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Singapore Telecoms

Focus stocks

Singtel BUY
Target price: **S\$4.21**

M1 SELL
Target price: **S\$2.44**

StarHub SELL
Target price: **S\$3.10**

Let the games begin

IDA paves way for 4th telco; M1 & StarHub has highest risk

IDA's final decision on the spectrum auction confirms that it will set aside 60MHz of spectrum at a discounted S\$35m for a fourth telco. While they now will impose a pre-qualification requirement and a performance bond, these are within expectations. With the auction delayed until 3Q16 providing bidders ample time to raise funds, the stage is set for a new player. The only silver-lining is that all incumbents will retain access to the 900MHz spectrum, and hence won't run the risk of losing network coverage. With our case studies in "The Great Disruptor" showing ARPU declines are imminent, we recommend switching out of M1 and StarHub into Singtel.

IDA sets aside discounted 60MHz of spectrum at S\$35m for 4th telco

- IDA's final decision on the up-coming spectrum auction has confirmed that it will be setting aside 60MHz of spectrum at a discount for a potential fourth telco.
- The revised allocation is 20MHz in the critical 900MHz, and 40MHz in the 2300MHz.
- Because of the change in spectrum allocation (no reservation of 700MHz), the indicative full-reserve price has dropped from S\$100m to S\$64m. As such, IDA correspondingly has reduced the bid price for the 4th telco from S\$40m to S\$35m.
- While the perceived discount for the 4th telco has narrowed (60% --> 45%), this is still net positive for a 4th telco as the 700MHz is not available for use until 2018.
- The new allocation allows a 4th telco to start ops with 60MHz of usable spectrum.

All incumbents to get allocation in 900MHz; reduces M1's risk

- IDA made the key move to set a minimum of 2x5MHz allocation for the three incumbent telcos in the 900MHz spectrum.
- As 900MHz is the only spectrum that is available for wide-area coverage currently, it is a critical spectrum to own for all 3 telcos especially given that out of the existing 60MHz available, 20MHz has been allocated to the 4th telco (40MHz left).
- This takes away the risk of M1 ending up with no 900MHz allocation if Singtel decides to over-bid to maintain its current allocation of 30MHz in the 900MHz.
- In addition, StarHub will no longer get First Rights on Refusal on its existing 900MHz spectrum, and will have to participate in the general auction.
- Given the "Ascending clock" auction structure, and that the 4th MNO is barred from participating in the 900MHz auction, we expect the auction to proceed rationally.
- The most likely scenario for the 900MHz allocation would be Singtel (20MHz), M1 (10MHz), STH (10MHz), 4th telco (20MHz).

Criteria for 4th telco within expectations; stage is set for a new player

- In general, IDA stuck to the requirements for a 4th telco as mentioned in the Jul'15 consultation paper, and confirmed the need for pre-qualification as well as a performance bond of 5% of expected capex (or a minimum of S\$20m).
- The pre-qualification requirements are still hazy for now, but will include evidence of a network deployment capability funding commitment from investors, and a banker's guarantee that matches the reserve price for the spectrum (S\$35m).
- If there is more than 1 bidder, they would bid in an ascending auction till 1 is left.
- These requirements are within expectations. With the auction delayed to 3Q16 giving potential bidders time to raise funds, the stage is set for a new telco player.

M1 and StarHub most at risk; Singtel the top pick within SG telcos

- As we highlighted in our report "The Great Disruptor" we expect ARPUs to decline by -10-15% due to the entrant of a 4th telco.
- Our case studies of France/Spain/M'sia highlights that the ARPU decline will start happen the moment a 4th telco is confirmed, and accelerate as it is about to launch.
- This hits M1 and STH the hardest due to their predominantly Singapore exposure.
- We continue to advocate a switch into Singtel (BUY, S\$4.21) given its low SG consumer exposure and strong earnings contribution from Optus and its associates.

IDA confirms rules of the game

IDA has published its final decision on the upcoming spectrum auction, as how they view the entrant of a fourth telco into the Singapore telco market.

The discount given to the fourth telco operator is smaller at 45% to indicative reserve price, but it can now start with 60MHz of usable spectrum from the onset. This is as the original allocation of 2 x 10MHz in the 700MHz spectrum was not usable until 2018 at the earliest.

