15 December 2014 Singapore Telecoms Sector Displaying Growth through Adversity

SINGAPORE | TELECOMMUNICATIONS | SECTOR UPDATES

Sector Overview

The telecommunications sector under our coverage consists of SingTel, StarHub & M1. StarHub and M1 are pure plays to the Singapore market, while SingTel has exposure to Asia-Pacific region through its regional mobile associates.

What is the news?

- Telcos reported gain in revenue in the last quarter, with StarHub's and M1's lifted by mobile growth and fixed services while SingTel gains across its Group Consumer, Enterprise and Digital Life segments.
- Strong net profit gains from SingTel and M1 in the last quarter. StarHub reversed declining earnings trend and posted modest earnings growth in the last quarter.
- Dividend yields of above 4% from Telcos remain attractive in our view, with potential growth in dividends.
- We continue to like **M1** as our preferred pick, with a **Buy** rating in view of firm growth fundamentals. We upgraded **SingTel** to **Accumulate** in our last update report while we have **Neutral** on **StarHub**.

Key Risks

- Threat of new entrants in Singapore mobile market.
- Return FX currency headwinds and heightening competition in overseas markets for SingTel.

Potential Upsides

- Lowering of handset subsidies.
- Bottom-out in declining voice and roaming revenue.
- Possible trend towards customers upgrading from basic-tier to mid-tier plans for higher data allowances.
- Softer competition in Singapore broadband segment.

Outlook for the Sector

We remain **positive on the Telco sector**, expecting Telcos to deliver earnings and dividends growth into FY2015. Increase in mobile plan prices and further exceeding of data allowances among consumers would lead to continued growth among the Telcos. M1 remains our top pick as it stands to benefit the most from growth in mobile and fibre broadband services. Albeit StarHub suffered from an intense broadband competition, but has shown recovery to growth for its Pay TV business in recent quarters. SingTel continues to deliver moderate earnings growth despite adverse FX movements and benefits from recent turnaround in Optus, stabilising FX movements against SGD and strong gains from associates. Though M1 remains our top pick in the sector at present, we think SingTel may offer greater growth potential over the other 2 Telcos in the medium to long-term investment horizon in view of a saturated mobile market in Singapore.

Singapore Telecommunications Sector

Company	Rating	Price	ТР	Upside	Mkt Cap
		(S\$)	(S\$)	(%)	(S\$'mn)
SingTel Ltd	Accum.	3.99	4.12	3.3%	63,615
StarHub Ltd	Neutral	4.11	4.25	3.4%	7,088
M1 Ltd	Buy	3.60	3.95	9.7%	3,352

ource: Bloomberg, PSR est

Analyst

Colin Tan

colintanwh@phillip.com.sg Tel: (65) 6531 1221

Fig: 1Y Share Performance



Source: Bloomberg

Fig: 5Y P/E Comparison









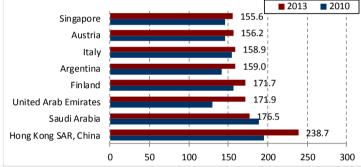
Singapore Mobile Market

Growth Impact from Slower Population Growth

Growth in non-resident population fell to 2.9%, down from 4.0% in mid-2013, as a result of foreign labour curbs undertaken by the Government, leading to a slowest population growth in 10 years record at 1.3% between Jun-13 and Jun-14. The population is projected to reach 6.5 to 6.9 million by 2030 based on Jan-2013 government White Paper, which would translate to 1.4% CAGR leading up to 2030.

Mobile penetration was at 156% as of end 2013, placing Singapore in 20th rank among countries/territories with the highest penetration rate. We think there is **still room for further increase in mobile penetration due to trend towards consumers owning multiple devices** (e.g. smartphones, tablets). Postpaid subscriber base continue to rise despite the decline in the total number of mobile subscriptions this year, resulted from the cut in prepaid SIM card quota from 10 to 3 per person wef April-14, **Overall, mobile subscriber growth is expected to slow down but estimated to stay above 3-4% range over the next few years**

Fig 1: Countries with the highest Mobile Penetration Comparison



Source: World Bank (**some countries above 20th rank are omitted*)

