

Figure 11: Singtel's Sum Of Parts breakdown

Valuation breakdown	Value (S\$mn)	Price Per share (S\$)	Comment
Singapore Business	13,121	0.80	7X FY19e EV/EBITDA
Australia Business	22,114	1.35	7X FY19e EV/EBITDA
Total (- debt + Cash)	25,229	1.55	
Listed associates	30,313	1.86	
Target Price		3.40	-

Source: Bloomberg, PSR

Figure 12: Value of Associates

Associates	No.of shares (mn)	Share price (S\$)	Market Cap (SGD mn)	Stake (%)	Value (SGD mn)	Per share (S\$)
Telkomsel	99,062	0.35	34,681	35.0%	12,138	0.74
Bharti Airtel	3,997	6.04	24,129	39.5%	9,531	0.58
AIS	2,973	7.38	21,934	23.3%	5,115	0.31
Globe	133	49.11	6,535	47.1%	3,077	0.19
Singpost	2,254	0.92	2,074	21.8%	452	0.03
				Total	30,313	1.86

Source: Bloomberg, PSR

Figure 13: Valuation of regional telecommunications peers

Company	1 Mth	3 Mth	YTD	Share Px	Market Cap	PE	P/BV	Dividend	ROE	TTM 12	FY19	EBITDA	EV
	Perf.	Perf.	Perf.	Local	(US\$mn)	FY18	FY18	Yield (%)	FY18	EV/EBITDA	EV/EBIDTA	Margin (%)	(US\$mn)
<u>India</u>													
Bharti	-7.0%	-22.1%	2.0%	310.5	17,667	208.0	1.8	2.5	0.9%	9.4	9.2	36.2	35,171
Vodafone	-9.5%	-52.9%	-51.3%	35.8	4,445	N.M.	0.4	N.A.	-15.1%	37.0	26.2	21.4	19,616
<u>Indonesia</u>													
Telkom	-10.0%	2.8%	-6.3%	3700.0	25,392	18.4	4.0	4.5	20.4%	7.0	6.5	50.2	29,002
Indosat	-15.2%	-65.1%	-73.7%	1660.0	625	N.M.	0.7	4.4	-11.5%	4.4	3.9	43.0	2,299
XL Axiata	-14.6%	-19.8%	-11.4%	2020.0	1,496	196.5	1.0	N.A.	0.0%	5.6	4.0	37.6	2,882
<u>Thailand</u>													
AIS	4.0%	-15.5%	18.4%	174.0	16,075	16.9	10.2	4.2	66.1%	9.5	8.5	44.6	19,344
DTAC	-1.6%	-3.3%	15.2%	43.5	3,201	51.1	3.8	2.9	4.0%	4.3	5.0	38.6	3,852
Philippines													
Globe	-5.8%	16.5%	24.8%	1889.0	4,780	14.0	3.7	4.8	25.1%	6.5	6.1	40.7	7,134
PLDT INC	-3.3%	-21.2%	-15.5%	1158.0	4,758	11.1	2.3	5.5	6.9%	6.7	5.8	38.9	7,306
Malaysia													
Axiata	1.1%	-30.0%	-15.5%	3.8	8,361	41.1	1.8	2.2	-15.2%	11.3	6.1	37.6	12,975
Digi	-4.3%	-3.9%	-8.4%	4.5	8,349	22.8	50.6	4.4	248.9%	13.3	12.5	45.4	8,863
ASTRO	-15.7%	-34.8%	-48.8%	1.3	1,673	12.1	11.3	6.0	82.4%	5.0	6.0	40.0	2,393
MAXIS	-3.9%	-4.0%	-9.2%	5.5	10,280	21.8	5.9	3.7	29.3%	N.A.	12.1	53.5	11,942
<u>Singapore</u>													
M1	-0.6%	20.1%	6.1%	2.1	1,416	14.9	3.9	5.5	30.8%	7.6	7.8	28.2	1,684
StarHub	-8.0%	-26.1%	-39.3%	1.7	2,154	13.8	8.1	9.4	69.6%	7.6	6.0	25.6	2,846
_	-4.9%	-11.9%	-4.3%		110,671	19.4	8.0	4.6	36.2%	8.9	8.8	42.6	19,523
Singtel	-0.3%	-15.4%	-21.9%	2.9	34,071	14.4	1.6	6.1	10.8%	12.8	11.0	40.1	41,353

