



rakon

Rakon Limited Annual Report 2019



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Directors' Report

The Directors are responsible for ensuring that the financial statements fairly present the financial position of the Group as at 31 March 2019 (FY2019) and their financial performance and cash flows for the year ended on that date.

The Directors consider that the financial statements of the Company and the Group have been prepared using appropriate accounting policies, consistently applied and supported by reasonable judgements and estimates, and that all relevant financial reporting and accounting standards have been followed.

The Directors believe that proper accounting records have been kept, which enable, with reasonable accuracy, the determination of the financial position of the Company and the Group and facilitate compliance of the financial statements with the Financial Markets Conduct Act 2013.

The Directors consider they have taken adequate steps to safeguard the assets of the Company and the Group and to prevent and detect fraud and other irregularities.

During the year the Company acquired the remaining 51% interest in Rakon India Private Limited for US\$5.5m; prior to this Rakon India was a joint venture. The Directors note that there were no other material changes in the nature of the business undertaken by the Company and the Group in the past year.

The Directors present the financial statements set out in pages 4 – 51, of Rakon Limited and subsidiaries for the year ended 31 March 2019.

The Board of Directors of Rakon Limited authorised these financial statements for issue on 16 May 2019.

Financial results

Rakon Limited has reported a full year net profit after tax of \$3.4m (2018: \$10.0m).

Sales revenue for the year was \$114m, up \$12.9m or 13% on the prior year, with increased revenue across the telecommunications and space & defence markets and decreased revenue in the global positioning market. Gross profit for the year was \$51.7m, up \$8.4m or 19% on the prior year. Gross profit increased from the flow through of higher revenue; the consolidation of Rakon India's operations from May 2018; and from the improved mix of business in products and markets. Operating expenses for the year were \$47.3m, up \$5.7m compared to the prior year.

During the year, the Company moved from a net cash position of \$7.4m at 31 March 2018 to a net debt position of \$7.7m at 31 March 2019 with the acquisition of the remaining 51% interest in Rakon India and investment in inventory and equipment to meet growing demand, predominantly in the telecommunications market. As at 31 March 2019, Rakon's shareholders' equity stood at \$90.0m, funding 66% of total assets.

The Board maintains a dividend policy, such that a dividend will be paid of up to 50% of the after tax profit, if considered fiscally appropriate by the Directors. The Board has determined that no dividend will be paid for the year ended 31 March 2019.

Donations and audit fees

The Group made donations totalling \$14,000 during the year. Amounts paid to PricewaterhouseCoopers for audit and other services are shown in section B2 d) of the financial statements.

On behalf of the Directors



B Irvine
Chair



BJ Robinson
CEO, Managing Director

Statement of Comprehensive Income

For the year ended 31 March 2019

	Note	2019 \$000s	2018 \$000s
Continuing operations			
Revenue	B2 a)	113,985	101,127
Cost of sales		(62,317)	(57,828)
Gross profit		51,668	43,299
Other operating income	B2 b)	121	2,421
Operating expenses	B2 d)	(47,338)	(41,626)
Other gains – net	B2 c)	718	4,624
Impairment	D1 a)	-	(120)
Operating profit		5,169	8,598
Finance income	D1 c)	37	3
Finance costs	D1 c)	(571)	(504)
Share of gain/(loss) of associates and joint venture	B4 b)	839	(1,915)
Net dilution gain on Thinextra shares	B4 c)	-	4,815
Profit before income tax		5,474	10,997
Income tax expense	D1 d)	(2,110)	(998)
Net profit for the year		3,364	9,999
Other comprehensive income			
Items that may be reclassified subsequently to profit or loss			
Decrease in fair value cash flow hedges		(1,812)	(372)
Cost of hedging		31	-
Exchange differences on translation of foreign operations		1,329	2,766
Income tax relating to components of other comprehensive income		507	104
Items that will not be reclassified subsequently to profit or loss			
Changes in fair value of equity investments at fair value through other comprehensive income - Thinextra		(454)	-
Other comprehensive income for the year, net of tax		(399)	2,498
Total comprehensive income for the year		2,965	12,497
Profit attributable to equity holders of the Company			
		3,364	9,999
Total comprehensive income attributable to equity holders of the Company		2,965	12,497
Earnings per share for continuing operations attributable to the equity holders of the Company			
		Cents	Cents
Basic earnings per share	D10 a)	1.5	4.4
Diluted earnings per share	D10 b)	1.5	4.3

The accompanying notes form an integral part of these financial statements.

Statement of Changes in Equity

For the year ended 31 March 2019

	Note	Share capital \$000s	Retained earnings \$000s	Other reserves \$000s	Total equity \$000s
Balance at 31 March 2017		181,035	(83,218)	(23,260)	74,557
Net profit after tax for the year		-	9,999	-	9,999
Currency translation differences	D5	-	-	2,766	2,766
Cash flow hedges, net of tax	D5	-	-	(268)	(268)
Total comprehensive income for the year		-	9,999	2,498	12,497
Contribution of equity net of transaction costs		(11)	-	-	(11)
Employee share schemes					
Value of employee services	D5	-	-	8	8
Balance at 31 March 2018		181,024	(73,219)	(20,754)	87,051
Net profit after tax for the year		-	3,364	-	3,364
Currency translation differences	D5	-	-	1,329	1,329
Cash flow hedges, net of tax	D5	-	-	(1,274)	(1,274)
Changes in fair value of equity investments at fair value through other comprehensive income - Thinxtra	D5	-	-	(454)	(454)
Total comprehensive income for the year		-	3,364	(399)	2,965
Balance at 31 March 2019		181,024	(69,855)	(21,153)	90,016

The accompanying notes form an integral part of these financial statements.

Balance Sheet

As at 31 March 2019

	Note	2019 \$000s	2018 \$000s
Assets			
Current assets			
Cash and cash equivalents	D2 a)	4,719	10,364
Trade and other receivables	B3 b)	38,220	28,395
Derivative financial instruments	D2 b)	307	1,078
Financial asset at fair value through profit and loss	D2 b)	19	211
Inventories	B5 a)	39,310	24,171
Current income tax asset		561	146
Total current assets		83,136	64,365
Non-current assets			
Derivative financial instruments	D2 b)	258	334
Financial asset at fair value through other comprehensive income - Thinxtra	B4 d)	4,549	-
Trade and other receivables	B3 b)	2,267	2,716
Property, plant and equipment	D3 a)	19,394	13,481
Intangible assets	B5 b)	9,149	9,115
Investment in associate	B4 b)	10,399	14,640
Interest in joint venture	B4 b)	-	2,876
Deferred tax asset	D4	7,352	5,906
Total non-current assets		53,368	49,068
Total assets		136,504	113,433
Liabilities			
Current liabilities			
Bank overdraft	D2 e)	11,501	2,824
Borrowings	D2 e)	474	98
Trade and other payables	D2 d)	26,398	19,107
Deferred consideration on acquisition – Rakon India	B6	1,885	-
Derivative financial instruments	D2 b)	945	235
Provisions	D3 b)	471	961
Deferred revenue – Siward	B2 b)	-	101
Total current liabilities		41,674	23,326
Non-current liabilities			
Derivative financial instruments	D2 b)	343	78
Borrowings	D2 e)	412	-
Provisions	D3 b)	2,990	2,734
Deferred tax liabilities	D4	1,069	244
Total non-current liabilities		4,814	3,056
Total liabilities		46,488	26,382
Net assets		90,016	87,051
Equity			
Share capital	D6 a)	181,024	181,024
Other reserves	D5	(21,153)	(20,754)
Accumulated losses		(69,855)	(73,219)
Total equity		90,016	87,051

The accompanying notes form an integral part of these financial statements.

Statement of Cash Flows

For the year ended 31 March 2019

	Note	2019 \$000s	2018 \$000s
Operating activities			
Cash provided from			
Receipts from customers		114,974	101,691
R&D grants received		1,894	1,726
Other income received		58	3
		116,926	103,420
Cash was applied to			
Payment to suppliers and others		(71,695)	(57,998)
Payment to employees		(46,286)	(36,735)
Interest paid		(459)	(536)
Income tax paid		(254)	(247)
		(118,694)	(95,516)
Net cash flow from operating activities		(1,768)	7,904
Investing activities			
Cash was provided from			
Net proceeds from sale of Thinextra shares		-	3,178
Sale of property, plant and equipment		82	4,754
		82	7,932
Cash was applied to			
Purchase of property, plant and equipment		(6,188)	(3,236)
Purchase of intangibles		(720)	(840)
Purchase of shares in CRI	B6 a)	(5,848)	-
		(12,756)	(4,076)
Net cash flow from investing activities		(12,674)	3,856
Financing activities			
Cash was applied to			
Share issuance cost		-	(11)
Repayment of principal on borrowings		-	(4,500)
Finance lease payments		(24)	(31)
		(24)	(4,542)
Cash was applied to financing activities		(24)	(4,542)
Net cash flow from financing activities		(24)	(4,542)
Net (decrease)/increase in cash and cash equivalents		(14,466)	7,218
Effects of exchange rate changes on cash and cash equivalents		144	246
Cash and cash equivalents at the beginning of the year		7,540	76
Cash and cash equivalents at the end of the year		(6,782)	7,540
Composition of cash and cash equivalents			
Cash and cash equivalents	D2 a)	4,719	10,364
Bank overdraft	D2 e)	(11,501)	(2,824)
Total cash and cash equivalents		(6,782)	7,540

The accompanying notes form an integral part of these financial statements.

Statement of Cash Flows

For the year ended 31 March 2019

	Note	2019 \$000s	2018 \$000s
Reconciliation of net profit to net cash flows from operating activities			
Reported net profit after tax		3,364	9,999
Adjustments for			
Depreciation expense	D3 a)	3,765	2,504
Amortisation expense	B5 b)	2,037	1,838
Impairment	D1 a)	-	120
Increase in estimated doubtful debts		475	7
Provisions provided	D3 b)	342	159
Employee share based expense	D1 b)	-	8
Movement in foreign currency		439	(590)
Monetised cash flow hedge, net of tax	B2 c)	-	(1,096)
Deferred revenue – Siward technology license agreement	B2 b)	(101)	(2,351)
Share of net profits/(losses) of associates and joint venture	B4 b)	(839)	1,915
Deferred tax movement		231	382
Loss/(gain) on disposal of property, plant and equipment		(82)	(2,155)
Thinextra shares – fair value adjustment	B2 c)	-	(1,852)
Net Dilution gain on Thinextra shares		-	(4,815)
Change in operating assets and liabilities			
Increase in trade and other receivables		(5,007)	(146)
Decrease in provisions		(246)	(645)
(Increase)/decrease in inventories		(9,145)	115
Increase in trade and other payables		2,781	4,557
Increase/(decrease) in tax provisions		218	(50)
Net cash flow from operating activities		(1,768)	7,904

Net cash reconciliation

An analysis of net debt and the movements in net cash is presented below.

	Other asset Cash/ bank overdraft \$000s	Liabilities from financing activities				Total \$000s
		Other borrowing due within 1 year \$000s	Other borrowing due after 1 year \$000s	Bank borrowing due within 1 year \$000s	Bank borrowing due after 1 year \$000s	
Balance as at 1 April 2017	76	(30)	(31)	(4,500)	-	(4,485)
Cash flows	7,218	-	31	4,500	-	11,749
Foreign exchange changes	246	(1)	-	-	-	245
Balance as at 31 March 2018	7,540	(31)	-	-	-	7,509
Cash flows	(14,466)	-	24	-	-	(14,442)
Foreign exchange changes	144	-	-	-	-	144
Balance as at 31 March 2019	(6,782)	(31)	24	-	-	(6,789)

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A. General information

Rakon Limited ('the Company') and its subsidiaries ('the Group') design and manufacture frequency control solutions for a wide range of applications. Rakon has leading market positions in the supply of crystal oscillators to the telecommunications, global positioning and space & defence markets. The Company is a limited liability company incorporated and domiciled in New Zealand. It is registered under the Companies Act 1993 with its registered office at 8 Sylvia Park Road, Mt Wellington, Auckland.

The financial statements of the Group have been presented in New Zealand dollars unless otherwise indicated.

The financial statements have been approved for issue by Rakon's Board of Directors ('the Board') on 16 May 2019.

B. Calculation of key numbers

B1. Segment information

The chief operating decision maker assess the performance of the operating segments based on a non-GAAP measure of 'Underlying EBITDA' defined as:

'Earnings before interest, tax, depreciation, amortisation, impairment, employee share schemes, non-controlling interests, adjustments for associate's and joint venture's share of interest, tax & depreciation, loss on disposal of assets and other cash and non-cash items (Underlying EBITDA)', refer note B1 c).

Underlying EBITDA is a non-GAAP measure that has not been presented in accordance with GAAP. The Directors present Underlying EBITDA as a useful non-GAAP measure to investors, in order to understand the underlying operating performance of the Group and each operating segment, before the adjustment of specific cash and non-cash items and before cash impacts relating to the capital structure and tax position. Underlying EBITDA is considered by the Directors to be the closest measure of how each operating segment within the Group is performing. Management uses the non-GAAP measure of Underlying EBITDA internally, to assess the underlying operating performance of the Group and each operating segment.

Underlying EBITDA as non-GAAP financial information has been extracted from the financial statements for the year. Except for Underlying EBITDA, other information provided to the chief operating decision maker is measured in a manner consistent with GAAP. The Directors provide a reconciliation of Underlying EBITDA to net profit for the year, refer note B1 c).

B1 a) Accounting policy

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Managing Director, Sales and Marketing Director and Chief Financial Officer.

B1 b) Segment results

31 March 2019

	NZ	UK	France	China – T'maker ¹	Australia – Thinxtra ⁶	India ²	Other ³	Total
	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
Sales to external customers	64,376	-	45,058	-	-	4,551	-	113,985
Inter-segment sales	285	-	33	-	-	-	(323)	(5)
Segment revenue	64,661	-	45,091	-	-	4,551	(323)	113,980
Underlying EBITDA	7,857	1,691	(1,312)	2,136	-	2,605	293	13,270
Depreciation and amortisation	2,426	515	1,775	-	-	1,099	(13)	5,802
Income tax (expense)/credit	(858)	(214)	31	-	-	(420)	(649)	(2,110)
Total assets ⁴	65,766	2,141	32,129	10,399	-	23,085	2,984	136,504
Investment in associates	-	-	-	10,399	-	-	-	10,399
Additions of property, plant, equipment and intangibles	3,191	482	1,395	-	-	1,986	-	7,054
Total liabilities ⁵	27,373	591	9,798	468	-	7,497	761	46,488

31 March 2018

	NZ	UK	France	China – Timaker ¹	India – Centum Rakon ²	Australia – Thinextra ⁶	Other ³	Total
	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
Sales to external customers	63,812	-	37,315	-	-	-	-	101,127
Inter-segment sales	163	-	5	-	-	-	33	201
Segment revenue	63,975	-	37,320	-	-	-	33	101,328
Underlying EBITDA	7,611	1,591	1,334	2,115	(9)	(430)	(118)	12,094
Depreciation and amortisation	2,517	508	1,408	-	-	-	(91)	4,342
Impairment	120	-	-	-	-	-	-	120
Income tax (expense)/credit	(623)	(129)	29	-	-	-	(275)	(998)
Total assets ⁴	51,819	3,255	37,326	9,350	2,876	5,290	3,517	113,433
Investment in associates	-	-	-	9,350	-	5,290	-	14,640
Investment in joint venture	-	-	-	-	2,876	-	-	2,876
Additions of property, plant, equipment and intangibles	2,463	441	1,255	-	-	-	4	4,163
Total liabilities ⁵	11,987	462	13,459	-	-	-	474	26,382

¹ Includes Rakon Limited's 40% share of investment in Chengdu Timemaker Crystal Technology Co. Limited and Shenzhen Taixiang Wafer Co. Limited, refer note B4 b).

² On 2 May 2018, the Group acquired the remaining 51% of the issued shares it did not own in Centum Rakon India Private Limited ('CRI'), a previously held joint venture which provides products and services to the frequency control industry. Subsequent to acquisition, the name was changed to Rakon India Private Limited. Refer note B6.

³ Includes investments in subsidiaries, Rakon Financial Services Limited, Rakon UK Holdings Limited, Rakon Investment HK Limited, and Rakon HK Limited.

⁴ The measure of assets has been disclosed for each reportable segment as it is regularly provided to the chief operating decision maker and excludes intercompany balances eliminated on consolidation.

⁵ The measure of liabilities has been disclosed for each reportable segment as it is regularly provided to the chief operating decision maker and excludes intercompany balances eliminated on consolidation.

⁶ Rakon Limited holds a 21.4% interest in Thinextra Limited, refer note B4 d) for further information.

B1 c) Reconciliation of Underlying EBITDA to net profit for the year

	2019 \$000s	2018 \$000s
Continuing operations		
Underlying EBITDA	13,270	12,094
Depreciation and amortisation	(5,802)	(4,342)
One off cash gains	-	1,096
Employee share schemes	-	(8)
Finance costs – net	(534)	(501)
Adjustment for associates and joint venture share of interest, tax and depreciation	(1,120)	(1,751)
Net dilution gain on Thinextra shares	-	4,815
Impairment	-	(120)
Loss on asset sales/disposal	(6)	(25)
Other non-cash items	(334)	(261)
Profit before income tax	5,474	10,997
Income tax expense	(2,110)	(998)
Net profit for the year	3,364	9,999

B2. Profit and loss information

B2 a) Revenue

Rakon is a global high technology company that designs and manufactures advanced frequency control and timing solutions. These are used in the telecommunications, global positioning and space & defence markets.

The Group has one main revenue stream which is the sale of manufactured finished products. The majority of the revenue earned by the Group is derived from the contracts with one single performance obligation which is the sale of products. Revenue is measured based on consideration specified in a contract with the customer and excludes amounts collected on behalf of third parties. The Group recognizes revenue when it transfers control over a product to a customer. Revenue is presented net of value added tax (VAT) and discounts and after eliminating intragroup sales.

The impact from the adoption of the new standard has been disclosed in note D12 c).

Revenue has been historically recognised at the time when the legal title of the products passes to the customer. It has been determined that the customer obtains control of the product at the same time as legal title passes to the customer, typically on delivery. In relation to the contract price, it has been determined that there are no material changes under NZ IFRS 15 to the accounting of variable consideration. No element of financing is deemed present as the sales are made with a credit term of 30 – 90 days which is consistent with market practice. A receivable is recognised when the goods are delivered as this is the point of time that the consideration is unconditional because only the passage of time is required before the payment is due.

Long-term contracts – space and defence segment in France

The Group has long-term contracts in the space and defence segment in France. For these contracts, the revenue is recognised over time because the Group's performance creates an asset which does not have an alternative use to the Group, and the Group has an enforceable right to be paid for work completed to date. The Group uses the percentage-of-completion to determine the appropriate amount to recognise in a given period. The stage of completion is measured by reference to the contract costs incurred up to the end of the reporting period as a percentage of total estimated costs for each contract.

Breakdown of revenue from all sources

	2019 \$000s	2018 \$000s
Sales of goods	113,227	99,916
Revenue from services	758	1,211
Total revenue	113,985	101,127

Breakdown of revenue by region

The Group's trading revenue is derived in the following regions. Revenue is allocated based on the country in which the customer is located.

	2019 \$000s	2018 \$000s
Asia	53,799	41,330
North America	25,793	23,940
Europe	31,671	33,069
Others	2,722	2,788
Total revenue by region	113,985	101,127

Breakdown of revenue by market segment

	2019 \$000s	2018 \$000s
Telecommunications	53,599	40,457
Global Positioning	20,498	25,999
Space and Defence	31,583	27,984
Other	8,305	6,687
Total revenue by market segment	113,985	101,127

B2 b) Other operating income**Accounting policy**

Royalty income is recognised on an accruals basis in accordance with the substance of the relevant agreements.

Breakdown of other operating income:

	2019 \$000s	2018 \$000s
Other income	20	70
Income from technology license agreement with Siward	101	2,351
Total other operating income	121	2,421

Critical accounting estimates and assumptions – prior year*Investment by Siward Crystal Technology Company Limited ('Siward') and attribution of proceeds*

Siward is a Taiwan based crystal manufacturer, which is listed on the Taiwan Stock Exchange. In February 2017, Siward paid US\$10m cash in return for 38,016,681 fully paid ordinary shares in Rakon and rights arising from a technology license agreement. Siward took up one appointment on Rakon's Board.

At 31 March 2019, the transfer under the technology licence agreement was fully completed (2018: 99%) and revenue of \$0.1m (2018: \$2.4m) recognised.

B2 c) Other gains – net

	2019 \$000s	2018 \$000s
(Loss)/Gain on disposal of property, plant, equipment, and intangible ¹	(82)	2,155
Sale of shares in Thinxtra ²	-	1,852
	(82)	4,007
Foreign exchange gains – net		
Forward foreign exchange contracts		
Held for trading	46	122
Gain on revaluation of foreign denominated monetary assets and liabilities ³	754	495
Total foreign exchange gains – net	800	617
Total other gains – net	718	4,624

¹ In 2018, the sale of land and buildings at Argenteuil, France was completed, and gain on sale of \$2.1m recognised.

² During December 2017, Thinxtra undertook additional capital raising (Series B). During this capital raising Rakon sold 199,242 shares for A\$3.0m to applicants who missed out on a Series B allotment. In 2018, a resultant gain of NZ\$1.9m was realised.

³ Includes realised and unrealised gains/(losses) arising from accounts receivable and accounts payable. Hedge accounting is sought on the initial sale of goods and purchase of inventory, subsequent movements are recognised in trading foreign exchange.

