Malaysia Media TV digitization in full swing

Update on TV digitization - Maintain BUY on MPR

We organized a site visit to MYTV Broadcasting's (MYTV) Digital Multimedia Broadcasting Hub. With 85% of the population currently covered by the digital terrestrial TV broadcasting (DTTB) platform, we opine that the TV digitization process is in full swing. More importantly, the rate of new FTA TV channels launched will now be gradual and the impasse over the annual rental fees that MYTV intends to charge FTA TV channels may be resolved soon. Maintain BUY on MPR, HOLD on ASTRO.

TV digitization has begun in earnest

85% of the population has been covered by the DTTB platform since Jan 2016. MYTV also currently has the capacity to launch 30 FTA TV channels. 98% of the population will be covered by the DTTB platform by 2017 but to be fair, it requires a lot more infrastructure and effort than covering 85% of the population. Analogue switch off (ASO) date has been set for Jun 2018 at latest and it will still be within the target ASO date for all ASEAN countries to migrate to the DTTB platform by 2018. All in all, we opine that the TV digitization process is in full swing.

Fears over competition and rental fees overblown?

MYTV initially targeted to upgrade its capacity to launch 80 FTA TV channels by 2019. Currently, MYTV will still upgrade its capacity to launch 80 FTA TV channels but gradually over a longer period. Various parties have expressed interest in launching 45 FTA TV channels (and thus leasing the 45 FTA TV channel capacity from MYTV) but we understand that only a fraction may eventually launch due to licensing requirements. The impasse over the annual rental fees that MYTV initially targeted to charge FTA TV channels (SD: MYR12m, HD: MYR25m) may also be resolved soon with revised rental fees based on bandwidth.

be sufficiently compelling to wrest significant TV adex share from MPR or compel ASTRO subscribers to discontinue their subscriptions. Although the revised rental fees based on bandwidth have not been announced yet, we gather that they will not exert downward pressure on MPR's margins. Maintain BUY call on MPR and HOLD call on ASTRO.

Status quo for MPR and ASTRO in the short-term We are relieved that the TV landscape will not be inundated with FTA TV channels so soon. Although we understand that RTM (Not Listed) will launch six new FTA TV channels, we do not believe that their content will

Stock	Bloomberg	Mkt cap	Rating	Price	ТР	Upside	P/E	(x)	P/B	(x)	Div yl	d (%)
	code	(USD'm)		(LC)	(LC)	(%)	15E	16E	15E	16E	15E	16E
Astro Malaysia	ASTRO MK	3,420	Hold	2.74	2.80	2	27.4	22.5	20.5	23.7	4.0	4.4
Star Media Grour	STAR MK	422	Hold	2.38	2.40	1	15.4	13.9	1.5	1.5	6.3	6.7
Media Prima	MPR MK	346	Buy	1.30	1.53	17	10.7	10.1	0.9	0.9	6.2	6.2
Media Chinese In	MCIL MK	267	Buy	0.66	0.73	11	7.7	8.5	1.4	1.3	5.2	5.9

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Update on TV digitization

Visited Digital Multimedia Broadcasting Hub

We organized a site visit to MYTV Broadcasting's (MYTV) Digital Multimedia Broadcasting Hub (DMBH) at Cyberjaya on 4 Feb 2016 to get an update on TV digitization in Malaysia. We were hosted by Mohamed Redzwan Yahya - COO, Haniza Ros Nasaruddin - CCO and Hamdan Mohamad - VP, Communications. To refresh your memory on TV digitization in Malaysia, please refer to our 27 Sep 2015 report (<u>link</u>).