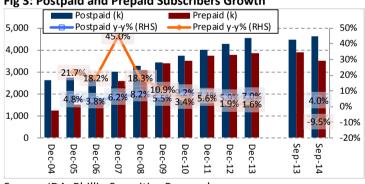


Fig 3: Postpaid and Prepaid Subscribers Growth

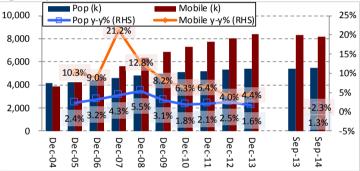
Source: IDA, Phillip Securities Research

Driving Growth with Higher Mobile Data Consumption

58% out of the 4.6 million postpaid subscribers had switched to 4G lines as of Sep-14 since the introduction of 4G LTE tiered data plans in 2012. LTE offer 3-4x faster than 3G speed and up to 150 Mbps, allowing faster web browsing and video streaming, hence leading to higher mobile data usage. About 19-22% of subscribers on tiered plans was reported to have exceeded their data allowances. **Telcos are seeing growing mobile revenues from monetization of mobile data despite falling revenue from voice and SMS services.** By end of 2014, the Telcos would have rolled out nationwide LTE-Advanced networks, which would double 4G speeds and **encourage higher data consumption among mobile subscribers.**

SingTel and M1 revised data excess charges from S\$5.35/GB to S\$10.70/GB by the beginning of 2014. StarHub's data charges was also revised from last year's promotional rate of S\$6.42/GB to S\$10.70/GB.

Fig 2: Population and Mobile Growth

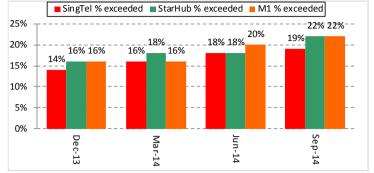




¹ Department of Statistics Singapore

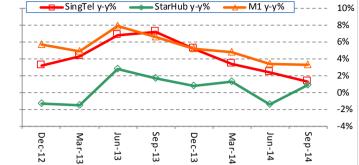


Fig 4: % of Tiered Plan Customers Exceeding Data Bundles

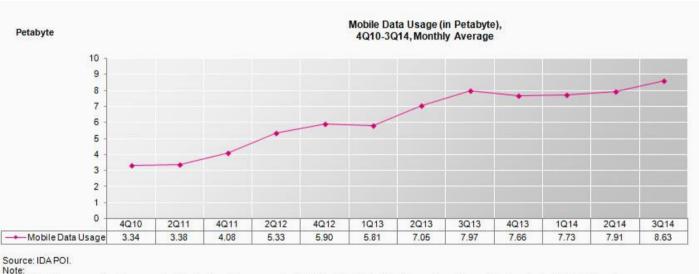


Source: Company, Phillip Securities Research

Fig 5: Quarterly Mobile Revenue Growth



Source: Company, Phillip Securities Research *note: SingTel: mobile revenue in Singapore; exclude Optus's



1) mobile data usage reflects the amount of bi-directional (the aggregated total downloaded) mobile data sent over the mobile networks, including MMS and

any other data upload/download but excludes video telephony and SMS. 2) The data usage figures are monthly average figures for each guarter, derived by taking the total data usage in a guarter, and then dividing by three.

Source: IDA

Telcos Fighting Back OTT Apps with VoLTE technology

Telcos have seen a continuous decline in voice revenue in recent years, attributing to the emergence of over-the-top (OTT) apps which support voice/video calls and messaging services. Fighting back competition by OTT players, **Telcos have taken steps to deploy Voice over LTE (VoLTE) by end of the year.** VoLTE promises **superior voice and video quality** as compared to current VoIP services by OTT apps and traditional calls over 3G networks. According to a study by NSN Smart Labs, VoLTE also consumed 40% less battery power vs. OTT VoIP. While VoLTE may help Telcos to regain some ground lost to OTT players, the key advantages that VoLTE would bring to the Telcos include **overall cost savings through consolidation of wireless services and termination of legacy network infrastructure, and protect existing voice revenues.**

58% of postpaid subscribers on 4G over last 2 years

Based on IDA statistics, about 2.7 out of 4.6 million postpaid subscribers were on 4G lines as of end Sep-14. With current take-up rate, we expect at least 80-85% of postpaid subscribers would have switched to 4G plans by end of 2015. **Consumers on 4G lines would benefit from faster 4G data speeds and VoLTE**, which would **drive higher data consumption beyond allocated data allowances and higher ARPU.**

WhatsApp, a popular OTT app among smartphone users, will likely rollout VoIP call services in early 2015.