B2 d)**Operating expenses****Accounting policy**

Proceeds such as grants and tax credits associated to operating expenses are directly net off the related expense. These research and development costs have a government related grant or tax credit related to the operating expense, which have been identified separately in the breakdown of operating expenses below.

	2019 \$000s	2018 \$000s
Operating expense by function		
Selling and marketing	9,809	9,905
Research and development	11,029	9,712
General and administration	26,500	22,009
Total operating expenses	47,338	41,626
Operating expenses include		
Depreciation – inclusive of depreciation included in cost of sales (note D3 a)	3,765	2,504
Amortisation (note B5 b)	2,037	1,838
Research and development expense	12,873	11,771
Research and development government grant	(847)	(739)
Research and development tax credit	(997)	(1,320)
Restructure costs – inclusive of restructure costs included in cost of sales (note D3 b)	-	159
Rental expense on operating leases	2,613	2,268
Costs of offering credit		
Bad debt recoveries/(write-offs)	-	19
Allowance for expected credit loss provision	475	-
Governance expenses		
Directors' fees	358	390
Auditors' fees		
Principal auditor's fees	622	537
Breakdown of fees:		
Audit fees for current year	551	460
Half year financial statements agreed procedures	24	23
Government R&D credits reviews	14	21
Annual Shareholders' Meeting procedures	8	8
Treasury advisory services	25	25
Audit services other auditors	24	23
Sundry expenses		
Donations	14	5

B3. Financial assets and liabilities

B3 a) Financial instruments

Financial instruments comprise of cash and cash equivalents, trade and other receivables, trade and other payables, borrowings and derivative financial instruments.

31 March 2019	Financial assets at amortised cost	At fair value through profit and loss	At fair value through other comprehensive income	Derivatives used for hedging	Total
Assets per balance sheet	\$000s	\$000s	\$000s	\$000s	\$000s
Derivative financial instruments (note D2 b)	-	19	-	565	584
Trade and other receivables	37,126	-	-	-	37,126
Cash and cash equivalents (note D2 a)	4,719	-	-	-	4,719
Fair value through other comprehensive income - Thinextra	-	-	4,549	-	4,549
Total assets per balance sheet	41,845	19	4,549	565	46,978

31 March 2019	Liabilities at fair value through the profit and loss	Derivatives used for hedging	Financial liabilities at amortised cost	Total
Liabilities per balance sheet	\$000s	\$000s	\$000s	\$000s
Borrowings	-	-	12,387	12,387
Derivative financial instruments (note D2 b)	95	1,193	-	1,288
Trade and other payables	-	-	14,471	14,471
Deferred consideration on acquisition – Rakon India	1,885	-	-	1,885
Total liabilities per balance sheet	1,980	1,193	26,858	30,031

31 March 2018	Cash and receivables	At fair value through profit and loss	Derivatives used for hedging	Total
Assets per balance sheet	\$000s	\$000s	\$000s	\$000s
Derivative financial instruments (note D2 b)	-	211	1,412	1,623
Trade and other receivables	30,159	-	-	30,159
Cash and cash equivalents (note D2 a)	10,364	-	-	10,364
Total assets per balance sheet	40,523	211	1,412	42,146

31 March 2018	Liabilities at fair value through the profit and loss	Derivatives used for hedging	Other financial liabilities	Total
Liabilities per balance sheet	\$000s	\$000s	\$000s	\$000s
Borrowings	-	-	2,922	2,922
Derivative financial instruments (note D2 b)	91	222	-	313
Trade and other payables	-	-	12,800	12,800
Total liabilities per balance sheet	91	222	15,722	16,035

Financial instruments by category

The line items in the tables above only include financial instruments. Trade and other receivables in note B3 b) and trade and other payables in note D2 d) include both financial and non-financial items.

B3 b) Trade and other receivables**Accounting policy**

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment.

As of 31 March 2019, trade receivables of \$816,000 (2018: \$64,000) were impaired and provided for. These receivables are calculated in accordance with the expected credit loss (ECL) model.

Breakdown of trade and other receivables

	2019	2018
	\$000s	\$000s
Trade receivables	33,960	25,932
Less: allowance for expected credit loss	(816)	(64)
Net trade receivables	33,144	25,868
Prepayments	1,448	952
GST/VAT receivable	1,913	-
Receivables from related parties (note D9 b)	349	307
Other receivables ¹	3,633	3,984
Total trade and other receivables	40,487	31,111
Less non-current other receivables ¹	2,267	2,716
Current trade and other receivables	38,220	28,395

¹ Other receivables includes research and development tax credits and government grants.

The fair value of trade and other receivables are equivalent to the carrying values.

The following table summarises the impact of doubtful debt and expected credit loss on the trade receivables balance. The movement in the provision for the expected credit loss during the year was as follows:

	Current	More than 30	30 days to	More than	Total
	\$000s	days past due	180 days past	180 days past	\$000s
	\$000s	\$000s	due	due	\$000s
Gross carrying amount of trade receivables	28,033	4,600	614	713	33,960
Expected loss rate	1.6%	2.6%	16.9%	20.0%	
Allowance for the expected credit loss	(449)	(120)	(104)	(143)	(816)

Aging

Included in trade and other receivables are the below amounts which were past due but not impaired. These relate to a number of customers for whom there is no recent history of default.

	2019	2018
	\$000s	\$000s
Up to 3 months	4,600	4,475
3 to 6 months	614	1,522
Over 6 months	713	167
Total overdue trade receivables	5,927	6,164

Currencies

The carrying amounts of the Group's trade and other receivables are denominated in the following currencies:

	2019	2018
	\$000s	\$000s
NZD	1,764	606
USD	23,594	17,250
EUR	10,663	12,396
GBP	703	837
INR	3,530	-
Other	233	22
Total trade and other receivables	40,487	31,111

The maximum exposure to credit risk at balance date is the carrying value of each class of receivable mentioned above. The Group does not hold any collateral as security.

B4. Interests in associates and joint venture

B4 a) Accounting policy

Associates are entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting and are initially recognised at cost.

Joint arrangements are classified as either joint operations or joint ventures. The classification depends on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangement. The Group's joint venture is accounted for using the equity method.

Under the equity method of accounting, the investments are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses of the investee in profit or loss, and the Group's share of movements in other comprehensive income of the investee. Dividends received or receivable from associates and joint ventures are recognised as a reduction in the carrying amount of the investment. When the Group's share of losses in an equity-accounted investment equals or exceeds its interest in the entity, including any other unsecured long-term receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the other entity. Unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in these entities. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of equity accounted investees have been changed where necessary to ensure consistency with the policies adopted by the Group. The carrying amount of equity-accounted investments is tested for impairment in accordance with the policy described in note D12 e).

The carrying amounts of the investments are reviewed at each balance date to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated being the higher of an asset's fair value less costs to sell and the asset's value in use. An impairment loss is recognised whenever the carrying amount of an asset exceeds its recoverable amount. Impairment losses are recognised in the statement of comprehensive income.

B4 b) Breakdown of interest in associates and joint venture

Set out below are the associates and joint venture of the Group. The entities listed below have share capital consisting solely of ordinary shares, which are held directly by the Group. The country of incorporation or registration is also their principal place of business, and the proportion of ownership interest is the same as the proportion of voting rights held.

Name of entity	Country of incorporation	% of ownership interest		Nature of relationship	Measurement method	Net investment		Equity accounted (loss)/profit	
		2019	2018			2019	2018	2019	2018
						\$000s	\$000s	\$000s	\$000s
Chengdu Timemaker Crystal Technology Co. Ltd ¹	China	40%	40%	Associate	Equity method	9,974	8,925		
Shenzhen Taixiang Wafer Co. Ltd ¹	China	40%	40%	Associate	Equity method	425	425		
Total Timemaker Group						10,399	9,350	1,050	908
Thinextra Pty Limited ³	Australia	-	21.4%	Associate	Equity method	-	5,290	(287)	(2,273)
Total carrying amount of associates						10,399	14,640	763	(1,365)
Centum Rakon India Private Ltd ²	India	-	49%	Joint venture	Equity method	-	2,876	76	(550)
Total carrying amount of equity accounted associates and joint venture						-	17,516	839	(1,915)

¹ The Group has a 40% interest in two related companies: Chengdu Timemaker Crystal Technology Co. Limited and Shenzhen Taixiang Wafer Co. Limited, which provide products and services to the frequency control products industry.

² On 2 May 2018, the Group assumed full ownership of Centum Rakon India Private Limited (CRI) by acquiring the remaining 51% interest of shares and subsequently changed the name to Rakon India Private Limited. Prior to the acquisition, CRI was a joint venture.

³ Due to loss of significant influence, on 1 June 2018, the Group has reclassified the investment in Thinxtra Pty Limited (Thinxtra), as a financial asset at fair value through other comprehensive income. Refer also note B4 d).

B4 c) Summarised financial information for associates and joint venture

The tables below provide summarised financial information for the associates and joint venture of the Group. The information disclosed reflects the amounts presented in the financial statements of the relevant associates and joint venture and not the Group's share of those amounts. They have been amended to reflect adjustments made by the entity when using the equity method, including fair value adjustments and modifications for differences in accounting policy. The total Timemaker Group is an aggregate of Chengdu Timemaker Crystal Technology Co. Limited and Shenzhen Taixiang Wafer Co. Limited.

In June 2017, Chengdu Shen-Timemaker Crystal Technology Co. Limited, a company in the Timemaker Group, was merged with Chengdu Timemaker Crystal Technology Co. Limited.

	Chengdu Shen-Timemaker Crystal Technology Co. Ltd		Chengdu Timemaker Crystal Technology Co. Ltd		Shenzhen Taixiang Wafer Co. Ltd		Total Timemaker Group	
	2019	2018	2019	2018	2019	2018	2019	2018
	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
Summarised Balance Sheet								
Current assets								
Cash & cash equivalents	-	-	2,904	3,138	2	2	2,906	3,140
Other current assets	-	-	17,786	15,450	1,135	1,135	18,921	16,585
Total current assets	-	-	20,690	18,588	1,137	1,137	21,827	19,725
Non-current assets	-	-	25,097	24,200	-	-	25,097	24,200
Current liabilities								
Financial liabilities (excluding trade payables)	-	-	11,371	8,434	-	-	11,371	8,434
Other current liabilities	-	-	8,923	10,364	73	73	8,996	10,437
Total current liabilities	-	-	20,294	18,798	73	73	20,367	18,871
Non-current liabilities								
Other non-current liabilities	-	-	558	1,678	-	-	558	1,678
Total non-current liabilities	-	-	558	1,678	-	-	558	1,678
Net assets	-	-	24,935	22,312	1,064	1,064	25,999	23,376

	Chengdu Shen-Timemaker Crystal Technology Co. Ltd		Chengdu Timemaker Crystal Technology Co. Ltd		Shenzhen Taixiang Wafer Co. Ltd		Total Timemaker Group	
	2019	2018	2019	2018	2019	2018	2019	2018
	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
Summarised Statement of Comprehensive Income								
Revenue	-	-	28,260	24,481	-	-	28,260	24,481
Depreciation and amortisation	-	(74)	(3,071)	(1,809)	-	-	(3,071)	(1,883)
Interest expenses	-	-	(576)	(1,017)	-	-	(576)	(1,017)
(Loss)/profit for the period	-	(166)	2,625	2,469	-	-	2,625	2,304

	Chengdu Shen-Timemaker Crystal Technology Co. Ltd		Chengdu Timemaker Crystal Technology Co. Ltd		Shenzhen Taixiang Wafer Co. Ltd		Total Timemaker Group	
	2019	2018	2019	2018	2019	2018	2019	2018
	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
Reconciliation of net assets to carrying amount								
Rakon's share in %	40%	40%	40%	40%	40%	40%	40%	40%
Rakon's share of associates' and joint venture's net assets	-	-	9,974	8,925	425	425	10,399	9,350
Carrying amount	-	-	9,974	8,925	425	425	10,399	9,350
Movement in carrying amount								
Opening net assets 1 April							9,350	7,930
Equity accounted profit							1,050	908
Foreign exchange movement							(1)	512
Carrying amount							10,399	9,350

	Centum Rakon India Private Ltd		Thinextra Pty Ltd	
	2019	2018	2019	2018
	\$000s	\$000s	\$000s	\$000s
Summarised Balance Sheet				
Current assets				
Cash & cash equivalents	-	1,159	-	11,117
Other current assets	-	11,721	-	2,091
Total current assets	-	12,880	-	13,208
Non-current assets	-	5,518	-	10,509
Current liabilities				
Financial liabilities (excluding trade payables)	-	2,157	-	149
Other current liabilities	-	3,645	-	1,400
Total current liabilities	-	5,802	-	1,549
Non-current liabilities				
Other non-current liabilities	-	269	-	-
Total non-current liabilities	-	269	-	-
Net assets	-	12,327	-	22,168

	Centum Rakon India Private Ltd		Thinextra Pty Ltd	
	2019	2018	2019	2018
	\$000s	\$000s	\$000s	\$000s
Summarised Statement of Comprehensive Income				
Revenue	-	14,951	-	615
Interest income	-	130	-	37
Depreciation and amortisation	-	(1,340)	-	(1)
Interest expense	-	(118)	-	-
Loss for the year	-	(1,121)	-	(7,642)

	Centum Rakon India Private Ltd		Thinextra Pty Ltd	
	2019	2018	2019	2018
	\$000s	\$000s	\$000s	\$000s
Reconciliation of net assets to carrying amount				
Rakon's share in %		49%		21.5%
Rakon's share of associates' and joint venture's net assets	-	6,040	-	4,775
Goodwill	-	-	-	515
Cumulative impairment	-	(3,164)	-	-
Carrying amount	-	2,876	-	5,290
Movement in carrying amount				
Opening net assets 1 April	2,876	3,722	5,290	4,074
Equity accounted Gain/(loss)	76	(550)	(287)	(2,273)
Foreign exchange movement	42	(296)	-	-
De-recognition of joint venture and associates	(2,994)	-	(5,003)	-
Gain on share price dilution recognised	-	-	-	4,815
Reduction in carrying value from sale of shares during the year	-	-	-	(1,326)
Net carrying amount	-	2,876	-	5,290

B4 d) Investment in Thinextra

Thinextra Pty Limited ('Thinextra') is an 'Internet of Things' (IoT) business that started in 2016. Thinextra's focus is on establishing an IoT network in Australia, New Zealand and Hong Kong and providing products, services and solutions enabling connectivity of devices to the network. Thinextra's business model is based on subscription for access to the network, platform solutions and the sale of IoT products. Further information is available at www.thinextra.com.

Rakon was one of the founding members of Thinextra in 2016 and has a 21.4% ownership interest at 31 March 2019.

Loss of significant influence and fair value re-measurement (1 June 2018)

On 1 June 2018 Rakon lost significant influence in Thinextra and ceased equity accounting the investment. In accordance with NZ IAS 28 Investments in Associates and Joint Ventures at 1 June 2018, the investment held was measured at fair value of \$12.2m and a gain of \$7.2m recognised in profit and loss. In determining the fair value at 1 June 2018, the Directors obtained an independent valuation report and adopted the lowest valuation in the range given in that report. In determining a valuation range the independent valuation report relied on the October 2017 capital raise which was oversubscribed and the subsequent sale of 199,763 shares by Rakon in November 2017 to those who missed out on the capital raise. Further, effective 1 June 2018, the Group elected to present subsequent changes in fair value of its investment in Thinextra in other comprehensive income, refer note D12 b) for accounting policy. These amounts were presented in the unaudited consolidated interim financial statements of the Group for the six months ended 30 September 2018.

Restatement of the valuation of the Investment in Thinextra at 1 June 2018 as previously disclosed in the unaudited 30 September 2018 consolidated interim financial statements

Upon re-examining the information available, the Directors consider the 1 June 2018 valuation of \$12.2m which as noted above relied on the independent valuation report, based on historical capital raise and limited external transactions dated back to October and November 2017 was not appropriate and should be restated. Accordingly, the valuation reported in the 30 September 2018 financial statements of \$12.2m has been reassessed resulting in a revised valuation of \$5.0m of the investment at 1 June 2018. The previously recognised gain of \$7.2m in the 30 September 2018 consolidated interim financial statements is reversed. This restatement will be disclosed in the unaudited consolidated interim financial statements of the Group for the six months ending 30 September 2019.

Valuation methodology

In undertaking the restated fair value assessment as at 1 June 2018, it was considered that one single valuation method would not provide an appropriate result. Accordingly, the Directors have used a range of valuation techniques which provide different scenario outcomes. These outcomes have then been assigned a probability based on the available information and Directors' judgement.

The methodology and overall outcome is summarised as follows:

Valuation Technique	Indicative View	Probability Assigned
A: Discounted cash flow	Most likely	75%
B: Last successful capital raise, October 2017 which raised A\$20m	Possible	25%

The valuation was between A\$5.25 and A\$6.52 per share with a value of A\$5.89 per share resulting in a restated valuation of \$5.0m at 1 June 2018. This is also consistent with the equity accounted value of the investment as at 1 June 2018.

Sensitivities on key inputs

The Directors recognise that the valuation outcomes under each technique are dependent on assumptions used. The following table provides an analysis of the impact on the final valuation where key assumptions are changed as described in b) to c) below.

Scenario	Assumptions changes	Valuation NZ\$	change
a) Base case valuation	base case	5.0	
b) DCF	Cash flow is 50% lower than forecast	3.7	(1.3)
c) DCF	Discount rate is 5% higher	4.2	(0.8)

An opposite change in assumptions would have the equal but opposite effect on the valuation.

Sensitivities on probability weightings assigned

The Directors recognise that the final valuation is dependent on probabilities assigned to the scenario under each valuation technique used. The following table provides an analysis of the impact on the final valuation where the probability weightings are changed.

Valuation Technique	Base case	Alternate case	change in valn NZ\$m
A: Discounted cash flow	75%	85%	
B: Last capital raise October 2017	25%	15%	
	100%	100%	
Valuation NZ\$	5.0	3.9	(1.1)

Subsequent capital raise offers by Thinxtra between September 2018 and March 2019

In September 2018 Thinxtra announced a new capital raise offer aimed at raising A\$20m. This offer was not filled with the main impediments being; the offer price was out of alignment with the maturity of the business; there were anti-dilution rights held by existing security holders which were an impediment to any new investors; and Thinxtra's two main shareholders elected not to participate in the capital raise offering.

A revised limited special offer was announced in March 2019 to raise A\$4m. This was expected to allow Thinxtra to sufficiently develop its business in preparation for additional funding to be raised through equity, debt or M&A activity to allow it to achieve breakeven. The Directors determined that Rakon would not participate in the March 2019 special offer due to the requirement to prioritise spend in its core business. This capital raise was successful and A\$5m was raised with the offering closing on 18 April 2019. In the Directors' view this was a special offer with a placement discount and was not indicative of the fair value of the Company.

Valuation of the investment in Thinxtra at 31 March 2019

As set out below, the Directors have determined the valuation range of Thinxtra at 31 March 2019, with a value recognised of \$4.6m. In forming this view, it was recognised that there is a high level of volatility and judgement required in valuing Thinxtra given its early stage of business; the new and developing IoT market and ecosystem in which it operates; the volatility in prices achieved by historic capital raises, it being a private company investment; and the track record of the Company achieving its forecast performance.

Consistent with the revised valuation approach adopted at 1 June 2018, in undertaking the fair value assessment, given the range of potential outcomes, it was considered that one single valuation method would not provide an appropriate result. Accordingly, the Directors have used a range of valuation techniques which provide different scenario outcomes. These outcomes have then been assigned a probability based on the available information and directors judgement. The methodology and overall outcome is summarised as follows:

Valuation Technique	Indicative View	Probability Assigned
A: Discounted cash flow	Likely	40%
B: Last successful capital raise, March 2019 which raised A\$5m	Likely	30%
C: Replacement cost of assets	Likely	30%

The resultant valuation was between A\$4.83 and A\$6.11 per share with a value of A\$5.47 adopted in the 31 March 2019 financial statements. This has resulted in fair value of \$4.6m at 31 March 2019 with the reduction of \$0.4m since 1 June 2018 being reflected in other comprehensive income.

Sensitivities on key inputs

The Directors recognise that the valuation outcomes under each technique are dependent on assumptions used. The following table provides an analysis of the impact on the final valuation where key assumptions are changed as described in b) to d) below:

Scenario	Assumptions changes	Valuation NZ\$	change
a) Base case valuation	base case	4.6	
b) Discounted cash flow	Cash flow is 50% lower than forecast	3.4	(1.1)
c) Discounted cash flow	Discount rate is 10% higher	3.0	(1.5)
d) Replacement cost	Replacement cost is 20% lower	3.8	(0.8)

Sensitivities on probability weightings assigned

The Directors recognise that the final valuation is dependent on probabilities assigned to the scenario under each valuation technique used. The following table provides an analysis of the impact on the final valuation where the probability weightings are changed.

To provide an indication about the reliability of the inputs used in determining fair value, the Directors classified the fair valuation of Thinxtra investment as a level 3 investment. Instruments are classified as level 3 only if one or more of the significant inputs for the valuation is not based on observable market data.

Valuation Technique	Base case	Alternate case	change in valn NZ\$m
A: Discounted cash flow	40%	30%	
B: Last capital raise April 2019	30%	50%	
C: Replacement cost	30%	20%	
	100%	100%	
Valuation NZ\$	4.6	4.0	(0.6)

Recognition of net dilution gain in Thinxtra – prior year

Critical accounting estimate

During the year to 31 March 2018, Thinxtra issued convertible preference shares. As at 31 March 2019 and during the year to 31 March 2018, Rakon held only ordinary shares in Thinxtra. In calculating Rakon's share of the net assets of its investment in Thinxtra, the Directors have determined that the convertible preference shares dilute Rakon's investment in Thinxtra.