Fig 1: Digital Multimedia Broadcasting Hub

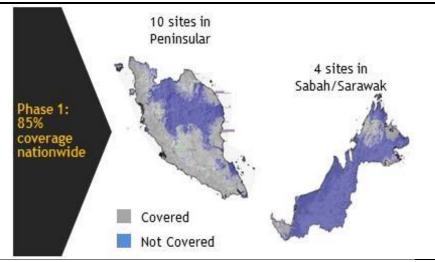


Source: MYTV

85% of population currently covered by DTTB

The digital terrestrial TV broadcasting (DTTB) rollout commenced in Apr 2015. Phase 1 targets to cover 85% of the population, focusing on the East Coast of Peninsular Malaysia. Testing commenced in Apr 2015 with 20,000 set-top-boxes (STB) and the 85% coverage was achieved in Jan 2016. The 85% coverage involved only 14 transmitters and all of them were already installed and leased from Telekom Malaysia (T MK, HOLD, TP: MYR7.00).

Fig 2: DTTB roll-out phase 1 (85% coverage)



Source: MCMC

Capacity to launch 30 FTA TV channels achieved

The DMBH is also housing three multiplexers (MUX) which enable MYTV to launch 30 FTA TV channels (assuming SD:HD FTA TV channel mix of 70%:30%). Simulcast (simultaneous broadcasting of analogue and digital TV signals) commenced in Apr 2015. For now, only Al-Hijrah is being broadcast in HD. Displayed at the top of every FTA channel were the words 'Siaran ujian DTT' in Malay which means 'DTT test broadcast' in English.

Fig 3: DTT test broadcast of FTA TV channels in Malaysia



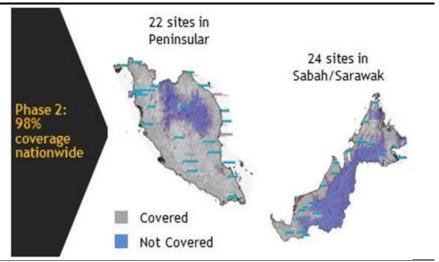
Source: Maybank Kim Eng

Analogue switch off date by Jun 2018

A lot more effort required for 98% coverage

Phase 2 targets to cover 98% of the population including the remainder of Peninsular and East Malaysia. To be fair, MYTV has to install 46 transmitters and 40 gap fillers to increase coverage of the population by only 13ppts to 98%. Recall that the 85% coverage involved only 14 transmitters. Thus, we gather that the 98% coverage will only be achieved in 2017.

Fig 4: DTTB roll-out phase 2 (98% coverage)



Source: MCMC

ASO date by Jun 2018 at latest

Given that 98% coverage will likely be achieved in 2017, we understand that the analogue switch off (ASO) date has been scheduled for Jun 2018. By then, MYTV would have supplied 2m households with STBs. MYTV will commence supplying the 2m STBs in Aug 2016. The threshold for ASO is 90% of the 7m Malaysian TV households having STBs, integrated digital tuner TVs or Pay TV. We understand that the ASO date may be earlier if the 90% threshold is achieved earlier.

Fig 5: Presentation of test STBs in Kota Kinabalu, Sabah on 9 Aug 2015



Source: MYTV

New FTA TV channels to be launched gradually

Initially targeted capacity of 80 FTA TV channels by 2019

There are seven existing FTA TV channels in Malaysia. MYTV currently has the capacity to launch 30 FTA TV channels via three MUXs and initially targeted to upgrade its capacity to launch 60 FTA TV channels by end-2017 via six MUXs. By end-2019, it initially targeted to upgrade its capacity to launch a total of 80 FTA TV channels via a total of eight MUXs. 70% were initially targeted to be in SD and 30% were initially targeted to be in HD.

Fig 6: Existing FTA TV channels in Malaysia

Channel	Operator	Genre/Content
TV3	MPR	Urban Malay
8TV	MPR Chinese/English	
ntv7	MPR	Chinese/English
TV9	MPR	Rural Malay
TV1	RTM	Rural Malay
TV2	RTM	Various
Al-Hijrah	AL-HIJRAH	Muslim

Source: MPR, RTM, Al-Hijrah Media Corporation

New FTA TV channels to be launched over a longer period

MYTV still intends to install eight MUXs in the long term but we understand that the additional three MUXs that will upgrade its capacity to launch 60 FTA TV channels will be installed in 2019 (originally by end-2017) and the two MUXs that will upgrade its capacity to launch 80 FTA TV channels will be installed from 2020 onwards (originally by end-2019). We opine that this is a wise move as the still weak adex sentiment is unlikely to support 80 FTA TV channels by 2019.