Newer phones which include iPhone 6/6 Plus and Samsung Note 4 support VoLTE.

Fig 6: Mobile Data Usage in Singapore



Fig 7: Comparison between OTT VoIP and VoLTE

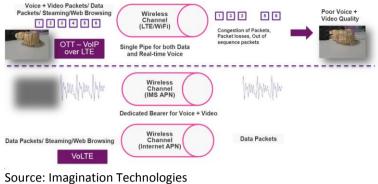
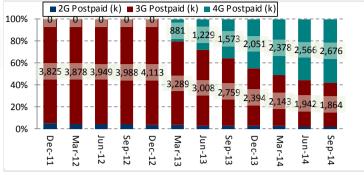
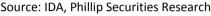


Fig 8: % of Postpaid Subscribers on 2/3/4G



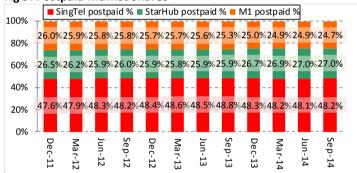


Postpaid Market Share – StarHub Biggest Gainer this Year

StarHub gained 0.3% in postpaid market shares since end Dec-13 while SingTel and M1 lost 0.1% and 0.2% respectively. **StarHub's gain may be attributed to its attractive bundle package comprising mobile, pay TV and broadband,** as StarHub reported growing triple-service hubbing households in its customer base. While M1 also offers bundled pay TV service with MiBox, it does not offer blockbuster movie channels or other international mainstream contents, unlike SingTel's mio TV and StarHub TV.

MiBox was launched in mid-2013 and replaces 1box, previous pay-TV service which was released back in 2010.

Fig 9: Postpaid Market Shares

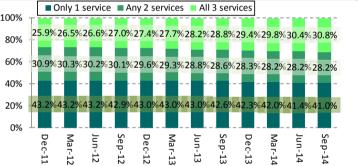


Source: Company, Phillip Securities Research

Rational Price Competition, with some Differentiation

Postpaid plans were last revised in Aug 2014 and monthly subscription prices have generally rose \$2-\$4 across most tiered plans. The steepest price increase came from StarHub plans, which previously were priced at \$1 to \$2 discount to the other 2 Telcos before the revision, were now priced the same as most of SingTel's tiered data plans. M1 offers 2-4% discount on its basic to mid tiered plans, making up for its less appealing Pay TV and broadband bundle packages as compared to its competitors. While the 3 Telcos may offer similar pricing as well as free bundled 4G data usage, there are some noteworthy differentiation in their value-add services (See table below). With cheaper pricing, M1 might regain some lost grounds. Nontheless, we expect market shares to remain largely stable.

Fig 10: StarHub's Household Customers on Single/Multiple Svcs



Source: Company, Phillip Securities Research

Newer postpaid plans would only affect new and re-contracting subscribers.



Table 1: Postpaid Mobile Plans Comparison

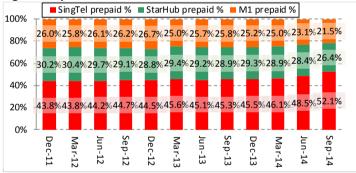
				Free outgoing	g call minutes		
		100	150-200	300-350	400-450	700-800	unlimited
SingTel	Mthly subscr (S\$)	\$27.90	\$42.90	\$62.90	\$82.90	\$102.90	\$239.90
	Bundled SMS/MMS	500	1000	1200	1300	1500	unlimited
	Bundled data	100MB	2GB	3GB	4GB	6GB	12GB
	Value adds*	-	Bundle	ed 2GB SingTel W	/iFi usage (unlimi	ted use till 31 Jul	2015)
StarHub	Mthly subscr (S\$)	N/A	\$42.90	\$62.90	\$82.90	\$102.90	\$220.00
	Bundled SMS/MMS	-	1000	1200	1300	1500	Unlimited
	Bundled data	-	3GB	4GB	5GB	6GB	12GB
	Value adds*			Additional 1	.GB data upsize @	9 \$8.56/mth	
M1	Mthly subscr (S\$)	\$28.00	\$41.00	\$61.00	\$81.00	\$101.00	\$208.00
	Bundled SMS/MMS	500	1000	1200	1500	2000	5000
	Bundled data	300MB	3GB	4GB	5GB	7GB	13GB
	Value adds*		U	nlimited free call	s to 3 M1 numbe	rs	

