Malaysia

Underweight *(previously Neutral)*

Highlighted Companies

Maxis Berhad
REDUCE, TP RM3.80, RM4.35 close

We forecast FY21F/22F core EPS to ease 4.3%/1.3% yoy on higher depreciation/interest cost and Makmur tax (FY22F), then rise 15.0% yoy in FY23F, on mobile revenue recovery (roaming, migrant/tourist subs), enterprise/home fibre growth and tax rate normalisation. There is risk of our FY22F/23F core EPS being lower by 3.6%/15.0% if the government proceeds with its SWN plans based on the current commercial wholesale offer.

Telekom Malaysia
ADD, TP RM7.50, RM5.08 close

We expect FY21F/22F/23F core EPS to rise 16.7%/2.8%/35.4% yoy (ex-Makmur tax: +16.7%/+17.4%/+18.8%) on Internet, ICT and data services revenue growth, with cost-saving initiatives helping to buffer any pressure from its fibre rollout acceleration.

Summary Valuation Metrics

P/E (x)	Dec-21F	Dec-22F	Dec-23F
Maxis Berhad	25.80	26.14	22.72
Telekom Malaysia	16.55	16.10	11.89

P/BV (x)	Dec-21F	Dec-22F	Dec-23F
Maxis Berhad	5.08	5.28	5.34
Telekom Malaysia	2.52	2.37	2.20

Dividend Yield	Dec-21F	Dec-22F	Dec-23F
Maxis Berhad	3.91%	4.60%	4.60%
Telekom Malaysia	3.63%	3.73%	5.05%

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Telco - Overall

Potential 5G pains for MNOs

- Our in-depth look at DNB's commercial offer shows that MNOs may have to pay substantial 5G wholesale fees from FY23F onwards.
- This may hit Maxis's FY23-31F core EPS by 15-33%. We think consensus has yet to factor this in due to lack of information on DNB's wholesale fees.
- Downgrade sector to Underweight and Maxis to Reduce with revised TP of RM3.80. Our top pick remains TM (T MK, Add, TP: RM7.50).

MNOs may have to pay substantial 5G wholesale fees from FY23F

If the government proceeds with its plan to accelerate the rollout of the 5G single wholesale network (SWN) via Digital Nasional Bhd (DNB; Unlisted), we estimate each mobile network operator (MNO) may be charged substantial minimum wholesale fees of RM303m/403m/432m/432m in FY23F/24F/25F/26F, based on DNB's commercial offer and timeline for site rollout. For Maxis (MAXIS MK, Reduce, TP: RM3.80), we project this could further rise to RM577m-1.5bn p.a. in FY27-31F, driven by traffic volume growth.

Minimal incremental 5G revenue and sticky 4G capex means…

We believe MNOs may not be able to generate much extra mobile revenue from 5G in the near/mid-term due to a) lack of unique "killer" use cases and b) still limited coverage in the first few years, while c) 5G device penetration will take time to rise. We do see potential for new 5G enterprise revenue streams, but widescale commercialisation may be 3-5 years away. While DNB pays for 5G capex, we think MNOs' capex will not drop much in FY22-24F due to a) JENDELA's 4G coverage/speed targets and b) still growing 4G traffic. MNOs' capex may fall from FY25F as they offload more 4G traffic onto DNB's 5G network when coverage is wider and 5G device penetration is higher, in our view.

… MNOs' core EPS could be significantly hit in the SWN scenario

If the above SWN scenario materialises, our FY22F core EPS for Maxis could be lower by 3.6% and by a bigger 15.0-33.4% for FY23-31F. The resulting FY22-23F core EPS would be 10-19% below current Bloomberg consensus estimates. We think this indicates that the market has yet to factor in substantial 5G wholesale fees to DNB due to the lack of information on the rate and fee structure thus far.

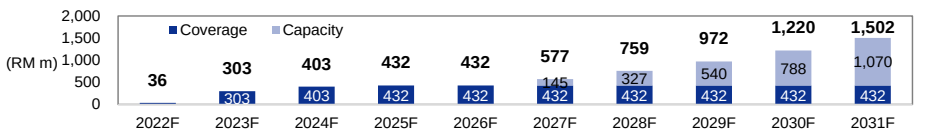
More intense mobile competition in the long run is another risk

When DNB's 5G coverage exceeds 90% in 2027F, we believe smaller MNOs (Webe, Yes) may be able to compete more effectively vs. the Big 4 MNOs. Our back-of-the-envelope calculation suggests that Webe may be able to offer a 150GB 5G plan for RM60/month and still earn EBITDA margin above 30%. In this scenario, incumbent MNOs may have to raise their plan quotas to stay competitive, resulting in an inability to monetise 5G traffic growth, or worse, experience an ARPU decline/market share loss.

Downgrade sector to Underweight & Maxis to Reduce

The government may decide on its SWN plan in Feb 2022. However, as the potential earnings downside risk is quite big and MNO share prices have yet to reflect this in a major way, we turn from sector Neutral to Underweight. We also downgrade Maxis from Hold to Reduce with a revised TP of RM3.80 (20% discount applied to its DCF-based fair value). We continue to prefer the fixed segment due to better revenue growth prospects, more benign competition and less regulatory risk. Telekom Malaysia remains our top Malaysian telco pick, with unchanged DCF-based TP of RM7.50. Key upside risks: lower 5G wholesale fees, cancellation of SWN or MNOs offered equity stakes in DNB.

Figure 1: Estimated 5G wholesale fee for Maxis in the SWN scenario



SOURCES: CGS-CIMB RESEARCH ESTIMATES, DNB

Figure 2: ASEAN Telco sector comparison

Company	Bloomberg Ticker	Recom.	Closing Price (local curr)	Target Price (local curr)	Mkt Cap (US$ m)	Core P/E (x)		EV/EBITDA (x)		EV/OpFCF (x)		3-year CAGR (%)		Dvd Yield (%)	
						2021F	2022F	2021F	2022F	2021F	2022F	EPS	EBITDA	2021F	2022F
Maxis	MAXIS MK	REDUCE	4.35	3.80	8,134	25.8	26.1	11.0	10.3	17.2	14.8	2.8	4.2	3.9	4.6
Telekom Malaysia	T MK	ADD	5.08	7.50	4,580	16.5	16.1	5.6	5.2	9.8	9.1	17.6	5.1	3.6	3.7
MY telcos average (ex-outliers)						**26.0**	**23.6**	**8.5**	**8.0**	**14.1**	**12.7**	**10.2**	**3.8**	**3.4**	**3.9**
SingTel	ST SP	ADD	2.48	2.90	30,444	19.6	15.2	8.2	7.3	15.4	16.6	22.1	1.8	3.8	4.9
Starhub	STH SP	ADD	1.32	1.70	1,698	17.3	18.8	6.9	6.7	11.6	10.5	1.2	(0.2)	4.6	4.3
SG telcos average (ex-outliers)						**18.4**	**17.0**	**7.6**	**7.0**	**13.5**	**13.5**	**11.7**	**0.8**	**4.2**	**4.6**
Telkom Indonesia	TLKM IJ	ADD	4,330	4,250	29,920	18.5	16.9	8.3	7.8	15.3	13.4	8.2	4.8	4.0	4.4
XL Axiata	EXCL IJ	ADD	3,050	3,500	2,282	34.1	18.2	4.7	4.3	11.6	9.5	45.3	4.8	1.5	3.3
Indosat	ISAT IJ	ADD	6,000	7,800	3,374	71.3	44.9	4.6	4.5	35.1	33.4	nm	9.4	30.0	1.1
Link Net	LINK IJ	ADD	4,380	5,200	875	13.2	13.2	5.5	4.9	16.7	13.5	2.3	7.5	2.3	2.3
Indo telcos average (ex-outliers)						**21.9**	**16.1**	**5.8**	**5.4**	**14.6**	**12.1**	**18.6**	**6.6**	**9.4**	**2.8**
Advanced Info Services	ADVANC TB	ADD	222.00	256.00	20,054	24.5	24.3	7.7	7.2	10.5	9.7	(0.4)	4.0	3.1	3.7
Total Access Communication	DTAC TB	ADD	47.00	52.70	3,380	34.3	29.6	5.4	5.2	10.4	10.1	(18.0)	2.3	4.4	4.5
True	TRUE TB	ADD	4.76	5.15	4,821	nm	nm	6.7	6.8	16.7	13.2	(18.1)	5.6	1.5	1.5
Jasmine Broadband Internet Infrastructure Fund	JASIF TB	HOLD	10.60	9.60	2,576	9.7	9.7	10.0	9.7	10.0	9.7	1.3	0.5	8.7	8.5
Digital Telecommunications Infrastructure Fund	DIF TB	ADD	14.30	17.20	4,618	12.2	12.4	12.1	12.3	12.1	12.3	0.0	(0.2)	7.3	7.2
Intouch	INTUCH TB	HOLD	77.75	73.60	7,573	23.7	23.5	19.9	19.6	19.9	19.6	1.0	1.0	3.2	3.8
Thai telcos average (ex-outliers)						**20.9**	**19.9**	**10.3**	**10.1**	**13.3**	**12.4**	**(3.2)**	**2.2**	**4.7**	**4.9**
ASEAN Telcos average (ex-outliers)						**22.2**	**19.7**	**8.4**	**8.0**	**13.8**	**12.6**	**7.4**	**3.5**	**5.5**	**4.1**

Note: Share prices as of 21 Jan 2022; operating FCF (OpFCF) is calculated as EBITDA minus average 3-year forward capex; core P/E is share price divided by core EPS (i.e. reported EPS excluding one-off extraordinary items); included only P/E ratios ranging between c.10-40x, EV/OpFCF of c.5-25x & EPS/EBITDA 3-year CAGR of -100% to +100% in our calculation of sector averages

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS, BLOOMBERG

Potential 5G pains for MNOs

5G wholesale fees to DNB may be substantial from FY23F onwards

Accelerated 5G rollout via a SWN by DNB… ➤

The Malaysian government announced plans to roll out a single wholesale network (SWN) for 5G via Digital Nasional Bhd (DNB; Unlisted) in the MyDigital initiative unveiled in Feb 2021. Since then, we have gathered more information on DNB, its rollout plans and wholesale pricing structure from its media releases, as well as spoken to its top management recently.

At the crux, DNB will undertake a supply-driven accelerated approach in the rollout of the 5G SWN, with targets to reach population coverage of 39%/73%/80% at end-2022/23/24F and more than 90% by 2027. Rollout started in 2021 with c.500 sites built at the end of the year in certain parts of Putrajaya, Cyberjaya and Kuala Lumpur, covering 10% of the population. Access to the network will be open to all licenced companies under the Communications and Multimedia Act (CMA) 1998.

Figure 3: DNB's 5G SWN coverage rollout timelines and targets

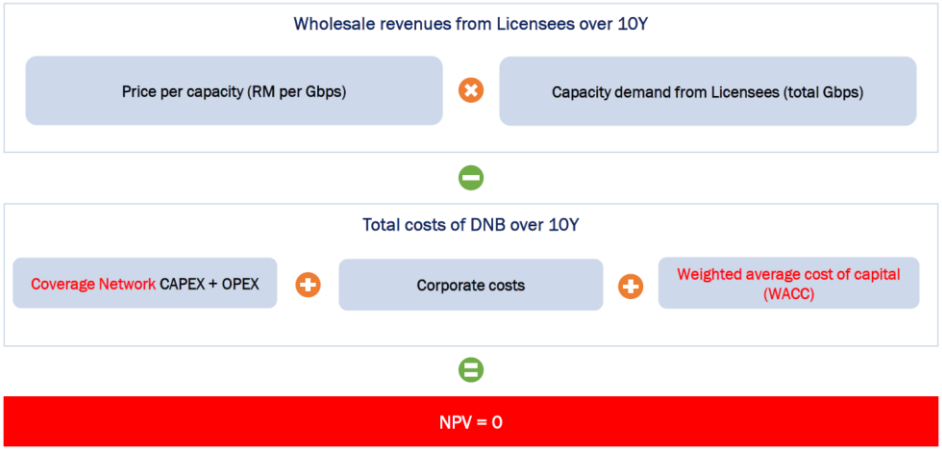
Year	2021	2022	2023	2024	2025-31
Phase	**1A (launched in Dec 2021)**	**1B**	**2**		**3**
5G population coverage	~10%	39%	73%	>80%	>90% by 2027
5G coverage areas	Putrajaya, Cyberjaya, Kuala Lumpur	Penang, Johor, Sabah, Sarawak, Selangor, Negeri Sembilan, Perak	Coverage for other major cities in Penang, Kedah, Kelantan, Labuan, Melaka, Perlis, Pahang, Johor, Sabah, Sarawak, Selangor, Negeri Sembilan, Perak		All states
Cumulative site count	500	4,018	7,509		10,167
5G penetration	~5%		~10%	~65%	~70%

SOURCES: DIGITAL NASIONAL BHD (DNB)

… may see minimum wholesale fees rising to an estimated RM432m p.a. in FY25F ➤

Allaying public concerns that it may take advantage of its monopoly to charge at will, DNB stated in a media report by The Vibes (10 Nov 2021) that it will take a cost-recovery approach in setting wholesale fees, as its sole purpose is to carry out the government's mandate to accelerate 5G network rollout for the country (not for profit maximisation). Its wholesale rate will be publicly published, regulated under the Mandatory Standard on Access Pricing (MSAP) and offered to all access seekers.

Figure 4: DNB's wholesale fees are set under a cost-recovery model



SOURCE: DNB

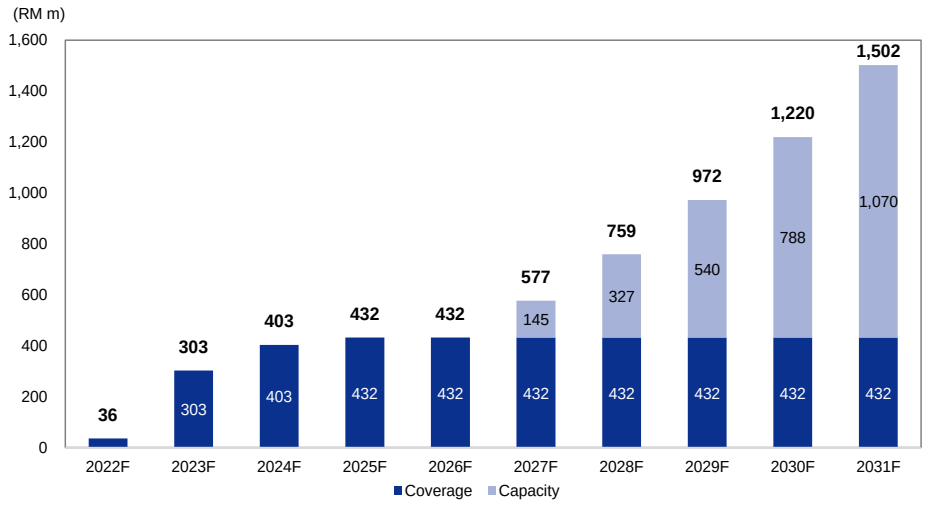
DNB during its analyst briefing mentioned that mobile network operators (MNOs)/access seekers will be offered a 5-year contract term for the wholesale agreement and that the fee will consist of two main components:

a) a fixed "Coverage" fee, based on a minimum volume commitment that rises to a total of 1,200Gbps/month when DNB has rolled out 7,509 sites (80% coverage) by end-2024. MNOs are not allowed to buy wholesale capacity for just selected sites or regions. The rate is set at RM30k/Gbps/month. Thus, the Coverage fee to be paid by each MNO would rise to an estimated RM432m p.a. (i.e. RM30k x 1,200Gbps x 12 months) from FY25 onwards, based on our estimates. This translates roughly into 13 sen/GB of capacity. However, the effective cost/GB for an MNO will certainly be higher, as the Coverage fee is fixed while the MNO's actual traffic is likely to be lower than the committed capacity (at least in the first 5 years, in our view); and

b) a variable "Capacity" fee that is charged based on additional capacity required on top of the minimum volume commitment. This is set at RM22k/Gbps/month, or 27% lower vs. the Coverage fee, giving MNOs that have larger subs and traffic scale slightly lower blended wholesale cost/GB. This translates roughly into 10 sen/GB of capacity.

