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Rakon Limited
5G Challenges Roll On, Opportunities Remain

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Rakon (RAK) updated the market at its ASM, providing opening underlying EBITDA guidance for FY25 of between NZ$5m to NZ$15m. This compares to NZ$13.5m reported in FY24. It suggests that weakness in RAK's key Telecommunications (51% of estimated FY25 revenue) and Positioning (11% of estimated FY25 revenue) segments is persisting. Weakness in the Telecommunications segment is mainly due to 5G deployment delays. These delays stem from economic uncertainties, limited revenue upside compared to 4G, and a shift in focus to network efficiencies rather than expansion. We explore these issues in more detail in this note. For RAK, 5G network deployment delays contributed to a -34% fall in Telecommunications sales in FY24. We materially lower our segment revenue expectations for FY25, with the outlook remaining soft. However, there are positive indications in other areas of RAK's product portfolio. Space and Defense revenues were up +27% in FY24 (and we retain our forecast of +14% growth in FY25), and AI-related products should materially support the Telecommunications segment from FY26. We lower our underlying EBITDA estimate from NZ$14.4m to NZ$10.6m in FY25. Our spot valuation falls -7cps to $0.88.

NZX Code	RAK
Share price	NZ$0.80
Spot Valuation	NZ$0.88 (from 0.95)
Risk rating	High
Issued shares	229.8m
Market cap	NZ$184m
Avg daily turnover	86.6k (NZ$85k)

Financials: Mar/	24A	25E	26E	27E
Rev (NZ$m)	128.4	120.7	149.4	177.9
NPAT* (NZ$m)	4.5	0.4	9.7	18.4
EPS* (NZc)	2.0	0.2	4.2	8.0
DPS (NZc)	0.0	0.0	0.0	1.5
Imputation (%)	100	0	0	100

*Based on normalised profits

Valuation (x)	24A	25E	26E	27E
PE	40.7	n/a	19.0	10.0
EV/EBIT	n/a	n/a	n/a	n/a
EV/EBITDA	n/a	n/a	n/a	n/a
Price / NTA	1.2	1.3	1.2	1.1
Cash div yld (%)	0.0	0.0	0.0	1.9
Gross div yld (%)	0.0	0.0	0.0	2.6

What's changed?

- **Earnings:** EBITDA estimates fall -26% in FY25, -15% in FY26 and -13% in FY27.
- **Spot valuation:** Our spot valuation falls -7% to NZ$0.88, with near-term earnings declines partially offset by an uplift in long-term expectations for RAK's AI product portfolio.

SiTime' (SITM) 2Q24 showing signs of recovery

On 7 August 2024, SiTime (SITM), a key peer for RAK, reported 2Q24 net revenue of US$43.9m, up +33% from 1Q24 and +58% over 2Q23. Improved demand was seen across all segments, notably in communications, enterprise, and data centres. Management also noted that the drag of excess industry inventory had passed, with inventory levels now normalised. SITM has greater exposure to consumer products relative to RAK, helping to explain why sales increases have not translated into RAK's higher-end client segments.

Revision of our estimates

We amend our sales estimates, with Telecommunications and Positioning revenues now expected to fall in FY25. Overall, we now forecast FY25 sales of NZ$120m (-6% on last year) and NZ$10.6m in underlying EBITDA. The Telco segment should rebound strongly in FY26 (albeit at a slower pace than anticipated), with traditional Telco weakness partially offset by AI-related growth.

TAM projections provided for the first time

As part of its ASM presentation, RAK provided quantitative addressable market estimates for four of its core markets for the first time. The company estimates that its total addressable market (TAM) is ~NZ$4.2bn, and its serviceable addressable market (SAM) is ~NZ$2.0bn. Refer to *Appendix 1: Addressable market projections* for more information.

Rakon Limited (RAK)

Market Data (NZ$)	
Priced as at 28 Aug 2024	**0.80**
52 week high / low	1.31 / 0.59
Market capitalisation (NZ$m)	183.8

Key WACC assumptions	
Risk free rate	5.00%
Equity beta	1.35
WACC	11.7%
Terminal growth	2.0%