Source: Company Websites (refer to websites for more details)

Prepaid Market Share – Dominant SingTel Continues Gain

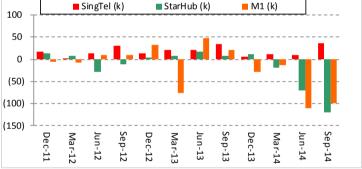
While both M1 and StarHub reported declines in prepaid subscribers following regulatory changes in prepaid SIM card quota, **SingTel continues to gain prepaid subscribers.** Contributing factors may be attributed to: 1) SingTel's clean-up of its inactive prepaid base on a more frequent basis and 2) extensive distribution channels and marketing from SingTel.

Fig 11: Prepaid Market Shares



Source: Company, Phillip Securities Research

Fig 12: Prepaid Net Adds (000)



Source: Company, Phillip Securities Research

Possible Threat of New Entrants

IDA had issued a consultation paper earlier in Apr this year and hinted on encouraging more competition in the Telco market. While we see little success of new entrants into the competition, IDA has received several feedbacks from industry players that have expressed interest to enter the Telecoms market, mostly as MVNOs. But the biggest threat of new competitor faced by the 3 telcos may come from MyRepublic, a 2-year old provider of fibre broadband services, which has indicated its intent on becoming the 4th telco in Singapore. The risk would not be immediate as:

- 1) it would need to purchase wireless spectrum and invest in 3/4G mobile network infrastructure and,
- IDA requires high QoS standards from the telcos, which are expected to provide > 99% mobile coverage in outdoor areas, putting high up-front capital cost pressure on any new Telco players.

In short, we not see any immediate threats to the incumbent Telcos, though we do not dismiss the possibility of IDA facilitating the entry of a fourth Telco into the market.

Mobile virtual network operator (MVNO) provides wireless communication services but does not own the wireless network infrastructure. It resells voice and data services purchased from existing MNOs at wholesale rates.



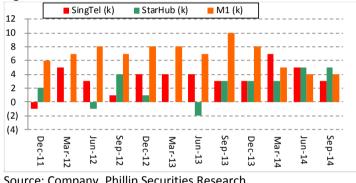
Singapore Broadband Market

Broadband Price Competition Remains – M1 Gains

Unlike mobile plans, residential broadband prices were more differentiated among various providers and competition was intense last year as Telcos had introduced aggressive promotion offers and cut prices on their broadband plans. While competition had seemed to ease a little this year, ISP continue to compete on prices. MyRepublic continues to offer 1Gbps fibre broadband at attractive price and M1 now offers 1Gbps plan at similar price. We opined that M1 could compete at lower broadband prices as it continues to grow its fixed services revenue, benefiting from the increase in subscribers from a low base. On the other hand, SingTel and StarHub reported declines in consumer broadband revenue, impacted by lower ARPU on their larger customer bases. On a positive note, we think that broadband competition may soften going forward as SingTel and StarHub continue to gain subscribers while cutting back on promotional offers.

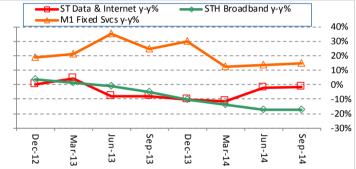
Prior to fibre broadband availability, SingTel and StarHub provide ADSL and Cable broadband services respectively while M1 did not have any fixed broadband services.

Fig 13: Broadband Net Adds



Source: Company, Phillip Securities Research

Fig 14: Broadband Related Revenue Growth



Source: Company, Phillip Securities Research

*note: SingTel's Data & Internet revenue in Singapore; exclude Optus's

		Broadband Download Speed (Mbps)										
		100	200	300	500-600	1000						
SingTel	Mthly subscr (S\$)	N/A	\$49.90	\$59.90	\$69.90	N/A						
	Bundles	Includes 10GB cloud storage + 10% Mobile Line discount										
	Add-ons	Addition	al ~\$18-\$20/mth fo	or basic mio TV bund	lles → 33% discoun	t off U.P.						
StarHub	Mthly subscr (S\$)	\$39.90	*	\$49.90	*	N/A						
	Bundles	Free StarHub TV bundle										
	Add-ons*	Additional ~28.90/mth for faster fibre speed, mobile broadband, unlimited local calls and \$5-6										
		monthly vouchers										
M1	Mthly subscr (S\$)	\$29.00	N/A	\$39.00	N/A	\$49.00						
	Bundles	Free mobile broadband, 12mths MiBox service, \$50-\$200 handset voucher										
	Add-ons			-								
MyRepublic	Mthly subscr (S\$)	N/A	-	N/A	N/A	\$49.99						
	Bundles											
	Add-ons			-								
ViewQwest	Mthly subscr (S\$)	N/A		N/A	\$65.00	\$89.95						
	Bundles			Free ViewQwest TV								
	Add-ons			-								