To ease MNOs into the wholesale agreement, DNB is offering to charge on a pay per use (13 sen/GB) basis for Year 1, then revert to the Coverage and Capacity fee structure above for Years 2-5. As such, in the SWN scenario, we estimate Maxis may have to pay a small 5G wholesale fee of RM36m to DNB in FY22F (assuming its commercial wholesale agreement starts on 1 Apr 2022). Thereafter, this could jump substantially to RM303m/403m/432m/432m in FY23F/24F/25F/26F, based on our estimates. This is just the Coverage fee, which rises with the number of 5G sites rolled out. We expect Capacity charges to kick in only from FY27F (see explanation below), potentially driving Maxis's total 5G wholesale cost up to RM577m-1.5bn p.a. in FY27-31F.

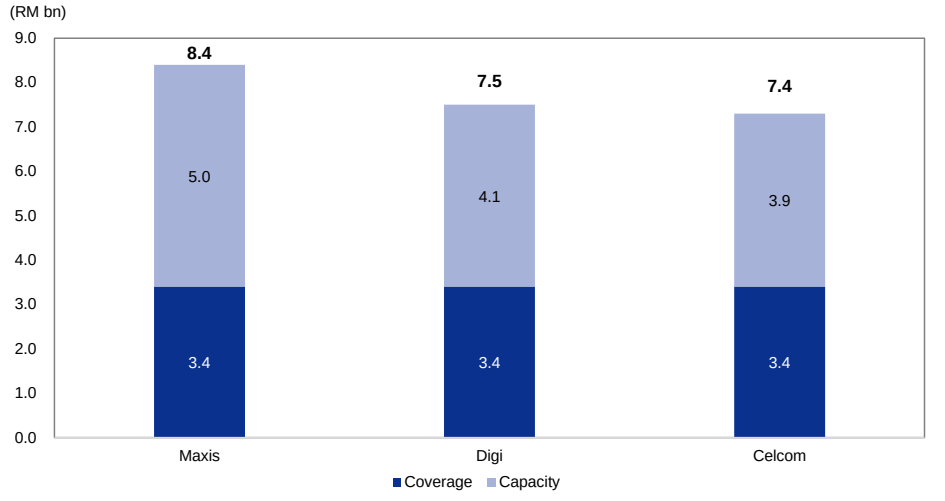
Figure 5: Estimated 5G wholesale fee for Maxis in the SWN scenario



SOURCES: CGS-CIMB RESEARCH ESTIMATES

We note that DNB forecasts the Big 3 MNOs (i.e. Maxis, Celcom (wholly-owned subsidiary of Axiata [AXIATA MK, Restricted] and Digi [DIGI MK, Restricted]) to pay cumulative wholesale fees of between RM7.4bn and RM8.4bn each over FY22-30F (nine years), according to DNB's analyst briefing presentation deck. For comparison, over the same duration in the SWN scenario, we estimate lower cumulative wholesale fees of RM5.1bn for Maxis, with the main difference being the Capacity charges (CGS-CIMB's RM1.8bn vs. DNB's projected RM5.0bn). It is possible that the more aggressive traffic projections that DNB is using come with additional revenue generation, and thus may not necessarily indicate the risk of a bigger hit to our net profit and FCFE forecasts for Maxis.

Figure 6: DNB's forecast of cumulative wholesale cost for Big 3 MNOs (2022-30)



SOURCES: DNB

Our 5G traffic projections and why Capacity charges may only kick in from FY27F onwards »

Based on typical daily traffic patterns, we estimate the minimum volume commitment (1,200Gbps over 7,509 sites) is sufficient for each MNO to support 5.5m 5G subs using an average 50GB/month, or 2.7m 5G subs if the average usage is at 100GB/month.

Figure 7: Throughput capacity vs. number of 5G subs at various data usage levels

Data usage (GB/sub/mth)	50	100	150	200
Throughput capacity (Gbps)	Number of 5G subs (m)			
600	2.8	1.4	0.9	0.7
1,200	5.5	2.7	1.8	1.4
2,400	11.0	5.5	3.7	2.7
3,600	16.5	8.1	5.4	4.2

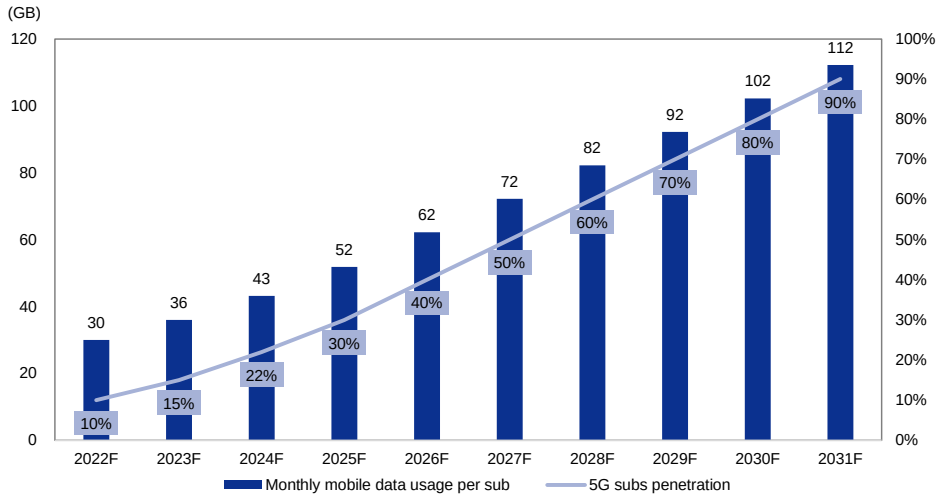
SOURCE: CGS-CIMB RESEARCH ESTIMATES

Based on this, we estimate the large MNOs will only need additional capacity beyond the minimum volume commitment in FY27F. This assumes:

i) the upgrade to 5G results in a sub's monthly data usage rising at an unabated 20% p.a. to 62GB by FY26F, then increases further by 10GB/month yoy from FY27F onwards. While one may argue for faster growth, we believe our assumption is realistic as it is applied on a high base of 25GB in FY21F, which was boosted by the work/study-from-home phenomena due to Covid-19 movement restrictions. Prior to Covid-19, 1Q20's average monthly data usage was 17GB, as per the Big 3's disclosures. In addition, while 5G subs consume 1.2-2.7x more data than 4G subs (based on Opensignal's Jun 2021 report titled "Quantifying the Impact of 5G and Covid-19 on Mobile Data Consumption"), the average monthly data usage of a 5G sub in a developed market like South Korea was at 38GB in 1Q21. Moreover, we think mobile data usage growth in Malaysia may also be somewhat tempered by the accelerated rollout of fibre broadband coverage under the National Digital Infrastructure Plan (JENDELA) (with more subs offloading their data usage onto fibre when at home); and

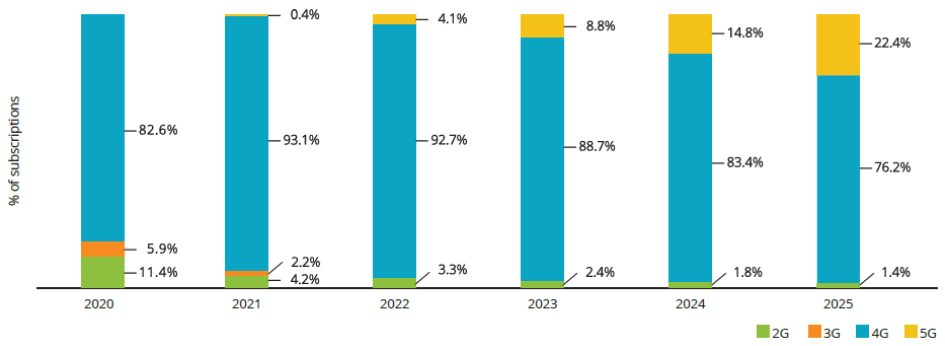
ii) 5G subs reach 30%/40%/50% of the total base in 2025F/26F/27F. This is more aggressive than market research firm International Data Corp's (IDC) forecast that there will be 12.7m 5G connections or roughly 22% of total subs in Malaysia by FY25 (as per its "Building a 5G Foundation for Digital Malaysia" report published in Oct 2021), as we think the influx of affordable Chinese 5G handsets will spur accelerated adoption. For reference, c.2.5 years after South Korea launched 5G services in Apr 2019, it had 20.1m 5G subs as at Nov 2021, or a penetration rate of 28%.

Figure 8: Monthly mobile data usage per sub vs. 5G subs penetration



SOURCE: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

Figure 9: IDC has a more conservative forecast of 5G connections growth in 2020-25



SOURCE: INTERNATIONAL DATA CORP (IDC)

MNOs may not be able to generate much incremental revenue from 5G in the near- to mid-term

MNOs may not be able to extract much or any premium for 5G services from mobile subs

Malaysian MNOs' pricing strategy for 5G services is unclear to us at the current juncture. From our discussions with the MNOs during past investor briefings, some take the view that industry players are likely to offer 5G to subs as a free network enhancement or that any premium charged initially would eventually dissipate beyond the early adopters. Others have stated that, with 5G, they hope to see revenues rising with traffic growth, suggesting an intention to monetise on 5G services.

We do not rule out the possibility of MNOs launching 5G plans at a slight 5-10% premium to their existing 4G plans. However, even if they do that, we believe it may be difficult for MNOs to compel a significant portion of their subs to pay the premium. This is because:

a) there is a lack of unique 5G "killer" use cases for the mainstream market at the moment, with 4G sufficient for most subs' current usage requirements (i.e. video streaming, social media);

b) 5G coverage will still be quite limited (especially in-building) in the first few years, making it less worthwhile for subs to pay the premium if they cannot consistently get 5G services; and

c) existing 4G plans already include rich quotas and it may be difficult for MNOs to incentivise subs to upgrade to 5G plans by throwing in 'value-for-money' additional quota. While Singapore telcos have had some success in uplifting postpaid average revenue per user (ARPU) using this 5G pricing strategy, we believe that this may be due to the existing 4G plans in that market having more modest quotas, wider availability of 5G services (estimated 50-75% at end-2021; island-wide by end-2022, according to StarHub at its 2021 Analyst Day briefing) and the higher purchasing power of the Singapore consumer.

Figure 10: Maxis' existing 4G postpaid plans have rich quotas

Plan	Maxis Postpaid				Hotlink Postpaid		
	98	128	158	188	30	40	60
Monthly fees (RM)	98	128	158	188	30	40	60
Data quota (GB)	50	70	90	110	2	12	30
Calls (min)	Unlimited				Unlimited		
SMS	Unlimited				Unlimited		
Other benefits	Free 30-day access to Viu, iQiyi, WeTV, iflix etc.				N/A		

SOURCES: CGS-CIMB RESEARCH, MAXIS WEBSITE

In addition, the take-up of 5G plans is subject to 5G device penetration in Malaysia, which will take time to increase. If Maxis offers 5G services for a RM5/month premium (on top of the current subscription fees) and half of its subs that have a 5G device opt in (i.e. an estimated 5%/8%/11%/15% of its total

base), we estimate it could generate incremental revenue of RM23m (9-month) /47m/69m/96m in FY22F/23F/24F/25F. This could boost its FY22-25F total revenue by a modest 0.2-0.9% and would be insufficient to offset the potential Coverage wholesale fee to DNB. As we mentioned above, it is unclear if Maxis will take this pricing strategy and whether any initial 5G premium charged may dissipate over time beyond the early adopters (as MNOs incentivise subs to move to the more cost-efficient 5G network) and due to competitive pressure.

5G FWA is a use case but may not represent a big revenue opportunity for MNOs in the near-term

5G Fixed Wireless Access (FWA) broadband may be a use case that MNOs can offer to consumers. However, we do not expect this to generate substantial new revenues for MNOs. While 5G FWA download speeds are faster (DNB is promising 100Mbps cell edge speed) than 4G FWA, we believe it would still be inferior and less consistent/reliable, especially in indoor settings, vs. fibre broadband (we estimate the majority of TM's unifi fibre broadband subs subscribe to 300Mbps or faster plans). 5G FWA plans may also come with limited quota (as MNOs have to pay additional Capacity fees to DNB if the traffic exceeds the minimum volume commitment), whereas fibre broadband plans are usually unlimited. Thus, 5G FWA is unlikely to be a viable substitute for fibre broadband, except for lighter-usage smaller households and in non-fibre covered areas, though these are possibly already served by 4G FWA. Fibre coverage is also expanding quickly into secondary/tertiary towns with 7.5m premises (out of total 9m households) to be passed by end-2022, based on JENDELA targets.

Widescale commercialisation of 5G enterprise solutions may still be 3-5 years away

According to the Malaysian Communications and Multimedia Commission (MCMC), the telco sector in Malaysia has collectively invested a total of RM116m into a series of 5G Demonstration Projects (5GDP) since Jan 2020. The demo projects aim to explore 5G use cases across nine segments, namely Digital Healthcare, Agriculture, Entertainment/Media, Smart Transportation, Manufacturing & Process Industries, Oil & Gas, Tourism, Education and Smart City. In addition, MNOs said during past investor briefings that they have been engaging and conducting 5G trials with partners over the past 18-24 months.

In Sep 21, Maxis was selected by Malaysia Airports (MAHB MK, Add, TP: RM6.95, CP: RM5.79) to co-develop a digital transformation roadmap for Smart Airport operations. Maxis will be managing the WiFi and 5G-related network services and solutions at both terminals of KL International Airport (KLIA). In the future, Maxis will also be developing 5G-enabled digital solutions for Malaysia Airports' tenants and passengers, as per the former's press release dated 20 Sep 2021. Maxis in a 19 Nov 2021 press release said that it was selected by national car maker Proton (Unlisted) to deploy a 5G use case comprising multiple converged solutions to power up its Tanjung Malim plant. This includes Smart Security systems to track and ensure the security of cars that roll off the production line and an Augmented Reality (AR)/Virtual Reality (VR) remote support and maintenance system that enables Proton engineers to communicate with their international partners in real time.