Profit and Loss Account (NZ$m)	2023A	2024A	2025E	2026E	2027E
Revenue	180.7	128.4	120.7	149.4	177.9
Normalised EBITDA	**41.1**	**10.9**	**8.1**	**20.3**	**32.0**
Depreciation and amortisation	(7.8)	(8.1)	(7.6)	(8.1)	(8.2)
Normalised EBIT	**33.3**	**2.8**	**0.4**	**12.2**	**23.8**
Net interest	(0.5)	(0.1)	(0.6)	(0.6)	(0.4)
Associate income	(1.5)	(2.3)	0.8	1.3	1.3
Tax	(8.1)	4.2	(0.1)	(3.2)	(6.3)
Minority interests	0	0	0	0	0
Normalised NPAT	**23.2**	**4.5**	**0.4**	**9.7**	**18.4**
Abnormals/other	0	0	0	0	0
Reported NPAT	**23.2**	**4.5**	**0.4**	**9.7**	**18.4**
Normalised EPS (cps)	10.1	2.0	0.2	4.2	8.0
DPS (cps)	1.5	0	0	0	1.5

Growth Rates	2023A	2024A	2025E	2026E	2027E
Revenue (%)	4.1	-29.0	-6.0	23.8	19.1
EBITDA (%)	-18.3	-73.4	-26.2	>100	57.9
EBIT (%)	-19.5	-91.6	-84.6	>100	95.0
Normalised NPAT (%)	-29.9	-80.6	-90.3	>100	89.9
Normalised EPS (%)	-29.9	-80.6	-90.3	>100	89.9
Ordinary DPS (%)	n/a	-100.0	n/a	n/a	n/a

Cash Flow (NZ$m)	2023A	2024A	2025E	2026E	2027E
EBITDA	**41.1**	**10.9**	**8.1**	**20.3**	**32.0**
Working capital change	(18.2)	2.8	13.0	(5.9)	(8.5)
Interest & tax paid	(10.5)	(3.6)	(0.7)	(3.8)	(6.7)
Other	(1.3)	6.6	0.8	1.3	1.3
Operating cash flow	**11**	**16.8**	**21.1**	**11.8**	**18.1**
Capital expenditure	(18.7)	(15.6)	(13.4)	(7.8)	(8.4)
(Acquisitions)/divestments	0	0	0	0	0
Other	(2.5)	(2.1)	(2.1)	(2.2)	(2.2)
Funding available/(required)	**(10.1)**	**(0.9)**	**5.6**	**1.8**	**7.4**
Dividends paid	0	(2.9)	0	0	(2.3)
Equity raised/(returned)	0	0	0	0	0
(Increase)/decrease in net debt	**(10.1)**	**(3.9)**	**5.6**	**1.8**	**5.1**

Balance Sheet (NZ$m)	2023A	2024A	2025E	2026E	2027E
Working capital	84.1	81.3	68.2	74.2	82.7
Fixed assets	34.4	40.1	45.0	43.4	42.5
Intangibles	7.7	10.8	13.7	16.9	19.9
Right of use asset	3.4	6.2	9.2	7.3	5.4
Other assets	26.0	25.3	25.3	25.3	25.3
Total funds employed	**155.6**	**163.7**	**161.5**	**167.1**	**175.9**
Net debt/(cash)	(16.5)	(11.2)	(16.8)	(18.6)	(23.8)
Lease liability	2.5	5.0	7.8	5.7	3.4
Other liabilities	12.7	10.7	10.7	10.7	11.8
Shareholder's funds	156.9	159.3	159.7	169.4	184.3
Minority interests	0	0	0	0	0
Total funding sources	**155.6**	**163.7**	**161.5**	**167.1**	**175.9**

* Forsyth Barr target prices reflect valuation rolled forward at cost of equity less the next 12-months dividend** Information on Forsyth Barr's Carbon and ESG (CESG) ratings can be found at www.forsythbarr.co.nz/corporate-news-events/cesg-report

Spot valuation (NZ$)	**0.88**
DCF	0.93
PE driven comparables valuation	0.84

DCF valuation summary (NZ$m)	
Total firm value	225
(Net debt)/cash	17
Less: Capitalised operating leases	-29
Value of equity	213

Valuation Ratios	2023A	2024A	2025E	2026E	2027E
EV/Sales (x)	0.9	1.4	1.5	1.2	1.0
EV/EBITDA (x)	4.1	15.9	21.8	8.6	5.5
EV/EBIT (x)	5.0	61.8	>100x	14.3	7.4
PE (x)	7.9	40.7	>100x	19.0	10.0
Price/NTA (x)	1.2	1.2	1.3	1.2	1.1
Free cash flow yield (%)	-5.5	-0.5	3.0	1.0	4.0
Adj. free cash flow yield (%)	4.7	8.0	10.3	5.2	8.6
Net dividend yield (%)	1.9	0.0	0.0	0.0	1.9
Gross dividend yield (%)	2.6	0.0	0.0	0.0	2.6

