



rakon

Rakon Limited
Annual Report 2018

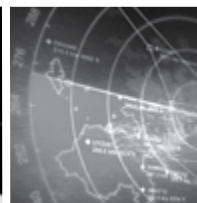


Table of Contents

Directors' Report	3
Statement of Comprehensive Income	4
Statement of Changes in Equity	5
Balance Sheet	6
Statement of Cash Flows	7
Notes to the Financial Statements	9
Independent Auditor's Report	49
Shareholder Information	56
Corporate Governance Report	60
Directory	66

Directors' Report

The Directors are responsible for ensuring that the financial statements present fairly the financial position of the Group as at 31 March 2018 (FY2018) 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.

The Directors note that there were no material changes in the nature of the business undertaken by the Company and the Group in the past year. Following balance date, the Company announced that it had completed a full buy-out of the shares of Centum Rakon India Pte. Limited.

The Directors present the financial statements set out in pages 4 – 48, of Rakon Limited and subsidiaries for the year ended 31 March 2018.

The Board of Directors of Rakon Limited authorised these financial statements for issue on 17 May 2018.

Financial results

Rakon Limited has reported a full year net profit after tax of \$10.0 million (2017: net loss after tax of \$13.6 million).

Sales revenue for the year was \$101.1 million, up \$6.4 million or 7% on the prior year. The Group's sales revenue increased as a result of gains in revenue across its space & defence and global positioning markets. Gross profit for the year was \$43.3 million, up \$9.6 million or 29% on the prior year. Gross profit increased as a result of the mix of business in products and markets. Operating expenses for the year of \$41.6 million are down \$0.3 million compared to the prior year. In addition to improved trading performance, the profit result increased as a result of a number of reporting events that include a gain from the sale of the Group's property in France, the partial gain on sale of shares in Thinxtra Limited and a net dilution gain on Thinxtra shares.

During the year the Company moved from a net debt position (31 March 2017: \$4.5 million) to a net cash position of \$7.4 million as at balance date. Cash increased as a result of the generation of operating cash flow and also proceeds from the sale of the France property. As at 31 March 2018 Rakon's shareholders' equity stood at \$87.1 million, funding 77% 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 FY2018.

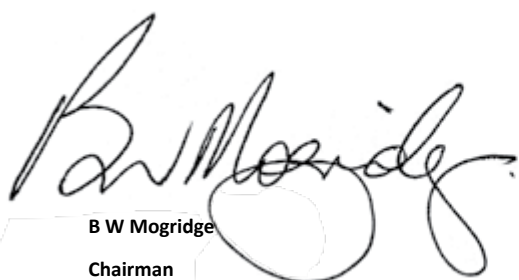
Donations and audit fees

The Group made donations totalling \$5,000 during the year. Amounts paid to PricewaterhouseCoopers for audit and other services are shown in section B2 d) of the financial statements.

Other statutory information

Additional information required by the Companies Act 1993 is set out in the Shareholder Information section.

On behalf of the Directors



B W Mogridge
Chairman



B J Robinson
CEO, Managing Director

Statement of Comprehensive Income

For the year ended 31 March 2018

	Note	2018 \$000s	2017 \$000s
Continuing operations			
Revenue	B2 a)	101,127	94,738
Cost of sales		(57,828)	(61,063)
Gross profit		43,299	33,675
Other operating income	B2 b)	2,421	4,363
Operating expenses	B2 d)	(41,626)	(41,888)
Other gains – net	B2 c)	4,624	439
Impairment	D1 a)	(120)	(6,594)
Operating profit/(loss)		8,598	(10,005)
Finance income	D1 c)	3	3
Finance costs	D1 c)	(504)	(1,435)
Share of loss of associates and joint venture	B4 b)	(1,915)	(2,054)
Net dilution gain on Thinextra shares	B4 d)	4,815	-
Profit/(loss) before income tax		10,997	(13,491)
Income tax expense	D1 d)	(998)	(67)
Net profit/(loss) for the year		9,999	(13,558)
Other comprehensive income			
Items that may be reclassified subsequently to profit or loss			
(Decrease)/increase in fair value cash flow hedges		(372)	1,018
Increase/(decrease) in fair value currency translation differences		2,766	(3,567)
Income tax relating to components of other comprehensive income		104	40
Other comprehensive income/(losses) for the year, net of tax		2,498	(2,509)
Total comprehensive income/(losses) for the year		12,497	(16,067)
Profit/(losses) attributable to equity holders of the Company		9,999	(13,558)
Total comprehensive profit/(losses) attributable to equity holders of the Company		12,497	(16,067)
Earnings per share for continuing operations attributable to the equity holders of the Company			
		Cents	Cents
Basic profit/(losses) earnings per share	D10 a)	4.4	(6.9)
Diluted profit/(losses) earnings per share	D10 b)	4.3	(6.8)