Figure 1

Original indicative spectrum allocation for 4 th telco			
Spectrum	Original reserve Px per block (S\$m)	Reserved for 4 th telco	Reserve price (S\$m)
700MHz	20	2 x 10 MHz	40
900MHz	20	2 x 10 MHz	40
2300MHz	5	4 x 5 MHz	20
Indicative Full reserve price			S\$100m
Initial discounted price for 4th telco			S\$40m
Discount for 4th telco			60%

Source: CLSA, IDA

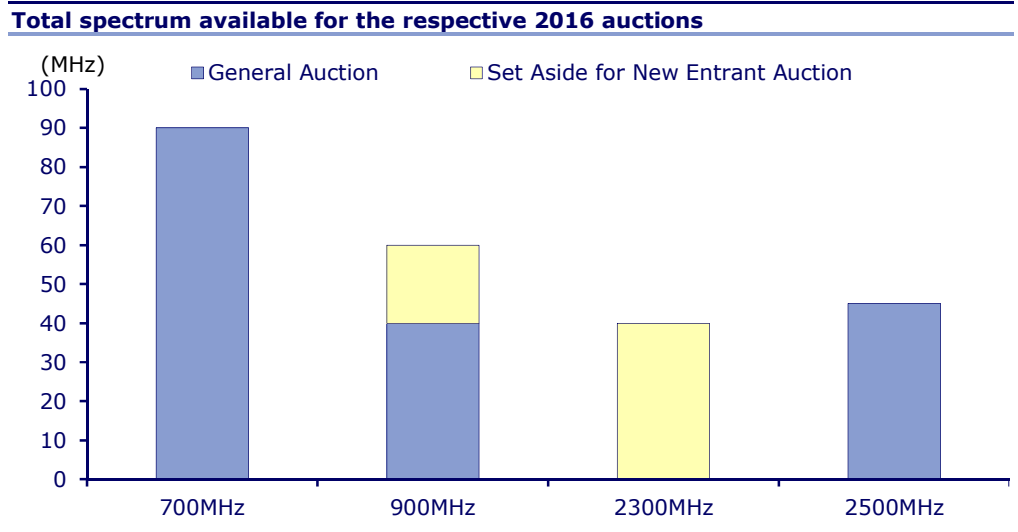
Figure 2

Finalized spectrum allocation for 4 th telco			
Spectrum	Finalized reserve Px per block (S\$m)	Reserved for 4 th telco	Reserve price (S\$m)
700MHz	20	0	0
900MHz	20	2 x 10 MHz	40
2300MHz	3	8 x 5 MHz	24
Indicative Full reserve price			S\$64m
Finalized discounted price for 4th telco			S\$35m
Discount for 4th telco			45%

Source: CLSA, IDA

2x 10MHz in the 900MHz band and 40 MHz in the 2300 MHz band have been set aside for the new entrant

Figure 3



Source: CLSA, IDA

Figure 4

Overview of spectrum auction parameters

Spectrum band	Lot Size	No. of lots for General Auction	Start date	End Date	Spectrum right duration	Reserve Price
700 MHz	2 x 5 MHz	9	1 January 2018*	31 December 2032	15 years	S\$20m / lot
900 MHz	2 x 5 MHz	4	1 April 2017	31 March 2033	16 years	S\$20m / lot
2300 MHz	5 MHz	-	1 April 2017	31 March 2033	16 years	S\$3m / lot
2500 MHz	5 MHz	9	1 April 2017	31 March 2033	16 years	S\$3m / lot

New MNO spectrum package	2 x10 MHz (900 MHz) 40 MHz (2300 MHz)		1 April 2017	31 March 2033	16 years	S\$35m