Capital Structure	2023A	2024A	2025E	2026E	2027E
Interest cover EBIT (x)	64.1	21.1	0.7	20.8	55.9
Interest cover EBITDA (x)	79.1	82.3	13.5	34.6	75.3
Net debt/ND+E (%)	-11.7	-7.6	-11.8	-12.3	-14.8
Net debt/EBITDA (x)	n/a	n/a	n/a	n/a	n/a

Key Ratios	2023A	2024A	2025E	2026E	2027E
Return on assets (%)	16.1	1.4	0.2	5.7	10.5
Return on equity (%)	14.8	2.8	0.3	5.7	10.0
Return on funds employed (%)	11.2	2.2	0.2	4.6	8.4
EBITDA margin (%)	22.8	8.5	6.7	13.6	18.0
EBIT margin (%)	18.4	2.2	0.4	8.2	13.4
Capex to sales (%)	10.3	12.2	11.1	5.2	4.7
Capex to depreciation (%)	286	250	201	114	125
Imputation (%)	100	100	0	0	100
Pay-out ratio (%)	15	0	0	0	19

Segment Revenue (NZ$m)	2023A	2024A	2025E	2026E	2027E
Telecommunications	101.6	66.9	54.8	74.0	93.3
Positioning	33.8	13.9	13.6	15.6	16.4
Space and Defence	28.9	36.8	42.0	49.9	58.9
IoT, Emerging and Other	17.0	10.5	10.0	9.5	9.0
Other revenues	-1.0	0.4	0.4	0.4	0.4
Total Revenue	**180.4**	**128.4**	**120.7**	**149.4**	**177.9**

Segment Gross Margin (%)	2023A	2024A	2025E	2026E	2027E
Telecommunications	42.3	33.8	34.5	36.5	38.0
Positioning	53.5	44.4	43.0	45.0	47.0
Space and Defence	68.0	65.2	64.2	63.2	62.2
IoT, Emerging and Other	47.7	49.1	49.1	49.1	49.1

Segment Gross Margin (NZ$m)	2023A	2024A	2025E	2026E	2027E
Telecommunications	42.9	22.6	18.9	27.0	35.4
Positioning	18.1	6.2	5.8	7.0	7.7
Space and Defence	19.7	24.0	26.9	31.5	36.6
IoT, Emerging and Other	8.1	5.2	4.9	4.6	4.4

"Underlying EBITDA" (NZ$m)	2023A	2024A	2025E	2026E	2027E
Underlying EBITDA estimates	42.2	13.5	10.6	23.9	35.7

Earnings revisions

We materially cut our traditional Telecommunication and Positioning revenue expectations in FY25. This is partially offset by increased assumptions in AI-related products (which are currently reported within Telco) in FY26 and onwards. This will see material drops in revenue from Telco in FY25 of ~-18% to NZ$55m, before strong growth off this base (FY26 revenue growth expectations now sit +35% to ~NZ$74m in revenue) when AI-related products are anticipated to contribute materially to revenues. We retain our estimates for Space and Defence, seeing solid +14%/+19%/+18% growth over FY25/FY26/FY27 respectively. We consider management's work on right-sizing costs, permitting gross margins to lift marginally to 47.0% in FY25 (up from 45.2% in FY24). However, underlying EBITDA expectations fall by -26%/-15%/13% over FY25/FY26/FY27 respectively. We now do not expect RAK to pay a dividend for FY25 or FY26.