Source: Bloomberg, PSR



Financials

Cash Flow

Income Statement					
Y/E Dec, SGD 'Mn	FY16	FY17	FY18	FY19e	FY20e
Revenue	16,961	16,711	17,532	17,302	18,359
Gross profit	4,864	4,782	4,830	5,034	6,526
EBITDA	5,013	4,998	5,089	5,243	6,770
Depreciation & Amortisation	2,149	2,239	2,340	3,132	3,167
EBIT	2,864	2,759	2,749	2,111	3,603
Net Finance Inc/(Exp)	(360)	(374)	(390)	(433)	(477)
Profit before tax	4,581	4,515	6,132	3,725	5,304
Taxation	(723)	(684)	(701)	(526)	(720)
Net profit, reported	3,858	3,831	5,430	3,199	4,584

Per share data (SGD Cents)					
Y/E Dec	FY16	FY17	FY18	FY19e	FY20e
EPS, reported	24.3	23.6	33.4	19.7	28.2
DPS	17.5	17.2	20.5	17.5	17.5
BVPS	156.7	172.8	181.8	183.9	194.6

Cash Flow					
Y/E Dec, SGD 'Mn	FY16	FY17	FY18	FY19e	FY20e
CFO					
Profit before tax	4,581	4,515	6,132	3,725	5,304
Adjustments	419	470	(1,037)	1,519	1,466
WC changes	(1,042)	(492)	(178)	(20)	(58)
Cash generated from ops	3,958	4,493	4,916	5,223	6,712
Tax paid	(658)	(834)	(608)	(526)	(720)
Cashflow from ops	4,648	5,315	5,955	6,184	6,655
<u>CFI</u>					
CAPEX & IA, net	(2,103)	(2,518)	(3,473)	(3,549)	(3,289)
Others	(637)	(2,314)	1,523	87	89
Cashflow from investments	(2,740)	(4,832)	(1,951)	(3,462)	(3,200)
<u>CFF</u>					
Share issuance, net	-	1,602	-	-	-
Loans, net of repayments	(209)	911	223	487	29
Dividends	(2,789)	(2,816)	(3,346)	(2,858)	(2,858)
Others	954	(121)	(886)	(433)	(477)
Cashflow from financing	(2,044)	(422)	(4,009)	(2,803)	(3,306)
Net change in cash	(136)	60	(5)	(81)	149
CCE, end	462	534	525	444	593

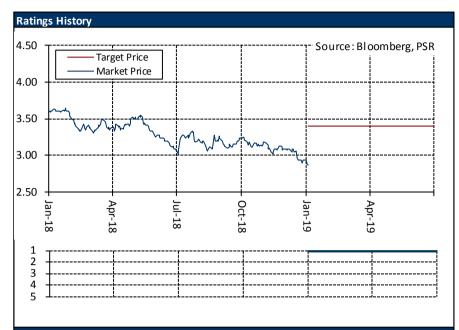
Balance Sheet					
Y/E Dec, SGD 'Mn	FY16	FY17	FY18	FY19e	FY20e
ASSETS					
PPE & IA	12,968	24,966	25,770	26,187	26,309
Others	25,432	17,411	16,503	16,975	18,401
Total non-current assets	38,400	42,377	42,273	43,162	44,710
Accounts receivables	4,366	4,924	5,035	4,841	5,273
Cash	462	534	525	444	593
Inventories	320	352	397	361	395
Others	18	107	23	23	23
Total current assets	5,165	5,918	5,981	5,669	6,284
Total Assets	43,566	48,294	48,254	48,831	50,995
LIABILITIES					
Accounts payables	4,594	4,922	5,234	4,983	5,392
Short term loans	960	3,343	2,152	2,152	2,152
Tax payable	364	296	351	351	351
Total current liabilities	6,540	9,272	8,293	8,042	8,451
Long term loans	9,255	8,052	8,607	9,094	9,123
Deferred tax liabilites	585	575	520	520	520
Others	2,183	2,181	1,180	1,180	1,180
Total non-current liabilities	12,023	10,808	10,307	10,794	10,823
Total Liabilities	18,563	20,081	18,600	18,836	19,274
EQUITY					
Non-controlling interests	36	22	(3)	(17)	(38)
Shareholder Equity	24,989	28,214	29,679	30,034	31,781