Table 2: Fibre Broadband Plan Comparison (Based on 24-months Contracts)

Source: Company Websites (refer to websites for more details)



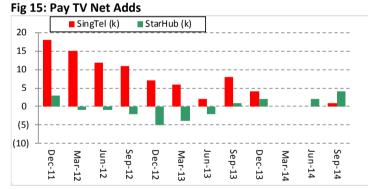
Favourable ICT Trends Create Opportunities for Telcos

While Next Gen NBN may have created more competition in the consumer broadband competition, it has also opened new doors to economic opportunities for Telcos to tap on the Enterprise market, providing innovative ICT and cloud solutions for businesses. **SingTel has been dominant in the Enterprise ICT segment but it is facing stiffer competition from the other 2 Telcos**. M1 looks to supports the underserved SME segment as it had earlier unveiled its data centre and enhanced suite of enterprise cloud offerings in end-Oct this year. StarHub is also growing its share of the pie as it enhances its capabilities and enterprise ICT and cloud solutions for businesses. With the trends towards Big Data and Cloud Computing on the enterprise level and Smart Nation initiative by the government, we are positive on continued growth from the Telcos in the enterprise market.

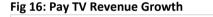
Singapore Pay TV Market

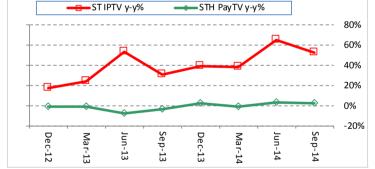
Facing Substitution Risks from Internet Streaming Services

StarHub managed to reverse declining trend in its Pay TV customer base since Sep-13, following cross carriage of the popular Barclays Premier League (BPL) contents availability and attributed to attractive bundle offers from StarHub. Albeit SingTel and StarHub continue to grow their Pay TV customer bases, the business is facing threats from rising popularity of movie/TV streaming services on the Internet. While geo-blocking helps to protect the local pay TV businesses, the trend towards consumers bypassing geo-restrictions to access contents that are otherwise unavailable in their countries could gradually erode profitability. Other developments that point to the growing threat include the expansion of Netflix, which is extending the availability of its streaming service to Australia in 2015, and HBO's "cutting the cords" with its standalone streaming service that would be launched in the US next year. Competitors ViewQwest and MyRepublic offers users bundled VPN access in their broadband services to popular streaming services, circumventing geographical restrictions.













Financial Performance

SingTel

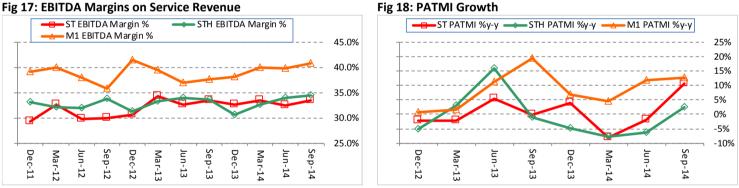
SingTel's service revenue growth was initially impacted by weaker Optus performance due to weakening Australian dollar against SGD and competition in the Australia mobile market, but had since rebounded on recent turnaround in Optus in the last 2 quarters. SingTel not only benefited from effective cost management and investments in enhancing mobile network infrastructure in both Singapore and Australia, but also from stronger earnings contribution from its associates, mainly Bharti Airtel and Globe, and stabilising FX movements.

StarHub

StarHub had poor showing due to intensified competition in the broadband and pay TV segments in Singapore mass market, impacting revenue and earnings growth. While we began to see some recovery in its Pay TV business, broadband revenue had declined sharply (~17%y-y in 3Q14) due to intense price competition which led to a 20% drop in broadband ARPU to S\$35/mth as of 3Q14, from S\$44/mth in the same quarter in previous year.