We are encouraged to see MNOs, such as Maxis, starting to make some progress in terms of developing the 5G enterprise business. However, we think the revenue contribution from this will not be significant until we see widescale commercialisation of 5G enterprise solutions, which may still be 3-5 years away in our view.

At our 2022 Malaysia Corporate Day (MCD22) conference in Jan 22, Maxis's CEO, Gokhan Ogut, said during its investor briefing that the partnership with MAHB is still in the planning stage, due to uncertainties around travel arising from Covid-19, and both parties are still exploring ways to work together on airport operations. Meanwhile, Maxis said it is in the more advanced stages in relation to its partnership with Proton and has started putting into play several

ideas in terms of smart manufacturing at its Tanjung Malim plant, though it has yet to commercialise this.

Small potential revenue from site leasing to DNB

Based on DNB's breakdown of the total base cost to build out the 5G SWN over 10 years from its analyst presentation deck, a sizeable RM4bn will go towards site leasing. However, only RM1bn has been allocated for site leasing from Maxis, Digi, TM, YTL Communications (60%-owned subsidiary of YTL Power International [YTLP MK, Add, TP: RM0.82, CP: RM0.63]), Celcom and U Mobile (Unlisted), as per the same deck above. According to the same presentation deck, another RM2.5bn will be allocated to various state-backed companies (SBCs)/network facilities providers (NFPs) and RM500m to edotco (63%-owned subsidiary of Axiata). If we assume that the Big 3 MNOs have a 70% share of the RM1bn site leasing revenue from DNB, each of them would only receive RM233m over 10 years, or an average of RM23m p.a.

Figure 11: MNOs will only receive RM1bn in site leasing revenues over 10 years, based on DNB's total base cost breakdown

Description	Estimated value (RM bn)	Potential allocated companies
5G network equipment	2.0	Ericsson
5G network rollout & managed services	2.0	Ericsson's subcontractors
Fibre leasing	2.5	TM & other fibre providers; majority of allocation will be to their subcontractors
Site leasing from SBCs/NFPs	2.5	Other suitable SBCs & NFPs
Site leasing from MNOs	1.0	Maxis, Digi, TM, YTL Communications, Celcom, U Mobile & their subcontractors
Site leasing from edotco	0.5	edotco & its subcontractors
Power utilities	1.0	Tenaga Nasional, Sarawak Energy, Sabah Electricity & their subcontractors
Apparatus Assignment fee	1.0	MCMC
Corporate costs	4.0	Staff, consultancy fees etc.
Total	**16.5**	

SOURCES: CGS-CIMB RESEARCH, DIGITAL NASIONAL BHD (DNB)

4G capex may not decline until possibly FY25F

DNB will incur the capex to roll out 5G…

As DNB will be the sole party rolling out the 5G SWN, it will incur the i) capex to build out the radio access network (RAN) and 5G core (5GC), ii) opex to run the network (fibre/tower leases, power, maintenance etc.), iii) spectrum payments and iv) corporate costs (staff, consultancy fees etc). DNB said in a 16 Oct 2021 media report by StarBiz that the total base cost is RM16.5bn over 10 years, with 80% coverage (7,509 sites) to be achieved by end-2024. According to the same article, another RM3.5bn may be incurred from 2025-31, bringing the total cost to RM20bn, to upgrade the network coverage to more than 90% (10,167 sites) and beyond the baseline capacity.

We understand the Big 4 MNOs plan to build their own 5GC and integrate it with DNB's RAN, and that this investment will be fairly modest (possibly just RM50m-100m). Having their own 5GC will enable MNOs to a) somewhat differentiate their products/services (with network slicing capabilities), especially for enterprise customers, b) avoid longer new product development cycle time and c) enable seamless integration between DNB's 5G and telcos' 2G/4G networks for better customer experience.

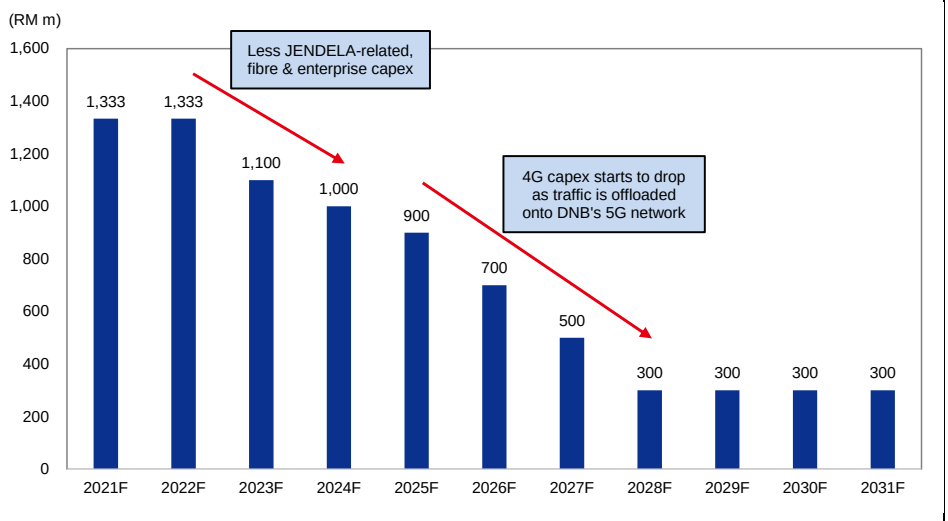
… but MNOs' capex may not fall off until possibly FY25F

While 5G capex will be largely incurred by DNB, we believe that MNOs' capex is unlikely to decline substantially in FY22-24F due to a) the need to meet JENDELA's 4G coverage (end-2022/25: 97%/100%) and speed targets (end-2022: 35Mbps); b) still growing 4G traffic (IDC projects 4G will still make up 76% of total mobile connections by 2025); and c) some 5GC network investment.

At our MCD22 conference, Maxis also said during its briefing that it needs to continue investing in 4G and does not see capex declining in the next few years as it will be more difficult to manage the data traffic transition from 4G to 5G networks, as it is not the one that is rolling out the latter. It also plans to invest in fibre rollout for 450k new homes passed in the next 12-18 months and to expand its enterprise business (order-driven).

Nevertheless, in the SWN scenario, we believe Maxis's capex may progressively decline from FY25F onwards as DNB's 5G coverage would have reached 80% by end-2024 (covering most of the high-traffic areas), thereby allowing Maxis to more substantially offload 4G traffic onto the 5G network. By FY29F, we project capex may potentially fall to a steady state of only RM300m p.a., mainly for 4G network maintenance and IT system upgrades.

Figure 12: Maxis capitalised capex in the SWN scenario



SOURCES: CGS-CIMB RESEARCH ESTIMATES

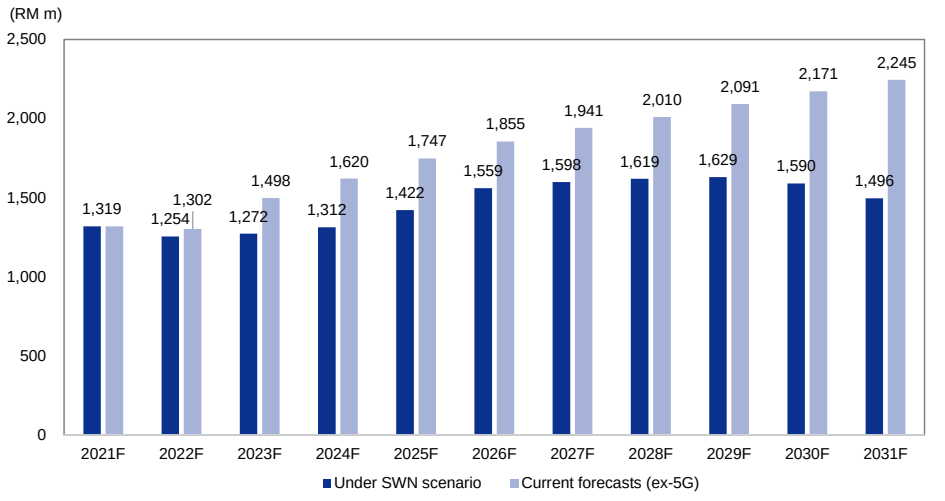
Potential negative impact on MNOs' core EPS & FCFE

Substantial rise in 5G wholesale cost could hold back recovery in Maxis's FY23-24F core net profit

If the SWN scenario above materialises, our FY22F core net profit for Maxis could be lower by 3.6% and by a bigger 15.0-33.4% across FY23-31F to factor in a substantial rise in 5G wholesale fees. Our current forecasts for Maxis are on an ex-5G basis due to uncertainties as to how 5G developments in Malaysia would unfold, i.e. we had not previously factored in any 5G-related opex, capex and spectrum payments.

Post revision in the SWN scenario, Maxis's core net profit may decline 4.9% yoy in FY22F due to the impact of the one-off Makmur Tax and initial 5G wholesale fees, which may more than offset a recovery in roaming revenue and migrant/ tourist prepaid SIM card sales, post-Covid-19. Thereafter, core net profit may recover by a mild 1.4%/3.1% yoy in FY23F/24F, as a more substantial jump in wholesale fees largely offsets a normalisation in the corporate tax rate (post-Makmur Tax) and decent service revenue growth of 2.7%/2.4% yoy (led by the Enterprise and Home businesses).

Figure 13: Maxis's core net profit under SWN scenario vs. our current forecasts



SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

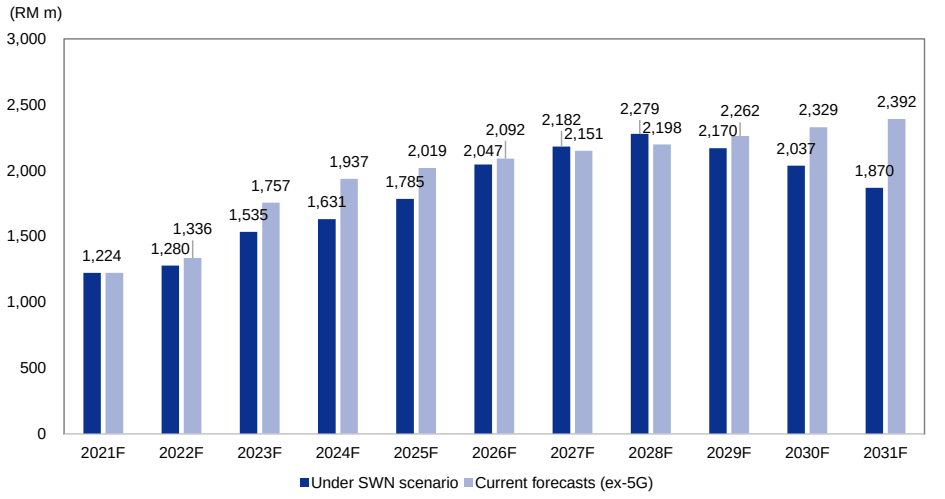
4G asset write-off or accelerated spectrum amortisation?

There are also risks that MNOs' earnings could be hit by 4G asset write-off or accelerated spectrum amortisation, should traffic shift more quickly than expected to the 5G network. While non-cash in nature, it may impact dividends (in a given year) for MNOs that have a 100% payout policy and limited retained earnings. The chances of this happening and the potential timeline are difficult to predict.

Potential negative impact on FCFE in FY22-26F

In the SWN scenario, the potential negative impact of the 5G wholesale fees on Maxis's FCFE is similar to that for core net profit in FY22-24F. However, as its 4G capex starts to decline from FY25F onwards and helps buffer against the wholesale fees, the net negative impact may lessen in FY25-26F. In FY27-28F, we find Maxis's FCFE to be even higher vs. our current forecasts as the reduction in 4G capex may outpace the increase in wholesale fees (now driven by variable Capacity charges). Nevertheless, once capex hits steady state (i.e. no further savings), FCFE may once again be impacted by a continued increase in wholesale fees.

Figure 14: Maxis's FCFE under SWN scenario vs. our current forecasts



SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

On the back of lower FCF, we estimate Maxis's DCF-based fair value would decline to RM3.80 in a SWN scenario, assuming the same WACC of 7.0% and terminal growth rate of 2.0%.

Figure 15: Maxis's DCF-based fair value would fall to RM3.80 in a SWN scenario

FYE 31 Dec (RM m)	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F
EBIT (1-T)	1,495	1,529	1,568	1,673	1,805	1,835	1,843	1,839	1,791	1,694
Depreciation & Amortisation	1,574	1,567	1,525	1,470	1,395	1,292	1,168	1,050	957	885
Capex (including upfront spectrum fee)	-1,495	-1,250	-1,150	-1,050	-850	-650	-450	-450	-450	-450
Annual FCFF	**1,574**	**1,846**	**1,943**	**2,093**	**2,350**	**2,477**	**2,561**	**2,439**	**2,298**	**2,128**
Terminal value										43,590
Present value of cash flow	**1,471**	**1,613**	**1,587**	**1,598**	**1,677**	**1,652**	**1,597**	**1,422**	**1,252**	**23,284**
Value of firm	**37,152**									
Net cash/(debt) at end-2021	-7,191									
Value of Equity	**29,962**									
Value of Equity per share (RM)	**3.80**									

SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

Figure 16: Sensitivity of Maxis's DCF-based fair value (under SWN scenario) to changes in WACC and terminal growth rates

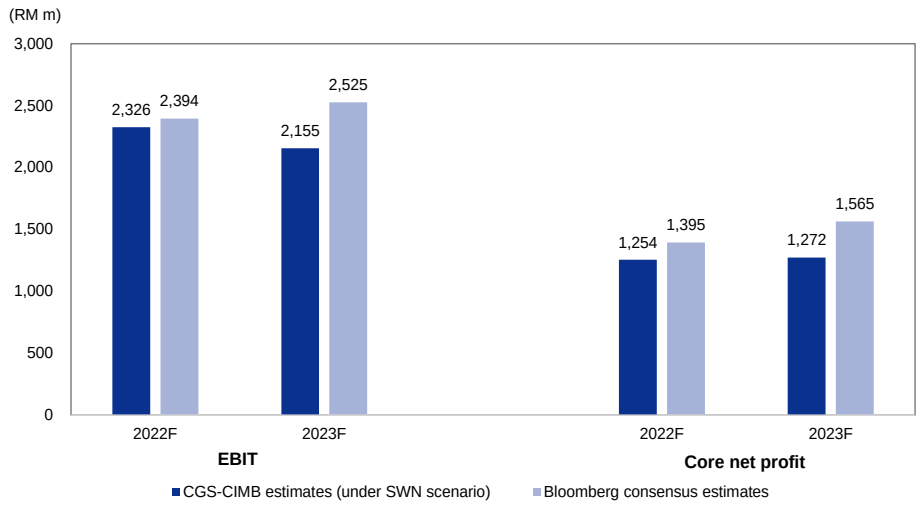
WACC	Terminal growth rate				
	1.0%	**1.5%**	**2.0%**	**2.5%**	**3.0%**
6.0%	4.16	4.51	4.96	5.54	6.30
6.5%	3.70	3.98	4.32	4.75	5.30
7.0%	3.33	3.56	**3.80**	4.16	4.58
7.5%	3.00	3.18	3.39	3.65	3.97
8.0%	2.72	2.87	3.04	3.25	3.50

SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

Consensus may eventually cut MNOs' EBIT and core EPS forecasts to factor in 5G wholesale fees

Our FY22-23F EBIT and core net profit for Maxis under the SWN scenario are lower than Bloomberg consensus estimates by 3-15% and 10-19%, respectively. We believe that the difference, especially for FY23F, indicates that the market has yet to factor in substantial 5G wholesale fees to DNB due to the lack of information on the rate and fee structure thus far.