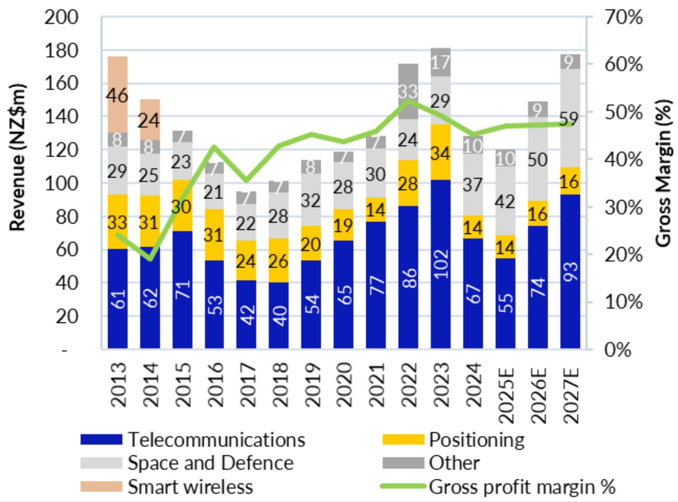
Figure 1. Earnings revisions

	FY25E			FY26E			FY27E		
	Old	New	Change	Old	New	Change	Old	New	Change
Revenue	135.8	120.3	-11%	164.4	149.0	-9%	193.2	177.6	-8%
Cost of sales	(73.2)	(63.8)	-13%	(88.3)	(78.8)	-11%	(102.4)	(93.4)	-9%
Gross Profit	**62.6**	**56.6**	**-10%**	**76.2**	**70.2**	**-8%**	**90.8**	**84.2**	**-7%**
Selling and marketing costs	(10.6)	(10.5)	-1%	(11.4)	(11.4)	-0%	(13.0)	(13.2)	+1%
Research and development	(19.0)	(16.8)	-11%	(21.4)	(19.4)	-9%	(23.2)	(21.3)	-8%
General and administration	(29.1)	(29.1)	+0%	(27.7)	(27.7)	+0%	(26.3)	(26.3)	+0%
Finance income	0.3	0.4	n/a	0.1	0.2	n/a	0.2	0.2	n/a
Finance costs	(1.0)	(1.0)	n/a	(0.8)	(0.8)	n/a	(0.7)	(0.7)	n/a
Share of net profits of associates	0.8	0.8	+0%	1.3	1.3	+0%	1.3	1.3	+0%
Profit before income tax	4.2	0.6	-86%	16.7	12.9	-23%	29.5	24.7	-16%
Income tax expense	(1.1)	(0.1)	-86%	(4.2)	(3.2)	-23%	(7.5)	(6.3)	-16%
Net profit for the period	**3.2**	**0.4**	**-86%**	**12.6**	**9.7**	**-23%**	**22.0**	**18.4**	**-16%**
Profit before income tax	4.2	0.6	-86%	16.7	12.9	-23%	29.5	24.7	-16%
Depreciation and amortisation	(7.7)	(7.6)	n/a	(8.3)	(8.1)	n/a	(8.5)	(8.2)	n/a
Finance costs – net	(0.7)	(0.6)	n/a	(0.7)	(0.6)	n/a	(0.5)	(0.4)	n/a
Adjustments for associate share of interest, tax and depreciation	(0.8)	(0.8)	n/a	(1.3)	(1.3)	n/a	(1.3)	(1.3)	n/a
Other non-cash items	(1.0)	(1.0)	n/a	(1.0)	(1.0)	n/a	(1.1)	(1.1)	n/a
Underlying EBITDA	**14.4**	**10.6**	**-26%**	**28.0**	**23.9**	**-15%**	**40.9**	**35.7**	**-13%**

Source: Forsyth Barr analysis

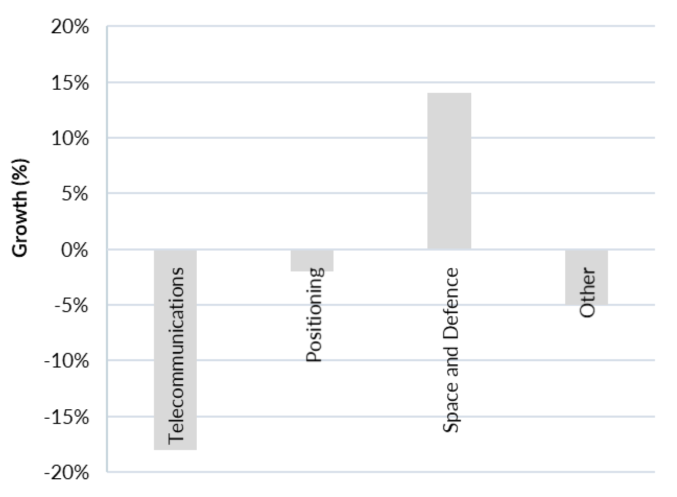
Key charts

Figure 2. RAK — Divisional revenue stack and gross margin (%)