Valuation Ratios					
Y/E Dec	FY16	FY17	FY18	FY19e	FY20e
P/E (X)	15.7	16.6	10.1	14.5	10.1
P/B (X)	2.4	2.3	1.9	1.6	1.5
EV/EBITDA (X)	14.1	15.0	12.8	11.0	8.5
Growth & Margins					
<u>Growth</u>					
Revenue	-	-1.5%	4.9%	-1.3%	6.1%
EBITDA	-	-0.3%	1.8%	3.0%	29.1%
EBIT	-	-3.7%	-0.4%	-23.2%	70.7%
Net profit, adj.	-	-0.7%	41.7%	-41.1%	43.3%
Margins					
Gross margin	28.7%	28.2%	28.5%	29.7%	38.5%
EBITDA margin	29.6%	29.5%	30.0%	30.9%	39.9%
EBIT margin	16.9%	16.3%	16.2%	12.4%	21.2%
Net profit margin	22.7%	22.6%	32.0%	18.9%	27.0%
Key Ratios					
ROE (%)	15%	14%	18%	11%	14%
ROA (%)	9%	8%	11%	7%	9%
Dividend Payout (%)	72%	73%	61%	89%	62%
Dividend Yield (%)	4.6%	4.4%	6.1%	6.1%	6.1%

Source: Company, Phillip Securities Research (Singapore) Estimates

^{*}Forward multiples & yields based on current market price; historical multiples & yields based on historical market price.





PSR Rating System	n	
Total Returns	Recommendation	Rating
> +20%	Buy	1
+5% to +20%	Accumulate	2
-5% to +5%	Neutral	3
-5% to -20%	Reduce	4
< -20%	Sell	5

Remarks

We do not base our recommendations entirely on the above quantitative return bands. We consider qualitative factors like (but not limited to) a stock's risk reward profile, market sentiment, recent rate of share price appreciation, presence or absence of stock price catalysts, and speculative undertones surrounding the stock, before making our final recommendation

SINGAPORE TELECOM SECTOR INITIATION



Important Information

This report is prepared and/or distributed by Phillip Securities Research Pte Ltd ("Phillip Securities Research"), which is a holder of a financial adviser's license under the Financial Advisers Act, Chapter 110 in Singapore.

By receiving or reading this report, you agree to be bound by the terms and limitations set out below. Any failure to comply with these terms and limitations may constitute a violation of law. This report has been provided to you for personal use only and shall not be reproduced, distributed or published by you in whole or in part, for any purpose. If you have received this report by mistake, please delete or destroy it, and notify the sender immediately.

The information and any analysis, forecasts, projections, expectations and opinions (collectively, the "Research") contained in this report has been obtained from public sources which Phillip Securities Research believes to be reliable. However, Phillip Securities Research does not make any representation or warranty, express or implied that such information or Research is accurate, complete or appropriate or should be relied upon as such. Any such information or Research contained in this report is subject to change, and Phillip Securities Research shall not have any responsibility to maintain or update the information or Research made available or to supply any corrections, updates or releases in connection therewith.

Any opinions, forecasts, assumptions, estimates, valuations and prices contained in this report are as of the date indicated and are subject to change at any time without prior notice. Past performance of any product referred to in this report is not indicative of future results.

This report does not constitute, and should not be used as a substitute for, tax, legal or investment advice. This report should not be relied upon exclusively or as authoritative, without further being subject to the recipient's own independent verification and exercise of judgment. The fact that this report has been made available constitutes neither a recommendation to enter into a particular transaction, nor a representation that any product described in this report is suitable or appropriate for the recipient. Recipients should be aware that many of the products, which may be described in this report involve significant risks and may not be suitable for all investors, and that any decision to enter into transactions involving such products should not be made, unless all such risks are understood and an independent determination has been made that such transactions would be appropriate. Any discussion of the risks contained herein with respect to any product should not be considered to be a disclosure of all risks or a complete discussion of such risks.