The key judgement applied was that the Directors concluded that the rights attached to the convertible preferences shares over and above the ordinary shares are protective and not substantive in nature. Therefore, the percentage ownership Rakon holds in Thinxtra is based on their proportion of shares including all convertible preference shares, as these shares hold the same voting rights as ordinary shares.

Supporting the above judgement is the fact that Rakon sold ordinary shares in November 2017, shortly after the convertible preference share issue, at the same price as convertible preference shares were issued. Should the protective rights attached to the convertible preference shares be triggered, these shareholders would be entitled to up to 1.2 times the issue price of the convertible preference shares, potentially reducing the net assets available to ordinary shareholders. As noted above the Directors judge these to be protective rights that are not substantive as at 31 March 2018.

Net dilution gain

During the year to 31 March 2018 Thinxtra issued new fully paid shares at a price in excess of what Rakon purchased shares at which resulted in a significant increase to its net assets. The increased number of shares diluted Rakon's shareholding percentage. For Rakon, the gain from Rakon's share of new capital invested outweighed the loss from the dilution in shareholding. A net gain of \$4.8m was recognised in the year to 31 March 2018.

B5. Non-financial assets and liabilities

B5 a) Inventories

Accounting policy

Inventories are stated at the lower of cost (weighted average cost) or net realisable value. Costs comprise direct materials, direct labour and appropriate proportion of variable and fixed overhead expenditure, the latter being allocated on the basis of normal operating capacity. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

Breakdown of inventories

	2019 \$000s	2018 \$000s
Raw materials	15,895	8,767
Work in progress	17,667	10,896
Finished goods	5,748	4,508
Total inventories	39,310	24,171

Obsolescence

An inventory obsolescence provision of \$5,132,000 (2018: \$4,584,000) is included in the inventory figures above. Significant judgements made in determining the provision include:

- Ageing of inventory
- Forecast revenue and likely consumption of inventory
- Historical revenue and actual consumption of inventory
- Specific identification of items of inventories for which the net realisable value is deemed lower than cost.

During the year inventory of \$1,168,000 (2018: \$5,141,000) was scrapped, of which \$553,000 (2018: \$5,141,000) was provided for. The net amount included in cost of sales from an increase in the obsolescence provision was \$1,101,000 (2018: \$1,292,000).

B5 b) Intangible assets

Accounting policy

Amortisation

Amortisation is charged to the Statement of Comprehensive Income on a straight-line basis over the estimated useful lives below:

Goodwill	Nil
Patents	20 years
Software	2 – 10 years
Product development	5 - 10 years
Assets under course of construction	Nil

Software assets and capitalised costs of developing systems are recorded as intangible assets and amortised unless they are directly related to a specific item of hardware, and in that case are recorded as property, plant and equipment.

Patents and software

Identifiable intangible assets that are acquired by the Group are stated at cost less accumulated amortisation and impairment losses. Subsequent expenditure on intangible assets is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure is expensed as incurred.

Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in the statement of comprehensive income as an expense as incurred. Any research and development taxation credits and government grant funding for research and development are recognised when eligibility criteria have been met and treated as a reduction in expenses.

Expenditure on development activities, whereby research findings are applied to a plan or design for the production of new or substantially improved products and processes, is capitalised if the product or process is technically and commercially feasible and the Group has sufficient resources to complete development. Other development expenditure is recognised in the Statement of Comprehensive Income as an expense as incurred.

Total capitalised research and development costs are \$6.8m (2018: \$7.9m) made up of product development assets and assets under construction.

Impairment

During the year, specific product development projects and projects in progress were reviewed for recoverability based on the expected cash flows to be generated by the projects. The expected cash flows supported the carrying values and no impairment was noted.

Breakdown of intangible assets

	Goodwill \$000s	Patents \$000s	Software \$000s	Product development \$000s	Assets under construction \$000s	Total \$000s
Year ended 31 March 2018						
Opening net book value	-	458	760	4,456	3,793	9,467
Foreign exchange differences	-	46	37	512	42	637
Additions	-	-	13	114	763	890
Disposals	-	-	(248)	(41)	-	(289)
Amortisation charge	-	-	(403)	(1,435)	-	(1,838)
Amortisation reversal on disposals	-	-	248	-	-	248
Transfers	-	-	28	898	(926)	-
Closing net book amounts	-	504	435	4,504	3,672	9,115
At 31 March 2018						
Cost	1,846	2,946	8,610	10,264	3,672	27,338
Accumulated amortisation and impairment	(1,846)	(2,442)	(8,175)	(5,760)	-	(18,223)
Net book value	-	504	435	4,504	3,672	9,115
Year ended 31 March 2019						
Opening net book value	-	504	435	4,504	3,672	9,115
Foreign exchange differences	-	(2)	(6)	(25)	(4)	(37)
Additions	1,294	-	73	447	317	2,131
Disposals	-	-	(25)	(102)	(20)	(147)
Amortisation charge	-	-	(325)	(1,712)	-	(2,037)
Amortisation reversal on disposals	-	-	22	102	-	124
Transfers	-	-	117	3,248	(3,365)	-
Closing net book amounts	1,294	502	291	6,462	600	9,149
At 31 March 2019						
Cost	3,140	2,944	8,769	13,832	600	29,285
Accumulated amortisation and impairment	(1,846)	(2,442)	(8,478)	(7,370)	-	(20,136)
Net book value	1,294	502	291	6,462	600	9,149

B6. Business combination – acquisition of Centum Rakon India Private Limited

On 2 May 2018, the Group acquired the remaining 51% of the issued shares in Centum Rakon India Private Limited (CRI), a previously held joint venture which provides products and services to the frequency control industry. Consideration was US\$5.5m and the acquisition is part of the Group's overall manufacturing strategy, providing a low cost manufacturing platform and in addition, access to the local Indian market in the longer term. Consideration of US\$4,125,000 was paid on 2 May 2018 with US\$1,375,000 payable within 18 months of acquisition date. The fair value of the US\$1,375,000 was estimated based on a discount rate of 5.90%. The deferred consideration has been revalued at year end to \$1,885,000.

B6 a) Details of the purchase consideration, the fair value of net assets acquired and goodwill

Purchase price consideration	\$000s
Cash paid	5,848
Deferred consideration	1,789
Less deemed settlement of pre-existing net trade balances	(1,249)
Total purchase price consideration	6,388

	Provisional fair value	Adjust- ments	Final fair value
The fair value of the assets and liabilities recognised as a result of the acquisition are as follows	\$000s	\$000s	\$000s
Cash and cash equivalents	1,500	-	1,500
Property, plant and equipment	3,750	-	3,750
Inventories	5,869	125	5,994
Trade and other receivables	5,002	-	5,002
Trade and other payables	(4,510)	-	(4,510)
Overdraft	(1,320)	-	(1,320)
Employee benefit obligations	(343)	(250)	(593)
Net deferred tax assets	1,379	37	1,416
Less deemed settlement of pre-existing net trade balances	(1,249)	-	(1,249)
Net identifiable assets acquired	10,078	(88)	9,990

	Provisional amount	Adjust- ments	Final amount
Re-measurement of previously held 49% equity interest	\$000s	\$000s	\$000s
Carrying value of equity interest prior to acquisition	2,994	-	2,994
Gain on re-measurement	1,944	(42)	1,902
Re-measured previously held equity interest	4,938	(42)	4,896
Net loss in business combination on previously held equity interest			
Gain on re-measurement of previously held equity interest	1,944	(42)	1,902
Loss on reclassification of currency translation reserve	(2,013)	-	(2,013)
Net loss in business combination on previously held equity interest	(69)	(42)	(111)
Goodwill on acquisition			
Net assets acquired	10,078	(88)	9,990
Less fair value of previously held 49% equity interest	(4,938)	42	(4,896)
Goodwill on acquisition	1,248	46	1,294
Total purchase consideration	6,388	-	6,388

The pre-existing 49% share of equity which was acquired on 25 March 2008, was re-measured to fair value and the currency translation reserve relating to the pre-existing 49% share of equity was recycled through the profit and loss component of the Statement of Comprehensive Income.

The goodwill is attributable to synergies expected to arise. None of the goodwill is expected to be deductible for tax purposes. A deferred tax asset of \$568,000 has been recognised in relation to the fair value adjustments.

Acquisition related costs

Acquisition related costs of \$204,000 are included in administrative expenses in the profit and loss component of the Statement of Comprehensive Income.

Revenue and profit contribution

The acquired business contributed revenues of \$4,551,000 and net profit of \$1,026,000 to the Group for the period from 2 May 2018 to 31 March 2019. If the acquisition had occurred on 1 April 2018, consolidated revenue and consolidated profit after tax for the year ended 31 March 2019 would have been \$4,764,000 and \$923,000 respectively. For April 2018, the Group recorded \$76,000 equity accounted profit for the owned 49% equity interest.

C. Risk

C1. Critical accounting estimates and assumptions

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, rarely equal the related actual results. The estimates and assumptions that involved a higher degree of judgement or complexity and of items which are more likely to be materially adjusted due to estimates and assumptions turning out to be wrong are included in section B and C. Specifically these are:

- Calculation of inventory obsolescence (note B5 a)
- Estimated useful life of intangible assets (note B5 b)
- Expected credit loss provision (note B3 b)
- Thinextra valuation (note B4 d)
- Acquisition of CRI (note B6)
- Prior year investment by Siward, attribution and apportionment of proceeds (note B2 b)
- Estimate and judgements not included above are detailed below.

C1 a) Impairment of assets

The Group has assessed as at 31 March 2019 whether any indicators of impairment exist. In doing so management and the Directors have considered factors including the current profitability of the Group and the market capitalisation value of the Company in comparison to the Group's net asset value. Detailed assessments were conducted for inventory (note B5 a), intangible assets (note B5 b), trade and other receivables (note B3 b) and property, plant and equipment (note D3 a). The Directors consider the net asset values of the Group to be appropriate.

Critical accounting estimates and assumptions

The Group tests annually for indicators of impairment, in accordance with the accounting policy stated in note D12 e). The recoverable amounts of cash generating units ('CGU') have been forecasted based on value-in-use calculations. These calculations require the use of estimates.

These calculations use pre-tax cash flow projections based on financial forecasts covering a five year period due to product life cycles, pricing trends and longer term expected currency trends.

Key assumptions used in 'value in use' calculations

CGU	Assumption	Range	5 Year CAGR
New Zealand	Annual sales growth rate ¹	5% to 9%	7.1%
	Gross margin % ²	48% to 56%	n/a
France	Annual sales growth rate ¹	2% to 12%	6.0%
	Gross margin % ²	28% to 30%	n/a
India	Annual sales growth rate ¹	5% to 10%	6.8%
	Gross margin % ²	19% to 21%	n/a
China	Annual net profit growth rate ³	3% to 58%	20.6%
	Free cash flow ³	4% to 133%	47.5%

Free cash flow is used in the above tables as the China assets are held through Rakon's investment in associates.

¹ Sales growth – Management have forecasted sales to grow over the period of the cash flow projection, due to a combination of factors including industry forecasts for the key market segments in which Rakon operates, future product innovation and estimations of its own share of the market reflective of the quality of its product range and technology advantages. Management have forecast a future increase in revenues for the NZ, France and India CGUs specifically as a result of its product positioning which is expected to meet the future increased technology specification that will be demanded in the telecommunications segment.

² Gross margin – Management forecasted gross margin based on past performance and its expectations of market development also taking into account gradual decline in average selling prices. Anticipated industry trends, product innovations, manufacturing efficiency and raw material cost improvements have also been factored into these gross margin assumptions.

³ China, net profit – Management forecasted net profit based on a combination of factors including industry forecasts for the key market segments, future product innovation and estimations of its own share of the market reflective of the quality of its product range and technology advantages.

These assumptions have been used for the analysis of each CGU within the business segment. The discount rates used are pre-tax and reflect specific risks relating to the relevant segments.

Significant estimate: impact of possible changes in key assumptions

New Zealand CGU

The recoverable amount is estimated to be \$47.6m (2018: \$43.6m). This exceeds the carrying amount of the CGU at balance date by \$5.7m (2018: \$9.9m). If the sales volumes used in the value-in-use calculation had been 2.0% lower than management's estimates, the Group would have recognised an impairment against the carrying amount of net assets of \$0.9m. If the gross margin percentage used in the value-in-use calculation had been 1.0% lower than management's estimates, the Group would have recognised an impairment against the carrying amount of net assets of \$2.2m. If the pre-tax discount rate applied to the cash flow projections was 15.0% instead of 13.6%, the recoverable amount of the CGU would equal its carrying amount.

France CGU

The recoverable amount is estimated to be \$21.9m (2018: \$30.0m). This exceeds the carrying amount of the CGU at balance date by \$2.8m (2018: \$4.4m). If the sales used in the value-in-use calculation had been 2.0% lower than management's estimates, the Group would have recognised an impairment against the carrying amount of net assets of \$2.9m. If the gross margin percentage used in the value-in-use calculation had been 1.0% lower than management's estimates, the Group would have recognised an impairment against the carrying amount of net assets of \$4.4m. If the pre-tax discount rate applied to the cash flow projections was 14.6% instead of 13.5%, the recoverable amount of the CGU would equal its carrying amount.

India CGU

The recoverable amount is estimated to be \$17.1m (2018: \$5.9m). This exceeds the carrying amount of the CGU at balance date by \$1.7m (2018: \$3.0m). If the sales used in the value-in-use calculation had been 4.0% lower than management's estimates, no impairment would result. If the gross margin percentage used in the value-in-use calculation had been 2.0% lower than management's estimates, the Group would have recognised an impairment against the carrying amount of net assets of \$1.7m. If the pre-tax discount rate applied to the cash flow projections was 29.3% instead of 27.1%, the recoverable amount of the CGU would equal its carrying amount.

China CGU

The recoverable amount is estimated to be \$9.9m (2018: \$13.1m). This exceeds the carrying amount of the CGU at balance date by \$2.8m (2018: \$3.8m). If free cash flow was 10.0% lower than management's estimates, no impairment would result. If the pre-tax discount rate applied to the cash flow projections was 17.0% instead of 14.8%, the recoverable amount of the CGU would equal its carrying amount.

Cash flows beyond the five year period are extrapolated using the estimated growth rates stated below.

	Growth rate		Discount rate (pre-tax)	
	2019	2018	2019	2018
New Zealand	1.90%	2.50%	13.60%	14.00%
United Kingdom	2.50%	2.50%	12.10%	11.10%
France	1.30%	2.50%	13.50%	13.00%
India	3.50%	2.50%	27.10%	24.20%
China	2.50%	2.50%	14.80%	14.20%

C1 b) Income taxes

The Group is subject to income taxes in numerous jurisdictions. Significant judgement is required in determining the worldwide provision for income taxes and recognition of deferred tax assets in relation to losses. There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

C2. Financial risk management

The Group has exposure to the following risks:

- Credit risk
- Liquidity risk
- Market risk

This section presents information about the Group's exposures to each of the above risks including the Group's objectives, policies, processes for measuring and managing risk, and the Group's management of capital. Further quantitative disclosures are included throughout these consolidated financial statements.

The Board has overall responsibility for the establishment and oversight of the Group's risk management framework. The Board has established the Audit and Risk Committee, which together with the Board, is responsible for developing and monitoring the Group's risk management policies.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls and to monitor risk adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Group's risk management is predominantly controlled at head office in New Zealand (Group treasury) under policies approved by the Board. Group treasury identifies, evaluates and hedges financial risks in close co-operation with the Group's operating units. The Board provides written principles for overall risk management, as well as policies covering specific areas, such as foreign exchange risk, interest rate risk, and credit risk, use of derivative financial instruments and non-derivative financial instruments, and investment of excess liquidity.

Where all relevant criteria are met, hedge accounting is applied to remove the accounting mismatch between the hedging instrument and the hedged item. This will effectively result in recognising interest expense at a fixed interest rate for the hedged floating rate loans and inventory at the fixed foreign currency rate for the hedged purchase.

Risk	Exposure arising from	Measurement	Management
Market risk – foreign exchange	Recognised financial assets and liabilities not denominated in currency units	Cash flow forecasting Sensitivity analysis	Foreign currency forwards and foreign currency options
Market risk – interest rate	Bank overdraft at variable rates	Sensitivity analysis	Interest rate swaps
Credit risk	Cash and cash equivalents, trade receivables, derivative financial instruments	Aging analysis Credit ratings	Credit limits
Liquidity risk	Borrowings and other liabilities	Rolling cash flow forecasts	Availability of committed credit lines and borrowing facilities

C2 a) Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from the Group's receivables from customers.

The adoption of IFRS 9 has changed the Group's loss impairment method by replacing the incurred loss approach with a forward-looking expected credit loss (ECL) approach. From 1 April 2018, the Group has been recording the allowance for expected credit losses for all debt financial assets not held at fair value through the profit and loss (FVPL) in this section all referred to as 'financial instruments'. Equity instruments are not subject to impairment under IFRS 9.

Trade and other receivables

The Group has financial assets of trade receivables from sales of inventory that are subject to the expected credit loss model.

While cash and cash equivalents are also subject to the impairment requirements of IFRS 9, the identified impairment loss was immaterial.

The ECL allowance is based on the credit losses expected to arise over the life of the asset (the lifetime expected credit loss or LTECL), unless there has been no significant increase in credit risk since origination, in which case, the allowance is based on the 12 months' expected credit loss.

To measure the expected credit losses, trade receivables and contract assets have been grouped based on shared credit risk characteristics and the days past due. The contract assets relate to unbilled work in progress and have substantially the same risk characteristics as the trade receivables for the same types of contracts. The Group has concluded that the expected loss rates for trade receivables are a reasonable approximation of the loss rates for the contract assets.

Previous accounting policy for impairment of trade receivables

In the prior year, impairment of trade receivables was assessed based on the incurred loss model. Individual receivables which were known to be uncollectible were written off by reducing the carrying amount directly. The other receivables were assessed collectively to determine whether there was objective evidence that an impairment had been incurred but not yet been identified. For these receivables the estimated impairment losses were recognised in a separate provision for impairment.

Group considered that there was evidence of impairment if any of the following indicators were present:

- significant financial difficulties of the debtor
- probability that the debtor will enter bankruptcy or financial reorganisation, and
- default or late payments (more than 30 days overdue).

Receivables for which an impairment provision was recognised were written off against the provision when there was no expectation of recovering additional cash.

The restatement on transition to IFRS 9 as a result of applying the expected credit risk model was immaterial.

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. The demographics of the Group's customer base, including the default risk of the industry and country, in which customers operate, has less influence on credit risk. The Group's most significant customer accounts for 10% (2018: 10%) of external revenue with the next most significant customer accounting for 9% (2018: 7%) of external revenue. The Group's most significant customer accounts for \$11.2m (2018: \$10.1m) revenue, is in the telecommunications segment and is supplied out of India and New Zealand.

The Group has established credit policies under which each new customer is analysed individually for credit-worthiness before payment and delivery terms and conditions are agreed. The Group's review includes trade references and external ratings, where appropriate and in some cases bank references. Purchase limits are established for each customer, which represents the maximum open amount; these limits are reviewed periodically. Customers that fail to meet the Group's benchmark credit-worthiness may transact with the Group only on a prepayment basis.

Credit quality of financial assets

Exposure to credit risk

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at 31 March is set out below other than for derivatives which is shown in note D2 b).

	Carrying amount	
	2019	2018
	\$000s	\$000s
Financial assets at fair value through profit or loss (note D2 b)	19	211
Trade and other receivables (note B3 b)	40,487	31,111
Cash and cash equivalents (note D2 a)	4,719	10,364
Forward exchange contracts and collar options used for hedging (note D2 b)	565	1,412
Total exposure to credit risk	45,790	43,098

The maximum exposure to credit risk for trade receivables at 31 March by currency of denomination is set out in note B3 b).

C2 b) Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

Typically, the Group ensures that it has sufficient cash on demand to meet expected operational expenses for a period of 60 days, including the servicing of financial obligations; this excludes the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters. In addition, the Group maintains the following lines of credit:

Current year

On 30 November 2018 the facilities with ASB were restructured and increased. At 31 March 2019 the following facilities were in place:

- \$15.5m overdraft limit. Interest is payable at the ASB Corporate Indicator Rate plus applicable margin. Also refer to note C3 b). The increase compared to the previous facility relates to additional working capital required for growth in the telecommunications business supplied out of India and New Zealand. This overdraft was drawn for the purchase of Rakon India.

Facilities are secured by a general security deed over all the present and future assets and undertakings of the Group and the Group has agreed to certain capital requirements, restrictions on dividend distributions and capital expenditure. The financial covenants include net tangible assets to total tangible assets, net debt to Underlying EBITDA and Underlying EBITDA to interest. Interest is based on wholesale market interest rates, bank margin and applicable line fee. The Company was in compliance with all required financial covenants during the year.

Prior year

- \$1.7m cash advance facility with ASB. The interest rate is reset every 30 – 90 days and interest is payable based on the bank bill rate for that interest period, the term funding premium and the applicable margin.
- \$9.8m overdraft limit. Interest is payable at the ASB Corporate Indicator Rate plus applicable margin. The \$2.0m increase compared to the previous facility relates to additional working capital for the Rakon India business and requires the release of securities held by CRI's current banks within four months of the date of the acquisition date.