Figure 17: Our FY22-23F EBIT and core net profit for Maxis under SWN scenario are lower than Bloomberg consensus estimates



SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS, BLOOMBERG

More intense mobile competition in the longer-run is another risk

5G SWN is unlikely to spark more intense competition in FY22-24F

With open and equal access to DNB's 5G SWN, there will be a lack of network differentiation among mobile service providers for 5G (especially in the consumer segment). Nevertheless, we do not see smaller MNOs (TM's Webe,

YTL Communications' Yes) or new entrants riding on DNB's 5G network as a significant competitive threat to the Big 4 MNOs in FY22-24F, and perhaps even up to FY26F. This is because DNB's 5G coverage will still be less than 90% up to that point and the incumbents' 4G networks will remain a key differentiating factor in subs' overall network experience.

Webe & Yes could start to put more pressure on incumbent MNOs from FY25-27F… »

However, when DNB's 5G coverage exceeds 80% in 2025F and 90% in 2027F, we believe Webe and Yes may be able to start competing more effectively vs. the Big 4 MNOs. This is because their network experience, especially from 2027 onwards, will likely not be too different to that of the incumbents; the only difference being the latter's 4G network providing back-up in the rare instances where 5G coverage is not available.

It is hard to fully predict the pricing and structure of the products that Webe and Yes could offer in the market 4-6 years into the future. However, in a back-of-the-envelope calculation, we estimate it may be viable for Webe to offer a 5G mobile plan with 150GB quota for RM60/month to 1.6m subs (we estimate it had c.900k-1m subs at end-FY21F) and still earn an EBITDA margin north of 30%. This is based on the assumption that a) Webe pays a wholesale fee of RM600m p.a. to DNB (i.e. RM432m for committed Coverage fees, RM168m for the remaining 10-20% coverage/additional capacity) and b) incur another RM200m for staff, marketing, administrative expenses and bad debt provisions (FY20: RM143m), for total opex of RM800m p.a.

Figure 18: Webe may be able to sell 150GB 5G plan for RM60/month

Annual P&L (FYE 31 Dec)	(RM m)	Comments
Revenue	**1,152**	
Wholesale fee to DNB	-600	RM432m Coverage fee + RM168m Capacity fee
Other opex	-200	Staff, marketing, bad debt, G&A
EBITDA	**352**	
EBITDA margin	31%	
Assumptions:		
5G price plan (RM/month)	60	Quota: 150GB/mth
Number of 5G subs (m)	1.6	87% of min. volume commitment of 1,200Gbps

SOURCES: CGS-CIMB RESEARCH ESTIMATES, DNB

In reality, Webe would offer a range of products with different quotas at different price points. However, our simple illustration above is meant to show that it is theoretically possible for a player like Webe to offer a sizeable 5G quota plan for a relatively low price, which could put significant price pressure on the incumbent MNOs as it is much cheaper than their current offerings. To-date, Webe has not gained too much market traction on its RM59/month unlimited 4G plan due to its inferior network vs. the incumbent MNOs, but this network differential will likely narrow considerably from 2027F onwards.

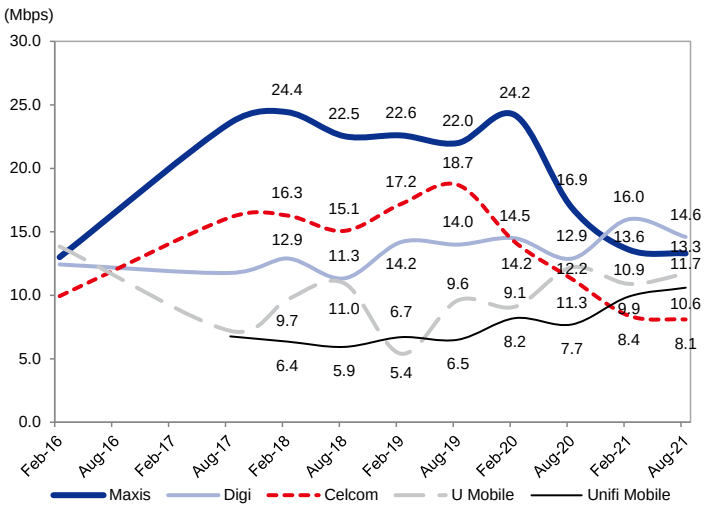
Figure 19: Incumbent MNOs' current postpaid offerings

	Maxis Postpaid	Celcom MEGA	Digi Postpaid	U Mobile
Plan	98 128 158 188	80 98 128 158 188	40 60 90 120 150	U28 P48 GX50 GX68 P79
Monthly fees (RM)	98 128 158 188	80 98 128 158 188	40 60 90 120 150	28 48 40* 68 79
Data quota (GB)	50 70 90 110	40 50/UL (10Mbps) 70/UL (15Mbps) 90/UL (20Mbps) 120/UL (30Mbps)	10 25 50 65 85	3 5 UL (5Mbps) UL^ 20
Calls (min)	UL	UL	UL	50 UL
SMS	UL	PPU	PPU 300 1000	100 (on-net)+200 (off-net) PPU: 3 sen (on-net), 8 sen (off-net) PPU: 10 sen
Other benefits	Free 30-day access to Viu, iQiyi, WeTV, iflix etc.	N/A 10/20/30/50GB hotspot (for UL plans only)	N/A Free 20/30/40GB quota if 12-month contract Free UL quota/ hotspot if 12-month contract taken	N/A 1GB Roam-Onz to 12 countries
		N/A UL roaming calls & SMS in 23 countries		3GB Video-Onz 5GB Video-Onz N/A UL Video-Onz (SD)
		N/A Free 6-mth iQiyi Standard VIP access		UL Music-Onz, Waze & App-Onz N/A UL chat, Music-Onz & Waze
		N/A 100GB roaming data		N/A 5GB hotspot N/A

Note: UL: Unlimited; PPU: Pay-per-use; *Offer valid for 12 months (normal price: RM50/month); ^YouTube may be managed to standard definition (SD) quality if network congested

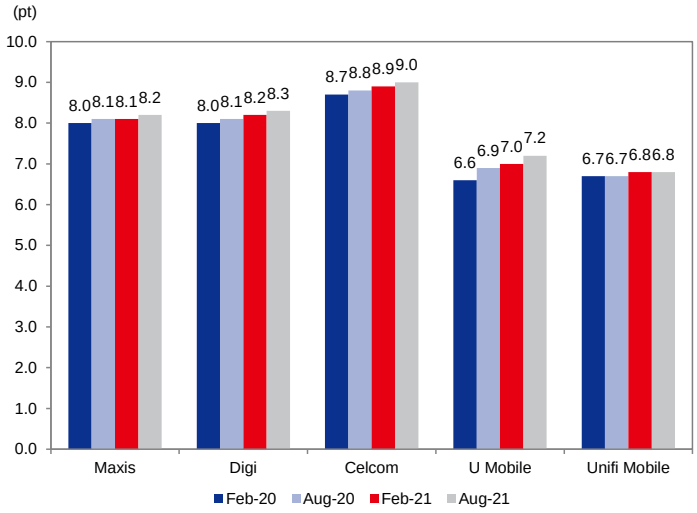
SOURCES: CGS-CIMB RESEARCH, MAXIS, CELCOM, DIGI, U MOBILE WEBSITES

Figure 20: 4G download speeds



SOURCES: OPENSIGNAL, CGS-CIMB RESEARCH

Figure 21: 4G coverage experience



SOURCES: OPENSIGNAL, CGS-CIMB RESEARCH

… leading to inability to monetise 5G traffic growth or even ARPU pressure

We believe the incumbent MNOs can probably still command some pricing premium to Webe/Yes even in the longer-run due to their still slightly better network experience (given their 4G backup), multi-service/device bundling strategy, customer service track record etc. However, we think the incumbent MNOs would probably have to raise quotas in their plans to stay competitive vs. Webe/Yes and thus, may not be able to monetise on our projected substantial growth in average data usage to 112GB/month by FY31F (or 150GB/month, as per DNB's forecasts), i.e. no ARPU or revenue uplift.

In a worse-case scenario, it is also possible that the more intense competition could lead to a decline in incumbent MNOs' ARPUs. Assuming a cumulative

10% decline in postpaid and prepaid ARPU between 2028-31F, this would reduce Maxis' FY29-31F core net profit by 8.2-31.6% and DCF-based fair value to RM3.20 (under SWN scenario). For now, we are not factoring in any longer-term ARPU pressure due to more competition from Webe/Yes as this is still very far into the future and incumbent MNOs may be able to make up for any loss in the traditional consumer mobile revenue with additional revenue streams from new consumer/enterprise 5G business cases (e.g. AR/VR, cloud-gaming, metaverse, autonomous vehicles/drones, industrial automation, smart city etc).

Figure 22: Scenario analysis: impact of lower ARPU on Maxis's FY29-31F core net profit & DCF-based fair value (vs. under SWN scenario)

Cumulative % decline in ARPU over 2028-31F (FYE 31 Dec)	Core net profit (RM m)			Core net profit impact			Fair value (RM)	Fair value impact
	2029F	2030F	2031F	2029F	2030F	2031F		
Under SWN scenario	**1,629**	**1,590**	**1,496**				**3.80**	
-5%	1,585	1,453	1,261	-2.7%	-8.6%	-15.7%	3.50	-8.5%
-10%	1,496	1,270	1,024	-8.2%	-20.1%	-31.6%	3.20	-17.1%
-20%	1,318	948	550	-19.1%	-40.4%	-63.3%	2.50	-34.3%
-30%	1,184	672	79	-27.3%	-57.7%	-94.7%	1.90	-51.4%

SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

Silver lining is that high coverage fees and five-year contract term should dissuade new entrants

While we were initially concerned that open and equal access to DNB's 5G SWN could increase the number of players and intensify competition substantially in the long-run (once 5G coverage is >90%), we now believe that this scenario is unlikely. The minimum wholesale cost of RM432m p.a. (for Coverage fee only) and 5-year duration for the wholesale agreement means that any access seeker must commit to pay a total of RM2.16bn (US$515m) to DNB. We believe this should dissuade any new entrants or even existing mobile virtual network operators (MVNOs) from signing up with DNB, as they may not have the necessary scale to justify the large fixed cost.

Things could still play out in a more favourable manner for incumbent MNOs

Government to decide on SWN plan by late-Jan or Feb 2022

On 7 Dec 2021, the Communications and Multimedia Minister, Tan Sri Annuar Musa said that the government is reconsidering its decision on the SWN model for the 5G network rollout after receiving feedback from telcos and industry stakeholders. Subsequently, on 14 Dec 2021, Reuters reported that the big 4 MNOs (Celcom, Digi, Maxis and U Mobile) have proposed to the government the set-up of a second 5G wholesale network (built and operated by a consortium of telcos). The telcos would also be open to proposals that would allow them to own equity stakes in DNB and asked for greater inclusion in the 5G rollout plans. We gather from DNB during its analyst briefing that the Cabinet could make a final decision on this issue in late-Jan or Feb 2022.

Allowing the Big 4 MNOs to run a second 5G wholesale network is unlikely, in our view

In our view, the government is unlikely to allow two 5G networks to run in parallel, i.e. one by DNB and the other by the Big 4, because in doing so, DNB will almost certainly fail without the Big 4 as wholesale customers. In addition, splitting the limited 5G spectrum between DNB and the Big 4 consortium would be rather impractical as the Big 4 would have to support nearly all the subs in the country with just half the 5G bandwidth.

A more likely outcome is allowing the MNOs to own equity stakes in DNB, in our view

A more likely outcome, in our view, is the government allowing the MNOs to own equity stakes in DNB. However, in this scenario, we believe the government may require DNB to be run independently of its equity stakeholders, with the

principles of open/equal access to still apply and to meet the current accelerated coverage rollout timeline.

A potential benefit of this arrangement is that DNB may be able to lower the minimum wholesale fee (which we believe is required currently due to its all-debt funding structure) or charge access seekers solely based on traffic demand. The latter will likely result in losses, especially in the initial years when 5G traffic volumes are still low, but if each MNO takes less than a 20% stake in DNB, the loss will only reduce their DNB investment value in the balance sheet and not hit the P&L.

Incumbent MNOs could delay signing the wholesale agreement with DNB until they are given better terms

If the government decides to proceed with the SWN plan via DNB, there is a chance the incumbent MNOs may hold back from signing the wholesale agreement with DNB in hopes of getting more favourable terms. If the government/DNB relent, it is possible the minimum volume commitment may be lowered, resulting in reduced Coverage fees (though this may have to be made up for by a higher rate for Capacity charges later on), and therefore a lesser hit to MNOs' earnings in FY22-26F.

Downgrade sector to Underweight & Maxis to Reduce

Risk-reward is unfavourable for MNOs

As mentioned above, the government may decide on its SWN plan in Feb 2022. However, as the potential earnings downside risk is quite big and MNO share prices have yet to reflect this in a major way in our view, we believe the risk-reward ratio is unfavourable. Hence, we turn from sector Neutral to Underweight and also downgrade Maxis from Hold to Reduce with a revised TP of RM3.80, after applying an additional 20% discount to its DCF-based fair value of RM4.70 (to factor in the regulatory uncertainty). Note that our revised TP for Maxis is the same as its DCF-based fair value based on our estimated core net profits under the SWN scenario. Key de-rating catalyst: government proceeds with SWN plan based on current commercial offer. Key upside risk: lower 5G wholesale fees, cancellation of SWN or MNOs offered equity stakes in DNB.