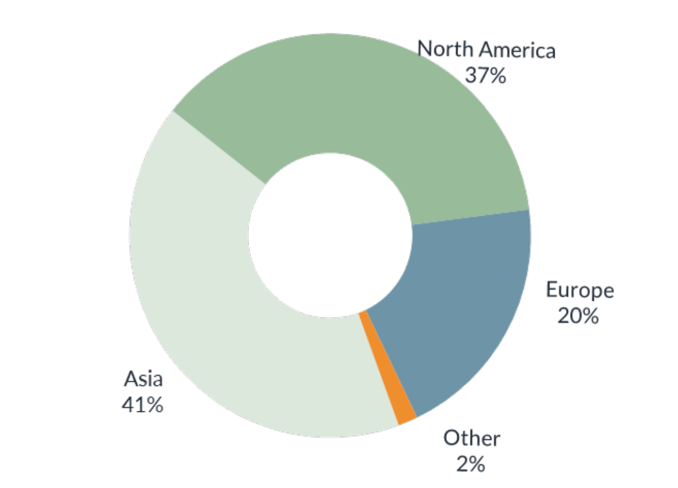
Source: Company, Forsyth Barr analysis

Figure 3. RAK — Revenue growth by division (FY25 estimate)



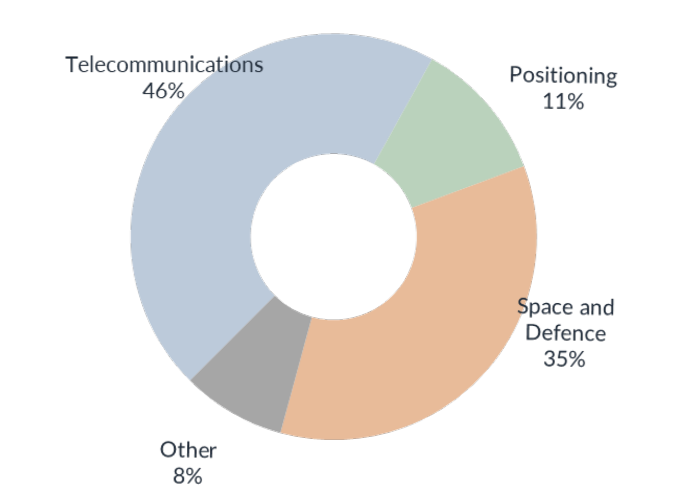
Source: Forsyth Barr analysis

Figure 4. RAK — Regional revenue split (FY24)



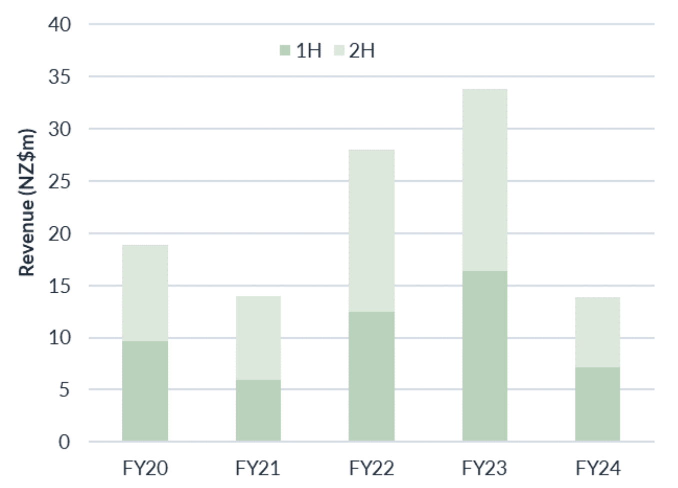
Source: Company data, Forsyth Barr analysis

Figure 5. RAK — Revenue by division (FY25 estimate)



Source: Company data, Forsyth Barr analysis

Figure 6. RAK — Positioning revenues (half years)

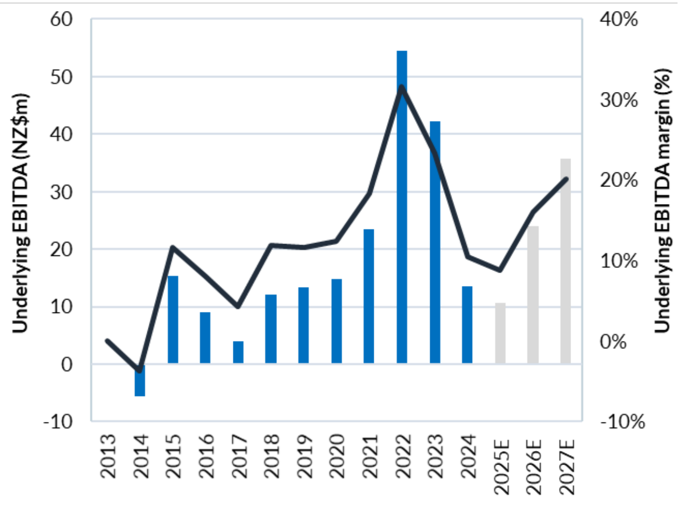


Source: Company data, Forsyth Barr analysis

Figure 7. RAK — Space and Defence revenues (half years)