Nothing in this report shall be construed to be an offer or solicitation for the purchase or sale of any product. Any decision to purchase any product mentioned in this report should take into account existing public information, including any registered prospectus in respect of such product.

Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may provide an array of financial services to a large number of corporations in Singapore and worldwide, including but not limited to commercial / investment banking activities (including sponsorship, financial advisory or underwriting activities), brokerage or securities trading activities. Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may have participated in or invested in transactions with the issuer(s) of the securities mentioned in this report, and may have performed services for or solicited business from such issuers. Additionally, Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may have provided advice or investment services to such companies and investments or related investments, as may be mentioned in this report.

Phillip Securities Research or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report may, from time to time maintain a long or short position in securities referred to herein, or in related futures or options, purchase or sell, make a market in, or engage in any other transaction involving such securities, and earn brokerage or other compensation in respect of the foregoing. Investments will be denominated in various currencies including US dollars and Euro and thus will be subject to any fluctuation in exchange rates between US dollars and Euro or foreign currencies and the currency of your own jurisdiction. Such fluctuations may have an adverse effect on the value, price or income return of the investment.

To the extent permitted by law, Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may at any time engage in any of the above activities as set out above or otherwise hold an interest, whether material or not, in respect of companies and investments or related investments, which may be mentioned in this report. Accordingly, information may be available to Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, which is not reflected in this report, and Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may, to the extent permitted by law, have acted upon or used the information prior to or immediately following its publication. Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited its officers, directors, employees or persons involved in the issuance of this report, may have issued other material that is inconsistent with, or reach different conclusions from, the contents of this report.

The information, tools and material presented herein are not directed, intended for distribution to or use by, any person or entity in any jurisdiction or country where such distribution, publication, availability or use would be contrary to the applicable law or regulation or which would subject Phillip Securities Research to any registration or licensing or other requirement, or penalty for contravention of such requirements within such jurisdiction.

This report is intended for general circulation only and does not take into account the specific investment objectives, financial situation or particular needs of any particular person. The products mentioned in this report may not be suitable for all investors and a person receiving or reading this report should seek advice from a professional and financial adviser regarding the legal, business, financial, tax and other aspects including the suitability of such products, taking into account the specific investment objectives, financial situation or particular needs of that person, before making a commitment to invest in any of such products.

This report is not intended for distribution, publication to or use by any person in any jurisdiction outside of Singapore or any other jurisdiction as Phillip Securities Research may determine in its absolute discretion.

IMPORTANT DISCLOSURES FOR INCLUDED RESEARCH ANALYSES OR REPORTS OF FOREIGN RESEARCH HOUSES

Where the report contains research analyses or reports from a foreign research house, please note:

- (i) recipients of the analyses or reports are to contact Phillip Securities Research (and not the relevant foreign research house) in Singapore at 250 North Bridge Road, #06-00 Raffles City Tower, Singapore 179101, telephone number +65 6533 6001, in respect of any matters arising from, or in connection with, the analyses or reports; and
- (ii) to the extent that the analyses or reports are delivered to and intended to be received by any person in Singapore who is not an accredited investor, expert investor or institutional investor, Phillip Securities Research accepts legal responsibility for the contents of the analyses or reports.



SINGAPORE TELECOM SECTOR INITIATION

Contact Information (Singapore Research Team)

Head of Research

Paul Chew - paulchewkl@phillip.com.sg

research@phillip.com.sg

Banking and Finance Tin Min Ying – tinmy@phillip.com.sg

Transport | REITs (Industrial) Richard Leow - richardleowwt@phillip.com.sg

US Equity

Edmund Xue - edmundxuejj@phillip.com.sg

Oil & Gas | Energy

Chen Guangzhi - chengz@phillip.com.sg

China/HK Equity

Zheng Jieyuan – zhengjy@phillip.com.sg

Telco | Technology

Research Admin

Alvin Chia - alvinchiawy@phillip.com.sg

REITs (Commercial, Retail, Healthcare) | Property

Tara Wong - tarawongsj@phillip.com.sg

SINGAPORE

Phillip Securities Pte Ltd

Raffles City Tower 250, North Bridge Road #06-00 Singapore 179101 Tel +65 6533 6001

Fax +65 6535 6631

Website: www.poems.com.sg

JAPAN

Phillip Securities Japan, Ltd.