Fig 7: Revised MYTV MUX deployment plan

Number of MUXs	Period	Capacity
3	2015	30 FTA TV channels
3	2019	30 FTA TV channels
2	>2020	20 FTA TV channels
8		80 FTA TV channels

Source: MYTV

Only a fraction may eventually launch though

MYTV represented that various parties have expressed interest in launching a total of 45 FTA TV channels and thus, leasing 45 FTA TV channel capacity from MYTV. That said, only a fraction of these 45 may eventually launch as they still have to apply for a Content Applications Service Provider (CASP) license from the Malaysian Communications and Multimedia Commission (MCMC). To date, we understand that only six new FTA TV channels have been approved and they are all by an incumbent, RTM.

Fig 8: Six new RTM FTA TV channels	Fig 8:	Six new	RTM FTA	TV channels
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Channel	Operator	Genre/Content		
TVi	RTM	East Malaysian		
Parlimen	RTM	Parliament		
Salam	RTM	Muslim		
BEST1	RTM	News		
krayon	RTM	Cartoon		
Iris	RTM	Women		
Source: RTM				

Source: RTM

End to FTA TV channel rental fees impasse?

Initial FTA TV channel rental fees were expensive

MYTV initially planned to lease out FTA TV channels on an annual basis or on an ad hoc basis. The initial annual rental fee for a 24-hour FTA TV channel was MYR12m for SD and MYR25m for HD. We understand that effectively all the incumbents (RTM and MPR) and potential new entrants (STAR) balked at the initial annual rental fees as they effectively set the break-even point of a FTA TV channel at MYR50m-MYR60m.

Fig 9: Initial annual rental fees

Medium	Resolution	Annual rental fee
FTA TV	SD	MYR12.0m
FTA TV	HD	MYR25.0m
Radio	Audio	MYR0.5m
Radio	Audio & video	MYR3.0m

Source: MYTV

More dynamic pricing for FTA TV channel rental fees?

We understand that MYTV will employ a more dynamic approach to pricing rental fees to one based on bandwidth (SD: 2.65Mbps, HD: 7.85Mbps). Going forward, we understand that FTA TV channels can even broadcast certain content in SD (e.g. news) and certain content in HD (e.g. sports) rather than broadcast all content in either SD or HD. This will allow the FTA TV channels to manage their rental fees better.

New FTA TV channel rental fees to be 'palatable'

MYTV did not reveal to us what the new rental fees based on bandwidth are yet. Our sources at the incumbents reveal that they too do not know what the new rental fees are yet. That said, MYTV represented that an announcement on the new rental fees will be made soon and that the new rental fees will be 'palatable' to both incumbents and potential new entrants.

Potential impact on MPR and ASTRO

Competition from new FTA TV channels to be gradual

We are relieved that MYTV's revised plan to upgrade its capacity to launch 80 FTA TV channels will be phased over a longer period versus three initially. Again, we opine that this is a wise move as the still weak adex sentiment is unlikely to support 80 FTA TV channels by 2019. While various parties have expressed interest in 45 FTA TV channels, only a fraction may eventually launch as they still have to apply for CASP licenses.

Unsure if new RTM FTA TV channels will pose a threat

Despite owning and operating 29% of the FTA TV channels in Malaysia, RTM commands only 14% net TV adex share. We gather that this is due to its less than compelling content. Therefore, we are doubtful that the six new RTM FTA TV channels will broadcast better content. While one may reason that they will wrest TV adex share from the **MPR** FTA TV channels, we opine that they may also cannibalize TV adex share from TV1 and TV2.