Source: CLSA, IDA *Tentative

Figure 5

Spectrum up for auction

Spectrum up for bid (MHz)	Total Spectrum on bid			Total Spectrum	Size Per lot	Duration (years)	4th Telco set-aside Spectrum	Reserve price for 4th player*	Remaining Spectrum	Reserve price per lot
	Lower		Upper							
700 MHz range (New)	703	-	748	45	2 x 5 MHz	15	-	-	45	S\$20m
(Currently used for TV)	758	-	803	45			-	-	45	
Earliest start Jan 2018				90			0	-	90	S\$180m
900 MHz range (refarmed)	885	-	915	30	2 x 5 MHz	16	10	-	20	S\$20m
	930	-	960	30			10	-	20	
Starts 1 Apr 2017				60			20	-	40	S\$80m
2300 MHz range (New)	2300	-	2340	40	5 MHz	16	40	-	-	-
2500 MHz range (New)	2570	-	2615	45	5 MHz	16	-	-	45	S\$3m
Starts 1 Apr 2017				85			40	-	45	S\$27m
Total Spectrum / Reserve price for total spectrum				235			60	S\$35m	175	S\$287m

Source: CLSA, IDA *New MNO will bid for the 900MHz and 2300MHz together as a bundle

Figure 6

Potential spectrum holdings post auction and minimum amounts paid

	Singtel	Starhub	M1	New MNO
700 MHz (2 x 5 MHz per lot)				
Potential auction split (MHz)	30	30	30	0
Min price per lot (S\$m)	20	20	20	20
Min price payable (S\$m)	60	60	60	0
900 MHz (2 x 5 MHz per lot)				
Potential auction split (MHz)	20	10	10	20
Min price per lot (S\$m)	20	20	20	-
Min price payable (S\$m)	40	20	20	-
2300 MHz (5 MHz per lot)				
Potential auction split (MHz)	0	0	0	40
Min price per lot (S\$m)	-	-	-	-
Min price payable (S\$m)	-	-	-	-
2500 MHz (5 MHz per lot)				
Potential auction split (MHz)	15	15	15	0
Min price per lot (S\$m)	3	3	3	3
Min price payable (S\$m)	9	9	9	0
Min total payable in 2016*	49	29	29	35
Min total payable in 2017*	60	60	60	-

Source: CLSA, IDA *The 700MHz spectrum is payable in 2017, while we expect the remaining spectrum to be payable in 4Q16

Figure 7

IDA requirement for fourth operator	
Issue	Requirement
Ownership	The 4th telco must be an incorporated company and cannot be related to any existing Mobile Network Operator in Singapore
Bidding process	Potential new entrants will bid for a set aside block of 60 MHz (2x10 MHz in 900MHz band, 40MHz in 2300 MHz band) in an ascending round auction format
Spectrum reserve price	The reserve price for the 60MHz block will be set at S\$35m
National roaming	IDA will not mandate nor require the existing mobile operator to allow the 4th MNO to roam on their networks. However, the 4th MNO is welcome to negotiate for roaming access on an individual basis with them
Site access/ Radio Access Network Sharing	IDA expects the 4th MNO to operate its own network efficiently, and will not support additional measures to allow further site access / Radio Access network sharing beyond what is provided for in existing frameworks, such as the Code of Practice for Info-comm Facilities in building (COPIF). IDA though requires incumbents to negotiate with the new MNO in good faith for access to Common Antenna Systems. IDA will step in to resolve any dispute.
Number Portability / interconnection	IDA will require existing MNOs to provide both interconnection and mobile number portability within a reasonable timeframe, and in good faith
Type of network	No strict specification on the type of network to be rolled out. However, the new MNO's network has to support voice, SMS and Data
Service Quality	The 4th MNO is expected to comply to regulatory frameworks such as QOS standards and Telecom Resiliency Code, among others, but will be in phases after its Nation-wide rollout
Banker's Guarantees	Prospective bidders have to submit a banker's guarantee that is equivalent to the reserve price of the spectrum set-aside package as part of their 'Expression of Interest'. Additionally, the successful bidder will be required to submit an additional banker's guarantee of at least 75% of the winning bid
Performance Bond	IDA will also impose a performance bond on the new MNO that is equivalent to 5% of the new MNO's expected capital expenditure or S\$20m whichever is higher
Roll-out requirements	18 months for outdoor Nation-wide coverage (Excluding in-building, road tunnels and underground MRT lines), 30 months for road tunnels and in-building coverage and 54 months for underground MRT lines. Clock starts from the allocation of the spectrum rights (1 Apr 2017)