M1

M1 had the strongest showing in performance on improving margins and earnings growth, benefiting from growth in both the mobile and fixed services segments. While M1 had also saw decline in its Fibre broadband ARPU, fixed services revenue continue to grow on the back of strong net additions of 21K to its fibre subscriber base during the last 4 quarters (27% increase from its subscriber base of 77K as of end Sep-13).



Source: Company, Phillip Securities Research



Upsides & Downside Risks

Potential Upsides

Key upsides among the Telcos would include: 1) lowering of mobile phone subsidies, 2) bottom-out in their declining voice and roaming revenue and 3) a trend towards customers upgrading from the basic-tier to mid-tier plans for higher data allowances. StarHub and M1 would further benefit from softer competition in Singapore broadband market as consumer broadband services account for a significant portion of their overall service revenue.

Key Risks

One major risk include the threat of new entrants in the local mobile space, as the regulator IDA may seek to facilitate more competition in the Singapore Telco sector in the near future. Impact from this risk would be lesser for SingTel as Singapore mobile communication services accounts for 12-13% of its total revenue. SingTel also faces FX headwind risks and heightening competitions in Australia and other regional markets where its mobile associates are present in.



Outlook

We remain **positive on the Telco sector**, expecting Telcos to deliver earnings and dividends growth into FY2015. Increase in mobile plan prices and further exceeding of data allowances among consumers would lead to continued growth among the Telcos. M1 remains our top pick as it stands to benefit the most from growth in mobile and fibre broadband services. Albeit StarHub suffered from an intense broadband competition, but has shown recovery to growth for its Pay TV business in recent quarters. SingTel continues to deliver moderate earnings growth despite adverse FX movements and benefits from recent turnaround in Optus, stabilising FX movements against SGD and strong gains from associates. Though M1 remains our top pick in the sector at present, we think SingTel may offer greater growth potential over the other 2 Telcos in the medium to long-term investment horizon in view of a saturated mobile market in Singapore.

Table 3: SWOT Comparison

SingTel	StarHub	M1					
Market leader in Singapore mobile, broadband & enterprise segments Diversified business across consumer (~62% of revenue), enterprise (~37%) and digital (~1%)	Strong position in residential Pay TV market, which remains viable.	Continued growth in fibre broadband; lesser impact from price wars.					
Impact from FX headwinds.	Service revenue down mainly from broadband competition.	Gradually declining mobile market shares.					
	Growth limited to saturated	mobile market in Singapore					
Rising data consumption and mobile ARPU, benefiting from rational price competition							
Digital Life investments turning profitable. Growth from overseas regions	Growing exposure to local enterprise n trends fo	narkets, riding on cloud computing, ICT r growth.					
through Optus and mobile associates.							
Threa	Threat of new entrants in Singapore mobile market						
Stiffer price competition in overseas markets	Substitution threats from Internet streaming services on Pay TV						
	Market leader in Singapore mobile, broadband & enterprise segments Diversified business across consumer (~62% of revenue), enterprise (~37%) and digital (~1%) Impact from FX headwinds. Rising data consumption Digital Life investments turning profitable. Growth from overseas regions through Optus and mobile associates. Threat	Market leader in Singapore mobile, broadband & enterprise segmentsStrong position in residential Pay TV market, which remains viable.Diversified business across consumer (~62% of revenue), enterprise (~37%) and digital (~1%)Service revenue down mainly from broadband competition.Impact from FX headwinds.Service revenue down mainly from broadband competition.Rising data consumption and mobile ARPU, benefiting from ratio Digital Life investments turning profitable.Growing exposure to local enterprise in trends for trends forGrowth from overseas regions through Optus and mobile associates.Threat of new entrants in Singapore mobile m Substitution threats from Internet					

Source: Phillip Securities Research

Fig 19: Telco Stocks Comparison

Company	Rating	Price	ТР	Upside	Mkt Cap	Ent Val		P/E			P/B			Div Yield (%	6)
		(S\$)	(S\$)	(%)	(S\$'mn)	(S\$'mn)	FY13/14	FY14/15F	FY15/16F	FY13/14	FY14/15F	FY15/16F	FY13/14	FY14/15F	FY15/16F
SINGAPORE TELECO	Accum.	3.99	4.12	3.3%	63,615	72,173	18.0	17.0	15.8	2.7	2.6	2.4	4.2%	4.2%	4.3%
STARHUB LTD	Neutral	4.11	4.25	3.4%	7,088	7,475	19.2	19.4	18.7	85.7	62.2	47.9	4.9%	4.9%	4.9%
M1 LTD	Buy	3.60	3.95	9.7%	3,352	3,590	21.0	19.4	18.3	8.5	8.5	7.7	3.9%	4.6%	5.3%

Source: Bloomberg, PSR est.