The following table shows the contractual undiscounted cash flow maturities of financial liabilities, including interest payments and excluding the impact of netting agreements:

31 March 2019	Carrying amount \$000s	6 months or less \$000s	6 – 12 months \$000s	1 – 2 years \$000s	2 – 5 years \$000s
<i>Financial liabilities</i>					
Derivatives (note D2 b)	1,288	(750)	(343)	(195)	-
Trade and other payables (note D2 d)	26,398	(26,398)	-	-	-
Bank overdraft (note D2 e)	11,501	(11,501)	-	-	-
Finance leases (note D2 e)	817	(405)	(412)	-	-
Total financial liabilities	40,004	(39,054)	(755)	(195)	-

31 March 2018	Carrying amount \$000s	6 months or less \$000s	6 – 12 months \$000s	1 – 2 years \$000s	2 – 5 years \$000s
<i>Financial liabilities</i>					
Derivatives (note D2 b)	313	(99)	(10)	(78)	(126)
Trade and other payables (note D2 d)	19,107	(19,107)	-	-	-
Bank overdraft (note D2 e)	2,824	(2,824)	-	-	-
Finance leases (note D2 e)	31	(15)	(16)	-	-
Total financial liabilities	22,275	(22,045)	(26)	(78)	(126)

C2 c) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices, will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, whilst optimising the return on risk.

The Group enters into derivatives in the ordinary course of business and also incurs financial liabilities, in order to manage market risks. All such transactions are carried out within the guidelines set by the Board and Audit and Risk Committee. Generally, the Group seeks to apply hedge accounting in order to manage volatility in the Statement of Comprehensive Income.

Currency risk

The Group is exposed to currency risk on sales and purchases that are denominated in a currency other than the respective functional currencies of the Group's entities, primarily New Zealand Dollars (NZD), Sterling (GBP) and the Euro (EUR). The currencies in which these sales and purchases transactions are primarily denominated are US Dollars (USD), Japanese Yen (JPY), Indian Rupees (INR), NZD, GBP and EUR. The Group uses foreign currency forward exchange contracts and collar options to hedge its currency risk.

Exposure to currency risk

The table below summarises the foreign exchange exposure on the net monetary assets of the Group against its respective functional currency, expressed in NZD.

	USD \$000s	EUR \$000s	GBP \$000s	JPY \$000s	INR \$000s
31 March 2019	17,397	(1,533)	(460)	(5,751)	1,205
31 March 2018	16,155	850	165	(617)	-

The following significant exchange rates applied during the year:

NZD	Average rate		Reporting date rate	
	2019	2018	2019	2018
USD	0.6768	0.7149	0.6806	0.7277
EUR	0.5887	0.6118	0.6044	0.5858
GBP	0.5188	0.5398	0.5154	0.5134
INR	47.4790	46.7996	46.9870	46.9569
JPY	75.1127	79.2096	75.1800	76.8400

Sensitivity analysis

Underlying exposures

A 10% weakening of the NZD against the following currencies at 31 March would have increased (decreased) equity and profit or loss by the amounts shown below. Based on historical movements, a 10% increase or decrease in the NZD is considered to be a reasonable estimate. This analysis assumes that all other variables, in particular interest rates remain constant. The analysis was performed on the same basis for 2018.

10% weakening	2019		2018	
	Equity	Profit or loss	Equity	Profit or loss
	\$000s	\$000s	\$000s	\$000s
USD	1,933	1,933	1,795	1,795
EUR	(170)	(170)	94	94
GBP	(51)	(51)	18	18
JPY	(639)	(639)	(69)	(69)
INR	134	134	-	-

A 10% strengthening of the NZD against the above currencies at 31 March would have had the equal but opposite effect on the above currencies to the amount shown above, on the basis that all other variables remain constant.

Forward foreign exchange contracts

A 10% weakening of the purchased currencies below against the forward foreign exchange contracts outstanding at 31 March, would have increased (decreased) equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular interest rates, remain constant. The analysis is performed on the same basis for 2018.

	2019			2018		
	Fair value	Equity	Profit or loss	Fair value	Equity	Profit or loss
	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
Forward foreign exchange contracts - Cash flow hedge						
Net buy NZD sell USD	5,811	(5,811)	-	1,294	(2,719)	-
Forward foreign exchange contracts - held for trading						
Net buy NZD sell EUR	(28)	231	231	159	(353)	(353)
Net buy NZ sell GBP	20	277	277	(91)	(472)	(472)
Net buy NZ sell INR	119	(496)	(496)	-	-	-

Interest rate risk

Under the Group's Treasury Management Policy, a minimum of 50% of term debt is required to be on fixed interest rates. The Group adopts a policy to manage its exposure to interest rates by considering fixed interest rate swap agreements.

Profile

At 31 March the interest rate profile of the Group's interest bearing financial instruments was:

	2019	2018
	\$000s	\$000s
Variable rate instruments		
Financial assets (note D2 a)	4,719	10,364
Financial liabilities	(11,501)	(2,824)
Net variable rate instruments	(6,782)	7,540
Fixed rate instruments		
Financial liabilities	(176)	(224)
Net fixed rate instruments	(176)	(224)

Sensitivity analysis

An increase of 100 basis points in interest rates at 31 March would have increased (decreased) equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular foreign exchange rates, remain constant. The analysis for 2019 was performed on the same basis as 2018.

	2019	2019	2018	2018
	Equity	Profit or loss	Equity	Profit or loss
	\$000s	\$000s	\$000s	\$000s
Variable rate instruments	(68)	(68)	(28)	(28)
Fixed rate instruments	76	76	58	58

A decrease of 100 basis points in interest rates at 31 March would have the opposite impact to what is shown above.

C3. Capital management

The Board's policy is to maintain a capital base (made up of debt and equity) so as to sustain future development of the business. There were no changes to the Group's approach to capital management during the year.

C3 a) Current year

The Group is reliant on its bank facility (refer note D2 e) and equity as the principal sources of capital management. The ability of the Group to remain in compliance with its banking covenants has been considered by the Directors in the adoption of the going concern assumption during the preparation of these financial statements.

C3 b) Bank facilities

On 30 November 2018 the facilities with ASB were restructured and increased, refer note C2 b).

Facilities are secured by a general security deed over all the present and future assets and undertakings of the Group and the Group has agreed to certain capital requirements, restrictions on dividend distributions and capital expenditure. The financial covenants include net tangible assets to total tangible assets, net debt to Underlying EBITDA and Underlying EBITDA to interest. Interest is based on wholesale market interest rates, bank margin and applicable line fee.

Compliance with bank covenants is dependent on the Group's financial performance. The Directors have approved a five year forecast and business valuation impairment model. The Directors forecast that the Group will trade at levels appropriate to manage its working capital requirements and meet its bank covenants for the period of at least 12 months from the date of authorisation of these financial statements. The Directors have considered the achievability of the assumptions underlying those forecasts, including forecast sales and positioning the business for the future. Forecasts indicate that the Group will meet all covenants and net cash requirements for at least 12 months from the date of authorisation of these financial statements and that there is sufficient headroom to allow for downward sensitivities, should the actual revenue and margin levels be lower than forecast.

D. Other information

D1. Other profit and loss information

D1 a) Summary of impairments

The Group has assessed as at 31 March 2019 whether any indicators of impairment exist. In undertaking such an assessment, no indicators of impairment were identified in the current year.

	2019 \$000s	2018 \$000s
Property, plant & equipment (note D3 a)	-	120
Total impairment	-	120

D1 b) Employee benefits expenses

Accounting policy

Employee entitlements to salaries, wages and annual leave to be settled within 12 months of balance date represent present obligations resulting from employees' services provided up to the balance date. These are calculated at undiscounted amounts based on remuneration rates that the Group expects to pay.

Breakdown of employee benefits expenses

	2019 \$000s	2018 \$000s
Wages and salaries	43,872	37,216
Contributions to defined contribution plans	644	570
Increase/(decrease) in liability for French retirement indemnity plan (note D3 b)	265	(23)
Increase in liability for long service leave (note D3 b)	65	114
Redundancy expense (note D3 b)	-	159
Employee share scheme (note D5)	-	8
Total employee benefits expenses	44,846	38,044

D1 c) Net finance (costs)/income

Accounting policy

Interest income is recognised in the statement of comprehensive income as it accrues, using the effective interest method.

Breakdown of finance (costs)/income

	2019 \$000s	2018 \$000s
Financial income		
Interest income	37	3
Financial expenses		
Interest expense on bank borrowings	(459)	(492)
Interest on deferred consideration on acquisition - Rakon India	(100)	-
Unwinding of lease make good provision discount	(12)	(12)
Total financial expenses	(571)	(504)
Net finance costs	(534)	(501)

D1 d) Income tax expense**Accounting policy**

Income tax on the net profit for the year comprises current and deferred tax. Income tax is recognised in the profit and loss component of the Statement of Comprehensive Income, with the exception of other items that relates to other comprehensive income, in which case it is recognised in other comprehensive income.

Breakdown of income tax expense

	2019 \$000s	2018 \$000s
Current tax	(1,879)	(616)
Deferred tax expense (note D4)	(231)	(382)
Income tax expense	(2,110)	(998)

The tax on the Group's result before tax differs from the theoretical amount that would arise using the weighted average tax rate applicable to the results of the consolidated entities.

	2019 \$000s	2018 \$000s
Reconciliation of income tax expense		
Profit before tax	5,474	10,997
Tax calculated at domestic tax rates applicable to profits in the respective countries	(1,540)	(2,943)
Foreign exchange difference in income tax calculation	-	15
Expenses not deductible	(276)	(73)
Non-taxable income	684	1,890
Expenses deductible for tax purposes	34	18
Prior year adjustment	46	296
Associate and joint venture results reported net of tax	95	(541)
Movement in deferred tax subsequent to business combination	(427)	-
Recognition and utilisation of previously unrecognised tax losses	347	610
Tax losses for which no deferred income tax asset was recognised	(1,073)	(270)
Income tax expense	(2,110)	(998)

The weighted average applicable tax rate was 39% (2018: 9%).

D2. Other financial assets and liabilities**D2 a) Cash and cash equivalents****Accounting policy**

Cash and cash equivalents comprise of cash balances, call deposits, and other short term highly liquid investments with original maturities of three months or less, that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value and bank overdrafts. Bank overdrafts are shown separately from borrowings on the balance sheet.

	2019 \$000s	2018 \$000s
Cash at bank and on hand	4,719	10,364
Cash, cash equivalents and bank overdrafts include the following for the purposes of the Statement of Cash Flows		
Cash and cash equivalents	4,719	10,364
Bank overdrafts (note D2 e)	(11,501)	(2,824)
Total cash and cash equivalents	(6,782)	7,540

D2 b)**Derivative financial instruments**

The Group is exposed to certain risks relating to its ongoing business operations. To mitigate the risks the Group uses derivative financial instruments such as cross-currency swaps and interest rates swaps. When the Group designates certain derivatives to be part of a hedging relationship, and they meet the criteria for hedge accounting, the hedges are classified as cash flow hedges.

Derivative financial instruments are held for risk and asset management purposes only and not for the purpose of speculation. The Group's risk management strategy and how it is applied to manage risk is explained further in note C2.

The following table sets out the notional amount of derivative instruments designated in a hedge relationship-by-relationship type as well as the related carrying amounts.

	2019	2019	2018	2018
	Assets	Liabilities	Assets	Liabilities
	\$000s	\$000s	\$000s	\$000s
Interest rate swaps – cash flow hedge	-	100	-	126
Forward foreign exchange contracts – cash flow hedges	274	837	1,242	-
Forward foreign exchange collar option – cash flow hedges	291	256	170	96
Total derivative financial instruments	565	1,193	1,412	222
Less: non-current forward foreign exchange – cash flow hedges	258	343	334	78
Current - derivative financial instruments	307	850	1,078	144
Forward foreign exchange contracts – held for trading	19	95	211	91
Total - derivative financial instruments	326	945	1,289	235

Trading derivatives are classified as a current asset or liability. The full fair value of a hedging derivative is classified as a non-current asset or liability if the remaining maturity of the hedged item is more than 12 months, or as a current asset or liability if the maturity of the hedged item is less than 12 months.

Forward foreign exchange contracts

The notional principal amounts of the outstanding forward foreign exchange contracts at 31 March 2019 were \$42,421,152 (2018: \$33,624,000). The hedged highly probable forecast transactions denominated in foreign currency are expected to occur at various dates during the next 24 months. Gains and losses recognised in the hedging reserve in equity on forward foreign exchange contracts will be recognised in the Statement of Comprehensive Income, in the period or periods during which the hedged forecast transaction affects the Statement of Comprehensive Income.

Interest rate swap contracts

At balance date, one interest rate swap was in place with \$3m of borrowings fixed at 4.17%, expiring June 2020. The interest rate swap, with a fair value of -\$100,000 (2018: -\$145,000), is exposed to fair value movements if interest rates change.

D2 c)**Recognised fair value measurements****Derivative financial instruments**

Derivative financial instruments are initially recognised at fair value exclusive of any transaction costs on the date a derivative contract is entered into and are subsequently re-measured to their fair value at each reporting date.

All derivatives are recognised as assets when their fair value is positive and as liabilities when their fair value is negative. Any gains or losses arising from the change in fair value of derivatives, except those that qualify as effective cash flow hedges, are immediately recognised in the Statement of Comprehensive Income.

Reclassifications of financial instruments on adoption of IFRS 9

On the date of initial application, 1 April 2018, the financial instruments were as follows, with any reclassifications noted:

	Measurement category		Carrying amount		
	Original (IAS 39)	New (IFRS 9)	Original \$000	New \$000	Difference \$000
Non-current financial asset					
Derivative financial instruments - Cash flow hedges	FVOCI	FVOCI	334	334	-
Trade and other receivables	Amortised cost	Amortised cost	2,716	2,716	-
Current financial assets					
Derivative financial instruments - Held for trading	FVPL	FVPL	211	211	-
Trade and other receivables	Amortised cost	Amortised cost	28,395	28,395	-
Cash and cash equivalents	Amortised cost	Amortised cost	10,364	10,364	-
Derivative financial instruments - cash flow hedges	FVOCI	FVOCI	1,078	1,078	-
Current financial liabilities					
Derivative financial instruments - Held for trading	FVPL	FVPL	91	91	-
Derivative financial instruments - Cash flow hedges	FVOCI	FVOCI	144	144	-
Non-current financial liabilities					
Derivative financial instruments - Cash flow hedges	FVOCI	FVOCI	78	78	-

Equity instruments

The Group subsequently measures all equity investments at fair value. Where the Group has elected to present fair value gains and losses on equity investments in other comprehensive income (OCI), there is no subsequent reclassification of fair value gains and losses to the profit and loss component of the Statement of Comprehensive Income. Dividends from such investments continue to be recognised as other income in the profit and loss component of the Statement of Comprehensive Income when the Group's right to receive payments are established. Changes in the fair value of financial assets at fair value through profit and loss (FVPL) are recognised in other gains/(losses) in the profit and loss component of the Statement of Comprehensive Income. Impairment losses (and reversal of impairment losses) on equity investments measured at fair value through other comprehensive income (FVOCI) are not reported separately from other changes in fair value.

Derivatives and hedging

The effective portion of changes in the fair value of cash flow hedges is recognised (including related tax impacts) through OCI in the cash flow hedge reserve in equity. The ineffective portion is recognised immediately in the Statement of Comprehensive Income. The balance of the cash flow hedge reserve in relation to each particular hedge is transferred to the profit or loss in the period when the hedged item affects profit or loss. Hedge accounting is discontinued when a hedging instrument expires or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting. The cumulative gain or loss existing in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the profit or loss. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the profit or loss.

Hedge ineffectiveness

Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and hedging instrument.

For hedges of foreign currency purchases, the Group enters into hedge relationships where the critical terms of the hedging instrument match exactly with the terms of the hedged item. The Group therefore performs a qualitative assessment of effectiveness. If changes in circumstances affect the terms of the hedged item such that the critical terms no longer match exactly with the critical terms of the hedging instrument, the Group assesses these terms that no longer match to assess hedge effectiveness.

In hedges of foreign currency purchases, ineffectiveness may arise if the timing of the forecast transaction changes from what was originally estimated, or if there are changes in the credit risk of the derivative counterparty.

The Group enters into interest rate swaps that have similar critical terms as the hedged item, such as reference rate, reset dates, payment dates, maturities and notional amount. The Group does not hedge 100% of its loans, therefore the hedged item is identified as a proportion of the outstanding loans up to the notional amount of the swaps. As all critical terms matched during the year, the economic relationship was 100% effective.

Hedge ineffectiveness for interest rate swaps is assessed using the same principles as for hedges of foreign currency purchases. It may occur due to:

- the credit value/debit value adjustment on the interest rate swaps which is not matched by the loan, and
- differences in critical terms between the interest rate swaps and loans.

There was no ineffectiveness during 2019 or 2018 in relation to the interest rate swaps.

During the year, the following amounts were recognised in profit or loss in relation to foreign currency transactions and interest rate swaps:

	2019
	\$000s
Net foreign exchange loss included in sales (note D5)	591
Net gain on foreign currency forwards not qualifying as hedges included in other gains (Note B2c)	46

Effects of hedge accounting on the financial position and performance

The effects of the foreign currency related hedging instruments on the Group's financial position and performance are as follows:

	2019	2019	2019
	\$000s	\$000s	\$000s
	Foreign	Foreign	Interest rate
	currency	currency	swaps
	options	forwards	swaps
Notional amount	32,940	42,421	3,000
Maturity date	MAY-19 to SEP-20	APR-19 to OCT-20	JUN-20
Hedge ratio	1:1	1:1	1:1
Change in intrinsic value of outstanding hedging instruments	(31)	-	-
Weighted average strike rate for the year:			
GBP/USD	1.34	-	-
NZD/USD	0.69	-	-
Weighted average contract rate for the year:			
NZD/USD	-	0.74	-
GBP/USD	-	1.33	-
EUR/USD	-	1.14	-
INR/USD	-	71.56	-

D2 d) Trade and other payables

Accounting policy

Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

Breakdown of trade and other payables

	2019	2018
	\$000s	\$000s
Trade payables	13,439	7,015
Amounts due to related parties (note D9 b)	468	1,874
Employee entitlements	8,908	7,803
Accrued expenses	3,583	1,839
GST/VAT payable	-	576
Total trade and other payables	26,398	19,107

The carrying amounts of trade and other payables are assumed the same as their fair values due to their short term nature.

D2 e) Borrowings

Accounting policy

Interest bearing borrowings are recognised initially at fair value, net of transaction costs incurred. Subsequent to initial recognition, interest bearing borrowings are measured at amortised cost with any difference between the proceeds (net of transaction costs) and the redemption amount, recognised in the Statement of Comprehensive Income over the period of the borrowings, using the effective interest method. Arrangement fees are amortised over the term of the loan facility.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after balance date.

Breakdown of borrowings

	2019 \$000s	2018 \$000s
Current		
Obligations under finance lease	405	31
Other borrowings	69	67
Bank overdrafts	11,501	2,824
Current borrowings	11,975	2,922
Non-current		
Obligations under finance lease	412	-
Non-current borrowings	412	-

Bank borrowings

During the year bank borrowings were restructured (refer note C2 b). The average interest rate during the year on this facility was 5.15% (2018: 5.97%).

Bank overdrafts and borrowings are secured by first mortgage over all the undertakings of Rakon Limited and any other wholly owned present and future subsidiaries.

The exposure of the Group's bank borrowings to interest rate changes and the contractual re-pricing dates at the balance dates are as follows:

	2019 \$000s	2018 \$000s
6 months or less	11,501	2,922
Total bank borrowings including overdraft	11,501	2,922

D3. Other non-financial assets and liabilities

D3 a) Property, plant and equipment

Accounting policy

Initial recording and subsequent measurement

Items of property, plant and equipment are stated at cost, less accumulated depreciation and impairment losses. The cost of purchased property, plant and equipment is the value of the consideration given to acquire the assets and the value of other directly attributable costs, which have been incurred in bringing the assets to the location and condition necessary for their intended service. Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items of property, plant or equipment.

Subsequent costs

The Group recognises in the carrying amount of an item of property, plant or equipment the cost of replacing part of such an item when that cost is incurred, only when it is probable that the future economic benefits embodied with the item will flow to the Group and the cost of the item can be measured reliably. All other costs are recognised in the Statement of Comprehensive Income as an expense when incurred.

Depreciation

Depreciation of property, plant and equipment, other than freehold land, is calculated on a straight line basis so as to expense the cost of the assets to their expected residual values over their useful lives as follows:

Land	Nil
Buildings	15 – 20 years
Leasehold improvements	3 – 25 years
Computer hardware	1 – 10 years
Plant and equipment	1 – 20 years
Furniture and fittings	3 – 20 years
Assets under course of construction	Nil

The assets' residual values and useful lives are reviewed and adjusted if appropriate, at each balance date.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within 'other gains/(losses) – net' in the Statement of Comprehensive Income.