Figure 23: Our revised DCF-based target price for Maxis is RM3.80 (WACC: 7.0%, terminal growth: 2.0%)

FYE 31 Dec (RM m)	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F
EBIT (1-T)	1,521	1,757	1,870	1,989	2,090	2,171	2,238	2,318	2,394	2,461
Depreciation & Amortisation	1,571	1,564	1,522	1,479	1,444	1,418	1,397	1,380	1,368	1,358
Capex (including upfront spectrum fee)	-1,483	-1,250	-1,150	-1,150	-1,150	-1,150	-1,150	-1,150	-1,150	-1,150
Annual FCFF	**1,609**	**2,071**	**2,243**	**2,318**	**2,385**	**2,439**	**2,485**	**2,548**	**2,612**	**2,669**
Terminal value									0	54,666
Present value of cash flow	**1,504**	**1,809**	**1,832**	**1,770**	**1,702**	**1,627**	**1,550**	**1,485**	**1,423**	**29,201**

Value of firm	**43,902**
Net cash/(debt) at end-2021F	-7,191
Value of Equity	**36,712**
Value of Equity per share (RM)	**4.70**
Discount to equity value	20%
Target price (RM)	**3.80**

Cost of equity		**WACC**		
Risk-free rate	**3.5%**		**% of total**	**Cost of capital**
Market Risk Premium	7.0%	Cost of equity	60.0%	9.1%
Beta	0.80	Cost of debt	40.0%	3.8%
Cost of equity	**9.1%**	**WACC**		**7.0%**

Terminal growth rate	**2.0%**

SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

Figure 24: Sensitivity of Maxis's target price to changes in WACC and terminal growth rates

WACC	Terminal growth rate				
	1.0%	1.5%	2.0%	2.5%	3.0%
6.0%	4.07	4.43	4.88	5.45	6.22
6.5%	3.62	3.90	4.24	4.67	5.23
7.0%	3.26	3.48	3.80	4.09	4.51
7.5%	2.92	3.11	3.32	3.58	3.90
8.0%	2.65	2.80	2.98	3.18	3.43

SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

We continue to prefer the fixed segment; top pick is TM »

We continue to prefer the fixed segment due to better revenue growth prospects, more benign competition and lesser regulatory risk. Telekom Malaysia remains our top Malaysian telco pick, with unchanged DCF-based TP of RM7.50 (WACC: 7.2%, terminal growth: 1.0%). TM is a beneficiary of 5G rollout in the country through increased demand for fibre leasing and in the longer-run, potential to grow its mobile business in a more level playing field. TM is a beneficiary of structural demand for: i) fibre broadband (relatively low penetration and supported by TM's accelerated fibre rollout), ii) wholesale fibre leasing (for mobile backhaul and wholesale high-speed broadband access) and iii) data centre/cloud services (thanks to over-the-top companies locating their content locally and cloud migration of public data under MyDigital). Key re-rating catalyst: stronger FY21-22F earnings. Key downside risks: higher-than-expected opex and adverse regulatory developments (e.g. Mandatory Standard on Access Pricing or MSAP review).

ESG in a nutshell

All four Malaysian telcos have final scores above the mid-point (based on our estimates), indicating that the sector as a whole performed well from an ESG perspective. The higher-rated telcos showed i) progressive network improvements, ii) industry-leading efforts in staff training, workforce diversity and positive workplace environment, iii) better board diversity, low-to-none material cases of corruption and broader disclosure, and iv) good progress on their carbon emission reduction targets.

Keep your eye on	Implications
The government's plan to roll out the sole nationwide 5G network could potentially be a mid- to longer-term risk for the incumbent mobile network operators. Up to five digital banking licences in Malaysia may be issued by 1Q22.	We have incorporated these downside and upside risks into our ESG scores and rankings for the telcos, but have not factored them into our valuations/forecasts, pending further details on the government's 5G rollout plan and announcement of the digital banking licence winners by Bank Negara Malaysia.

ESG highlights	Implications
Overall, the Malaysian telco sector performed well from an ESG standpoint, as the companies have a relatively small impact on the environment, contribute significantly to community development (e.g. digital/financial inclusion) and are generally well-governed, in our view. Besides the potential 5G risk factor, Malaysian mobile operators' (MNOs) performance in data privacy and security is below the overall score, due to a massive data breach affecting 46.2m subs from at least 12 MNOs and MVNOs in 2014.	We believe the telco sector's ESG performance is relatively better than other sectors, especially those in the natural resource, manufacturing, power generation (coal, natural gas) and sin sectors. On an absolute basis, we do not expect the good ESG performance to have a material positive impact on the sector's topline and earnings, as this is more likely to be driven by issues such as competition, M&As and regulatory developments, in our view.

Trends	Implications
In return for the licence to operate their networks, the public expects telcos to roll out their networks and provide good and reliable quality of service (QoS) at affordable prices. If telcos fail at this, there may be community calls on the regulator to intervene to correct a real/perceived market failure, perhaps with the setting of more stringent QoS/coverage targets (with fines imposed if key performance indicators are not met), imposition of tariff ceilings or the suspension of licence/issuance of additional licences to bring in new entrants to spur competition. Telcos that do not consistently provide good and reliable QoS/coverage and customer service may also, over the longer run, risk losing subs and incur additional costs to manage high subs churn rates.	A telcos' progressive network improvements may help improve its market traction over the medium term. We have factored this into our fundamental analysis for the respective telcos, by projecting mobile service revenue market share changes in FY22-24F.

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS, OPENSIGNAL

Background on DNB

Development of DNB »

The government first mooted plans to roll out a 5G single wholesale network (SWN) via a government-owned special purpose vehicle (SPV), as part of the MyDigital initiative and Malaysia Digital Economy Blueprint launched in Feb 2021. On 1 Mar 2021, the Ministry of Finance (MoF) established Digital Nasional Bhd (DNB) as its wholly-owned SPV to roll out, own and run the 5G network over 10 years (2021-30).

DNB is licenced under the Communications and Multimedia Act 1998 (CMA 98) and subject to the Malaysian Communications and Multimedia Commission's (MCMC) oversight. It will lease 5G wholesale capacity in a transparent, affordable and equal basis to licensees under CMA 98 (including mobile network

operators and application service providers), which will in turn offer 5G services to their end users. Under its licence terms, DNB and/or any of its subsidiaries are not allowed to undertake 5G retail services. DNB seeks to avoid duplicating network infrastructure and tap into existing towers/fibre infrastructure where possible.

MCMC has allocated the 700MHz (exact bandwidth to be disclosed in the National Spectrum Plan), 3.5GHz (bandwidth: 200MHz) and 28GHz (bandwidth: 1.6GHz) spectrum to DNB. Mobile network operators (MNOs) are not allowed to re-farm existing spectrum for 5G deployments, to ensure their continued focus on expanding 4G network coverage and that DNB is the sole 5G network provider for access seekers in the country.

Recent contract awards

DNB announced in Jul 2021 that it had awarded a 10-year contract to Ericsson (ERICB SS, Not Rated) to design, build and maintain its 5G network at a total cost of RM11bn (which was subsequently increased to RM12.5bn after factoring in higher fibre leasing cost), via an open tender. According to DNB's press release, Ericsson's network equipment, deployment services and ongoing maintenance/network management costs of RM4bn were the lowest amongst the shortlisted bidders. The balance cost of RM8.5bn will cover network infrastructure costs from other parties, comprising primarily tower rental and fibre leasing over the 10 years.

The process began with the initial evaluation of 14 Network Equipment Providers (NEPs), after which eight were shortlisted and invited to bid for the tender, DNB said. The criteria evaluated when shortlisting the NEPs were:

- Proven credentials in successful 5G deployment and execution of end-to-end technology solutions
- Availability of enhanced security to safeguard users and platforms
- Established Malaysian presence and ecosystem and a sound understanding of the business environment including existing network of vendors
- Locally-based resources for immediate deployment
- Effective plan for the transfer of knowledge to be acquired by domestic affiliates

Of the eight invited, only four submitted bids, DNB said. The tender requirements were based on criteria identified and refined through a rigorous process with industry feedback on the requirements of the 5G network and shared with all invited NEPs, it added. Ericsson was ranked top in all three key components of the following tender evaluation criteria:

- Technical: covering overall 5G technology capabilities, 5G deployment capabilities, integration approach, cyber and network security, and operations & maintenance
- Commercial: covering financing proposal and total cost of ownership
- Socio-economic: covering local development and socio-economic impact

Subsequently, DNB signed a binding term sheet in mid-Dec 2021 to lease fronthaul and backhaul fibre from TM for 10 years, with a total contract value of RM2bn, according to TM's 16 Dec 2021 bourse filing. Both parties have entered into negotiations with the aim to finalise the definitive agreement within four months (i.e. by mid-Apr 2022), as per the same filing.

Funding mechanism and wholesale pricing framework

The rollout costs incurred by DNB over the 10-year period will be funded entirely by the private sector, i.e. it will not involve government funding/guarantees, universal service provision (USP) funding or new taxes imposed on telcos. Vendor financing via deferred payment schemes would cover a large portion (c.RM3bn) of the initial rollout cost, with Ericsson committed to arranging for deferred payment arrangements for up to five years. In addition, DNB will secure working capital facilities of up to c.RM2bn from Malaysian banks to meet its short-term funding requirements, according to DNB's analyst briefing presentation deck. An additional long-term sukuk programme amounting to RM5bn will also be established by mid-2022 to refinance the working capital

facilities and repay deferred payment arrangements with suppliers. Thus far, DNB has received strong interest from domestic financial institutions to participate in its debt offerings, as evidenced by i) Ericsson's and UOB's Oct 2021 announcement of a RM800m Receivable Purchase Arrangement to fund DNB's 5G rollout, and ii) DNB's RM400m working capital facilities secured from Deutsche Bank in Nov 2021, based on DNB's analyst briefing presentation deck.

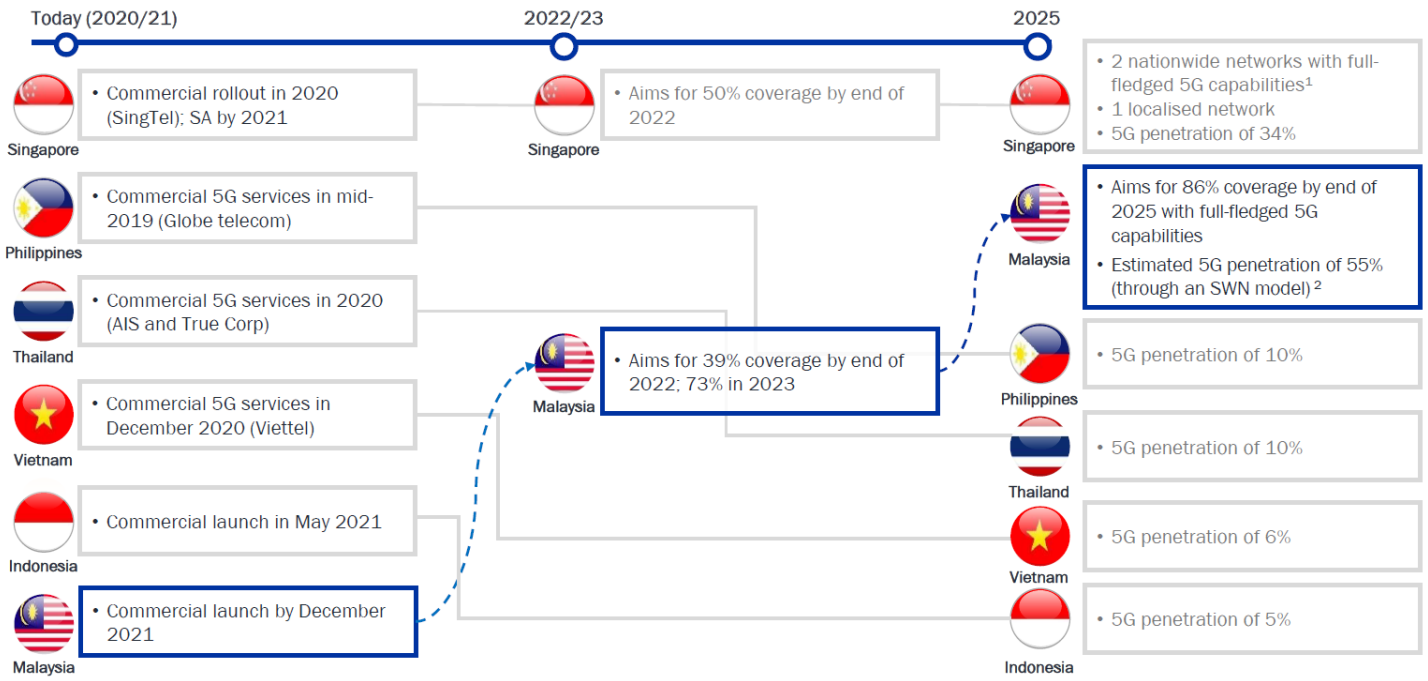
In MCMC's final Determination on Access List (effective from 15 Dec 2021), MCMC included 5G wholesale services into the Access List and also allowed 5G Standalone Access Seekers (i.e. MNOs) to integrate their 5G Core networks with DNB's 5G Radio Access Network. We believe a Mandatory Standard on Access Pricing (MSAP) review may possibly be concluded by end-2022F, which will set a regulated price for DNB's 5G wholesale service.

The rationale and benefits of DNB »

According to DNB and MCMC, the government's main rationale for rolling out 5G via DNB includes:

- Accelerate 5G rollout and adoption beyond what would be achieved by MNOs independently, with comprehensive coverage extending to rural areas. On the former, the launch date of 5G services in Malaysia was expedited by 1-2 years to end-2021, vs. JENDELA's previous target of end-2022/23.
- Lower cost of 5G deployment by using resources more efficiently (leveraging existing infrastructure), avoiding network duplication, improving spectral efficiency (spectrum aggregation with all 5G spectrum owned by a single entity), which lowers cost/GB for telcos and in turn translates into more affordable prices for retail and enterprise end users.
- Encourage MNOs to shift away from an infrastructure-based business model (network differentiation) towards a services-oriented model (service and product differentiation), as well as explore new revenue streams (e.g. fixed wireless access and cloud services).

Figure 25: DNB would accelerate Malaysia's 5G rollout relative to regional peers



Notes: [1]Including 1 shared network, [2]Differs from a 5G penetration of 20% projected by GSMA
SOURCES: DNB, IMDA, GSMA, INQUIRER.NET, BANGKOK POST, FINANCIAL TIMES, THE JAKARTA POST, KHMER TIMES, NIKKEI ASIA

In terms of economic benefits to the nation, Ernst & Young Consulting Services (EY) in its 16 Nov 2021 report "Estimating the economic impact of the Single Wholesale 5G Network in Malaysia" estimated that the adoption of 5G technologies will increase Malaysia's GDP by a cumulative RM650bn over 2022-30. EY believed 5G will also support the net creation of 148k jobs and contribute to an increase in the proportion of high-skilled jobs in the economy by 3% pts in

2030 alone, with the GDP uplift and creation of jobs expected to begin with the rollout of the SWN in 2021, steadily increase in the years to 2030, and extend beyond 2030. Moreover, DNB's investment in the 5G network over its 10-year licence period could generate additional economy-wide GDP of RM20.9bn via direct income/salaries to employees and indirectly via the supply chain and wider economy, EY estimated. At the peak of the network rollout in 2022, EY forecasted that DNB's investment could support over 14,800 jobs.