Important Information

This publication is prepared by Phillip Securities Research Pte Ltd., 250 North Bridge Road, #06-00, Raffles City Tower, Singapore 179101 (Registration Number: 198803136N), which is regulated by the Monetary Authority of Singapore ("Phillip Securities Research"). By receiving or reading this publication, you agree to be bound by the terms and limitations set out below. This publication 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 document by mistake, please delete or destroy it, and notify the sender immediately. Phillip Securities Research shall not be liable for any direct or consequential loss arising from any use of material contained in this publication.

The information contained in this publication has been obtained from public sources, which Phillip Securities Research has no reason to believe are unreliable and any analysis, forecasts, projections, expectations and opinions (collectively, the "Research") contained in this publication are based on such information and are expressions of belief of the individual author or the indicated source (as applicable) only. Phillip Securities Research has not verified this information and no representation or warranty, express or implied, is made that such information or Research is accurate, complete, appropriate or verified or should be relied upon as such. Any such information or Research contained in this publication 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. In no event will 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 preparation or issuance of this report, (i) be liable in any manner whatsoever for any consequences (including but not limited to any special, direct, indirect, incidental or consequential losses, loss of profits and damages) of any reliance or usage of this publication or (ii) accept any legal responsibility from any person who receives this publication, even if it has been advised of the possibility of such damages. You must make the final investment decision and accept all responsibility for your investment decision, including, but not limited to your reliance on the information, data and/or other materials presented in this publication.

Any opinions, forecasts, assumptions, estimates, valuations and prices contained in this material 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 publication 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 publication 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 publication has been made available constitutes neither a recommendation to enter into a particular transaction, nor a representation that any product described in this material is suitable or appropriate for the recipient. Recipients should be aware that many of the products, which may be described in this publication 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 research 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 preparation or 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 preparation or issuance of this report, may have participated in or invested in transactions with the issuer(s) of the securities mentioned in this publication, 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, directors, employees or persons involved in the preparation or issuance of this report, 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 preparation or 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 publication.

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 preparation or 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 preparation or issuance of this report, may at any time engage in any of the above activities as set out above or otherwise hold a interest, whether material or not, in respect of companies and investments or related investments, which may be mentioned in this publication. 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 preparation or issuance of this report, which is not reflected in this material, and Phillip Securities Research, or persons associated with or connected to its officers, directors, employees or persons involved to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved to Phillip Securities Research, including but not limited to its officers, directors, employees or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the preparation or 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, employees or persons involved in the preparation or issuance of this report, may have issued other material that is inconsistent with, or reach different conclusions from, the contents of this material.

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. Section 27 of the Financial Advisers Act (Cap. 110) of Singapore and the MAS Notice on Recommendations on Investment Products (FAA-N01) do not apply in respect of this publication.

This material 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 material may not be suitable for all investors and a person receiving or reading this material 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.

Please contact Phillip Securities Research at [65 65311240] in respect of any matters arising from, or in connection with, this document. This report is only for the purpose of distribution in Singapore.