Breakdown of property, plant and equipment

	Land and buildings \$000s	Leasehold improve- ments \$000s	Plant and equipment \$000s	Computer hardware \$000s	Other \$000s	Assets under construct- ion \$000s	Total \$000s
Year ended 31 March 2018							
Opening net book value	529	2,055	7,546	273	351	1,991	12,745
Foreign exchange differences	-	82	173	20	17	82	374
Additions	-	121	1,159	324	162	1,507	3,273
Disposals	-	(3,061)	(3,243)	(434)	(76)	(13)	(6,827)
Depreciation charge	-	(398)	(1,809)	(250)	(47)	-	(2,504)
Depreciation reversal on disposals	-	2,890	3,158	434	58	-	6,540
Impairment	-	-	(94)	-	-	(26)	(120)
Transfers	-	27	553	11	1	(592)	-
Closing net book amounts	529	1,716	7,443	378	466	2,949	13,481
At 31 March 2018							
Cost	4,887	7,450	80,725	5,040	2,480	2,975	103,557
Accumulated depreciation and impairment	(4,358)	(5,734)	(73,282)	(4,662)	(2,014)	(26)	(90,076)
Net book value	529	1,716	7,443	378	466	2,949	13,481
Year ended 31 March 2019							
Opening net book value	529	1,716	7,443	378	466	2,949	13,481
Foreign exchange differences	(4)	(35)	(54)	(12)	(21)	(40)	(166)
Additions	-	552	2,414	728	56	2,467	6,217
Additions on acquisition	-	98	3,540	4	79	28	3,749
Disposals	-	-	(667)	(29)	(5)	(76)	(777)
Depreciation charge	-	(470)	(2,940)	(292)	(63)	-	(3,765)
Depreciation reversal on disposals	-	-	627	28	-	-	655
Transfers	-	414	643	20	7	(1,084)	-
Closing net book amounts	525	2,275	11,006	825	519	4,244	19,394
At 31 March 2019							
Cost	4,883	8,479	86,601	5,751	2,596	4,270	112,580
Accumulated depreciation and impairment	(4,358)	(6,204)	(75,595)	(4,926)	(2,077)	(26)	(93,186)
Net book value	525	2,275	11,006	825	519	4,244	19,394

D3 b) Provisions for other liabilities and charges

Accounting policies

A provision is recognised in the balance sheet when the Group has a present legal or constructive obligation as a result of a past event and it is probable that an outflow of economic benefits will be required to settle the obligation. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and where appropriate, the risks specific to the liability.

Retirement provision

The Group's net obligation in respect of the French retirement indemnity plan is the amount of future benefit that employees have earned in return for their service in the current and prior periods. The obligation is calculated using the projected unit credit method and is discounted to its present value and the fair value of any related assets is deducted. The French retirement indemnity plan entitles permanent French employees to a lump sum on retirement. The payment is dependent on an employee's final salary and the number of years of service rendered.

French employees are entitled to a retirement pay-out once they have met specific criteria. This is a one off payment based on service time at retirement date. A provision has been created to recognise this cost taking in consideration the time served, probability of attainment and discount rates. An actuarial valuation was performed at 31 March 2019.

Long service leave

The Group's net obligation in respect of long service leave is the amount of future benefit that employees have earned in return for their service in the current and prior periods. The obligation is calculated using the projected unit credit method and is discounted to its present value.

New Zealand employees are entitled to long service leave after the completion of 10 years' continuous service, in the form of special holidays and allowance. A provision has been created to recognise this cost, taking into consideration the time served, probability of attainment and discount rates.

Lease make good

Rakon is required to restore the leased premises at Mt Wellington, Auckland, New Zealand to their original condition at the end of the respective lease terms. A provision is recognised for the present value of the estimated expenditure required to remove any leasehold improvements. These costs have been capitalised as part of the cost of leasehold improvements and are amortised over the lease terms.

Restructure provision

During 2017 a proposal for re-organisation was discussed with the Work Inspection Administration and Workers Council in France and communicated to the employees of Rakon France SAS as a plan to restructure. During the year, the restructure plan was concluded.

Breakdown of provisions for other liabilities and charges

	Retirement provision \$000s	Long service leave \$000s	Restructure provision \$000s	Lease make good \$000s	Total \$000s
At 31 March 2017	1,941	417	833	628	3,819
(Credited)/charged to the Statement of Comprehensive Income	(23)	114	159	12	262
Used during the year	(109)	(61)	(645)	-	(815)
Foreign exchange	337	-	92	-	429
At 31 March 2018	2,146	470	439	640	3,695
Charged to the Statement of Comprehensive Income	265	65	-	12	342
Used during the year	-	(72)	(439)	-	(511)
Foreign exchange	(80)	-	-	15	(65)
At 31 March 2019	2,331	463	-	667	3,461
Represented by					
Current portion	154	317	-	-	471
Non-current portion	2,177	146	-	667	2,990
Total provisions for other liabilities and charges	2,331	463	-	667	3,461

D4. Deferred income tax

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and current tax liabilities and when the deferred income taxes relate to the same fiscal authority. The offset amounts are as follows:

	2019 \$000s	2018 \$000s
Deferred tax assets	7,352	5,906
Deferred tax liabilities	(1,069)	(244)
Net deferred tax asset	6,283	5,662
	2019 \$000s	2018 \$000s

The gross movement in the deferred income tax account is as follows:

Opening balance	5,662	6,668
Foreign exchange differences	(3)	112
Losses transferred to subsidiaries	(209)	(389)
Deferred tax on cash flow hedge	496	(347)
Acquisition of subsidiaries	568	-
Income statement expense (note D1 d)	(231)	(382)
Closing balance	6,283	5,662

The movement in deferred income tax assets and liabilities during the year, without taking into consideration the offsetting of balances within the same jurisdiction, is as follows:

	Property, plant & equipment \$000s	Intangibles \$000s	Employee benefits \$000s	Other ¹ \$000s	Future income tax benefit \$000s	Total \$000s
At 31 March 2017	223	-	414	3,012	3,019	6,668
(Charged)/credited to profit or loss	(180)	-	88	(291)	1	(382)
Losses transferred to subsidiaries	-	-	-	-	(389)	(389)
Charged to equity	-	-	-	(347)	-	(347)
Foreign exchange difference	5	-	-	107	-	112
At 31 March 2018	48	-	502	2,481	2,631	5,662
(Charged)/credited to profit or loss	(321)	-	149	(138)	79	(231)
Losses transferred to subsidiaries	-	-	-	-	(209)	(209)
Acquisition of subsidiaries	-	-	-	568	-	568
Charged to equity	-	-	-	496	-	496
Foreign exchange difference	-	-	-	(3)	-	(3)
At 31 March 2019	(273)	-	651	3,404	2,501	6,283

¹ Includes deferred tax arising from financial instruments (cash flow hedges) and inventory provisioning.

At balance date Rakon Limited had total tax losses of \$26,743,000 (2018: \$29,266,000) of which \$8,908,000 (2018: \$9,396,000) are recognised in deferred income tax assets. Accordingly, \$17,835,000 (2018: \$19,901,000) of tax losses have not been recognised in deferred income tax assets. Rakon Limited's tax losses have no expiry date. During the year Rakon Limited recognised tax losses of \$1,712,000 (2018: \$2,180,000) which were not previously recognised in deferred income tax assets. These were fully utilised against current year taxable income. Deferred income tax assets are recognised for tax losses to the extent that the related tax benefit is expected to be realised through future taxable profits.

D5. Other reserves

	Foreign currency translation reserve \$000s	Hedging reserve \$000s	Share option reserve \$000s	Other comprehensive income revaluation \$000s	Total \$000s
At 31 March 2017	(27,478)	1,162	3,056	-	(23,260)
Cash flow hedges					
Fair value gains/(losses) in year	-	(930)	-	-	(930)
Tax on fair value gains	-	260	-	-	260
Transfers to sales	-	558	-	-	558
Tax on transfers to income tax expense	-	(156)	-	-	(156)
Subsidiaries	2,982	-	-	-	2,982
Associates and joint venture	(216)	-	-	-	(216)
Fair value of share options issued	-	-	8	-	8
At 31 March 2018	(24,712)	894	3,064	-	(20,754)
Cash flow hedges					
Fair value gains/(losses) in year	-	(1,221)	-	-	(1,221)
Cost of hedge	-	31	-	-	31
Changes in fair value of equity investments at fair value through other comprehensive income - Thinxtra	-	-	-	(454)	(454)
Tax on fair value losses	-	342	-	-	342
Transfers to sales	-	(591)	-	-	(591)
Tax on transfers to income tax expense	-	165	-	-	165
Subsidiaries	1,330	-	-	-	1,330
Associates and joint venture	(1)	-	-	-	(1)
At 31 March 2019	(23,383)	(380)	3,064	(454)	(21,153)

D6. Contributed equity

D6 a) Share capital

Accounting policy

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

At 31 March 2019 the total number of ordinary shares, including treasury shares, is 229,055,272 shares (2018: 229,055,272) made up as follows:

- 226,961,983 are fully paid shares (2018: 226,961,983)
- 321,972 unpaid ordinary shares were on issue and held in trust on behalf of participants in the Rakon Share Plan (2018: 321,972)
- 1,771,317 unpaid ordinary shares were held by Rakon ESOP Trustee Limited for future allocation to participants (2018: 1,771,317)

At 31 March 2019, the share capital remained unchanged at \$181,024,000.

D7. Contingencies

Prior to acquisition, Rakon India has received income tax assessments, which are in dispute. The Directors of Rakon India believe the positions are likely to be upheld and accordingly no provision was made in Rakon India's financial statements. The below summarises the potential impacts on Rakon India's tax balances if the assessments are upheld, and in which case, the exiting joint venture partner will assume 51% of the liability.

Income taxes

2011/12 – an increase in taxable income of \$1.6m (tax value \$750,000)

2013/14 – no increase in taxable income (tax value \$480,000)

Indirect taxes

December 2010/ August 2012 – excess input credit availed (tax value \$840,000)

D8. Commitments

D8 a) Capital commitments

Capital expenditure contracted for at the balance date but not yet incurred is \$194,000 (2018: \$433,000).

D8 b) Leases

Accounting policy

The Group is the lessee. Leases where the lessor retains substantially all the risk and rewards of ownership are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the Statement of Comprehensive Income on a straight line basis over the period of the lease.

Finance leases, which transfer to the Group substantially all the risks and benefits incidental to ownership of the leased item, are capitalised at the inception of the lease at the fair value of the leased asset or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between the finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognised in finance costs in profit or loss.

Capitalised leased assets are depreciated over the shorter of the estimated useful life of the asset and the lease term if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term.

Finance lease – Group as lessee

	2019 \$000s	2018 \$000s
No later than 1 year	405	31
Later than 1 year and no later than 5 years	412	-
Total minimum lease payments	817	31
Less amounts representing finance charges	(26)	(1)
Present value of minimum lease payments	791	30
Included in the financial statements as		
Current borrowings (note D2 e)	405	31
Non-current borrowings (note D2 e)	412	-
Total finance lease included in borrowings	817	31

Operating lease commitments – Group as lessee

The Group leases various factories, offices and warehouses under non-cancellable operating lease agreements. The lease terms are between 1 and 7 years and the majority of lease agreements are renewable at the end of the lease period at market rate.

The Group also leases motor vehicles under operating lease agreements. The lease terms are for 3 years. The lease expenditure is charged to the Statement of Comprehensive Income.

The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

	2019 \$000s	2018 \$000s
No later than 1 year	2,689	2,155
Later than 1 year and no later than 5 years	6,755	5,904
Later than 5 years	938	1,640
Total non-cancellable operating leases	10,382	9,699

D9. Related party information

No amounts owed by a related party have been written off or forgiven during the year. Related party transactions were transacted at arm's length.

D9 a) Key management compensation

	2019 \$000s	2018 \$000s
Salaries and other short-term employee benefits	3,767	3,437
Share based payments	-	15
Total key management compensation	3,767	3,452

D9 b) Transactions and year end balances

	2019 \$000s	2018 \$000s
Sales to joint venture, Centum Rakon India Private Limited	-	125
Purchases from joint venture, Centum Rakon India Private Limited	(1,284)	(13,204)
Purchases from associate, Chengdu Shen-Timemaker Crystal Technology Co. Limited	(233)	(243)
Engineering support charges to joint venture, Centum Rakon India Private Limited	-	47
Net transactions	(1,517)	(13,275)
Receivables:		
Centum Rakon India Private Limited	-	64
Rakon HK Limited	139	93
	139	157
Payables:		
Centum Rakon India Private Limited	-	1,858
Chengdu Shen-Timemaker Crystal Technology Co. Limited	232	-
	232	1,858

Following are sales and purchases to/from Siward Crystal Technologies Co. Limited

Sales	210	190
Purchases	(236)	(174)
Engineering support services	-	115
Net transactions	(26)	131
Receivables from Siward Crystal Technologies Co. Limited	210	150
Payables to Siward Crystal Technologies Co. Limited	236	16

D10. Earnings per share

D10 a) Basic

Basic earnings per share is calculated by dividing the profit or loss attributable to equity holders of the Group, by the weighted average number of ordinary shares on issue during the year.

	2019 000s	2018 000s
Weighted average number of ordinary shares on issue (note D6 a)	226,962	226,962
Continuing operations		
Earnings attributable to equity holders of the Group (\$000s)	3,364	9,999
Basic earnings per share (cents per share)	1.5	4.4

D10 b) Diluted

Diluted earnings per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares. The Group has two categories of dilutive potential ordinary shares: restricted ordinary shares and share options.

	2019 000s	2018 000s
Weighted average number of ordinary shares on issue (note D6 a)	226,962	226,962
Adjustments for dilutive potential ordinary shares (restricted ordinary shares and share options)	322	3,622
Weighted average number of ordinary shares for diluted earnings per share	227,284	230,584
Continuing operations		
Earnings attributable to equity holders of the Group (\$000s)	3,364	9,999
Diluted earnings per share (cents per share)	1.5	4.3

D11. Share based payments**D11 a) Accounting policy**

The Group's management awards qualifying employees' bonuses, in the form of share options and conditional rights to redeemable ordinary shares, from time to time, on a discretionary basis. These are subject to vesting conditions and their fair value is recognised as an employee benefit expense with a corresponding increase in other reserve equity over the vesting period. The fair value determined at grant date excludes the impact of any non-market vesting conditions, such as the requirement to remain in employment with the Group. Non-market vesting conditions are included in the assumptions about the number of options that are expected to vest and the number of redeemable ordinary shares that are expected to transfer. At each balance date the estimate of the number of options expected to vest and the number of redeemable ordinary shares expected to transfer is revised and the impact of any change in this estimate is recognised in the Statement of Comprehensive Income with a corresponding entry to equity. The proceeds received net of any directly attributable transaction costs are credited to share capital when the options are exercised, or the conditional rights to redeemable ordinary shares are transferred.

D11 b) Rakon Share Plan

In March 2006, Rakon Limited established a share plan to enable selected employees of Rakon Limited to acquire shares in the Company through the plan trustee, Rakon ESOP Trustee Limited.

Under the terms of the share plan, 2,759 ordinary shares were issued at deemed market value at that time to Rakon ESOP Trustee Limited to hold on behalf of the participating employees. Following a share split on 13 April 2006, the resulting number of shares under this plan was 859,137. All shares issued to Rakon ESOP Trustee Limited have been allocated. The shares rank equally in all respects with all other ordinary shares issued by the Company. The outstanding loan balance provided by Rakon Limited to participating employees in respect of these shares totals \$195,000 (2018: \$195,000). Loans are provided on an interest free basis and the employee may repay all or part of the loan at any time. No repayments were due at 31 March 2019 (2018: nil). The Trust Deed makes provision for the Company to require repayment of the loans in certain circumstances.

As at 31 March 2019, 321,972 (31 March 2018: 321,972) shares were held by Rakon ESOP Trustee Limited.

Shares issued under the share plan are held on trust by Rakon ESOP Trustee Limited. A participating manager may request the trustee to transfer the relevant shares to him or her, provided the loan to that manager has been repaid in full.

The Company may remove and appoint trustees at any time. The Directors and shareholders of Rakon ESOP Trustee Limited are Bryan Mogridge and Bruce Irvine.

Shares held by the share plan represent approximately 0.14% of the Company's total shares on issue as at balance date (2018: 0.14%).

D11 c) Rakon Employee Share Option Scheme (2015)

During the year, no options were exercised and all remaining options lapsed as the benchmark share price was not achieved. The weighted average fair value of options granted of \$0.018 per option was determined using the Black-Scholes valuation model. The significant inputs into the model were the following: weighted average share price of \$0.25 at the grant date, exercise price shown above, volatility of 15%, dividend yield of 0%, an average expected option life of 2 years and an annual risk-free interest rate of 4%. The volatility was measured at the standard deviation of continuously compounded share returns, based on statistical analysis of daily share prices from the 12 months preceding July 2014. There have been no allocations since July 2014.

		2019	2018
	Option Price	Number of Options	Number of Options
Opening balance	-	3,300,000	3,300,000
Granted	0.25	-	-
Cancelled	0.25	-	-
Lapsed	-	(3,300,000)	-
Closing balance	0.25	-	3,300,000

Share options outstanding at 31 March:

	Exercise price	Benchmark price	2019 Number of Options	2018 Number of Options
Year ended 31 March	0.25	0.3	-	3,300,000

D12. Summary of other significant accounting policies

The principal accounting policies adopted in the preparation of these consolidated financial statements have been set out in sections B to D. Additional relevant policies are detailed below and have been consistently applied to all the years presented, unless otherwise stated.

D12 a) Basis of preparation

The Company is registered under the Companies Act 1993 and is a FMC reporting entity under Part 7 of the Financial Markets Conduct Act 2013. The financial statements of the Group have been prepared in accordance with the requirements of Part 7 of the Financial Markets Conduct Act 2013 and the NZX (Main Board) Listing Rules.

These consolidated financial statements for the year ended 31 March 2019 have been prepared in accordance with New Zealand Generally Accepted Accounting Practice (NZ GAAP). They comply with New Zealand equivalents to International Financial Reporting Standards (NZ IFRS), other New Zealand accounting standards and authoritative notices that are applicable to entities that apply NZ IFRS. The consolidated financial statements also comply with International Financial Reporting Standards (IFRS). The Group is a profit-oriented entity for the purposes of complying with NZ GAAP. These financial statements comprise Rakon and its subsidiaries.

The financial statements have been prepared on a historical cost basis, except for: derivative financial instruments – measured at fair value, and equity instruments – measured at fair value.

The preparation of financial statements in accordance with NZ IFRS requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. Actual results may differ from these estimates, refer to section C1.

D12 b) Financial assets and financial liabilities

Financial assets and financial liabilities are recognised on the Group's balance sheet when the Group becomes a party to the contractual provisions of the instrument. Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the Group has transferred substantially all risks and rewards of ownership.

Fair value estimates

The fair value of financial assets and financial liabilities must be estimated for recognition and measurement, or for disclosure purposes.

The fair value of financial instruments that are not traded in an active market is determined using valuation techniques. The Group uses a variety of methods and makes assumptions that are based on market conditions existing at each balance date. Techniques, such as estimated discounted cash flows, are used to determine fair value for financial instruments. The fair value of forward exchange contracts and collar options is determined using forward exchange market rates at the balance date.

The nominal value less estimated credit adjustments of trade receivables and payables are assumed to approximate their fair values. The fair value of financial liabilities for disclosure purposes, is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Group for similar financial instruments.

Classification of financial assets

The Group classifies its financial assets in the following categories:

- Financial asset at fair value through profit or loss
- Financial assets at fair value through other comprehensive income
- Derivative financial instruments
- Other financial assets at amortised cost.

The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at initial recognition and re-evaluates this designation at each reporting date with the exception of financial assets at fair value through other comprehensive income.

Financial assets at fair value through profit or loss

This category has two subcategories: financial assets held for trading and those designated at fair value through profit or loss on initial recognition. For accounting purposes, derivatives are categorised as held for trading unless they are designated as hedges. Assets in this category are classified as current assets if they are either held for trading or are expected to be realised within 12 months of the balance date.

Financial assets at fair value through profit and loss are carried at fair value. Realised and unrealised gains and losses arising from changes in the fair value of the 'financial assets at fair value through profit or loss' category are included in the Statement of Comprehensive Income, in the period in which they arise.

The Group establishes fair value by using valuation techniques. These include reference to the fair values of recent arm's length transactions, involving the same instruments or other instruments that are substantially the same and discounted cash flow analysis.

The Group assesses at each balance date whether there is objective evidence that a financial asset or group of financial assets is impaired. Impairment testing of trade receivables is described in note B3 b).

Classification of financial assets at fair value through other comprehensive income

On disposal of these equity investments, any related balance within the FVOCI reserve is reclassified to retained earnings. Equity securities which are not held for trading, and which the Group has irrevocably elected at initial recognition to recognise in this category. These are strategic investments and the Group considers this classification to be more relevant.

Other financial assets at amortised cost

Receivables and other financial assets are classified as subsequently measured at amortised cost on the basis of both the Group's business model for managing the financial assets and the contractual cash flow characteristics of the financial asset. If collection of the amounts is expected in one year or less they are classified as current assets.

Other financial assets at amortised cost include loans to related parties and trade and other receivables.

Derivative financial instruments

In accordance with its wider risk management, it is the Group's strategy to apply cash flow hedge accounting to keep its foreign currency revaluation fluctuations within its established limits, refer note 0 and D2 c). Applying cash flow hedge accounting enables the Group to reduce the cash flow fluctuations arising from foreign exchange risk on an instrument or Group of instruments, or to hedge mismatches. A cash flow hedge is a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction that could affect profit or loss.

D12 c) Changes in accounting policy and disclosures

New and amended accounting standards adopted by the Group

A number of new accounting standards and amendments have been adopted effective 1 April 2018.

NZ IFRS 15 Revenue from contracts with customers

The Group adopted NZ IFRS 15 Revenue from Contracts with Customers from 1 April 2018, resulted in changes in accounting policies which are disclosed in note B2 a). The group applied NZ IFRS 15 using the modified retrospective method.

Following a detailed review of the Group's portfolio of contracts, management concluded that the implementation of NZ IFRS 15 has no material impact on the opening balance sheet, therefore no transition adjustments have been made. The details of the review process are outlined below.