The projected increase in GDP will be driven by increases in efficiency and improvements in productivity that are delivered by digital transformation enabled by 5G use cases. The expansion of digital industries and the entry of new firms to the market will also increase GDP, according to EY. Out of the projected rollout cost of RM11.5bn to be paid for network equipment, managed services, infrastructure leasing and utilities over the 10-year period, DNB has also estimated that RM7bn (61%) will be allocated to Bumiputera-owned companies.

5G rollout timeline »

DNB's 5G services were launched on 15 Dec 2021 with c.10% coverage (500 sites) in populated areas spanning Kuala Lumpur, Putrajaya and Cyberjaya. Subsequently, it targets to achieve the following rollout timelines:

- c.40% 5G coverage in populated areas by end-2022 via a total of 4,018 sites in Penang, Johor, Sabah, Sarawak, Selangor, Negeri Sembilan and Perak
- >80% 5G coverage in populated areas by end-2024 via a total of 7,509 sites across major cities in most states nationwide
- >90% 5G coverage in populated areas nationwide by end-2027 via a total of 10,167 sites

Board of directors and management team »

On the same day as DNB's launch (1 Mar 2021), the MoF announced the appointment of Augustus Ralph Marshall and Datuk Asri Hamidon as DNB's CEO and Chairman, respectively. Ralph Marshall was formerly a director at Maxis (1993-2016) and Group CEO as well as Deputy Chairman at Astro (1994-2017). Meanwhile, Datuk Asri Hamidon is the current Treasury Secretary-General, a position he has held since May 2020.

Also appointed to DNB's board of directors were Datuk Seri Yusof Ismail (Director-General of the Malaysia Administrative Modernisation and Management Planning Unit or MAMPU), Datuk Mohamed Sharil Tarmizi (former MCMC Chairman in 2011-14) and Datuk Muthanna Abdullah (Consultant at law firm Abdullah Chan & Co.; sits on the boards of several Malaysian companies).

Thereafter on 1 Jun 2021, DNB announced two other high-profile appointments as its independent non-executive directors, i.e. Morten Lundal and Lim Tau Kien. Morten was previously the CEO of Maxis (2013-18), Group Chief Commercial Officer of Vodafone Group (2010-13) and CEO of Digi (2004-08). Meanwhile, Lim Tau Kien was the former Country CFO, Country Controller and Finance Director at Shell China prior to her retirement in 2008. To date, Dushyanthan Zubin Vaithiyanathan, who was formerly Maxis's Chief Marketing Officer, has also been appointed as DNB's COO.

DNB's senior management team and board members are highly experienced and come from various backgrounds, with several having past experiences in the telco industry. With these high-quality appointments to the board, coupled with the leadership of Ralph Marshall as CEO and Datuk Asri Hamidon as Chairman, we believe this will raise Malaysians' and investors' confidence in DNB's ability to properly execute and roll out the nationwide 5G network, barring major changes in the political landscape.

Figure 26: Key members of DNB's senior management team and board of directors

Name	Role at DNB	Current/prior role(s)
Board of directors		
Dato' Asri Hamidon	Chairman	Current Treasury Secretary-General
Datuk Seri Dr Yusof Ismail	Board Member	Current Director-General of MAMPU
Datuk Muthanna Abdullah	Chairman of Nomination & Remuneration Committee	Current Consultant at law firm Abdullah Chan & Co.
Datuk Mohamed Sharil Tarmizi	Chairman of Tender Committee	Former MCMC Chairman
Lim Tau Kien	Chairman of Audit & Risk Committee	Former Country CFO, Country Controller and Finance Director at Shell China
Morten Lundal	Board Member	Former CEO of Maxis & Digi, Group Chief Commercial Officer of Vodafone Group
Dr Anand R Prasad	Board Member	Current Partner at Deloitte Tohmatsu Cyber for connectivity security, former founder of cybersecurity firm wenovator
Senior management team		
Augustus Ralph Marshall	CEO	Former director at Maxis, Group CEO & Deputy Chairman at Astro
Dushyanthan Zubin Vaithiyanathan	COO	Former Chief Marketing Officer at Maxis
Nik Azlan Nik Abdul Aziz	CFO	Former Group CFO of UMW Holdings
Ken Tan Tzi Kieng	CTO	Former Head VP, Digital Networks at Singtel Optus
Wan Mohd Zam Wan Embong	General Counsel	Former McDonald's Legal Director in Singapore
Wan Ezrin Wan Sazali	Chief HR Officer	Former Chief People Officer at TIME dotCom
Zuraida Jamaluddin	Chief Corporate Affairs Officer	Chief Regulatory & Societal Development Officer at Celcom

SOURCES: CGS-CIMB RESEARCH, DNB, MAXIS, STARBIZ, MOF

Government to decide on SWN plan soon amid recent controversies

The key controversies/concerns raised by telcos over DNB are as follows, according to Reuters (11 Nov 2021):

- DNB would hold all the 5G spectrum as well as build/maintain the entire network, with operators using the infrastructure to provide mobile services, which would lead to value destruction for MNOs and lower returns for their shareholders.
- Telcos could end up paying more than if they had rolled out their own 5G networks, as DNB may be a nationalised monopoly and its proposed pricing plan did not factor in additional requirements related to traffic volumes and contingency costs, etc.
- Telcos sought assurances that DNB would operate solely as a wholesale provider and not reserve 5G capacity for itself or harbour any retail ambitions.

Moreover, opposition lawmakers previously urged the government to call off the establishment of a 5G SWN, citing concerns over higher rollout costs, DNB's "monopolistic" nature (which led to discussions about a single point of failure) and the loss of potential government revenue from a spectrum auction to private telcos, based on media reports from The Edge Markets and Malay Mail. Currently, only TM and YTL Communications have entered into an agreement to lease 5G wholesale capacity from DNB.

Reuters reported on 14 Dec 2021 that the big 4 MNOs (Celcom, Digi, Maxis and U Mobile) recommended the government to allow a second 5G wholesale network (built and operated by a consortium of telcos) to be set up. They proposed that the consortia commence the two networks in parallel this year and separate them from 2023, thus "giving Malaysia fast initial deployment and the security of dual competing networks going forward". Both SWNs will make use of existing infrastructure and collaborate in the first 12-18 months to expedite the 5G rollout vs. what would be achieved by any one party, as per their proposal. The telcos would also be open to proposals that would allow them to own equity stakes in DNB and asked for greater inclusion in the 5G rollout plans, according to Reuters.

However, on 7 Jan 2022, Tan Sri Annuar Musa said that the government has decided to proceed with the SWN model and the 5G rollout will run as planned, though telcos that have yet to enter into wholesale agreements with DNB may slow down the deployment, according to The Malaysian Reserve. No further details were provided.

Company Brief

Malaysia

REDUCE *(previously HOLD)*

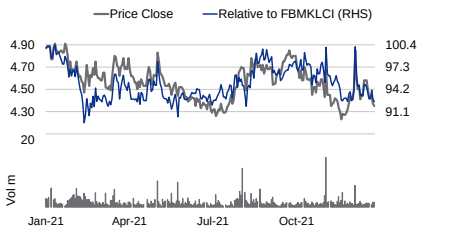
Consensus ratings*:	Buy 5	Hold 12	Sell 6

Current price:	RM4.35
Target price:	RM3.80
Previous target:	RM4.70
Up/downside:	-12.6%
CGS-CIMB / Consensus:	-17.8%
Reuters:	MXSC.KL
Bloomberg:	MAXIS MK
Market cap:	US$8,134m
	RM34,044m
Average daily turnover:	US$1.65m
	RM6.90m
Current shares o/s:	7,809m
Free float:	37.7%

Source: Bloomberg

Key changes in this note

- No changes.



Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	1.9	-9.4	-13.9
Relative (%)	-0.4	-5.3	-9.6

Major shareholders	% held
Binariang GSM	62.3
Employees Provident Fund	11.9
Amanah Saham Bumiputera	8.1

Maxis Berhad

5G SWN may weigh on future prospects

- Maxis may have to pay substantial 5G wholesale fees of RM303m/403m/432m/432m to DNB in FY23F/24F/25F/26F, based on our estimates.
- This may hit Maxis's FY23-31F core EPS by 15-33%. We think consensus has yet to factor this in due to lack of information on DNB's wholesale fees.
- Downgrade from Hold to Reduce with a lower TP of RM3.80.

Maxis may have to pay substantial 5G wholesale fees from FY23F

If the government proceeds with its plan to accelerate the 5G single wholesale network (SWN) rollout via Digital Nasional Bhd (DNB; Unlisted), we estimate Maxis may be charged substantial minimum wholesale fees of RM303m/403m/432m/432m in FY23F/24F/25F/26F, based on DNB's commercial offer and rollout timeline. We project this could further rise to RM577m-1.5bn p.a. in FY27-31F, driven by traffic volume growth.

Minimal incremental 5G revenue and sticky 4G capex means…

We think mobile network operators (MNOs) may not be able to generate much extra mobile revenue from 5G in the near/mid-term due to a) lack of unique "killer" use cases and b) still limited coverage in the first few years, while c) 5G device penetration will take time to rise. We are encouraged to see Maxis selected by Malaysia Airports and Proton recently as their technology partners but widescale commercialisation of 5G solutions may be 3-5 years away. We think Maxis's capex will not drop much in FY22-24F due to a) JENDELA's 4G coverage/speed targets, b) growing 4G traffic and c) fibre investments.

… Maxis's core EPS could be significantly hit in a SWN scenario

If the above SWN scenario materialises, our FY22F core EPS for Maxis could be lower by 3.6% and by a bigger 15.0-33.4% for FY23-31F. The resulting FY22-23F core EPS would be 10-19% below current consensus estimates, suggesting that the market has yet to factor in substantial 5G wholesale fees to DNB.

More intense mobile competition in the long run is another risk

When DNB's 5G coverage exceeds 90% in 2027F, we see smaller MNOs (Webe, Yes) being able to compete more effectively vs. the Big 4 MNOs in terms of network experience and offer big quota 5G plans at lower prices. Thus, Maxis may have to raise its plan quotas, impairing its ability to monetise 5G traffic growth. In a worse scenario, if blended ARPU falls 10% over 2028-31F, this would further cut Maxis's FY29-31F core EPS under the SWN scenario by 8.2-31.6% and DCF-based fair value to RM3.20.

Downgrade from Hold to Reduce with lower TP of RM3.80

We keep our earnings forecasts unchanged, pending the government's final decision on its SWN plan. Our revised TP is after applying a 20% discount to Maxis's DCF-based fair value to factor in potential earnings risk due to the SWN. Key de-rating catalyst: government proceeds with SWN plan based on current commercial offer. Upside risks: lower 5G wholesale fees, cancellation of SWN or MNOs offered equity stakes in DNB.

Financial Summary

	Dec-19A	Dec-20A	Dec-21F	Dec-22F	Dec-23F
Revenue (RMm)	9,313	8,966	9,055	9,519	9,741
Operating EBITDA (RMm)	3,926	3,814	3,916	4,223	4,315
Operating EBITDA Margin	42.2%	42.5%	43.2%	44.4%	44.3%
Net Profit (RMm)	1,512	1,382	1,319	1,302	1,498
Core EPS (RM)	0.19	0.18	0.17	0.17	0.19
Core EPS Growth	(15.6%)	(7.7%)	(4.3%)	(1.3%)	15.0%
FD Core P/E (x)	22.78	24.69	25.80	26.14	22.72
DPS (RM)	0.20	0.17	0.17	0.20	0.20
Dividend Yield	4.60%	3.91%	3.91%	4.60%	4.60%
EV/EBITDA (x)	11.04	11.29	11.02	10.27	10.01
P/FCFE (x)	16.26	16.85	18.77	17.20	15.45
Net Gearing	104%	106%	107%	115%	113%
ROE	21.1%	20.1%	19.7%	19.8%	23.4%
% Change In Core EPS Estimates			0%	0%	0%
CGS-CIMB/Consensus EPS (x)			0.96	0.92	0.96

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

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5G SWN may weigh on future prospects

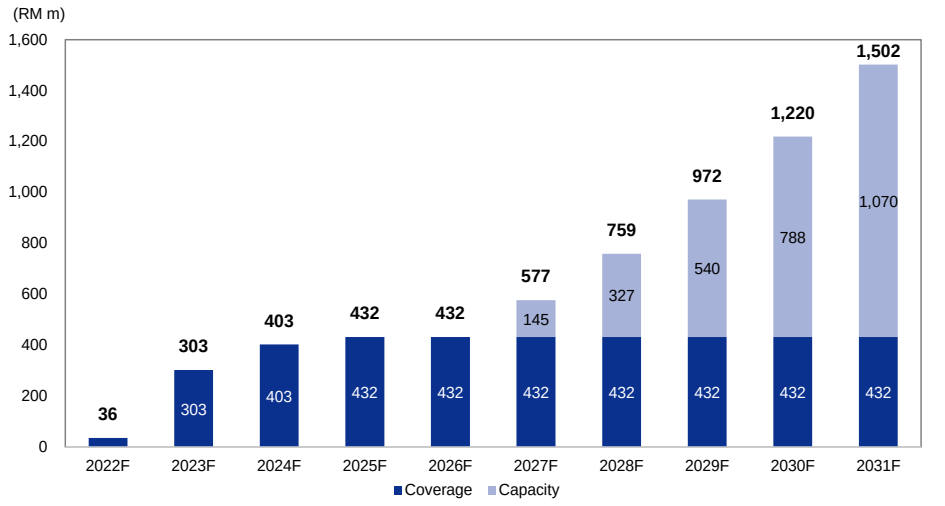
Valuation assumptions and key de-rating catalyst

We lower Maxis's target price to RM3.80 (WACC: 7.0%, terminal growth: 2.0%), after applying a 20% discount to its DCF-based fair value (no discount was applied previously). The discount is to account for the potential earnings risk arising from the government's SWN plan, the impact from which could be quite material if implemented, in our view. The key potential de-rating catalyst would be the government proceeding with the SWN plan based on the current commercial offer.