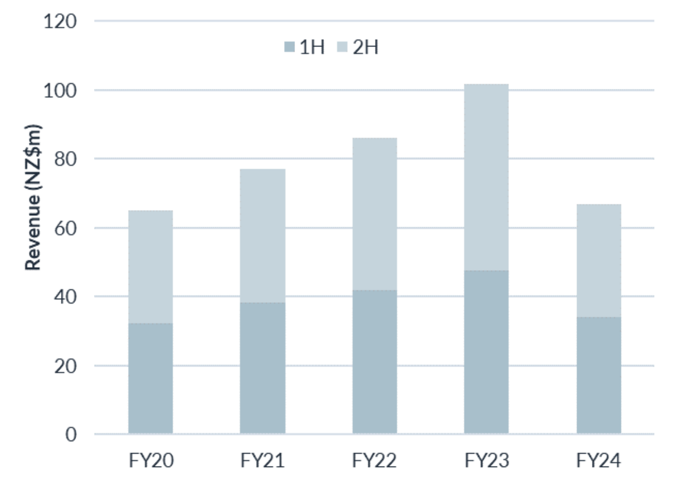
Source: Company data, Forsyth Barr analysis

Figure 8. RAK — Underlying EBITDA



Source: Company data, Forsyth Barr analysis

Figure 9. RAK — Telecommunications revenues (half years)



Source: Company data, Forsyth Barr analysis

The spectrum of issues influencing the rollout of 5G networks

The deceleration in the deployment of 5G networks globally over 2023 and 2024 contrasts sharply with the strength witnessed in earlier years (where RAK's five-year CAGR of Telecommunication sales to FY22 was +20%). This can be attributed to a confluence of economic, technological and regulatory challenges, but practical constraints and shifting market dynamics have tempered the initial excitement surrounding the transformative potential of 5G. We consider the factors contributing to the softening in sales below:

- One of the primary factors contributing to sector weakness is the **economic slowdown** that has impacted numerous countries. The onset of recessionary pressures and inflation has led to a reduction in consumer spending and a re-evaluation of investment priorities by businesses, including mobile network operators (MNOs). This economic backdrop has made the substantial capital expenditure required for 5G deployment less feasible, especially with high interest rates. MNOs are grappling with the need to balance their investment in new technology against uncertain immediate returns, leading to postponed or scaled-down rollouts.
- With high levels of market penetration already achieved for existing 4G services, **the incremental benefits of 5G** in terms of consumer experience are perceived as limited. Telcos are **not able to monetise the benefits**, dampening the urgency for rapid deployment. Moreover, the business case for immediate widespread rollout of 5G is weakened by the adequate performance of existing 4G networks, which continue to effectively serve the current needs of most consumers and businesses.
- **Technological challenges** also play a significant role. Despite the advancements in 5G technology, the integration of this new standard with existing infrastructure has proven more complex and costly than anticipated. The density of antennas needed to ensure comprehensive coverage and the requisite back-haul capacity exceed those for previous generations, escalating the logistical and financial burdens on operators. Furthermore, the technological maturity of 5G, particularly in areas like network slicing and edge computing, is still evolving. Operators are potentially hesitant to commit fully to deployments before these technologies have been fully proven and standardised, which delays broader implementation.
- Regulatory and geopolitical factors have further complicated the 5G landscape. In several regions, regulatory uncertainties regarding **spectrum allocation** have slowed the momentum. Spectrum auctions have been delayed or entangled in bureaucratic red tape, hindering operators' ability to plan and execute 5G deployment strategies effectively. Additionally, geopolitical tensions have led to scrutiny over the security of 5G equipment, particularly concerning suppliers from rival US/Chinese suppliers. This scrutiny has resulted in bans and restrictions on certain vendors, fragmenting the supply chain and forcing some operators to re-evaluate their equipment sourcing strategies, leading to delays.
- On the demand side, the anticipated revolution in industry verticals through **5G-enabled technologies like the Internet of Things (IoT), autonomous vehicles, and smart cities has yet to materialise at the expected pace**. The development of these technologies and their ecosystems is intricate, and progressing slower than the initial forecasts. This lag has led to reduced immediate demand for 5G from these sectors, diminishing the business case for rapid network expansion.
- The **availability and affordability of 5G-enabled devices** remain barriers to widespread consumer adoption. Although the prices of 5G smartphones have been decreasing, they are still prohibitively high for a significant segment of consumers in various markets. Without a critical mass of users on 5G devices, the impetus for operators to accelerate network rollout diminishes.