To assess the impact of NZ IFRS 15 on the Group it has reviewed all significant contracts and the five-step method was applied to assess the impact on revenue recognition. The five-step method for recognising revenue from contracts with customers involves consideration of the following:

1. Identifying the contract with the customer
2. Identifying performance obligations
3. Determining the transaction price
4. Allocating the transaction price to distinct performance obligations; and
5. Recognising revenue.

Applying this approach, the adoption of NZ IFRS 15 resulted in changing the timing of revenue recognition for specific long-term contracts related to the space and defence segment in France. Previously the Group recognised the revenue in relation to these contracts on the delivery of the product to the customer, whilst under NZ IFRS 15, revenue should be recognised over time. The impact of the new standard for year ended 31 March 2019 was significant due to the timing of completion of performance obligations.

The table below shows the amount by which each financial statement line item affected in the current year by NZ IFRS 15 as compared to NZ IAS 18 and the related interpretations that were in effect before the change.

	NZ IAS18	NZ IFRS 15 adjustment	NZ IFRS 15
For the year ended 31 March 2019	\$000s	\$000s	\$000s
Revenue (note B2a)	111,617	2,368	113,985
Trade and other receivables (note B3b)	38,119	2,368	40,487
Cost of sales	(61,607)	(710)	(62,317)
Inventory (note B5a)	40,020	(710)	39,310

NZ IFRS 9 Financial instruments

NZ IFRS 9 Financial Instruments became effective for periods beginning on 1 January 2018. NZ IFRS 9 makes changes to the classification and measurement of financial instruments, introduces a new expected loss model when recognising expected credit losses (ECL) on financial assets, and introduces new general hedge accounting requirements.

The accounting for the Group's financial liabilities remains the same as it was under NZ IFRS 39. The adoption of NZ IFRS 9 has changed the Group's accounting for impairment losses for financial assets by replacing NZ IFRS 39's incurred loss approach with a forward-looking ECL approach.

The ECL model, further described in note B3 b), applies to all the Group's financial assets measured at amortised cost.

The Group has applied IFRS 9 retrospectively without restating the comparative information for 2018 as permitted by the transitional provisions. The difference between the previous carrying amount of financial instruments and the carrying amount of those instruments at 1 April 2018 measured in accordance with NZ IFRS 9 has not been restated.

The classification depends on the Group's business model for managing the financial assets and the contractual terms of the cash flows. For assets measured at fair value, gains and losses will either be recorded in profit or loss or OCI. For investments in equity instruments that are not held for trading, classification will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income (FVOCI).

Amounts accumulated in equity are reclassified in the periods when the hedged item affects profit or loss, as follows:

Where the hedged item subsequently results in the recognition of a non-financial asset (such as inventory), both the deferred hedging gains and losses and the deferred time value of the option contracts or deferred forward points, if any, are included within the initial cost of the asset. The deferred amounts are ultimately recognised in profit or loss as the hedged item affects profit or loss (for example through cost of sales).

The gain or loss relating to the effective portion of the interest rate swaps hedging variable rate borrowings, is recognised in profit or loss within finance cost at the same time as the interest expense on the hedged borrowings.

When a hedging instrument expires, or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gain or loss and deferred costs of hedging in equity at that time remains in equity until the forecast transaction occurs, resulting in the recognition of a non-financial asset such as inventory. When the forecast transaction is no longer expected to occur, the cumulative gain or loss and deferred costs of hedging that were reported in equity are immediately reclassified to profit or loss.

New and amended standards and interpretations not yet adopted

NZ IFRS 16 Leases

NZ IFRS 16 was issued in January 2016. It will result in almost all leases being recognised on the balance sheet, as the distinction between operating and finance leases is removed. Under the new standard, an asset (the right to use the leased item) and a financial liability to pay rentals are recognised. The only exceptions are short-term and low-value leases.

The group intends to apply the simplified transition approach and will not restate comparative amounts for the year prior to first adoption. All right of use assets will be measured at the amount of the lease liability on adoption (adjusted for any prepaid or accrued lease expenses).

The standard will have no effect on the underlying cash flows, however amounts paid for leases will be reclassified from operating activity to financing activity in the Statement of Cash Flows.

On adoption at 1 April 2019, and expected impact at 31 March 2020 is as follows:

	On Adoption of IFRS 16 \$000s	Expected impact 31 March 2020 \$000s
Asset will increase	9,783	7,611
Liabilities will increase	(9,783)	(8,831)
Net Asset Impact	-	(1,220)
Operating expenses will decrease		215
Interest expenses will increase		66

The above has no cash effect to the Group and the change is for financial reporting purposes only.

D12 d) Foreign currency translation

Functional and presentation currency

Items included in the financial statements of each entity in the Group are measured using the currency that best reflects the economic substance of the underlying events and circumstances relevant to that entity ('the functional currency'). The consolidated financial statements are presented in New Zealand dollars, ('the presentation currency'), which is the functional currency of the parent.

Transactions and balances

Transactions in foreign currencies are translated at the foreign exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the balance date are translated to New Zealand dollars at the foreign exchange rate ruling at that date. Foreign exchange differences arising on translation are recognised in the Statement of Comprehensive Income, within other gains/(losses) – net, except when deferred in other comprehensive income as qualifying cash flow hedges and qualifying net investment hedges. Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated to New Zealand dollars at foreign exchange rates ruling at the dates the fair value was determined.

The assets and liabilities of all of the Group companies (none of which have a currency of a hyper-inflationary economy) that have a functional currency that differs from the presentation currency, including goodwill and fair value adjustments arising on consolidation, are translated to New Zealand dollars at foreign exchange rates, ruling at the balance date. The revenues and expenses of these foreign operations are translated to New Zealand dollars, at rates approximating to the foreign exchange rates ruling at the dates of the transactions.

Exchange differences arising from the translation of foreign operations are recognised in the foreign currency translation reserve. Borrowings and other currency instruments designated as hedges of such investments are taken to shareholders' equity.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and are translated at the foreign exchange rates ruling at the balance date.

D12 e) Impairment of non-financial assets

The carrying amounts of the Group's non-financial assets are reviewed at each balance date to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated being the higher of an asset's fair value less costs to sell and the asset's value in use. An impairment loss is recognised whenever the carrying amount of an asset or its cash generating unit exceeds its recoverable amount. Impairment losses are recognised in the Statement of Comprehensive Income.

For goodwill, the recoverable amount is estimated at each balance date. Impairment losses recognised in respect of cash generating units are allocated first to reduce the carrying amount of any goodwill allocated to cash generating units and then, to reduce the carrying amount of the other assets in the unit on a pro rata basis.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

D12 f) Employee entitlements

Superannuation schemes

The Group's New Zealand and overseas operations participate in their respective government superannuation schemes, whereby the Group is required to pay fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not have sufficient assets to pay all employees the benefits relating to the employee service in the current and prior periods. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as an employee benefit expense when they are due.

D12 g) Income tax

Income tax on the profit or loss for the years presented, comprises current and deferred tax. Income tax is recognised in the Statement of Comprehensive Income except to the extent that it relates to items recognised directly in other comprehensive income, in which case it is recognised in other comprehensive income.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantially enacted at the balance date and any adjustment to tax payable in respect of previous years.

Deferred tax is provided using the balance sheet liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The following temporary differences are not provided for: goodwill not deductible for tax purposes, the initial recognition of assets or liabilities that affect neither accounting nor taxable profit and differences relating to investments in subsidiaries, associates and joint venture to the extent that they will probably not reverse in the foreseeable future. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the balance date.

A deferred tax asset shall be recognised for the carry forward of unused tax losses and unused tax credits, to the extent that it is probable that future taxable profit will be available, against which the unused tax losses and unused tax credits can be utilised.

D13. Imputation balances

	2019	2018
	\$000s	\$000s
Imputation credit available for use in subsequent periods	11,203	11,202

D14. Principal subsidiaries

D14 a) Accounting policy

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

Business combinations are accounted for using the acquisition method. The consideration transferred in a business combination shall be measured at fair value, which shall be calculated as the following: the total of the acquisition date fair values of the assets transferred by the Group, the liabilities incurred by the Group to former owners, the equity issued by the Group and the amount of any non-controlling interest in the acquiree either at fair value or at the proportional share of the acquiree's identifiable net assets. Acquisition related costs are expensed as incurred.

All material transactions between subsidiaries or between the parent company and subsidiaries are eliminated on consolidation. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Disposal of subsidiaries

When the Group ceases to have control, any retained interest in the entity is re-measured to its fair value at the date when control is lost, with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in other comprehensive income are reclassified to profit or loss.

D14 b) Subsidiaries at balance date

Name of entity	Principal activities	Country of incorporation	Balance date	% interest held by group	
				2019	2018
Rakon America LLC	Marketing support	USA	31-Mar	100	100
Rakon Singapore (Pte) Limited	Marketing support	Singapore	31-Mar	100	100
Rakon Financial Services Limited	Financing	New Zealand	31-Mar	100	100
Rakon International Limited	Marketing support	New Zealand	31-Mar	100	100
Rakon UK Holdings Limited	Holding company	United Kingdom	31-Mar	100	100
Rakon UK Limited	Research and development	United Kingdom	31-Mar	100	100
Rakon France SAS	R&D, manufacturing and sales	France	31-Mar	100	100
Rakon HK Limited	Holding company	Hong Kong	31-Mar	50	50
Rakon (Mauritius) Limited	Holding company	Mauritius	31-Mar	100	100
Rakon Investment HK Limited	Holding company	Hong Kong	31-Mar	100	100
Rakon Crystal Electronic International Limited	Marketing support	China	31-Mar	100	100
Rakon India Pvt Limited	Manufacturing, R&D and sales	India	31-Mar	100	49
Rakon ESOP Trustee Limited	Share trustee	New Zealand	31-Mar	-	-
Rakon PPS Trustee Limited	Share trustee	New Zealand	31-Mar	-	-

Rakon ESOP Trustee Limited and Rakon PPS Trustee Limited are classified as in-substance subsidiaries and are consolidated into the Group financial statements.

D15. Subsequent events

The Directors are not aware of any material events subsequent to the balance date 31 March 2019.



Independent auditor's report

To the shareholders of Rakon Limited

We have audited the financial statements which comprise:

- the balance sheet as at 31 March 2019;
- the statement of comprehensive income for the year then ended;
- the statement of changes in equity for the year then ended;
- the statement of cash flows for the year then ended; and
- the notes to the financial statements, which include significant accounting policies.

Our opinion

In our opinion, the accompanying financial statements of Rakon Limited (the Company), including its subsidiaries (the Group), present fairly, in all material respects, the financial position of the Group as at 31 March 2019, its financial performance and its cash flows for the year then ended in accordance with New Zealand Equivalents to International Financial Reporting Standards (NZ IFRS) and International Financial Reporting Standards (IFRS).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (New Zealand) (ISAs (NZ)) and International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements* section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

We are independent of the Group in accordance with Professional and Ethical Standard 1 (Revised) *Code of Ethics for Assurance Practitioners* (PES 1) issued by the New Zealand Auditing and Assurance Standards Board and the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants* (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Our firm carries out other services for the Group in the areas of treasury advisory services, agreed upon procedures in relation to the Annual General Meeting and half year financial statements, as well as review procedures over the confirmation of the Eligible Research and Development Expense claimed under the Growth Grant. The provision of these other services has not impaired our independence as auditor of the Group.

Our audit approach

Overview



An audit is designed to obtain reasonable assurance whether the financial statements are free from material misstatement.

Overall Group materiality: \$1,140,000, which represents 1% of revenue.

Given the changes in the business during recent years, in our judgement, revenue provided a more stable measure for establishing our materiality benchmark.

We have determined that there are three key audit matters:

- Impairment risk for non-financial assets
- Valuation of research and development costs associated with the development of new products
- Accounting for the investment in Thinxtra Limited.

Materiality

The scope of our audit was influenced by our application of materiality.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall Group materiality for the financial statements as a whole as set out above. These, together with qualitative considerations, helped us to determine the scope of our audit, the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Audit scope

We designed our audit by assessing the risks of material misstatement in the financial statements and our application of materiality. As in all of our audits, we also addressed the risk of management override of internal controls including among other matters, consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the Group operates.

We conducted a full scope audit over two segments, New Zealand, including the investment in Thinxtra, and France and a limited review was conducted for India. Together these make up 100% of external revenue. We conducted specific audit procedures for the UK subsidiary and for the investment in Timemaker.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current year. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter	How our audit addressed the key audit matter
<p><i>Impairment risk for non-financial assets</i></p> <p>As noted in note C1a, the Directors assess assets annually for impairment. The Directors look initially for indicators of impairment which requires a level of judgement.</p> <p>When the market capitalisation is lower than the net asset value of the Group this can be an indicator of potential impairment of non-financial assets held by the Group. Market capitalisation of the Group at 31 March 2019 was \$75.6 million compared to the carrying value of the net assets of \$90 million.</p> <p>The Directors performed an assessment of impairment on an asset class basis as well as performing a business valuation for the Group as a whole. The business valuation was prepared on a value in use basis using a discounted cash flow model.</p> <p>The key assumptions used by the Directors in the discounted cash flow model are included in note C1a of the financial statements which include:</p> <ul style="list-style-type: none"> • Annual sales growth rate • Gross margin • Terminal growth rates • Discount rates <p>The results of the Directors' assessment are detailed in note C1a.</p>	<p>Our audit procedures included the following:</p> <p>We updated our understanding of business processes and controls applied in the assessment of indicators of impairment of non-financial assets and determining any impairment required.</p> <p>In considering the results of the Directors' assessment of impairment on an asset class basis we have:</p> <ul style="list-style-type: none"> • Considered the historical recoverability of inventory balances and whether there is any indication of impairment. • Assessed whether there were indicators of impairment for intangible R&D assets, which has been discussed in the key audit matter below. • Considered the recoverability of deferred tax assets. <p>In considering the discounted cash flow model used for the assessment of impairment of the business as a whole we have:</p> <ul style="list-style-type: none"> • Compared cash flow forecasts used in the discounted cash flow models to the latest Board approved budgets and long-term forecasts. • Tested the mathematical accuracy of the underlying model and agreed the carrying value of each CGU to the audited financial records. • Assessed the reliability of forecasts by performing a look back analysis of historical forecasts against actual results. • Considered key assumptions used in the discounted cash flow models, in particular the estimated sales growth rates, by agreeing to supporting evidence of: <ul style="list-style-type: none"> - Historical sales - Current orders in place - Communications with customers - External market forecast reports. • Engaged our valuation expert to assess and challenge the assumptions for terminal growth rates and discount rates used by management by comparing them to relevant industry rates and performing sensitivity analysis on those rates.

Key audit matter	How our audit addressed the key audit matter
	<ul style="list-style-type: none"> • Performed a sensitivity analysis on the cash flows to determine whether a reasonably possible change in assumptions could lead to a conclusion that the assets are impaired. • Assessed the adequacy of disclosures in the financial statements to ensure that they are compliant with the requirements of NZ IFRS. <p>As a result of these procedures we did not propose any adjustments.</p>
<p><i>Valuation of research and development costs associated with the development of new products</i></p> <p>Rakon incurs costs with respect to developing new products. This is included within the product development and assets under construction categories of intangible assets (note B5b of the financial statements) and amounts to \$6.8 million at 31 March 2019. There is a risk that the costs that are being capitalised for development may not meet the criteria for capitalisation as an intangible asset under NZ IFRS.</p> <p>In particular, there is judgement and often uncertainty around the potential for success of new projects as well as the technical feasibility and probable future economic benefits associated with new and existing projects primarily with respect to telecommunications infrastructure products.</p> <p>The Directors assessed the future income generating ability of capitalised development expenditure by referring to current demand for the products now in production and to the business case for future sales of products not yet in production.</p>	<p>Our audit procedures included the following:</p> <ul style="list-style-type: none"> • We updated our understanding of how the costs for research and development are captured and approved for capitalisation and the controls over these processes. • We obtained an understanding of the projects which have been capitalised during the year and, on a sample basis, agreed costs incurred to supporting documentation and approval. • We assessed overall costs capitalised for compliance with Group policies and the requirements defined in NZ IFRS for capitalisation of research and development costs. • For those products in production, where costs have been capitalised, we challenged the Directors' assessment of the future income expected from those products by comparing the estimate with the level of sales currently being achieved. • We challenged the Directors' assessment of the future income expected from new telecommunications infrastructure products by comparing the estimate with the level of sales of previous generations of telecommunications infrastructure products and with market forecast reports. <p>As a result of these procedures we did not propose any adjustments.</p>

Key audit matter	How our audit addressed the key audit matter
<p><i>Accounting for the investment in Thinxtra Limited</i></p> <p>Rakon holds ordinary shares in Thinxtra Limited (“Thinxtra”), which was an equity accounted associate investment in the prior year. On 1 June 2018, Rakon lost significant influence triggering a change in the accounting method from equity accounting to a financial asset carried at fair value.</p> <p>We considered the valuation of the investment in Thinxtra a key audit matter because of the uncertainty involved in the estimation process and the significant judgements the Directors make in determining the fair value. Changes in the assumptions applied as part of the estimation process can lead to significant movements in the fair value of the investment.</p> <p>The Directors developed a valuation methodology based on a range of valuation techniques with different assigned probabilities based on the available information and Directors’ judgement, as disclosed in note B4d. This methodology was applied to estimate the fair value of the investment as at 1 June 2018 and as at 31 March 2019.</p> <p>The Directors also considered sensitivity by determining other reasonably possible scenarios and assessing the impact on the valuation of these scenarios.</p> <p>The results of the Directors’ assessment and sensitivity analysis is detailed in note B4d.</p>	<p>Our audit procedures included:</p> <ul style="list-style-type: none"> • We obtained an understanding of the valuation methodology developed by the Directors and the key assumptions they applied in determining the fair value of investment in Thinxtra as at 1 June 2018 and 31 March 2019. • We agreed the key inputs in the valuation model to unaudited information obtained by management from Thinxtra. • We considered the discounted cash flow model approach which formed part of the Directors’ basis of valuation. We determined the underlying forecasts used in the model were not sufficiently reliable due to Thinxtra’s business being at an early stage of development, the history of not meeting budgeted results and the reliance on raising additional funding to achieve those forecasts. Accordingly, this required us to take a different valuation approach to that taken by the Directors. • We engaged our valuation expert to provide support in our assessment of the fair value of the investment as at 1 June 2018 and 31 March 2019. Our expert’s assessment was based on the following valuation approaches: <ul style="list-style-type: none"> - Consideration of the share price achieved in Thinxtra’s capital raise that closed on 18 April 2019, adjusted for an estimated discount to fair value that would be expected in the circumstances of that capital raise. - Cost to replicate approach based on the capital contributed and the losses incurred to date on the basis that a purchaser would avoid those costs to reach the position that Thinxtra is currently in. - Look-back assessment of the fair value at 1 June 2018 given the circumstances and events between 1 June 2018 and 31 March 2019. • We considered a range of reasonably possible alternative scenarios. For each scenario, we assessed whether the changes were reasonably possible and tested the impact of those changes on the valuation.



Key audit matter	How our audit addressed the key audit matter
	<ul style="list-style-type: none">• We assessed the adequacy of disclosures in the financial statements to ensure that this is compliant with the requirements of NZ IFRS. <p>Based on our work we consider that, given the estimation uncertainty for an investment in a business of this nature, the fair value determined by the Directors at 1 June 2018 and at 31 March 2019 is within the range of reasonable expected outcomes.</p>

Information other than the financial statements and auditor's report

The Directors are responsible for the annual report. Our opinion on the financial statements does not cover the other information included in the annual report and we do not and will not express any form of assurance conclusion on the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard, except that not all other information was available to us at the date of our signing. Prior to the date of this report we had received and read the Directors' Report. The Shareholder Information and Corporate Governance sections of the annual report are expected to be made available to us after the date of our report.

Responsibilities of the Directors for the financial statements

The Directors are responsible, on behalf of the Company, for the preparation and fair presentation of the financial statements in accordance with NZ IFRS and IFRS, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements, as a whole, are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (NZ) and ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.



A further description of our responsibilities for the audit of the financial statements is located at the External Reporting Board's website at:

<https://www.xrb.govt.nz/standards-for-assurance-practitioners/auditors-responsibilities/audit-report-1/>

This description forms part of our auditor's report.

Who we report to

This report is made solely to the Company's shareholders, as a body. Our audit work has been undertaken so that we might state those matters which we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's shareholders, as a body, for our audit work, for this report or for the opinions we have formed.

The engagement partner on the audit resulting in this independent auditor's report is Lisa Crooke.

For and on behalf of:

A handwritten signature in dark ink that reads "PricewaterhouseCoopers".

Chartered Accountants
16 May 2019

Auckland

Shareholder Information

Directors and Directors' remuneration

The names of the current Directors of Rakon together with short biographies for each of them are set out in the 2019 Annual Review and on the Company's website.

Subject to approval by shareholders of the total pool for non-executive director remuneration, non-executive directors of Rakon receive fees determined by the Board on the recommendation of the People Committee plus reasonable travelling, accommodation and other expenses incurred in the course of performing their duties as directors. Shareholders approved a total pool of \$360,000 for the remuneration of non-executive directors of Rakon in September 2012.