Fig 10: Net TV adex share by FTA TV channel

2007	2008	2009	2010	2011	2012	2013	2014	9M15
55.2%	56.6%	54.5%	53.5%	54.3%	55.1%	54.7%	50.2%	52.8%
13.4%	12.2%	11.3%	11.7%	12.5%	10.9%	11.2%	10.7%	11.8%
13.3%	14.1%	11.1%	11.5%	11.7%	9.8 %	9.9 %	8.6%	8.6%
6.3%	6.6%	8.0%	7.8%	7.0%	8.0%	9.0%	9.6%	11.8%
3.3%	3.2%	3.1%	3.2%	3.4%	4.2%	3.4%	4.4%	3.7%
8.5%	7.2%	11 .9 %	12.3%	11.1%	12.0%	9.4%	10.0%	9.5%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	6.5%	1.9%
100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	55.2% 13.4% 13.3% 6.3% 3.3% 8.5% 0.0%	55.2% 56.6% 13.4% 12.2% 13.3% 14.1% 6.3% 6.6% 3.3% 3.2% 8.5% 7.2% 0.0% 0.0%	55.2% 56.6% 54.5% 13.4% 12.2% 11.3% 13.3% 14.1% 11.1% 6.3% 6.6% 8.0% 3.3% 3.2% 3.1% 8.5% 7.2% 11.9% 0.0% 0.0% 0.0%	55.2% 56.6% 54.5% 53.5% 13.4% 12.2% 11.3% 11.7% 13.3% 14.1% 11.1% 11.5% 6.3% 6.6% 8.0% 7.8% 3.3% 3.2% 3.1% 3.2% 8.5% 7.2% 11.9% 12.3% 0.0% 0.0% 0.0% 0.0%	55.2% 56.6% 54.5% 53.5% 54.3% 13.4% 12.2% 11.3% 11.7% 12.5% 13.3% 14.1% 11.1% 11.5% 11.7% 6.3% 6.6% 8.0% 7.8% 7.0% 3.3% 3.2% 3.1% 3.2% 3.4% 8.5% 7.2% 11.9% 12.3% 11.1% 0.0% 0.0% 0.0% 0.0% 0.0%	55.2% 56.6% 54.5% 53.5% 54.3% 55.1% 13.4% 12.2% 11.3% 11.7% 12.5% 10.9% 13.3% 14.1% 11.1% 11.5% 11.7% 9.8% 6.3% 6.6% 8.0% 7.8% 7.0% 8.0% 3.3% 3.2% 3.1% 3.2% 3.4% 4.2% 8.5% 7.2% 11.9% 12.3% 11.1% 12.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	55.2% 56.6% 54.5% 53.5% 54.3% 55.1% 54.7% 13.4% 12.2% 11.3% 11.7% 12.5% 10.9% 11.2% 13.3% 14.1% 11.1% 11.5% 11.7% 9.8% 9.9% 6.3% 6.6% 8.0% 7.8% 7.0% 8.0% 9.0% 3.3% 3.2% 3.1% 3.2% 3.4% 4.2% 3.4% 8.5% 7.2% 11.9% 12.3% 11.1% 12.0% 9.4% 0.0% 0.0% 0.0% 0.0% 0.0% 2.4%	55.2% 56.6% 54.5% 53.5% 54.3% 55.1% 54.7% 50.2% 13.4% 12.2% 11.3% 11.7% 12.5% 10.9% 11.2% 10.7% 13.3% 14.1% 11.1% 11.5% 11.7% 9.8% 9.9% 8.6% 6.3% 6.6% 8.0% 7.8% 7.0% 8.0% 9.0% 9.6% 3.3% 3.2% 3.1% 3.2% 3.4% 4.2% 3.4% 4.4% 8.5% 7.2% 11.9% 12.3% 11.1% 12.0% 9.4% 10.0% 0.0% 0.0% 0.0% 0.0% 0.0% 2.4% 6.5%

* Yellow denotes MPR group, grey denotes RTM group Source: Nielsen Medie Pesserch

Source: Nielsen Media Research

Although the six new RTM channels will bring the number of FTA TV channels from seven to 13, we are doubtful that the content offering on the RTM FTA TV channels will be compelling enough for **ASTRO** subscribers to discontinue their subscriptions. Already ASTRO offers the subscription-free NJOI product, albeit a one-time payment of MYR428 applies, which grants viewers free access to 28 TV channels and 20 radio channels.