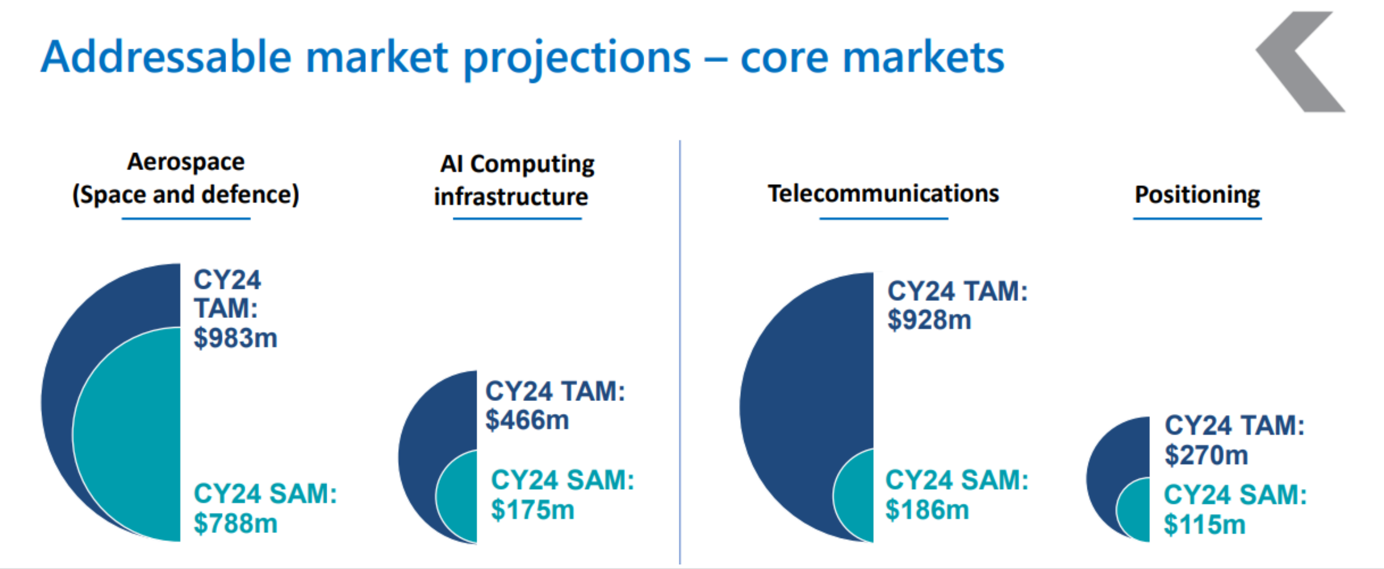
Appendices

Appendix 1: Addressable market projections

For the first time, RAK has provided the market with addressable market projections for its core markets. RAK estimates that its total addressable market (TAM) is US$2.6bn or ~NZ$4.2bn, spread between: (1) Aerospace (US$0.9bn), (2) AI Computing Infrastructure (US$0.5bn), (3) Telecommunications (US$0.9bn), and (4) Positioning (US$0.3bn). See Figure 10 below. Within each of these four markets, RAK has also estimated the serviceable addressable market (SAM).

Details surrounding the inputs used in RAK's addressable market estimates are light. Nevertheless, the presentation of quantitative projections should be taken as a positive signal of the opportunity in front of the company, particularly in Aerospace and AI Computing Infrastructure. We expect these product lines to be the primary growth engines for RAK in the future, alongside a recovery in conventional Telecommunications sales.