The following people held office as directors of Rakon during the year ended 31 March 2019; their independence status and the remuneration they received during that period are set out below:

Name	Category	Remuneration
Bruce Robertson Irvine	Independent (Chair since 7 August 2018)	\$95,000
Brent John Robinson ¹	Executive (Managing Director)	\$815,802
Keith William Oliver	Independent	\$60,000
Yin Tang Tseng	Non-Executive	\$61,378
Roger Yao	Non-Executive (alternate director of Yin Tang Tseng)	
Lorraine Mary Witten	Independent	\$60,000
Robert Keith Hamilton (Keith) Watson ²	Independent	\$31,667
Bryan William Mogridge ³	Independent (former Chair)	\$50,000

¹ Employed by Rakon as Managing Director and Chief Executive Officer and receives salary and other benefits in respect of his employment.

² Appointed as a director on 21 September 2018.

³ Ceased as a director 7 August 2018.

Directors of subsidiaries

Directors of the Company's subsidiaries do not receive any remuneration or other benefits in respect of their appointments. The remuneration and other benefits of any such directors (not being directors of Rakon Limited) who are employees of the Group totalling \$100,000 or more during the year ended 31 March 2019 are included in the relevant bandings for remuneration disclosed in this Shareholder Information section of the 2019 Annual Report.

The following people held office as directors of subsidiary companies at 31 March 2019:

Entity	Director (or authorised representative where noted)
Rakon America LLC	John Mundschau (authorised representative)
Rakon Singapore (Pte) Limited	Brent Robinson, Darren Robinson, Warren Robinson, Damian Boon
Rakon Financial Services Limited	Brent Robinson, Darren Robinson
Rakon International Limited	Brent Robinson
Rakon UK Holdings Limited	Brent Robinson, Darren Robinson, Sinan Altug, Philip Davies
Rakon UK Limited	Brent Robinson, Darren Robinson, Sinan Altug, Philip Davies
Rakon France SAS	Brent Robinson
Rakon (Mauritius) Limited	Brent Robinson, Darren Robinson, Neernaysingh Madhour, Kamalam Pillay Rungapadiachy
Rakon Investment HK Limited	Brent Robinson
Rakon Crystal Electronic International Limited	Daryoush Shahidi (authorised representative)
Rakon HK Limited	Brent Robinson, Darren Robinson, Zhuzhi Ye, Rongguo Chen
Rakon ESOP Trustee Limited	Bryan Mogridge, Bruce Irvine
Rakon PPS Trustee Limited	Bryan Mogridge, Bruce Irvine
Rakon India (Private) Limited	Brent Robinson, Clifford Hand, P.M. Unnikrishnan

Directors' interests

As permitted by the Companies Act 1993 and the Company's constitution, the Company has granted certain indemnities to the Directors and specified employees of the Company or any related company in respect of liability and legal costs incurred by those directors and specified employees in their capacity as directors and/or employees of the Company or any related company. As permitted by the Companies Act 1993 and the Company's constitution, the Company has arranged directors' and officers' liability insurance which insures those persons indemnified for certain liabilities and costs.

The Company maintains an interests' register in accordance with the Companies Act 1993 and the Financial Markets Conduct Act 2013. The following are particulars of entries, including the date of disclosure shown in brackets, made in the Company's interests' register for the year ended 31 March 2019 and through until 31 May 2019:

Bruce Robertson Irvine

- Appointed as Director of Cowes Bay Holdings (NZ) Limited (26 April 2018)
- Resigned as Director of Godfrey Hirst NZ Limited (2 July 2018)
- Appointed as Director of Gough Group Holdings Limited and various group companies (5 November 2018)
- Resigned as Director of PGG Wrightson Limited (30 April 2019)

Keith William Oliver

- Resigned as Director of Vigil Nominees No.2 Limited (13 July 2018)
- Resigned as Director Vigil Monitoring Limited (13 July 2018)
- Appointed as Director of Wellington Drive Technologies Limited (27 March 2019)

Robert Keith Hamilton Watson

- Appointed as Director of Rakon Limited (21 September 2018)
- Director of New Zealand Institute of Economic Research (21 September 2018)
- Director of Working Assets Consulting Limited, Working Assets Limited and other Working Assets companies (1 November 2018)
- Director of Cranleigh Forests Limited (1 November 2018)
- Director of Dovedale Forests Limited (1 November 2018)
- Shareholder and Director of Complete 3D Limited (1 November 2018)
- Director of Petrena Miller Design Limited (19 December 2018)

Lorraine Mary Witten

- Appointed as Director of Horizon Energy Group (1 November 2018)
- Resigned as Director of Zag Limited formerly known as Solitus Limited (21 February 2019)
- Resigned as Director of StarNow Limited (31 March 2019)

Bryan William Mogridge

- Resigned as Director of Rakon Limited on 7 August 2018
- Resigned as Rakon's appointed Director of Thinxtra Pty Limited (1 June 2018)
- Appointed as Director and Chair of Thinxtra Pty Limited (3 July 2018)

Directors' shareholdings

Directors' shareholdings as recorded in the interests' register of the Company as at 31 March 2019 are set out below:

Name	Category	Shareholding
Brent Robinson	shares held with beneficial interest	34,846,237
Bruce Irvine	shares held with beneficial interest	454,278
	shares held with non-beneficial interest ¹	2,093,299
	shares held with non-beneficial interest	289,824
Lorraine Witten	shares held with beneficial interest	120,000
Keith Watson	shares held with beneficial interest	100,000
Bryan Mogridge	shares held with beneficial interest	2,013,926
	shares held with non-beneficial interest ¹	2,093,299

¹ Bryan Mogridge and Bruce Irvine jointly hold the same parcel of 2,093,299 ordinary shares as trustees of the Rakon ESOP Trustee Limited.

Employees' remuneration

During the year ended 31 March 2019, the number of employees or former employees of Rakon Limited and its subsidiaries, not being directors of Rakon Limited received remuneration including the value of other benefits in excess of \$100,000 in the following bands:

Remuneration	Number of employees	Remuneration	Number of employees
\$100,000 – \$110,000	20	\$230,001 – \$240,000	2
\$110,001 – \$120,000	14	\$240,001 – \$250,000	3
\$120,001 – \$130,000	14	\$250,001 – \$260,000	3
\$130,001 – \$140,000	9	\$260,001 – \$270,000	2
\$140,001 – \$150,000	11	\$270,001 – \$280,000	1
\$150,001 – \$160,000	3	\$280,001 – \$290,000	2
\$160,001 – \$170,000	9	\$290,001 – \$300,000	2
\$170,001 – \$180,000	7	\$300,001 – \$310,000	1
\$180,001 – \$190,000	5	\$320,001 – \$330,000	2
\$190,001 – \$200,000	7	\$340,001 – \$350,000	1
\$200,001 – \$210,000	5	\$470,001 – \$480,000	1
\$210,001 – \$220,000	3	\$510,001 – \$520,000	1
\$220,001 – \$230,000	2	\$670,001 – \$680,000	1

The remuneration above includes the fair value attributable to employee share schemes.

Substantial quoted equity security holders

The following information is given pursuant to Section 293 of the Financial Markets Conduct Act 2013.

According to the notices given under Financial Markets Conduct Act 2013 (or its predecessor the Securities Markets Act 1988), the following persons were substantial product holders in the Company as at 31 March 2019 in respect of the number of voting securities below. As at 31 March 2019, the Company had one share class on issue, comprising of 229,055,272 voting shares:

Name	Shareholding Interest	Number Held	%
Siward Crystal Technology Co. Limited	beneficial relevant interest	38,016,681	16.60
Trusts Limited	non-beneficial relevant interest	24,930,823	10.88
Warren John Robinson	beneficial relevant interest	24,930,823	10.88
Brent John Robinson	direct beneficial relevant interest	9,915,414	4.33
	beneficial relevant interest	24,930,823	10.88
Darren Paul Robinson	direct beneficial relevant interest	9,914,180	4.33
	beneficial relevant interest	24,930,823	10.88

Spread of quoted equity securities holders and holdings as at 26 April 2019

Size of holding	Number of holders	%	Total number held	%
1 – 99	14	0.30	788	0.00
100 – 199	54	1.16	7,028	0.00
200 – 499	192	4.11	58,235	0.03
500 – 999	269	5.76	175,304	0.08
1,000 – 1,999	677	14.49	875,026	0.38
2,000 – 4,999	1,167	24.98	3,570,921	1.56
5,000 – 9,999	696	14.90	4,519,030	1.97
10,000 – 49,999	1,203	25.75	23,629,552	10.32
50,000 – 99,999	173	3.70	11,494,706	5.02
100,000 – 499,999	184	3.94	33,875,602	14.79
500,000 – 999,999	17	0.36	11,693,804	5.11
1,000,000 – 99,999,999	25	0.55	139,155,276	60.74
Total	4,671	100.00	229,055,272	100.00

Twenty largest equity security holders as at 26 April 2019

Name	Shareholding	%
Siward Crystal Technology Co. Limited	38,016,681	16.59
Warren John Robinson & Trusts Limited	24,930,823	10.88
Accident Compensation Corporation ¹	10,283,084	4.49
Brent John Robinson	9,915,414	4.32
Darren Paul Robinson	9,914,180	4.32
Michael Walter Daniel & Nigel Geoffrey Ledgard Burton & Michael Murray Benjamin (Wairahi A/C)	8,000,000	3.49
JBWere (NZ) Nominees Limited (52093 A/C)	6,744,900	2.94
Etimes Group International Limited	3,697,716	1.61
Iconic Investments Limited	2,608,192	1.13
Stuart Robert Kidd	2,113,000	0.92
Rakon ESOP Trustee Limited	2,093,289	0.91
Craig John Thompson	1,959,829	0.85
Fergus David Elliott Brown	1,902,706	0.83
Hang Men Tee & Nuanla Or Sodrung	1,650,000	0.72
F B Trustee Limited	1,586,311	0.69
HLR Holdings Company Limited	1,584,736	0.69
Wo Zhou Yang	1,428,716	0.62
NZ Permanent Trustees Limited ¹	1,200,000	0.52
Trevor John Logan	1,100,000	0.48
Ling Te Hu	1,058,824	0.46

¹ Held through New Zealand Central Securities Depository Limited, which is a depository that allows electronic trading of securities by members.

NZX waivers

For the purposes of Rakon's disclosure obligation under Rule 3.7.1 (g) Rakon confirms that it transitioned to the NZX Listing Rules (dated 1 January 2019) (NZX Listing Rules) with effect from 1 April 2019 (Transition Date) and from that date has relied on the class ruling granted by NZX Regulation (NZXR) for a period from and including 1 January 2019 to, and including, 30 June 2020, granting waivers from NZX Listing Rules 1.1.1(a), 2.18.1(a) and 2.20.1 to the extent those NZX Listing Rules would require a Transitioning Equity Issuer to have a Governing Document that complies with NZX Listing Rules 2.18.1(a) and 2.20.1 from its Transition Date.

Rakon notes that it is a condition of the waivers granted that Rakon puts a resolution at its next scheduled annual meeting after its Transition Date to approve a Governing Document which is compliant with the NZX Listing Rules and until Rakon adopts a NZX Listing Rules compliant Governing Document it will comply with, and procure that its directors will comply with the NZX Listing Rules from its Transition Date as if the content requirements of Rules 2.18.1 and 2.20.1 were contained in Rakon's Governing Document (i.e. Rakon's Constitution).

There were no other NZX waivers granted or published by NZX within or relied upon in the 12 months ending 31 March 2019.

Credit rating

The Company does not currently have an external credit rating status.

Exercise of disciplinary powers

The NZX or the Financial Market Authority have not taken any disciplinary action against the Company during the financial year ended 31 March 2019.

Introduction

The Board is committed to conducting business in the right way and maintaining the highest standards of corporate behaviour and accountability. Rakon's board regularly reviews Rakon's corporate governance framework and supports best practice reporting.

In its 2018 Corporate Governance Report the Board noted several items which Rakon was progressing to ensure compliance with the NZX Corporate Governance Code released in 2017 and the Board is pleased to be able to comment on its progress with those matters in this year's report.

In this 2019 report, the Board explains the extent to which the Rakon corporate governance framework meets the recommendations of the NZX Corporate Governance Code 1 January 2019 ('NZX Code') and, where applicable, there is an explanation of why a NZX Code recommendation has not been followed and the alternative practices followed in lieu of that recommendation.

Rakon elected to transition to the NZX Listing Rules 1 January 2019 ('NZX Listing Rules') with effect from 1 April 2019.

The information in this Corporate Governance Report is current as at 10 June 2019 and has been approved by the board of Rakon.

The key corporate governance documents referred to in this report are available on Rakon's website at:

<http://www.rakon.com/corporate/investor/ir-gov>

Rakon is listed on the NZX Main Board and is subject to regulatory control and monitoring by both the NZX and the Financial Markets Authority ('FMA').

Principle 1 – Code of ethical behaviour

Directors should set high standards of ethical behaviour, model this behaviour and hold management accountable for these standards being followed throughout the organisation.

Rakon is committed to ensuring the highest ethical standards are maintained by directors, employees and suppliers, contractors and consultants to the Company in all activities conducted by or in the interests of the Company.

Recommendation 1.1 The board should document minimum standards of ethical behaviour to which issuer's directors and employees are expected to adhere (a code of ethics).

Ethical standards and guiding principles are set out in Rakon's Business Code of Conduct which is available on the Company's website and was last reviewed in May 2019. Additional guidance for directors on the requirement to maintain high standards of honesty, integrity and ethical conduct is provided in the Board Charter which was last reviewed in March 2019 and which is available on the Company's website.

The Business Code of Conduct requires directors and employees to promptly report material breaches of the Code. To support this expectation of disclosure of breaches of the Business Code of Conduct, as well as disclosure of other wrongdoing or suspected wrongdoing, the Board has developed a Protected Disclosure (whistle blowing) Policy which was approved by the Board in May 2019 and is available on the Company's website.

Rakon has processes in place to enable training for all new and existing employees to ensure awareness and understanding of the Business Code of Conduct and other Company policies. Rakon is exploring new innovative and effective processes for ensuring awareness and for receiving assurance of understanding and compliance.

Recommendation 1.2 An issuer should have a financial product dealing policy which applies to directors and employees.

Rakon has a Financial Product Trading Policy to mitigate the risk of insider trading in Rakon securities by directors and employees. A copy of this is available on Rakon's website. This policy was last reviewed and updated by the Board in March 2019 and was then circulated to directors and employees along with further guidance on the application of the policy. Additional trading restrictions apply to Restricted Persons as defined in the policy, including directors and certain employees. Details of directors' shareholdings as at 31 March 2019 are set out in the Shareholder Information section of the 2019 Annual Report.

Principle 2 – Board composition and performance

To ensure an effective board, there should be a balance of independence, skills, knowledge, experience and perspectives.

The Rakon board has ultimate responsibility for the strategic direction of Rakon and oversight of the management of Rakon, with the aim of increasing shareholder value and ensuring the obligations of the Company are met.

Recommendation 2.1 The board of an issuer should operate under a written charter which sets out the roles and responsibilities of the board. The board charter should clearly distinguish and disclose the respective roles and responsibilities of the board and management.

The Rakon board operates under a written charter which: sets out the structure of the Board and the procedures for the nomination, resignation and removal of directors; outlines the respective responsibilities and roles of the Directors and management; and identifies procedures to ensure that the Board meets regularly, conducts its meetings in an efficient and effective manner and that each Director is fully empowered to perform his or her duties as a Director of the Company and to fully participate in meetings of the Board.

Day to day management of Rakon is undertaken by the executive teams under the leadership of the Managing Director, through a set of delegated authorities which are reviewed regularly.

In discharging their duties, directors have direct access to and may rely upon Rakon's senior management and external advisers. Directors have the right, with the approval of the Chair or by resolution of the Board, to seek independent legal or financial advice at the expense of Rakon for the proper performance of their duties.

Recommendation 2.2 Every issuer should have a procedure for the nomination and appointment of directors.

While the appointment of new directors is the responsibility of the whole board, the People Committee Charter outlines the Committee's particular duties and responsibilities in relation to the selection and appointment of new directors and succession planning.

The People Committee is responsible for identifying and recommending candidates for the role of Director, taking into account such factors as it deems appropriate, including tenure, capability, skill sets, experience, diversity, qualifications, judgement and the ability to work with other directors.

During its latest director search the Committee used a skills matrix as one of the tools to assist with identifying and assessing existing directors' skills and competencies and future skills and competencies to meet the Company's future governance requirements.

The number of elected directors and the procedure for their appointment, retirement and re-election at annual meetings is set out in the Constitution of the Company and the NZX Listing Rules, noting changes to the Rakon Constitution to ensure compliance with the NZX Listing Rules will be proposed for approval by shareholders at the annual meeting to be held in 2019.

All directors, including any executive Director must retire by rotation and if eligible stand for re-election at the third annual meeting or three years after their last election whichever is longer. Any Director appointed since the previous annual meeting must also retire and is eligible for election.

The Board supports the separation of the roles of Chair and Chief Executive Officer and the appointment of an independent Chair.

Recommendation 2.3 An issuer should enter into written agreements with each newly appointed director establishing the terms of their appointment.

The Board has determined that new directors will receive a letter of appointment to agree the key terms and conditions of their appointment as directors of Rakon. To date the Board has relied on the general rules and practice including appointment, tenure, duties and responsibilities and requirements outlined in relevant legislation, the NZX Listing Rules, the Company's Constitution and the Board Charter as encompassing the key terms and conditions and expectations of Rakon directors.

Recommendation 2.4 Every issuer should disclose information about each director in its annual report or on its website, including a profile of experience, length of service, independence and ownership interest and director attendance at board meetings.

Information about each Director is available on the Rakon website and in the 2019 Annual Review which is available on the Company's website at the same time as the 2019 Annual Report. The Company maintains an interests' register and particulars of the entries made in the interests' register during the year ended 31 March 2019 in relation to directors' interests are disclosed in the Shareholder Information section of the 2019 Annual Report.

Board meetings and attendance

The Board meets as often as it deems appropriate including sessions to review the performance of the business against plans and to consider the strategic direction of Rakon and Rakon's forward-looking business plans. Video and/or phone conferences are also used as required.

The table below sets out directors' attendances at the Board and Committees' meetings during the year ended 31 March 2019. In total, there were eleven board meetings, three Audit and Risk Committee meetings and four People Committee meetings.

	Board Meetings	Audit & Risk Committee	People Committee
Total number of meetings held	11	3	4
Bruce Irvine	11	3	3
Keith Oliver	10	-	4
Brent Robinson	11	3	3
Lorraine Witten	10	3	4
Roger Yao: Alternate Director appointment for Yin Tang Tseng ²	11	-	1
Keith Watson ³	6	2	-
Bryan Mogridge ¹	4	1	2

¹ Ceased as a director of Rakon Limited 7 August 2018.

² Roger Yao was appointed by the Board as alternate director for Yin Tang (Tony) Tseng in June 2017. He attends Rakon board meetings and provides support for Tony who continues to be actively engaged in the activities of the Board. Tony is the current Chair of Siward Crystal Technology Co. Limited, a substantial shareholder (16.6%) in Rakon.

³ Appointed as a director of Rakon Limited 21 September 2018.

Recommendation 2.5 An issuer should have a written diversity policy which includes requirements for the board or a relevant committee of the board to set measurable objectives for achieving diversity (which, at a minimum, should address gender diversity) and to assess annually both the objectives and the progress in achieving them. The issuer should disclose the policy or a summary of it.

Rakon has recognised the value of diversity of thinking and skills in its recruitment practices and its management and governance and has sought to create inclusive work environments where all of its people are valued and respected. Rakon recognises diversity means one or more of a number of different characteristics including but not limited to gender, ethnic background, religion, age, marital status, culture, disability, economic background, education, language, physical appearance and sexual orientation. Rakon considers different backgrounds, communication styles, life-skills and interpersonal skills of directors and employees are of value in building diverse teams.

Rakon has developed a formal Diversity and Inclusion Policy which was approved by the Board in May 2019 and is available on the Company's website. As required under that policy, Rakon has set objectives for measuring and promoting diversity and inclusion within the Company. Progress on these objectives is required to be monitored and assessed by the People Committee and the Board at least annually.

As at 31 March 2019, females represented 20% (FY18: 14%) of Directors and Officers (as defined in NZX listing Rule 3.8.1(c) of the Company). A quantitative breakdown of the number of male and female directors and the number of male and female Officers as at 31 March 2019 and as at 31 March 2018 is set out in the table below. In that table the Chief Executive Officer who is the Managing Director is included as a Director and Officers are the direct reports of the Chief Executive Officer having key functional responsibilities.

	31 March 2019	31 March 2018
Directors		
Females	1	1
Males	5	5
Officers		
Females	2	1
Males	7	7

Recommendation 2.6 Directors should undertake appropriate training to remain current on how best to perform their duties as directors of an issuer.

The Company encourages all directors to undertake appropriate training and education so that they may best perform their duties. This includes attending presentations on changes in governance, legal and regulatory frameworks; attending technical and professional development courses; and attending presentations from industry experts and key advisers. In addition, updates are provided to the Board on relevant industry and Company issues. A number of Rakon's directors are members of the Institute of Directors.

Recommendation 2.7 The board should have a procedure to regularly assess director, board and committee performance.

The Board regularly considers individual and collective performance, together with the skill sets, training and development and succession planning required to govern the business. An evaluation of board performance was undertaken during the year ended 31 March 2019. Consistent with the requirements of the Board Charter for regular reviews of performance, another evaluation of board performance is scheduled in the Board's work plan to be undertaken in the year ending 31 March 2020, along with the evaluation of individual directors' performance and committee performance.

The Board's Committees' charters also require the Committees to undertake a self-review process, including receiving feedback from the Board as a whole and reporting to the Board on the outcome of the reviews.

Recommendation 2.8 A majority of the board should be independent directors.