Source: CLSA, IDA

Figure 8

Indicative timeline for 2016 Spectrum Auction	
Milestone	Indicative Timeline
Collection of information package for prospective new entrants	10 business days from the issuance of the IDA Decision (18 Feb 2016)
Issuance of draft Information Memorandum and Auction Rules	March/ April 2016
Industry Clarification sessions (if any)	March/ April 2016
Issuance of final Information Memorandum and Auction Rules	April/ May 2016
Submission of Binding Expression of Interest by potential new entrant	Mid 2016
Conduct of New Entrant Auction	3Q2016
Submission of Initial Offer and Banker's Guarantee for General Auction	3Q/ 4Q 2016
Announcement of whether General Auction will proceed	3Q/ 4Q 2016
Information Session and Notification of Auction details	3Q/ 4Q 2016
Conduct of General Auction (if applicable)	3Q/ 4Q 2016

Source: CLSA, IDA

Figure 9

MyRepublic and Consistel: Side-by-side comparison

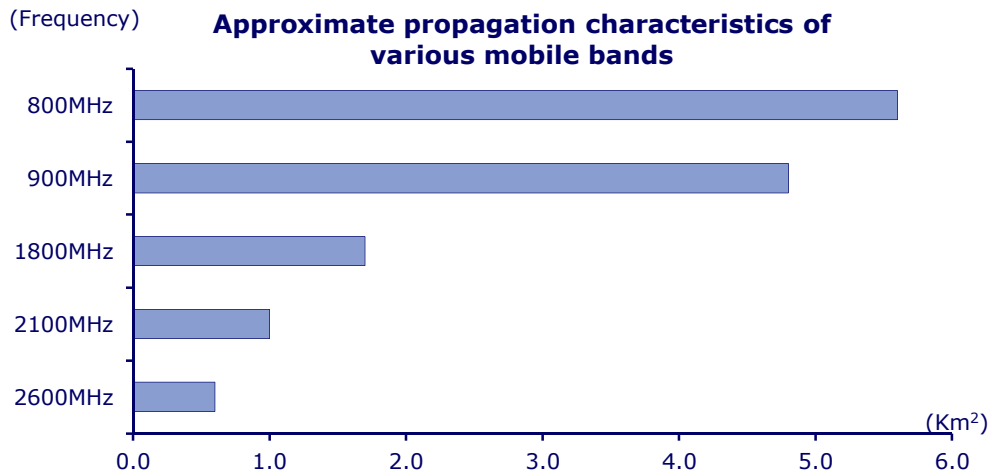
Company	Consistel	MyRepublic
Claim to fame?	Consistel was founded by Chairman Masoud Bassiri in 1996 via a management LBO from parent, MSI Group. Its main business is the implementation of In-Building Solutions (IBS) for both wireless and mobile connections. Since 1996, it has completed >3,300 turnkey IBS projects in over 15 countries.	MyRepublic was founded by Malcolm Rodrigues, KL Lai, and Greg Mittman in 2012, where after Malcolm and Greg met while working on Singapore's NBN network, they saw the opportunities in the Fiber broadband space, and decided to set up their own broadband operator company. They have since extended operations into Indonesia, Australia, New Zealand, and are looking at expanding into M'sia.
What do they do in SG today?	Consistel has worked with all 3 telco operators in Singapore to roll out the 2/3/4G networks. In addition, their notable projects include rolling out the coverage network solution for buildings such as Marina Bay Sands, Reflections @ Keppel Bay, Marina Bay Financial Centre Tower 3, and Singapore Sports Hub.	MyRepublic today services ~40k fiber broadband subscribers in Singapore, and has constantly been an innovator in terms of pricing and product offering, being the first operator to offer 1Gbps connections in Singapore below S\$50/mth.
Who's in it?	Chairman - Masoud Bassiri has 26yrs of experience in network solutions, having worked with Motorola, Nortel Networks, and MSI, before leading the Mgmt. LBO of Consistel. CFO - Roch Low has 25yr of finance experience working in various industries, and was last the CFO of Lotus Investments Funds, a PE focused on Hotel investments. Prior to that he was the Group CFO for Behringer Group, a German audio equipment manufacturer.	CEO - Malcolm Rodrigues was a former VP of STH's International & Wholesale team, and was key in establishing Nucleus Connect. CCO - KL Lai was a former Senior VP of Consumer Sales and has held leadership roles in all 3 telcos VP - Greg Mittman has over 15yrs of experience in telecom and tech, and was the lead for Alcatel-Lucent's NBN team that worked with IDA in rolling out Singapore's NBN network.
Where's the money?	Consistel last raised S\$150m in Dec'13 from PE fund, Equips Funds Group. While SMRT initially said that it would invest up to S\$34.5m in the 4th MNO via an option if they win the licence in Apr'15, they subsequently said that they won't exercise the option in Jun'15, with the transport minister also weighing in by saying the government will ensure that SRMT continues to focus on its core business. They are currently in the midst of raising additional funds.	In Jul'14, MyRepublic raised S\$24m from the Indonesian conglomerate, Sonar Mas, which also has a telco arm in Indonesia; and S\$10m from Xavier Neil, who founded Free Mobile in France. In Sep'15, MyRepublic raised S\$23m from Brunei's telco, DST Communications, among others. They are currently raising additional funds.
How much will it cost?	Consistel reckons that in order to build out a full network, an investment of up to S\$1bn, spread over multiple years, would be necessary. The estimated initial capex is more in the range of S\$600-800m.	MyRepublic believes that it can roll-out a network for ~S\$300m, excluding the licence fees.
What do they plan to do?	Consistel believes that its Atrium software, which relies on big data analytics to determine the best location for network deployment, will be able to cut down site locations by 10-20%. It believes that it has a cost advantage as it will not be constrained by legacy infrastructure and issues, and these costs savings from both deployment and lack of legacy could then end up benefitting customers in the form of lower subscription fees.	My Republic believes that by using cloud based applications and architecture, and by using HetNet network architecture, it will be able to reduce their roll-out cost. They are targeting a 10-15% market share, and think it can break-even with a 5% market share. They believe that monthly data plans of 10GB should be the standard, and will offer unlimited data plans.
Where are they lacking?	Whilst Consistel has a very strong implementation track-record, its lack of brand awareness within consumers and B2C marketing experience might prove to be stumbling blocks as they could run into issues selling the product even after building it.	MyRepublic has had a relatively successful track record in the fibre broadband business, having captured 5% of the market. This has given them some brand recognition within consumers,
Other notable points?	Consistel has managed to attract a strong advisory board, which consists of: George Yeo - Former Sg Foreign Affairs Minister Khoo Boon Hui - Former Commissioner of SG Police Michael Yap - Former Deputy CEO of IDA	MyRepublic is doing a network trial in Jurong Lake District, where it is rolling out HetNet as a proof of concept, to show what they can do if they do get the 4th telco licence