Key upside risks

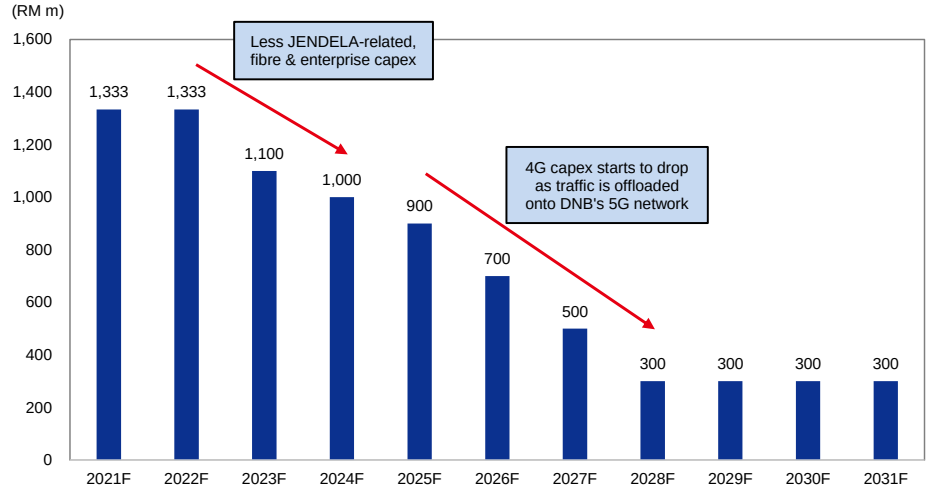
- Lower-than-expected 5G wholesale fees. If DNB's 5G wholesale fees are lower-than-expected for the MNOs due to a change in the former's commercial offer or rollout timeline, the potential hit to Maxis's core EPS may be less severe than our estimated 3.6% for FY22F and 15.0-33.4% across FY23-31F.
- Cancellation of the government's SWN plan. If the government cancels its SWN plan, Maxis would be relieved of the negative core net profit impact from the substantial 5G wholesale fees paid to DNB from FY23F onwards.
- MNOs offered equity stakes in DNB. We believe a potential benefit of this arrangement is that DNB may be able to lower the minimum wholesale fee (which we believe is required currently due to its all-debt funding structure) or charge access seekers solely based on traffic demand. The latter will likely result in losses, especially in the initial years when 5G traffic volumes are still low, but if each MNO takes less than a 20% stake in DNB, the loss will only reduce their DNB investment value in the balance sheet and not hit the P&L.

Figure 1: Estimated 5G wholesale fee for Maxis in the SWN scenario



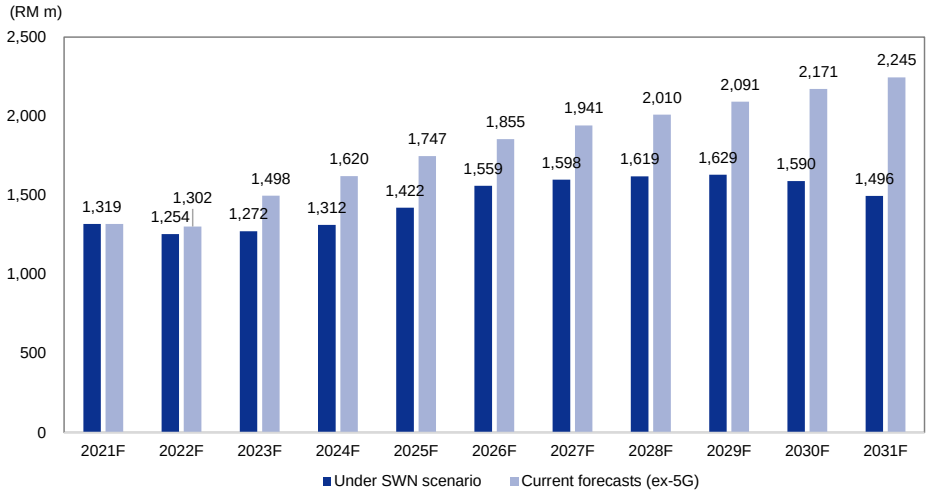
SOURCES: CGS-CIMB RESEARCH ESTIMATES

Figure 2: Maxis's capitalised capex in the SWN scenario



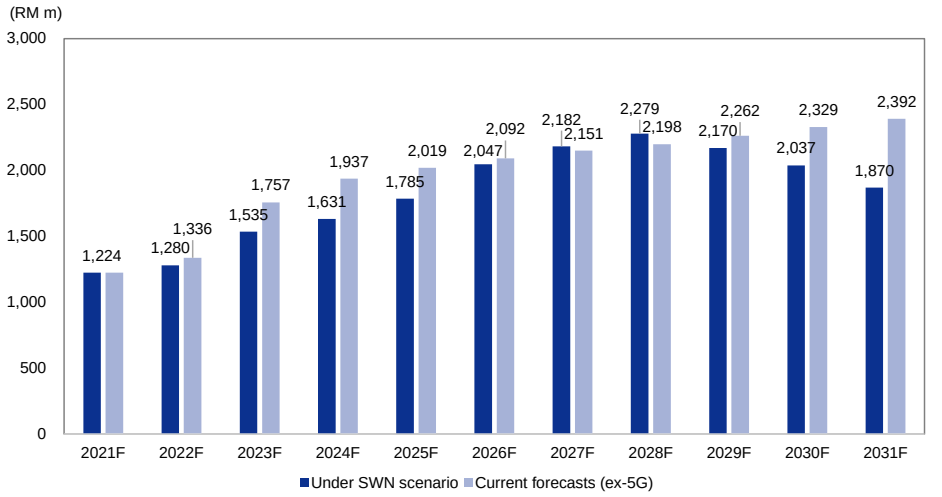
SOURCES: CGS-CIMB RESEARCH ESTIMATES

Figure 3: Maxis's core net profit under SWN scenario vs. our current forecasts



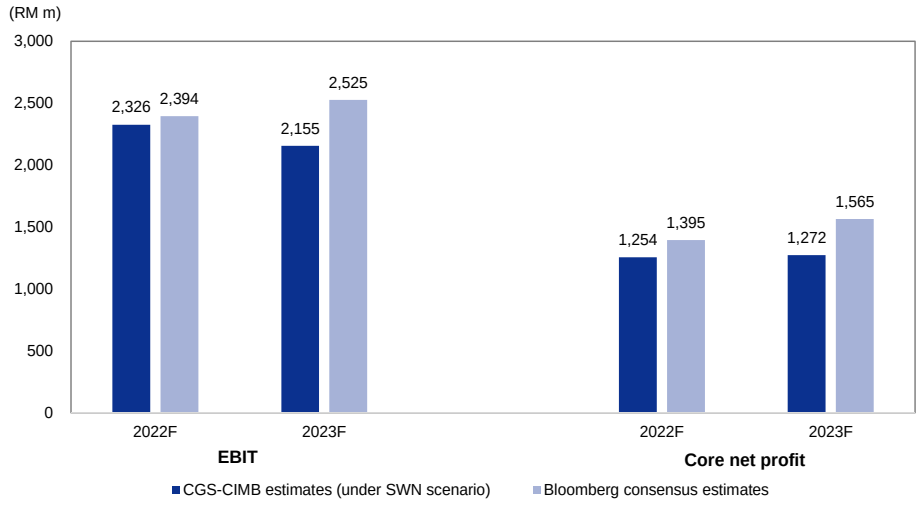
SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

Figure 4: Maxis's FCFE under SWN scenario vs. our current forecasts



SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

Figure 5: Our FY22-23F EBIT and core net profit for Maxis under SWN scenario are lower than Bloomberg consensus estimates



SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS, BLOOMBERG

Figure 6: Scenario analysis: impact of lower ARPU on Maxis's FY29-31F core net profit & DCF-based fair value (vs. under SWN scenario)

Cumulative % decline in ARPU over 2028-31F (FYE 31 Dec)	Core net profit (RM m)			Core net profit impact			Fair value (RM)	Fair value impact
	2029F	2030F	2031F	2029F	2030F	2031F		
Under SWN scenario	**1,629**	**1,590**	**1,496**				**3.80**	
-5%	1,585	1,453	1,261	-2.7%	-8.6%	-15.7%	3.50	-8.5%
-10%	1,496	1,270	1,024	-8.2%	-20.1%	-31.6%	3.20	-17.1%
-20%	1,318	948	550	-19.1%	-40.4%	-63.3%	2.50	-34.3%
-30%	1,184	672	79	-27.3%	-57.7%	-94.7%	1.90	-51.4%

SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

Figure 7: Our revised DCF-based target price for Maxis is RM3.80 (WACC: 7.0%, terminal growth: 2.0%)

FYE 31 Dec (RM m)	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F
EBIT (1-T)	1,521	1,757	1,870	1,989	2,090	2,171	2,238	2,318	2,394	2,461
Depreciation & Amortisation	1,571	1,564	1,522	1,479	1,444	1,418	1,397	1,380	1,368	1,358
Capex (including upfront spectrum fee)	-1,483	-1,250	-1,150	-1,150	-1,150	-1,150	-1,150	-1,150	-1,150	-1,150
Annual FCFF	**1,609**	**2,071**	**2,243**	**2,318**	**2,385**	**2,439**	**2,485**	**2,548**	**2,612**	**2,669**
Terminal value									0	54,666
Present value of cash flow	**1,504**	**1,809**	**1,832**	**1,770**	**1,702**	**1,627**	**1,550**	**1,485**	**1,423**	**29,201**
Value of firm	**43,902**									
Net cash/(debt) at end-2021F	-7,191									
Value of Equity	**36,712**									
Value of Equity per share (RM)	**4.70**									
Discount to equity value	20%									
Target price (RM)	**3.80**									
Cost of equity			**WACC**							
Risk-free rate	**3.5%**				**% of total**	**Cost of capital**				
Market Risk Premium	7.0%		Cost of equity		60.0%	9.1%				
Beta	0.80		Cost of debt		40.0%	3.8%				
Cost of equity	**9.1%**		**WACC**			**7.0%**				
Terminal growth rate	**2.0%**									

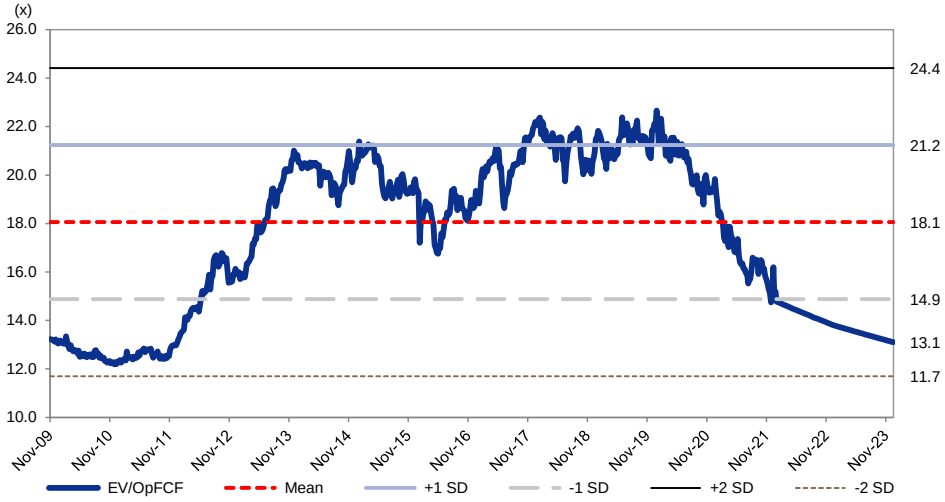
SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

Figure 8: Sensitivity of target price to changes in WACC and terminal growth rates

WACC	Terminal growth rate				
	1.0%	1.5%	2.0%	2.5%	3.0%
6.0%	4.07	4.43	4.88	5.45	6.22
6.5%	3.62	3.90	4.24	4.67	5.23
7.0%	3.26	3.48	3.80	4.09	4.51
7.5%	2.92	3.11	3.32	3.58	3.90
8.0%	2.65	2.80	2.98	3.18	3.43

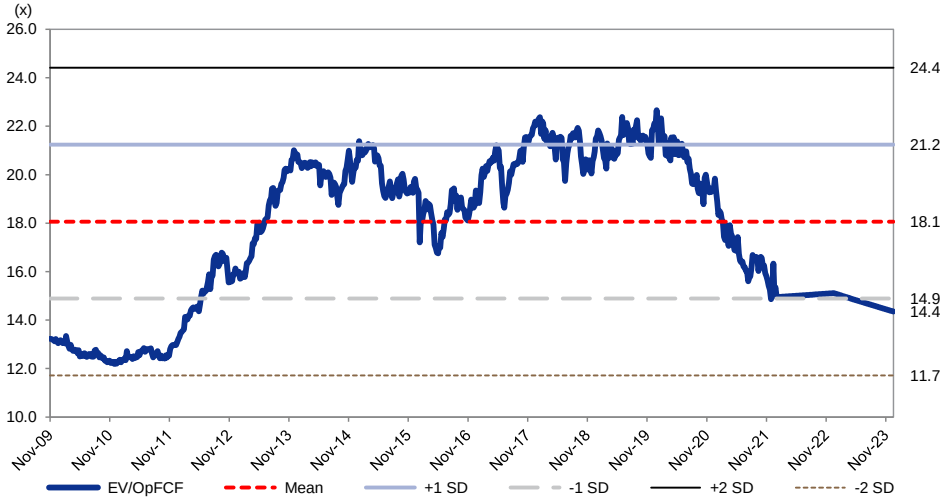
SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

Figure 9: Maxis's EV/OpFCF trading band (based on current earnings forecasts)



SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS, BLOOMBERG

Figure 10: Maxis's EV/OpFCF trading band (based on earnings estimates under SWN scenario)



SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS, BLOOMBERG

Figure 11: ASEAN telco sector comparison

Company	Bloomberg Ticker	Recom.	Current share price (local curr.)	Target price (local curr.)	Market cap (US$ m)	Core P/E (x)		EV/EBITDA (x)		EV/OpFCF (x)		3-year CAGR (%)		Dvd Yield (%)	
						2021F	2022F	2021F	2022F	2021F	2022F	EPS	EBITDA	2021F	2022F
Maxis	MAXIS MK	REDUCE	4.35	3.80	8,134	25.8	26.1	11.0	10.3	17.2	14.8	2.8	4.2	3.9	4.6
TM	T MK	ADD	5.08	7.50	4,580	16.5	16.1	5.6	5.2	9.8	9.1	17.6	5.1	3.6	3.7
MY telcos average (ex-outliers)						**26.0**	**23.6**	**8.5**	**8.0**	**14.1**	**12.7**	**10.2**	**3.8**	**3.4**	**3.9**
SingTel	ST SP	ADD	2.48	2.90	30,444	19.6	15.2	8.2	7.3	15.4	16.6	22.1	1.8	3.8	4.9
Starhub	STH SP	ADD	1.32	1.70	1,698	17.3	18.8	6.9	6.7	11.6	10.5	1.2	(0.2)	4.6	4.3
SG telcos average (ex-outliers)						**18.4**	**17.0**	**7.6**	**7.0**	**13.5**	**13.5**	**11.7**	**0.8**	**4.2**	**4.6**
TLKM	TLKM IJ	ADD	4,330	4,250	29,920	18.5	16.9	8.3	7.8	15.3	13.4	8.2	4.8	4.0	4.4
XL Axiata	EXCL IJ	ADD	3,050	3,500	2,282	34.1	18.2	4.7	4.3	11.6	9.5	45.3	4.8	1.5	3.3
Indosat	ISAT IJ	ADD	6,000	7,800	3,374	71.3	44.9	4.6	4.5	35.1	33.4	nm	9.4	30.0	1.1
Link Net	LINK IJ	ADD	4,380	5,200	875	13.2	13.2	5.5	4.9	16.7	13.5	2.3	7.5	2.3	2.3
Indo telcos average (ex-outliers)						**21.9**	**16.1**	**5.8**	**5.4**	**14.6**	**12.1**	**18.6**	**6.6**	**9.4**	**2.8**
AIS	ADVANC TB	ADD	222.00	256.00	20,054	24.5	24.3	7.7	7.2	10.5	9.7	(0.4)	4.0	3.1	3.7
DTAC	DTAC TB	ADD	47.00	52.70	3,380	34.3	29.6	5.4	5.2	10.4	10.1	(18.0)	2.3	4.4	4.5
True	TRUE TB	ADD	4.76	5.15	4,821	nm	nm	6.7	6.8	16.7	13.2	(18.1)	5.6	1.5	1.5
Jasmine	JASIF TB	HOLD	10.60	9.60	2,576	9.7	9.7	10.0	9.7	10.0	9.7	1.3	0.5	8.7	8.5
DIF	DIF TB	ADD	14.30	17.20	4,618	12.2	12.4	12.1	12.3	12.1	12.3	0.0	(0.2)	7.3	7.2
Intouch	INTUCH TB	HOLD	77.75	73.60	7,573	23.7	23.5	19.9	19.6	19.9	19.6	1.0	1.0	3.2	3.8
Thai telcos average (ex-outliers)						**20.9**	**19.9**	**10.3**	**10.1**	**13.3**	**12.4**	**(3.2)**	**2.2**	**4.7**	**4.9**
ASEAN Telcos average (ex-outliers)						**22.2**	**19.7**	**8.4**	**8.0**	**13.8**	**12.6**	**7.4**	**3.5**	**5.5**	**4.1**