Figure 10. RAK — addressable market projections

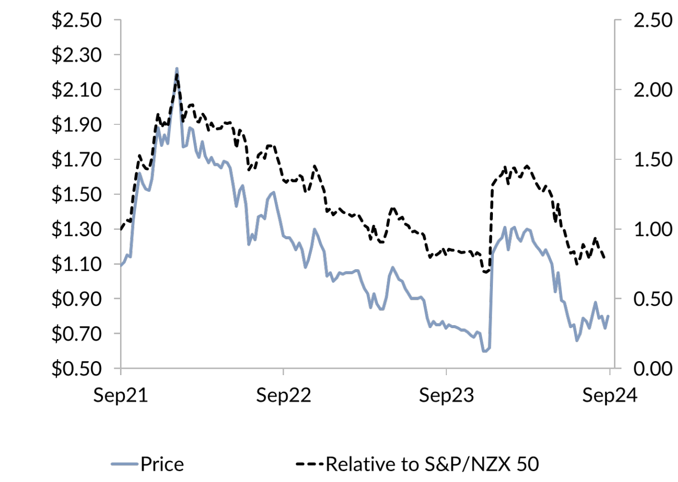


Source: Company, Forsyth Barr analysis

Appendix 2: Executive changes

RAK has appointed Mark Dunwoodie as **interim CFO**, effective 26 August 2024, bringing >25 years of experience from positions at Credit Suisse and Deutsche Bank. Further, Nick Pudney was appointed in the new role of **Chief Transformation and Operations Officer NZ**, effective 7 October 2024, due to his experience leading large-scale change programmes at Mercury NZ and Natwest (UK).

Figure 11. Price performance



Source: Forsyth Barr analysis

Figure 12. Substantial shareholders

Shareholder	Latest Holding
Brent John Robinson	15.2%
Siward Crystal Technology	12.2%
Wairahi Investments and Wairahi Holdings Limited	6.1%

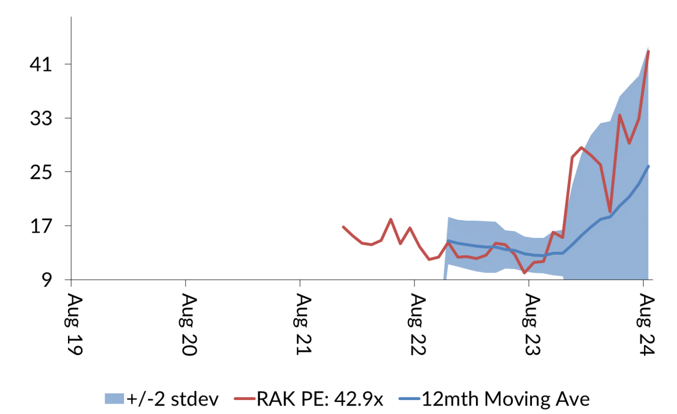
Source: NZX, Forsyth Barr analysis, NOTE: based on SPH notices only

Figure 13. International valuation comparisons

Company	Code	Price	Mkt Cap	PE		EV/EBITDA		EV/EBIT		Cash Yld
(metrics re-weighted to reflect RAK's balance date - March)			(m)	2025E	2026E	2025E	2026E	2025E	2026E	2026E
Rakon	**RAK NZ**	**NZ$0.80**	**NZ$184**	**>75x**	**19.0x**	**n/a**	**8.6x**	**n/a**	**14.3x**	**0.0%**
Txc Corp	3042 TT	TWD111.00	TWD34,384	15.3x	n/a	8.8x	n/a	13.3x	n/a	n/a
Sitime Corp	SITM US	US$143.03	US$3,309	>75x	>50x	>75x	49.3x	<0x	>75x	n/a
Microchip Technology Inc	MCHP US	US$80.94	US$43,425	40.4x	24.1x	28.3x	18.8x	33.7x	21.4x	2.3%
Siward Crystal Technology Co	2484 TT	TWD29.05	TWD4,631	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Daishinku Corp	6962 T	¥636.00	¥23,021	20.3x	13.2x	5.0x	4.2x	14.9x	10.9x	4.6%
Nihon Dempa Kogyo Co	6779 T	¥1140.00	¥26,367	9.1x	6.4x	4.5x	3.8x	7.6x	6.1x	3.2%
Seiko Epson Corp	6724 JP	¥2694.00	¥1,037,250	16.7x	14.3x	6.1x	5.6x	12.0x	10.5x	2.9%
			Compco Average:	**20.3x**	**14.5x**	**10.5x**	**16.4x**	**16.3x**	**12.2x**	**3.2%**
EV = Mkt cap+net debt+lease liabilities+min interests-investments			**RAK Relative:**	**n/a**	**31%**	**n/a**	**-47%**	**n/a**	**17%**	**-100%**

Source: *Forsyth Barr analysis, Bloomberg Consensus, Compco metrics re-weighted to reflect headline (RAK) companies fiscal year end

Figure 14. One year forward PE (x)



Source: Forsyth Barr analysis

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