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

Statement of Changes in Equity

For the year ended 31 March 2018

	Note	Share capital \$000s	Retained earnings \$000s	Other reserves \$000s	Total equity \$000s
Balance at 31 March 2016		173,881	(69,660)	(20,793)	83,428
Net loss after tax for the year ended 31 March 2017		-	(13,558)	-	(13,558)
Currency translation differences	D5	-	-	(3,567)	(3,567)
Cash flow hedges, net of tax	D5	-	-	1,058	1,058
Total comprehensive losses for the year		-	(13,558)	(2,509)	(16,067)
Contribution of equity net of transaction costs	D6 a)	7,154	-	-	7,154
Employee share schemes					
Value of employee services	D5	-	-	42	42
Balance at 31 March 2017		181,035	(83,218)	(23,260)	74,557
Net profit after tax for the year ended 31 March 2018		-	9,999	-	9,999
Currency translation differences	D5	-	-	2,766	2,766
Cash flow hedges, net of tax	D5	-	-	(268)	(268)
Total comprehensive profit for the year		-	9,999	2,498	12,497
Contribution of equity net of transaction costs	D6 a)	(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

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

Balance Sheet

As at 31 March 2018

	Note	2018 \$000s	2017 \$000s
Assets			
Current assets			
Cash and cash equivalents	D2 a)	10,364	3,305
Trade and other receivables	B3 b)	28,395	28,249
Assets classified as held for sale	B2 c)	-	1,969
Derivatives – held for trading	D2 b)	211	2
Derivatives – cash flow hedges	D2 b)	1,078	179
Inventories	B5 a)	24,171	24,286
Current income tax asset		146	96
Total current assets		64,365	58,086
Non-current assets			
Derivatives – cash flow hedges	D2 b)	334	115
Trade and other receivables	B3 b)	2,716	1,365
Property, plant and equipment	D3 a)	13,481	12,745
Intangible assets	B5 b)	9,115	9,467
Investment in associate	B4 b)	14,640	12,004
Interest in joint venture	B4 b)	2,876	3,722
Deferred tax asset	D4	5,906	6,692
Total non-current assets		49,068	46,110
Total assets		113,433	104,196
Liabilities			
Current liabilities			
Bank overdraft	D2 e)	2,824	3,229
Borrowings	D2 e)	98	4,530
Trade and other payables	D2 d)	19,107	15,246
Derivatives – held for trading	D2 b)	91	1
Derivatives – cash flow hedges	D2 b)	144	225
Provisions	D3 b)	961	910
Deferred revenue – Siward	B2 b)	101	2,534
Total current liabilities		23,326	26,675
Non-current liabilities			
Derivatives – cash flow hedges	D2 b)	78	-
Borrowings	D2 e)	-	31
Provisions	D3 b)	2,734	2,909
Deferred tax liabilities	D4	244	24
Total non-current liabilities		3,056	2,964
Total liabilities		26,382	29,639
Net assets		87,051	74,557
Equity			
Share capital	D6 a)	181,024	181,035
Other reserves	D5	(20,754)	(23,260)
Accumulated losses		(73,219)	(83,218)
Total equity		87,051	74,557