Source: CLSA, company statements

Bands under 1GHz have a better coverage radius vs higher frequency spectrums

Figure 10

Spectrum propagation characteristics



Source: CLSA, Analysys Mason

Figure 11

Singapore Telcos price valuation

Name	Ticker	Rec	TP	Mkt Cap	PE (x)		PB (x)		EV/EBITDA (x)		Div. Yield (%)	
					S\$	US\$m	15CL	16CL	15CL	16CL	15CL	16CL
SingTel	ST SP	BUY	S\$4.21	41,927	15.6	15.4	2.3	2.2	11.3	11.1	4.8	4.9
StarHub	STH SP	SELL	S\$3.10	4,386	16.2	18.1	32.2	34.6	9.2	9.6	5.7	5.7
M1	M1 SP	SELL	S\$2.44	1,716	13.2	14.3	5.7	5.4	7.9	8.3	6.1	5.6
Wt. Avg.				48,029	15.6	15.6	5.2	5.3	11.0	10.8	4.9	5.0

Source: CLSA, Bloomberg

Valuation details - M1 Ltd M1 SP

We value M1 using a DCF methodology, which is based on a WACC of 6.9% and long-term growth rate of 1.5%. Our WACC assumption is based on long-term debt/equity of 60%, 3% risk-free rate, 6% market risk premium and beta of 1.0x, cost of debt at 4% and a tax rate of 17%.