The Board currently comprises of six directors: five non-executive directors, four of whom are independent including the independent Chair, and one executive Director who is the Managing Director and Chief Executive Officer. In order for a Director to be independent, the Board has determined, among other things, that he or she must not be an executive of Rakon and must have no disqualifying relationships. The Board provides guidance for determining independence in its Charter and follows the guidelines in the NZX Listing Rules.

The Board recognises that from time to time it is appropriate for the Board to confer without executive directors or other senior management present.

Recommendation 2.9 An issuer should have an independent chair of the board. If the chair is not independent then the chair and the CEO should be different people.

The Chair of Rakon is an independent director. While the Board Charter does not require the chair of the Board to be an independent director, if the Directors appoint a fellow Director as Chair who is not independent then they are required to disclose this fact in the Company's annual report, along with reasons justifying such a decision and the Chair and the Managing Director or Chief Executive Officer shall not be the same person.

Principle 3 – Committees

The Board should use committees where this will enhance its effectiveness in key areas, while still retaining board responsibility.

The Board has delegated a number of its responsibilities to committees to assist in the execution of the Board's responsibilities.

The current committees of the Board are the Audit and Risk Committee and the People Committee ('Committees').

The Committees review and analyse policies and strategies which are within their terms of reference. They examine reports, information and proposals and, where appropriate, make recommendations to the full Board. Committees do not take action or make decisions on behalf of the Board unless specifically mandated by prior board authority to do so.

The Committees meet as required and have terms of reference (charters), which are approved and reviewed by the Board. Copies of the Audit and Risk Committee Charter and the People Committee Charter are on the Rakon website and were last approved in March 2019.

All members of the Board receive the minutes of each Committee meeting and all directors are entitled to attend any Committee meeting. In pursuing its duties and responsibilities, each Committee is empowered to seek any information it requires from employees and to obtain independent legal or other professional advice. Each Committee is required to report to the Board after each meeting of the Committee.

From time to time, special purpose committees may be formed to review and monitor specific projects with senior management.

Recommendation 3.1 An issuer's audit committee should operate under a written charter. Membership on the committee should be majority independent and comprise solely of non-executive directors of the issuer. The chair of the audit committee should be an independent director and not the chair of the board.

The Audit and Risk Committee's purpose and key objectives are to ensure oversight of all matters related to the financial accounting and reporting of the Company, monitoring the processes undertaken by external auditors and internal audit activity, operational risk management and compliance with all financial corporate governance requirements. Its duties and responsibilities include:

- Reviewing the consolidated financial statements and making recommendations on financial and accounting policies.
- Reviewing the performance of the external auditor and recommending to the Board their appointment and removal if required.
- Overseeing the adequacy and effectiveness of internal controls and operational risk management including insurance.

The Audit and Risk Committee's Charter provides that the Committee must be comprised solely of directors of Rakon, have a minimum of three members, have a majority of independent directors and have at least one Director with an accounting or financial background. The makeup of the current members of this Committee complies with these requirements.

Members of the Audit and Risk Committee as at the date of this report are Lorraine Witten (Chair), Bruce Irvine and Keith Watson. The Chair of the Audit and Risk Committee is not the Chair of the Board.

Recommendation 3.2 Employees should only attend audit committee meetings at the invitation of the audit committee.

Management may attend meetings at the invitation of the Audit and Risk Committee and the Committee routinely has committee member-only time with the external auditor without management present.

Recommendation 3.3 An issuer should have a remuneration committee which operates under a written charter (unless this is carried out by the whole board). At least a majority of the remuneration committee should be independent directors. Management should only attend committee meetings at the invitation of the remuneration committee.

During the financial year ended 31 March 2019, the Board determined to combine the duties and responsibilities of the Remuneration Committee and the Nomination Committee under one committee known as the People Committee. While the membership of each of the committees had been the same, a new charter reflecting the combined responsibilities was formally approved by the Board in March 2019. The Committee's work plan reflects duties and responsibilities that would otherwise be covered by separate remuneration and nomination committees.

The People Committee's purpose and key objective is to assist the Board in establishing coherent human resources, remuneration and Director nomination policies and practices. Its duties and responsibilities include:

- Overseeing, reviewing and making recommendations to the Board in relation to human resources strategy, management succession planning, employee incentive schemes, remuneration arrangements for the Managing Director and senior management and directors and compliance with applicable human resources legislation; and
- Overseeing, reviewing and making recommendations to the Board in relation to the selection and appointment of new directors, processes for identifying and assessing skills and competencies, Director succession planning and effective induction and training programmes for new and existing directors in order that the Board is comprised of directors who contribute to the successful management of the Rakon Group.

The Committee's Charter requires that a majority of its membership shall be independent directors and that the Chair shall be independent. Currently, the Chair and all other members of the Committee are independent directors.

Members of the People Committee as at the date of this Report are Keith Oliver (Chair), Bruce Irvine, and Lorraine Witten. Management may attend meetings at the invitation of the Committee.

Recommendation 3.4 An issuer should establish a nomination committee to recommend director appointments (unless this is carried out by the whole board), which should operate under a written charter. At least a majority of the nomination committee should be independent directors.

As reported in respect of Recommendation 3.3 the Board elected to combine its Remuneration and Nomination Committees into one People Committee. This change is considered as sensible from an administrative perspective and facilitates regular oversight of both remuneration and nomination matters through the year.

Recommendation 3.5 An issuer should consider whether it is appropriate to have any other board committees. All committees should operate under written charters. An issuer should identify the members of each of its committees and periodically report member attendance.

The Board Charter specifically requires the Board to assess regularly whether there is a need for any further standing committees and the Board acknowledges that any committee established should operate under a written charter. The Audit and Risk Committee and the People Committee Charters are available on the Rakon website and their members are identified on the Rakon website and in the Company's annual reports along with their attendance at the Committees' meetings.

Currently health and safety matters are the responsibility of the full Board with oversight of legislative compliance and policy by the People Committee.

Recommendation 3.6 The board should establish appropriate protocols that set out the procedure to be followed if there is a takeover offer for the issuers including any communications between insiders and the bidder. The board should disclose the scope of independent advisory reports to shareholders. These protocols should include the option of establishing an independent takeover committee, and the likely composition and implementation of an independent takeover committee.

Rakon has not developed specific policy governing the Board's response to a takeover situation. Current legal advice on process that should be followed in the event of a takeover offer is readily accessible by directors in their online Resource Centre. In the case of a takeover offer,

Rakon will form an Independent Takeover Committee to oversee disclosure and response, and engage expert legal and financial advisors to provide advice on procedure.

Principle 4 – Reporting and disclosure

The Board should demand integrity in financial and non-financial reporting, and in the timeliness and balance of corporate disclosures.

Rakon's directors are committed to keeping investors and the market informed of all material information about the Company and its performance, in a timely manner.

Recommendation 4.1 An issuer's board should have a continuous disclosure policy.

Rakon has a Continuous Disclosure Policy to ensure that material information is identified, reported, assessed and disclosed promptly and without delay to the market. This policy was reviewed and updated by the Board in March 2019 and was then circulated to directors and employees along with further guidance on the application of the policy.

In addition to all information required by law, Rakon also seeks to provide sufficient meaningful information to ensure stakeholders and investors are well informed, including financial and non-financial information.

Recommendation 4.2 An issuer should make its code of ethics, board and committee charters and the policies recommended in the NZX Code, together with any other key governance documents available on its website.

The key corporate governance documents referred to in this Corporate Governance Report are available on Rakon's website at <http://www.rakon.com/corporate/investor/ir-gov>

Recommendation 4.3 Financial reporting should be balanced, clear and objective. An issuer should provide non-financial disclosure at least annually, including considering environmental, economic and social sustainability factors and practices. It should explain how operational or non-financial targets are measured. Non-financial reporting should be informative, include forward looking assessments, and align with key strategies and metrics monitored by the board.

Financial information

Rakon's business management teams are responsible for implementing and maintaining appropriate accounting and financial reporting principles, policies and internal controls designed to ensure compliance with accounting standards and applicable laws and regulations.

The Board's Audit and Risk Committee oversees the quality and integrity of external financial reporting, including the accuracy, completeness, clarity, balance and timeliness of financial statements. It reviews Rakon's full and half-year financial statements and makes recommendations to the Board concerning accounting policies, areas of judgement, compliance with accounting standards, stock exchange and legal requirements, and the results of the external audit. All matters required to be addressed and for which the Committee has responsibility were addressed during the reporting period.

For the financial year ended 31 March 2019, the Directors believe that proper accounting records have been kept which enable, with reasonable accuracy, the determination of the financial position of the Company and facilitate the compliance of the financial statements with the Financial Markets Conduct Act 2013. The Chief Executive Officer and Chief Financial Officer have confirmed in writing to the Board that Rakon's external financial reports present a true and fair view of the Company's financial position in all material aspects.

Rakon's full and half-year financial statements are available on the Company's website.

Non-financial information

Rakon discusses its strategic objectives and its progress towards achieving these in the Chair and Chief Executive Officer's commentary in its reports to shareholders.

Rakon is committed to ensuring the protection of the world's environment and natural resources. As part of this commitment, Rakon has achieved ISO14001 certification at the following sites: Auckland – New Zealand and Bangalore – India.

Across its global facilities, Rakon is integrating an Environmental Management System (EMS) to deliver continuous improvement in this area.

Details of Rakon's commitment to the environment and human rights can be viewed on the Company's website at <http://www.rakon.com/corporate/about/corp-policies>. This includes the Company's policy on the restriction of hazardous substances (RoHS/RoHS2); and Rakon's positions on Conflict Minerals and Slavery and Human Trafficking.

The Company also invests in a number of social responsibility initiatives that support employees and the communities in which it operates.

To date Rakon has not sought to adopt a specific reporting framework for ESG policies and practices. Rakon nevertheless continues to focus on continuous improvement of its ESG practices and may consider more structured reporting in the future.

Principle 5 – Remuneration

The remuneration of directors and executives should be transparent, fair and reasonable.

Oversight of policy and processes in relation to the remuneration of directors and executives is a key responsibility of the People Committee.

Recommendation 5.1 An issuer should recommend director remuneration to shareholders for approval in a transparent manner. Actual director remuneration should be clearly disclosed in the issuer's annual report.

The total remuneration available for directors is approved by shareholders. The Board determines the level of remuneration paid to directors from the approved collective pool. Directors also receive reimbursement for reasonable travelling, accommodation and other expenses incurred in the course of performing their duties.

The annual fee pool limit is \$360,000 and was approved by shareholders at the 2012 Annual Shareholders' Meeting.

Any proposed increases in non-executive directors' fees and remuneration will be put to shareholders for approval.

If independent advice is sought by the Board, the consultants will be required to declare their independence. If the Board elects to state publicly that it is relying on such advice in respect of its remuneration proposal, a summary of the findings will be disclosed to shareholders as part of the approval process.

Recommendation 5.2 An issuer should have a remuneration policy for remuneration of directors and officers which outlines the relative weightings of remuneration components and relevant performance criteria.

While Rakon has had established guidelines in place in regards to remuneration of its executives, it has developed a formal Remuneration (Directors and Executives) Policy which was approved by the Board in May 2019. This policy recognises that investors have a particular interest in director and executive remuneration and that the remuneration of directors and executives should be transparent, fair and reasonable and outlines the framework within which Rakon determines remuneration for its directors and executives.

Rakon applies a fair and equitable approach to remuneration having regard to the financial position of the Company and the external environment.

The policy records that Rakon and its People Committee may obtain independent advice and relevant market data and benchmarking in New Zealand and other regions in which it operates from appropriately qualified consultants to assist in setting remuneration for its executives, Chief Executive and directors. External advice is sought on a regular basis to ensure remuneration is benchmarked to the market.

Director remuneration

Board role	Approved remuneration
Chair	\$120,000
Non-executive director	\$60,000

Details of individual directors' remuneration are set out in the Shareholder Information section of the 2019 Annual Report.

Executive remuneration

In general, executive remuneration comprises of a fixed base salary and an at risk short-term incentive (STI) payable annually. Some executives also receive fringe benefits. At risk incentives, including any STI, are payable at the Board's discretion and by reference to targets set at the commencement of the period, which are generally based on financial measures including Company earnings targets, progress against objectives related to the strategic plan and other personal objectives.

Recommendation 5.3 An issuer should disclose the remuneration arrangements in place for the CEO in its annual report. This should include disclosure of the base salary, short-term incentives and long-term incentives and the performance criteria used to determine performance based payments.

CEO remuneration

The review and approval of the Chief Executive Officer's remuneration is the responsibility of the People Committee and the Board.

External advice is sought on the remuneration of the Chief Executive Officer and was last obtained in 2018.

The Chief Executive Officer's remuneration comprises a fixed base salary, fringe benefits, and an at risk STI. At risk incentives are payable at the Board's discretion and by reference to targets agreed with the Chief Executive Officer based on financial measures including earnings targets, progress against objectives related to the strategic plan and other personal objectives. The remuneration detailed below relates to payments made to Brent Robinson in the year ended 31 March 2019 (FY2019) (but not any STI payments earned and to be paid in the 2020 financial year). The breakdown of the Chief Executive Officer's STI for FY2019 was 30% of Base Salary with performance measures linked 50% to achievement of certain Company performance targets and linked 50% to achievement of certain personal objectives. The same breakdown was applicable to the Chief Executive Officer's STI for the year ended 31 March 2018 (FY2018).

	Base Salary	Benefits	Subtotal	At Risk Incentive		Total Remuneration
				STI	% STI achieved against maximum	
FY2019	\$634,139	\$34,064	\$668,202	\$147,000	77 %	\$815,202
FY2018	\$619,358	\$33,044	\$652,402	\$73,500	40 %	\$725,902

Principle 6 – Risk management

Directors should have a sound understanding of the material risks faced by the issuer and how to manage them. The board should regularly verify that the issuer has appropriate processes that identify and manage potential and material risks.

The Board has overall responsibility for the Company's system of risk management and internal control.

Recommendation 6.1 An issuer should have a risk management framework for its business and the issuer's board should receive and review regular reports. An issuer should report the material risks facing the business and how these are being managed.

The Board delegates day-to-day management of risk to the Chief Executive Officer. The Audit and Risk Committee provides additional and more specialised oversight of the Company's risks to support the Board's oversight. As recorded in the Audit and Risk Committee's Charter the Board delegates specific responsibilities to the Committee in regards to risk assurance. The Committee's work plan and meeting schedule provide dedicated time for review of the Company's risk management framework, financial risks, operational risk registers and review of the Company's risk appetite. The Committee is required to report its findings to the full Board. In the year ended 31 March 2019 the Board commenced a practice of maintaining a strategic risks register for review and updating at each board meeting.

The executive team and other senior management are required to identify significant risks affecting the business and develop structures, practices and processes to manage and monitor these risks. Each half year the Chief Financial Officer reports to the Audit and Risk Committee on other risks including but not limited to fraud, cyber security and business continuity and related risk management, including insurances.

The Board is satisfied that the Company's significant risks are identified and reviewed and intends to further develop and implement improvements to the Company's risk management framework in FY2020.

Rakon maintains insurance policies that it considers adequate to meet its insurable risks.

Details of Rakon's financial risk management are available in section C2 of the Notes to the Financial Statements in the 2019 Annual Report.

Recommendation 6.2 An issuer should disclose how it manages its health and safety risks and should report on its health and safety risks, performance and management.

Health and safety matters are the responsibility of the full Board with oversight of legislative compliance and policy review by the People Committee.

The Rakon board recognises that effective management of health and safety is essential for the operation of a successful business, and its intent is to prevent harm and promote wellbeing for employees, contractors and customers. The Board is responsible for governance and oversight of the Company's health and safety framework including ensuring that the systems used to identify and manage health and safety risks: foster an effective health and safety culture, set clear expectations, are fit for purpose, and are effectively implemented, properly resourced, regularly reviewed and continuously improved.

Rakon has a number of operational subsidiary businesses outside New Zealand in India, France and the United Kingdom, each of which is responsible for managing its own health and safety framework. Each business prepares monthly reports which are submitted to Rakon's General Manager People & Capability, with a monthly report to the Board, providing up-to-date information on key performance indicators, activities and key events. The Board receives reports of Incident Rates including Lost Time Incidents and Near Misses, analysis of each reported incident, schedules recording the timing and performance of drills, training and audits and the Company's Critical Risk Register. The Board is satisfied that there is a comprehensive health and safety framework in place.

The Company's Lost Time Injuries recorded in its New Zealand operations in the year to 31 March 2019 numbered three (FY 2018:one)

Rakon is currently formalising a global Health & Safety Policy to achieve consistency of behaviour, processes and expectations across all subsidiary businesses.

Principle 7 – Auditors

The Board should ensure the quality and independence of the external audit process.

The Rakon board is committed to ensuring audit independence, both in fact and appearance, in order that Rakon's external financial reporting is viewed as being highly objective and without bias.

Recommendation 7.1 The board should establish a framework for the issuer's relationship with its external auditors.

The Audit and Risk Committee reviews the quality and cost of the audit undertaken by the Company's external auditors and provides a formal channel of communication between the Board, senior management and external auditors.

As outlined in the Audit and Risk Committee Charter the Committee regularly meets with the external auditor to approve the terms of engagement, audit partner rotation (at least every five years) and audit fee, and to review and provide feedback in respect of the annual audit plan. A comprehensive review and formal assessment of the independence and effectiveness of the external auditor is undertaken periodically. The Committee routinely has time with the external auditor without management present. The Audit and Risk Committee also assesses the auditor's independence on an annual basis.

For the financial year ended 31 March 2019, PricewaterhouseCoopers (PwC) was the external auditor for Rakon.

All audit work at Rakon is fully separated from non-audit services, to ensure that appropriate independence is maintained. Other services provided by PwC in FY2019 were non-audit related and involved the provision of advice. These services were deemed to have no effect on the independence or objectivity of the auditor in relation to audit work. The fees paid to PwC for audit and non-audit work are identified at section B2 d) in the Notes to the Financial Statements in the 2019 Annual Report.

Rakon's External Auditor Independence Policy will be reviewed by the Audit and Risk Committee in the year ending 31 March 2020 to ensure it provides comprehensive and current guidance on the services that may or may not be performed by the external auditor.

PwC has provided the Audit and Risk Committee with written confirmation that, in their view, they were able to operate independently during FY2019.

Recommendation 7.2 The external auditor should attend the issuer's annual meeting to answer questions from shareholders in relation to audit.

The audit partner of the Company's external auditor, PwC, is asked to attend the Company's annual meetings, and to be available to answer questions from shareholders at those meetings. The PwC audit partner attended Rakon's 2018 Annual Shareholders' Meeting.

Recommendation 7.3 Internal audit functions should be disclosed.

Rakon has a number of internal controls overseen by the Audit and Risk Committee and/or the Board which are supported by policy, processes and procedures and regular reporting. These include controls for computerised information and management systems, cyber risk and information security, business continuity management, insurance, health and safety, conflicts of interest, prevention and identification of fraud and legislative compliance. The Company does not have an internal audit function. From time to time, the Company engages external audit services to review its systems and internal controls.

Principle 8 – Shareholder rights and relations

The board should respect the rights of shareholders and foster constructive relationships with shareholders that encourage them to engage with the issuer.

The Board is committed to open and regular dialogue and engagement with shareholders. Rakon seeks to ensure that investors understand its activities by communicating effectively with them and giving them access to clear and balanced information.

Recommendation 8.1 Issuers should have a website where investors and interested stakeholders can access financial and operational information and key corporate governance information.

Rakon maintains a website www.rakon.com where shareholders and other stakeholders may obtain up-to-date financial and operational information and key governance information along with other information about the Company and its products.

The Company's annual Corporate Governance Reports will be available on the Company's website in the relevant annual report and as a separate document including any updated versions of the Corporate Governance Report issued after the publication of the relevant annual report.

Recommendation 8.2 An issuer should allow investors the ability to easily communicate with the issuer, including providing the option to receive communications from the issuer electronically.

Rakon has a calendar of communications and events for shareholders, including but not limited to:

- Annual and Interim Reports.
- Market announcements.
- Annual meetings.
- Ad hoc investor presentations to institutional investors and retail brokers.
- Easy access to information through the Rakon website www.rakon.com
- Access to management and the Board via a dedicated email address investors@rakon.com

Shareholders are actively encouraged to attend the Company's annual meetings and may raise matters for discussion at these events, and vote on major decisions which affect Rakon. Voting is by poll, upholding the 'one share, one vote' philosophy.

All shareholders are given the option to elect to receive electronic communications from the Company.

In addition to shareholders, Rakon has a wide range of stakeholders and maintains open channels of communication for all audiences, including brokers, the investing community and the New Zealand Shareholders' Association and regulators, as well as Rakon employees, customers and suppliers.

Recommendation 8.3 Quoted equity security holders should have the right to vote on major decisions which may change the nature of the issuer in which they are invested.

In accordance with the Companies Act 1993, Rakon's Constitution and the NZX Listing Rules, Rakon refers major decisions which may change the nature of Rakon to shareholders for approval.

Recommendation 8.4 If seeking additional equity capital, issuers of quoted securities should offer further equity securities to existing security holders of the same class on a pro rata basis, and no less favourable terms before further equity securities are offered to other investors.

The Board notes the NZX Code recommendation in relation to considering the interests of all existing financial product holders. The Board will take account of the recommendation in the event of a capital raise as well as the expectation that it should explain why any capital raising method other than pro-rata was preferred when reporting against the NZX Code.

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Keith Oliver
Brent Robinson
Roger Yao
Yin Tang Tseng
Lorraine Witten
Keith Watson (*appointed 21 September 2018*)

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