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

Statement of Cash Flows

For the year ended 31 March 2018

	Note	2018 \$000s	2017 \$000s
Operating activities			
Cash provided from			
Receipts from customers		101,691	98,179
Income tax refund		-	231
R&D grants received		1,726	1,327
Siward technology license agreement		-	6,877
Other income received		3	41
		103,420	106,655
Cash was applied to			
Payment to suppliers and others		(57,998)	(54,112)
Payment to employees		(36,735)	(41,174)
Interest paid		(536)	(1,449)
Income tax paid		(247)	(417)
		(95,516)	(97,152)
Net cash flow from operating activities		7,904	9,503
Investing activities			
Cash was provided from			
Net proceeds from sale of Thinktra shares		3,178	-
Sale of property, plant and equipment		4,754	8
		7,932	8
Cash was applied to			
Purchase of property, plant and equipment		(3,236)	(2,586)
Purchase of intangibles		(840)	(1,157)
Investment in shares and associates		-	(4,629)
		(4,076)	(8,372)
Net cash flow from investing activities		3,856	(8,364)
Financing activities			
Cash was provided from			
Issuance of share capital		-	7,195
Proceeds from borrowings		-	6,911
		-	14,106
Cash was applied to			
Share issuance cost		(11)	(41)
Repayment of principal on borrowings		(4,500)	(14,411)
Finance lease payments		(31)	-
Cash was applied to financing activities		(4,542)	(14,452)
		(4,542)	(346)
Net increase/ (decrease) in cash and cash equivalents		7,218	793
Effects of exchange rate changes on cash and cash equivalents		246	(156)
Cash and cash equivalents at the beginning of the year		76	(561)
Cash and cash equivalents at the end of the period		7,540	76
Composition of cash and cash equivalents			
Cash and cash equivalents	D2 a)	10,364	3,305
Bank overdraft	D2 e)	(2,824)	(3,229)
Total cash and cash equivalents		7,540	76

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

Statement of Cash Flows

For the year ended 31 March 2018

	Note	2018 \$000s	2017 \$000s
Reconciliation of net profit/(loss) to net cash flows from operating activities			
Reported net profit/(loss) after tax		9,999	(13,558)
Following adjustments:			
Depreciation expense	D3 a)	2,504	3,491
Amortisation expense	B5 b)	1,838	2,118
Impairment	D1 a)	120	6,594
Increase/(decrease) in estimated doubtful debts		7	(69)
Provision for restructure	D3 b)	159	3,043
Employee share based expense	D1 b)	8	42
Movement in foreign currency		(590)	418
Monetised cash flow hedge, net of tax	B2 c)	(1,096)	1,096
Deferred revenue – Siward technology license agreement	B2 b)	(2,351)	2,534
Share of losses from joint venture and associates	B4 b)	1,915	2,054
Deferred tax		382	294
(Gain)/loss on disposal of property, plant and equipment	B2 c)	(2,155)	330
Gain on sale of shares in Thinxtra	B2 c)	(1,852)	-
Net dilution gain on Thinxtra shares	B4 d)	(4,815)	-
Total items cash flow adjusted for		(5,926)	21,945
Impact of changes in working capital items			
Trade and other receivables		(146)	363
Provision for restructure		(645)	(2,402)
Inventories		115	5,544
Trade and other payables		4,557	(2,505)
Tax provisions		(50)	116
Total impact of changes in working capital items		3,831	1,116
Net cash flow from operating activities		7,904	9,503

Net debt reconciliation

An analysis of net debt and the movements in net debt for each of the periods is presented below.

	Net debt reconciliation					Total \$000s
	Other asset Cash/ bank overdraft \$000s	Liabilities from financing activities			Bank borrowing due after 1 year \$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 2016	(561)	(15)	-	-	(12,000)	(12,576)
Cash flows	793	-	-	(4,500)	12,000	8,293
Acquisitions – finance leases	-	(15)	(31)	-	-	(46)
Foreign exchange changes	(156)	-	-	-	-	(156)
Balance as at 31 March 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

Notes to the Financial Statements

A.	General information	10
B.	Calculation of key numbers	10
B1.	Segment information	10
B2.	Profit & loss information	12
B3.	Financial assets and liabilities	15
B4.	Interests in associates and joint venture	17
B5.	Non-financial assets & liabilities	21
C.	Risk	23
C1.	Critical accounting estimates and assumptions	23
C2.	Financial risk management	25
C3.	Capital management	29
D.	Other information	30
D1.	Other profit and loss information	30
D2.	Other financial assets and liabilities	32
D3.	Other non-financial assets and liabilities	34
D4.	Deferred income tax	38
D5.	Other reserves	39
D6.	Contributed equity	39
D7.	Contingencies	40
D8.	Commitments	40
D9.	Related party information	41
D10.	Earnings per share	42
D11.	Share based payments	43
D12.	Summary of other significant accounting policies	44
D13.	Imputation balances	47
D14.	Principal subsidiaries	47

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 17 May 2018.