Investment risks - M1 Ltd M1 SP

Key risks to our view include: an extended period of low interest rates, which could lead to further yield compression and thus push the stock higher; and the failure of a fourth mobile operator to enter the market, which will maintain the status quo and hence trigger a rerating of the stock.

Valuation details - Singapore Telecommunications Ltd ST SP

Our target price is based on a sum-of-the-parts methodology, which in turn is based on DCF-derived values for its Singapore and Australia businesses, while associate stakes are pegged to our target prices for the listed companies (Bharti, AIS, Globe and Singpost) and 8x EV/Ebitda for Telkomsel. Our DCF value for the Singapore business uses a WACC of 6.6% and long-term growth rate of 2%. Similarly, our DCF value for Australia uses a WACC of 7.2% and a 2% long-term growth rate.

Investment risks - Singapore Telecommunications Ltd ST SP

Key risks for the business include: entry of a fourth mobile operator in Singapore; unfavourable currency movements; and a decline in enterprise spending on telecommunications.

Valuation details - StarHub Ltd STH SP

We base our target on DCF with a 7.1% WACC and a 1.5% terminal-growth rate, which reflects the mature nature of the Singapore market and growth headwinds the company faces from a structural decline in pay TV, as well as the potential entry of a fourth telco.

Investment risks - StarHub Ltd STH SP

Key risks to our negative view on the stock include: (extended period of low interest rates, which could sustain even higher valuations; better-than-expected Arpu growth in the cable-TV business, driven by popular local content, as well as a rising subscriber base from record home completions in Singapore; and a failed entry by a fourth MNO into the Singapore mobile market, maintaining the status quo for the incumbent telcos.

Companies mentioned

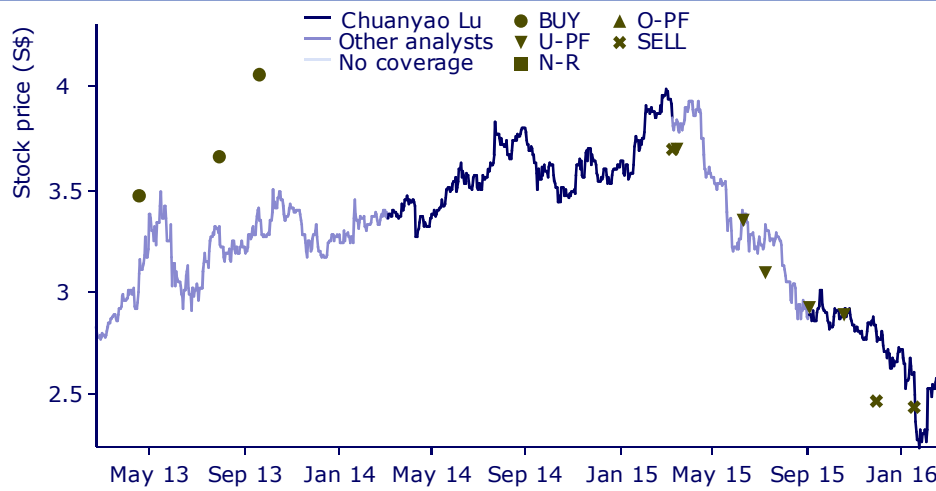
M1 (M1 SP - S\$2.52 - SELL)
 Singtel (ST SP - S\$3.76 - BUY)
 StarHub (STH SP - S\$3.49 - SELL)