Note: Share prices as of 21 Jan 2022; operating FCF (OpFCF) is calculated as EBITDA minus average 3-year forward capex; core P/E is share price divided by core EPS (i.e. reported EPS excluding one-off extraordinary items); included only P/E ratios ranging between c.10-40x, EV/OpFCF of c.5-25x & EPS/EBITDA 3-year CAGR of -100% to +100% in our calculation of sector averages

SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS, BLOOMBERG

ESG in a nutshell

Refinitiv ESG Scores

C-	A+	C-	D+	D+	B
ESG Score	ESG Controversies Score	ESG Combined Score	ESG Environment Pillar Score	ESG Social Pillar Score	ESG Government Pillar Score

We rank Maxis fourth for sustainability among the Malaysian telcos under our coverage. We believe it is not a clear leader in any of the key material ESG matters for the sector, and has more room to improve in several aspects. Nonetheless, we note its ESG performance is still fairly decent on an absolute basis, with bright spots including its fairly high average learning and training hours per employee and good/improving workforce/management diversity in 2017-20.

Keep your eye on	Implications
The government's plan to roll out the sole nationwide 5G network could be a mid- to longer-term risk for incumbent mobile network operators, including Maxis.	We have incorporated this downside risk into our ESG score and ranking for Maxis, but have not baked it into our valuation or forecasts, pending further details on the government's 5G rollout plan.

ESG highlights	Implications
We think that Maxis has more room to improve on: i) corporate governance/ethics (lags behind peers in terms of board diversity, number of directors exceeding the 9-year tenure limit and disclosure on individual remuneration of key management executives/directors as well as material corruption cases), ii) environmental impact, as it has not set any targets for the reduction of carbon emissions, which have risen for two consecutive years, and iii) data privacy/security.	This leads us to rank Maxis fourth among Malaysian telcos from an ESG angle. On an absolute basis, we do not expect its ESG performance to have a material impact on revenue/earnings, as the latter is more likely to be driven by issues such as competition, M&A and regulatory developments.

Trends	Implications
In return for the licence to operate their networks, society expects telcos to roll out their networks and provide good and reliable quality of service (QoS) at affordable prices. If telcos fail at this, there may be community calls on the regulator to intervene to correct a real/perceived market failure, perhaps with the setting of more stringent QoS/ coverage targets (with fines imposed if key performance indicators are not met), imposition of tariff ceilings or the suspension of licence/issuance of additional licences to bring in new entrants to spur competition. Telcos that do not consistently provide good and reliable QoS/coverage and customer service may also, over the longer run, risk losing subs and incur additional costs to manage high subs churn rates. Digi won the 4G download speed and video experience awards for the two consecutive times in Opensignal's Dec 20-Aug 21 tests, overtaking Maxis, which is now ranked second.	We are of the view that Maxis losing its position as the leader in network quality in Malaysia is a potential threat that could reduce its market traction over the medium term. We have factored this into our forecasts by projecting a gradual mobile revenue market share erosion for Maxis over FY22-24F.

SOURCES: CGS-CIMB RESEARCH, REFINITIV, OPENSIGNAL, COMPANY REPORTS

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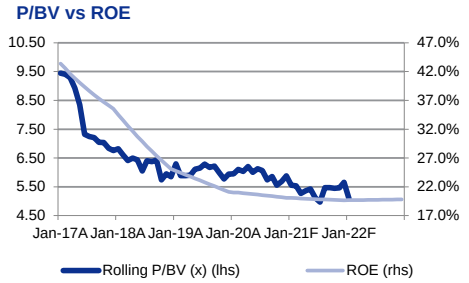

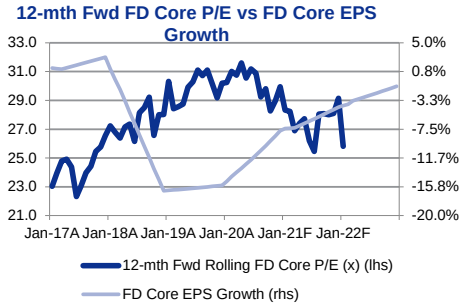

Profit & Loss

(RMm)	Dec-19A	Dec-20A	Dec-21F	Dec-22F	Dec-23F
Total Net Revenues	**9,504**	**9,240**	**9,329**	**9,793**	**10,015**
Gross Profit	**9,504**	**9,240**	**9,329**	**9,793**	**10,015**
Operating EBITDA	**3,926**	**3,814**	**3,916**	**4,223**	**4,315**
Depreciation And Amortisation	-1,439	-1,535	-1,724	-1,859	-1,855
Operating EBIT	**2,487**	**2,279**	**2,192**	**2,364**	**2,460**
Financial Income/(Expense)	-452	-405	-424	-433	-453
Pretax Income/(Loss) from Assoc.	0	0	0	0	0
Non-Operating Income/(Expense)	0	0	0	0	0
Profit Before Tax (pre-EI)	**2,035**	**1,874**	**1,767**	**1,932**	**2,007**
Exceptional Items	-8	-22	0	0	0
Pre-tax Profit	**2,027**	**1,852**	**1,767**	**1,932**	**2,007**
Taxation	-515	-470	-449	-630	-509
Exceptional Income - post-tax					
Profit After Tax	**1,512**	**1,382**	**1,319**	**1,302**	**1,498**
Minority Interests	0	0	0	0	0
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	**1,512**	**1,382**	**1,319**	**1,302**	**1,498**
Recurring Net Profit	1,493	1,378	1,319	1,302	1,498
Fully Diluted Recurring Net Profit	**1,493**	**1,378**	**1,319**	**1,302**	**1,498**

Cash Flow

(RMm)	Dec-19A	Dec-20A	Dec-21F	Dec-22F	Dec-23F
EBITDA	3,926	3,814	3,916	4,223	4,315
Cash Flow from Invt. & Assoc.					
Change In Working Capital	-84	-207	-207	-207	-207
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense					
Other Operating Cashflow	468	652	454	452	451
Net Interest (Paid)/Received	-495	-472	-469	-478	-498
Tax Paid	-547	-355	-449	-630	-509
Cashflow From Operations	**3,268**	**3,432**	**3,245**	**3,360**	**3,551**
Capex	-1,371	-1,396	-1,483	-1,483	-1,250
Disposals Of FAs/subsidiaries	1	1	1	1	1
Acq. Of Subsidiaries/investments	0	0	0	0	0
Other Investing Cashflow	-6	-18	0	0	0
Cash Flow From Investing	**-1,376**	**-1,413**	**-1,482**	**-1,482**	**-1,249**
Debt Raised/(repaid)	200	0	50	100	-100
Proceeds From Issue Of Shares	0	0	0	0	0
Shares Repurchased					
Dividends Paid	-1,564	-1,330	-1,330	-1,564	-1,564
Preferred Dividends					
Other Financing Cashflow	-755	-743	-743	-746	-766
Cash Flow From Financing	**-2,119**	**-2,073**	**-2,023**	**-2,211**	**-2,431**
Total Cash Generated	-227	-54	-260	-333	-129
Free Cashflow To Equity	**2,092**	**2,019**	**1,813**	**1,978**	**2,202**
Free Cashflow To Firm	**2,414**	**2,508**	**2,253**	**2,372**	**2,815**

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

BY THE NUMBERS… cont'd

Balance Sheet

(RMm)	Dec-19A	Dec-20A	Dec-21F	Dec-22F	Dec-23F
Total Cash And Equivalents	582	735	680	553	647
Total Debtors	2,390	2,073	2,434	2,304	2,544
Inventories	3	3	3	3	3
Total Other Current Assets	11	11	12	13	15
Total Current Assets	**2,986**	**2,822**	**3,130**	**2,874**	**3,209**
Fixed Assets	4,922	4,931	5,067	5,151	5,008
Total Investments	0	0	0	0	0
Intangible Assets	11,310	11,461	11,419	11,297	11,175
Total Other Non-Current Assets	3,105	2,718	2,813	2,918	3,033
Total Non-current Assets	**19,337**	**19,110**	**19,299**	**19,366**	**19,217**
Short-term Debt	905	0	0	0	0
Current Portion of Long-Term Debt					
Total Creditors	4,323	3,997	4,303	4,238	4,502
Other Current Liabilities	532	464	464	464	464
Total Current Liabilities	**5,760**	**4,461**	**4,767**	**4,702**	**4,966**
Total Long-term Debt	6,934	7,821	7,871	7,971	7,871
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	2,628	2,935	3,087	3,125	3,215
Total Non-current Liabilities	**9,562**	**10,756**	**10,958**	**11,096**	**11,086**
Total Provisions	0	0	0	0	0
Total Liabilities	**15,322**	**15,217**	**15,725**	**15,798**	**16,051**
Shareholders' Equity	7,001	6,715	6,704	6,442	6,375
Minority Interests	0	0	0	0	0
Total Equity	**7,001**	**6,715**	**6,704**	**6,442**	**6,375**

Key Ratios

	Dec-19A	Dec-20A	Dec-21F	Dec-22F	Dec-23F
Revenue Growth	1.32%	(3.73%)	0.99%	5.13%	2.32%
Operating EBITDA Growth	2.19%	(2.85%)	2.68%	7.84%	2.17%
Operating EBITDA Margin	42.2%	42.5%	43.2%	44.4%	44.3%
Net Cash Per Share (RM)	-0.93	-0.91	-0.92	-0.95	-0.92
BVPS (RM)	0.90	0.86	0.86	0.82	0.81
Gross Interest Cover	4.76	4.66	4.48	4.79	4.79
Effective Tax Rate	25.4%	25.4%	25.4%	32.6%	25.4%
Net Dividend Payout Ratio	103%	95%	101%	120%	104%
Accounts Receivables Days	87.12	91.09	90.84	90.84	90.84
Inventory Days	N/A	N/A	N/A	N/A	N/A
Accounts Payables Days	N/A	N/A	N/A	N/A	N/A
ROIC (%)	12.5%	10.1%	9.8%	10.4%	10.9%
ROCE (%)	17.3%	16.1%	15.5%	16.7%	17.6%
Return On Average Assets	8.83%	7.72%	7.38%	7.28%	8.23%

Key Drivers

	Dec-19A	Dec-20A	Dec-21F	Dec-22F	Dec-23F
Total RGS mobile subs ('000)	9,868.0	9,790.0	10,073.1	10,277.7	10,441.5
Postpaid RGS subs, ex-M2M ('000)	3,372.0	3,508.0	3,708.0	3,858.0	3,988.0
Postpaid M2M RGS subs ('000)	269.0	331.0	364.1	418.7	502.5
Prepaid RGS subs ('000)	6,227.0	5,951.0	6,001.0	6,001.0	5,951.0
Postpaid RGS ARPU, ex-M2M (RM/mth/sub)	90.8	84.5	81.0	80.0	78.0
Prepaid RGS ARPU (RM/mth/sub)	41.0	39.5	38.0	38.5	38.0
Wireless broadband subs ('000)	104.0	129.0	209.0	239.0	239.0
Home Fibre subs ('000)	331.0	402.0	487.0	562.0	632.0
Home Fibre ARPU (RM/mth/sub)	109.2	107.5	109.7	111.9	114.1

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

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Description:	Excellent	Very Good	Good	N/A	N/A

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	Rating Distribution (%)	Investment Banking clients (%)
Add	71.1%	1.5%
Hold	21.8%	0.0%
Reduce	7.1%	0.0%

Corporate Governance Report of Thai Listed Companies (CGR). CG Rating by the Thai Institute of Directors Association (Thai IOD) in 2021, Anti-Corruption 2021

ADVANC – Excellent, Certified, **AMATA** – Excellent, Certified, **ANAN** – Excellent, n/a, **AOT** – Excellent, n/a, **AP** – Excellent, Certified, **ASP** – Excellent, n/a, **AWC** – Excellent, Declared, **AU** – Good, n/a, **BAM** – Very Good, Certified, **BAY** – Excellent, Certified, **BBL** – Excellent, Certified, **BCH** – Very Good, Certified, **BCP** - Excellent, Certified, **BCPG** – Excellent, Certified, **BDMS** – Excellent, n/a, **BEAUTY** – Good, n/a, **BEM** – Excellent, n/a **BH** - Good, n/a, **BJC** – Very Good, n/a, **BLA** – Very Good, Certified, **BTS** - Excellent, Certified, **CBG** – Very Good, n/a, **CCET** – n/a,

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- CG Score 2021 from Thai Institute of Directors Association (IOD)

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Add	The stock's total return is expected to exceed 10% over the next 12 months.
Hold	The stock's total return is expected to be between 0% and positive 10% over the next 12 months.
Reduce	The stock's total return is expected to fall below 0% or more over the next 12 months.

The total expected return of a stock is defined as the sum of the: (i) percentage difference between the target price and the current price and (ii) the forward net dividend yields of the stock. Stock price targets have an investment horizon of 12 months.

Sector Ratings	Definition:
Overweight	An Overweight rating means stocks in the sector have, on a market cap-weighted basis, a positive absolute recommendation.
Neutral	A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation.
Underweight	An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation.

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Neutral	A Neutral rating means investors should be positioned with a neutral weight in this country relative to benchmark.
Underweight	An Underweight rating means investors should be positioned with a below-market weight in this country relative to benchmark.

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