4-2 Nihonbashi Kabuto-cho Chuo-ku, Tokyo 103-0026 Tel +81-3 3666 2101

Fax +81-3 3666 6090 Website: www.phillip.co.jp

THAILAND

Phillip Securities (Thailand) Public Co. Ltd

15th Floor, Vorawat Building, 849 Silom Road, Silom, Bangrak, Bangkok 10500 Thailand Tel +66-2 6351700 / 22680999 Fax +66-2 22680921

Website www.phillip.co.th

UNITED STATES

Phillip Capital Inc 141 W Jackson Blvd Ste 3050

The Chicago Board of Trade Building Chicago, IL 60604 USA Tel +1-312 356 9000

Fax +1-312 356 9005

Website: www.phillipusa.com

INDIA

PhillipCapital (India) Private Limited

No.1, 18th Floor, Urmi Estate 95, Ganpatrao Kadam Marg Lower Parel West, Mumbai 400-013 Maharashtra, India

Tel: +91-22-2300 2999 / Fax: +91-22-2300 2969

Website: www.phillipcapital.in

CAMBODIA Phillip Bank Plc

Ground Floor of B-Office Centre,#61-64, Norodom Blvd Corner Street 306, Sangkat Boeung Keng Kang 1, Khan Chamkamorn, Phnom Penh, Cambodia

Tel: 855 (0) 7796 6151/855 (0) 1620 0769 Website: www.phillipbank.com.kh

Contact Information (Regional Member Companies) ΜΔΙΔΥΚΙΔ

Phillip Capital Management Sdn Bhd

B-3-6 Block B Level 3 Megan Avenue II, No. 12, Jalan Yap Kwan Seng, 50450 Kuala Lumpur

Tel +603 2162 8841 Fax +603 2166 5099

Website: www.poems.com.my

INDONESIA

PT Phillip Securities Indonesia

ANZ Tower Level 23B, Jl Jend Sudirman Kav 33A Jakarta 10220 - Indonesia

Tel +62-21 5790 0800

Fax +62-21 5790 0809

Website: www.phillip.co.id

FRANCE

King & Shaxson Capital Limited

3rd Floor, 35 Rue de la Bienfaisance 75008

Paris France Tel +33-1 45633100

Fax +33-1 45636017

Website: www.kingandshaxson.com

AUSTRALIA

Phillip Capital Limited

Level 10, 330 Collins Street Melbourne, Victoria 3000, Australia Tel +61-03 8633 9803

Fax +61-03 8633 9899

 $Website: \underline{www.phillipcapital.com.au}\\$

TURKEY

PhillipCapital Menkul Degerler Dr. Cemil Bengü Cad. Hak Is Merkezi

No. 2 Kat. 6A Caglayan 34403 Istanbul, Turkey Tel: 0212 296 84 84 Fax: 0212 233 69 29

Website: www.phillipcapital.com.tr

HONG KONG

Phillip Securities (HK) Ltd

11/F United Centre 95 Queensway Hong Kong

Tel +852 2277 6600 Fax +852 2868 5307

Websites: www.phillip.com.hk

CHINA

Phillip Financial Advisory (Shanghai) Co Ltd

No 550 Yan An East Road, Ocean Tower Unit 2318, Postal code 200001 Tel +86-21 5169 9200

Fax +86-21 6351 2940

Website: www.phillip.com.cn

UNITED KINGDOM

King & Shaxson Capital Limited

6th Floor, Candlewick House, 120 Cannon Street, London, EC4N 6AS Tel +44-20 7426 5950

Fax +44-20 7626 1757 Website: www.kingandshaxson.com

SRI LANKA

Asha Phillip Securities Limited

No. 60, 5th Lane, Colombo 3, Sri Lanka Tel: (94) 11 2429 100

Fax: (94) 11 2429 199

Website: www.ashaphillip.net

DUBAI

Phillip Futures DMCC

Member of the Dubai Gold and Commodities Exchange (DGCX) Unit No 601, Plot No 58, White Crown Bldg, Sheikh Zayed Road, P.O.Box 212291 Dubai-UAE

Tel: +971-4-3325052 / Fax: + 971-4-3328895