Pressure on MPR margins to be relieved?

In our 27 Sep 2015 report, we examined the impact that the initial annual rental fee of MYR12m for SD channels, MYR25m for HD channels and MYR0.5m for radio channels may have on MPR's earnings. It appeared that MPR's EBITDA may be diluted by MYR7m p.a. if all its FTA TV channels will continue to be broadcast in SD but by a whopping MYR59m p.a. if all its FTA TV channels will be broadcast in HD going forward.

Fig 11: Potential dilution to MPR EBITDA (MYRm) assuming SD broadcast

Annual rental fee	Channels	Total
А	В	C=AXB
12.0	4	48.0
0.5	3	1.5
		49.5
		42.2
		7.3
	A 12.0	A B 12.0 4

Source: Maybank Kim Eng

Fig 12: Potential dilution to MPR EBITDA (MYRm) assuming HD broadcast

	Annual rental fee	Channels	Total
	А	В	C=AXB
FTA TV channel	25.0	4.0	100.0
Radio	0.5	3.0	1.5
Total (C)			101.5
2014 transmission fees (D)			42.2
Additional expense (E=C-D)			59.3
Source: Maybank Kim Eng			

With MYTV representing that the new rental fees based on bandwidth will be 'palatable' to both incumbents and potential new entrants, we gather that the pressure on MPR's EBITDA and margins may be relieved. That said, we are unable to quantify the impact the new rental fees based on bandwidth will have on MPR's EBITDA and margins until they are finally announced by MYTV. Our earnings estimates for MPR have imputed annual rental fees of MYR42m-MYR45m.

Maintain BUY call on MPR and HOLD on ASTRO

With competition from new FTA TV channels to be gradual, less than compelling content from the six new RTM FTA TV channels, and potential relief of pressure on MPR's EBITDA margins, we maintain our estimates, BUY call and MYR1.53 TP on 1.0x end-FY16 P/BV for MPR. Our MPR earnings estimates assume that it will continue to command 85% share of net TV adex and incur annual rental fees of MYR42m-MYR45m.

Like MPR, with competition from new FTA TV channels to be gradual and less than compelling content from the RTM FTA TV channels, we maintain our earnings estimates, HOLD call and MYR2.80 DCF-based TP (9.3% WACC, 2.5% long-term growth) for ASTRO. Our ASTRO estimates assume FY17/FY18/FY19 net additions of 0k/150k/150k and FY17/FY18/FY19 ARPU of MYR100/MYR101/ MYR102. We gather that the TV digitization process will make the TV landscape more competitive only in the long term.

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Adex	Advertising expenditure; sometimes used to refer to 'advertising revenue' in a company
ASO	Analogue switch off; analogue terrestrial TV broadcasting is ceased and replaced with digital terrestrial TV broadcasting
FTA	Free-To-Air
HD	High-Definition; commonly refers to TV or video at a resolution of either 720p, 1080i or 1080p
HD TV	Refers to either a TV capable of receiving and properly displaying an HD resolution TV signal of HD TV services in general
Multiplexer	Device that combines several analogue or digital TV signals into a single frequency. Accommodates 13-15 SD or 4-6 HD TV channels.
SD	Standard definition
Terrestrial	The oldest and most common technology for TV broadcasting. Transmits analogue signals utilising the ultrahigh frequency band.
TV Households	Households with at least one TV set. In the Malaysian context, we only consider Malaysian citizens and exclude non-citizens.
Source: Various	

Fig 13: Glossary of technical terms

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