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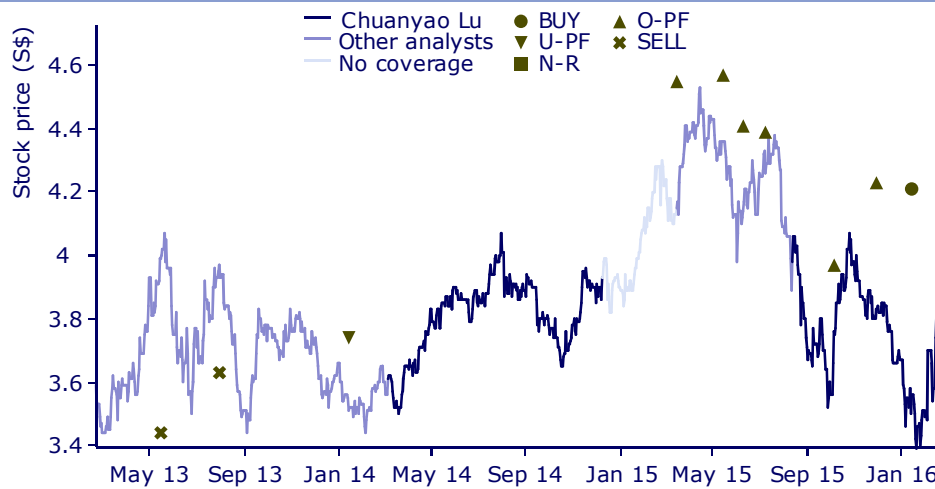
Recommendation history of M1 Ltd M1 SP



Date	Rec	Target	Date	Rec	Target
18 Jan 2016	SELL	2.44	16 Mar 2015	U-PF	3.70
30 Nov 2015	SELL	2.47	10 Mar 2015	SELL	3.70
19 Oct 2015	U-PF	2.89	20 Sep 2013	BUY	4.06
04 Sep 2015	U-PF	2.93	30 Jul 2013	BUY	3.66
09 Jul 2015	U-PF	3.10	17 Apr 2013	BUY	3.47
10 Jun 2015	U-PF	3.35			

Source: CLSA

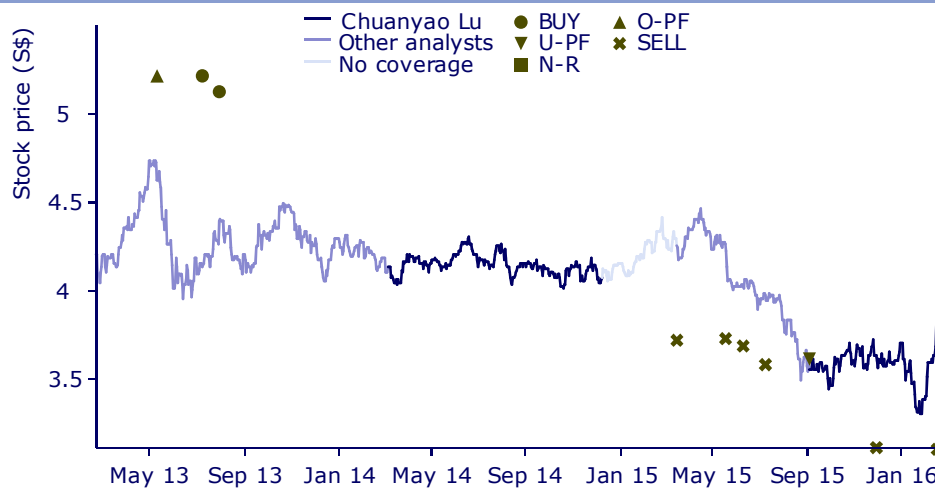
Recommendation history of Singapore Telecommunications Ltd ST SP



Date	Rec	Target	Date	Rec	Target
15 Jan 2016	BUY	4.21	16 Mar 2015	O-PF	4.55
30 Nov 2015	O-PF	4.23	09 Dec 2014	Dropped Coverage	
06 Oct 2015	O-PF	3.97	14 Jan 2014	U-PF	3.74
09 Jul 2015	O-PF	4.39	30 Jul 2013	SELL	3.63
10 Jun 2015	O-PF	4.41	15 May 2013	SELL	3.44
15 May 2015	O-PF	4.57			

Source: CLSA

Recommendation history of StarHub Ltd STH SP



Date	Rec	Target	Date	Rec	Target
17 Feb 2016	SELL	3.10	16 Mar 2015	SELL	3.72
30 Nov 2015	SELL	3.11	09 Dec 2014	Dropped Coverage	
04 Sep 2015	U-PF	3.61	30 Jul 2013	BUY	5.12
09 Jul 2015	SELL	3.58	08 Jul 2013	BUY	5.21
10 Jun 2015	SELL	3.68	10 May 2013	O-PF	5.21
18 May 2015	SELL	3.73			

Source: CLSA

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