Website: www.phillipcapital.in



		Contact Informatio	n (Singapore Research Team)				
Management							
Chan Wai Chee		+65 6531 1231		Research Operations	Officer		
(CEO, Research - Special Op	portunities)	105 0551 1251		Jaelyn Chin	+65 6531 1240		
loshua Tan		+65 6531 1249					
Head, Research - Equities &	& Macro)	105 0551 1245					
Macro Equities		Market Analyst Equ	uitios	US Equities			
Soh Lin Sin	+65 6531 1516	Kenneth Koh	+65 6531 1791	Wong Yong Kai	+65 6531 1685		
Bakhteyar Osama	+65 6531 1793	Kenneth Kon	105 0551 1751	wong rong ka	105 0551 1085		
		De l'Estata					
Finance Offshore Marine Benjamin Ong	+65 6531 1535	Real Estate Caroline Tay	+65 6531 1792				
benjamin ong	105 0551 1555	caronne ray	105 0551 1752				
Telecoms Technology		Transport & Logistics					
Colin Tan	+65 6531 1221	Richard Leow, CFTe	+65 6531 1735				
		Contact Information	(Regional Member Companies	s)			
SINGA	PORE		IALAYSIA		HONG KONG		
Phillip Secur	ities Pte Ltd	Phillip Capital	Management Sdn Bhd	Phillip	Securities (HK) Ltd		
Raffles Ci	ty Tower	B-3-6 Block B Le	evel 3 Megan Avenue II,	11/F United	d Centre 95 Queensway		
250, North Bridg	ge Road #06-00		ap Kwan Seng, 50450		Hong Kong		
Singapore	e 179101	Ku	ala Lumpur	Tel	+852 2277 6600		
Tel +65 65	533 6001	Tel +6	03 2162 8841	Fax	+852 2868 5307		
Fax +65 6	535 6631	Fax +6	03 2166 5099	Websites	: <u>www.phillip.com.hk</u>		
Website: <u>www</u> .	poems.com.sg	Website:	www.poems.com.my				
JAPAN			INDONESIA		CHINA		
Phillip Securities Japan, Ltd.		PT Phillip	Securities Indonesia	Phillip Financial	Phillip Financial Advisory (Shanghai) Co Lt		
4-2 Nihonbashi Kabuto-cho Chuo-ku,		ANZ	ower Level 23B,	-	No 550 Yan An East Road,		
Tokyo 103-0026		Jl Jend	Sudirman Kav 33A	Ocean	Ocean Tower Unit 2318,		
Tel +81-3 3666 2101		Jakarta	10220 – Indonesia	Pos	Postal code 200001		
Fax +81-3	3 3666 6090	Tel +	52-21 5790 0800	Tel +	Tel +86-21 5169 9200		
Website: <u>wv</u>	<u>ww.phillip.co.jp</u>	Fax +	62-21 5790 0809	Fax +86-21 6351 2940			
		Website	e: <u>www.phillip.co.id</u>	Website	: <u>www.phillip.com.cn</u>		
THA	ILAND		FRANCE	UN	ITED KINGDOM		
Phillip Securities (Tl	hailand) Public Co. Ltd	King & Sha	axson Capital Limited	King & Shaxson Capital Limited			
	orawat Building,	-	e de la Bienfaisance 75008	6th Floor, Candlewick House,			
849 Silom Road	d, Silom, Bangrak,	1	Paris France	120	Cannon Street,		
	0500 Thailand	Tel -	-33-1 45633100	Lor	ndon, EC4N 6AS		
-	1700 / 22680999	Fax -	33-1 45636017	Tel +44-20 7426 5950			
Fax +66-2	2 22680921	Website: wv	vw.kingandshaxson.com	Fax +	44-20 7626 1757		
Website <u>ww</u>	ww.phillip.co.th	_		Website: w	ww.kingandshaxson.com		
UNITE	D STATES		AUSTRALIA		SRI LANKA		
	utures Inc		o Capital Limited	Asha Phil	lip Securities Limited		
•	on Blvd Ste 3050		, 15 William Street,		Prince Alfred Tower,		
	rd of Trade Building		Victoria 3000, Australia		d House Gardens,		
•	L 60604 USA		51-03 9629 8288	Colombo 03, Sri Lanka			
-	12 356 9000	Fax +	61-03 9629 8882	Tel:	(94) 11 2429 100		
Fax +1-312 356 9005		Website: wy	vw.phillipcapital.com.au		(94) 11 2429 199		
Website: www	w.phillipusa.com				www.ashaphillip.net		
IND	DIA		TURKEY		DUBAI		
PhillipCapital (Indi	ia) Private Limited	PhillipCap	oital Menkul Degerler	Phill	ip Futures DMCC		
	18th Floor		ngü Cad. Hak Is Merkezi		of the Dubai Gold and		
	ni Estate		Kat. 6A Caglayan		ities Exchange (DGCX)		
	ao Kadam Marg		3 Istanbul, Turkey		ot No 58, White Crown Bldg		
	st, Mumbai 400-013		0212 296 84 84	,	d Road, P.O.Box 212291		
	shtra, India		0212 233 69 29	- / -	Dubai-UAE		
Tel: +91-22-2300 2999 /			ww.phillipcapital.com.tr	Tel: +971-4-332	5052 / Fax: + 971-4-332889		
	w phillincapital in			Website: www.phillincapital.in			

Website: <u>www.phillipcapital.in</u>