B. Calculation of key numbers

B1. Segment information

The chief operating decision maker assesses 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 associates and joint ventures' share of interest, tax & depreciation, loss on disposal of assets and other cash and non-cash items (Underlying EBITDA)."

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. In 2018 underlying EBITDA includes the gain on sale from the Argenteuil, France property (refer note B2 c) and the gain from the sale of shares in Thinextra (refer note B4 c), this is considered by the Directors to be part of underlying operating performance. EBITDA is considered 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 period. 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 or loss 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 2018							
	NZ	UK	France	China – T'maker ¹	India – Centum Rakon ²	Australia – Thinextra ⁷	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 ⁶	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

31 March 2017

	NZ \$000s	UK \$000s	France \$000s	China – T'maker ¹ \$000s	India – Centum Rakon ² \$000s	Australia – Thinextra ⁷ \$000s	Other ³ \$000s	Total \$000s
Sales to external customers	61,297	-	33,441	-	-	-	-	94,738
Inter-segment sales	111	-	7	-	-	-	(23)	95
Segment revenue	61,408	-	33,448	-	-	-	(23)	94,833
Underlying EBITDA ⁶	6,679	1,952	(4,149)	1,101	956	(2,100)	(407)	4,032
Depreciation and amortisation	3,484	638	1,646	-	-	-	(159)	5,609
Impairment	789	160	635	-	3,164	-	1,846	6,594
Income tax (expense)/credit	313	(264)	28	-	-	-	(144)	(67)
Total assets ⁴	52,292	6,452	30,248	7,930	3,722	4,074	(522)	104,196
Investment in associates	-	-	-	7,930	-	4,074	-	12,004
Investment in joint venture	-	-	-	-	3,722	-	-	3,722
Additions of property, plant, equipment and intangibles	2,795	449	569	-	-	-	-	3,813
Total liabilities ⁵	18,918	432	8,241	-	-	-	2,048	29,639

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 Includes Rakon Limited's 49% share of investment in Centum Rakon India Private Limited, refer note B4 b).

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 This includes one off restructure costs in New Zealand of nil (2017: \$817,000) and in France of nil (2017: \$2,242,000) (refer note B2 d) and income from a technology license agreement with Siward of \$2,351,000 (2017: \$4,343,000 (refer note B2 c). This is also in the New Zealand segment.

⁷ Rakon Limited's 21.5% (2017: 42%) interest in Thinextra Limited refer note B4 c).

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

	2018 \$000s	2017 \$000s
Continuing operations		
Underlying EBITDA	12,094	4,032
Depreciation and amortisation	(4,342)	(5,609)
One off cash gains realised on derivatives closed out	1,096	(1,096)
Employee share schemes	(8)	(42)
Finance costs – net	(501)	(1,432)
Adjustment for associates and joint venture share of interest, tax & depreciation	(1,751)	(2,079)
Net dilution gain on Thinextra shares	4,815	-
Impairment	(120)	(6,594)
Loss on asset sales/disposal	(25)	(296)
Other non-cash items	(261)	(375)
Profit/(loss) before income tax	10,997	(13,491)
Income tax expense	(998)	(67)
Net profit/(loss) for the year	9,999	(13,558)

B2. Profit & loss information

B2 a) Revenue

Accounting policy

Revenue comprises the fair value of amounts received and receivable by the Group for goods and services supplied in the ordinary course of business. Revenue is stated net of goods and services tax (or value added tax) collected from customers. Revenue from the sale of goods is recognised in the statement of comprehensive income when the significant risks and rewards of ownership have been transferred to the buyer and the amount can be measured reliably. Revenue from services rendered is recognised in the statement of comprehensive income, in proportion to the stage of completion of the transaction at the balance date.

Breakdown of revenue by goods and services

Revenue from all sources is as follows:

	2018 \$000s	2017 \$000s
Sales of goods	99,916	93,283
Revenue from services	1,211	1,455
Total revenue	101,127	94,738

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.

	2018 \$000s	2017 \$000s
Asia	41,330	41,465
North America	23,940	18,530
Europe	33,069	32,814
Others	2,788	1,929
Total revenue by region	101,127	94,738

Breakdown of revenue by market segment

	2018 \$000s	2017 \$000s
Telecommunications	40,457	41,698
Global Positioning	25,999	23,944
Space and Defence	27,984	21,616
Other	6,687	7,480
Total revenue by market segment	101,127	94,738

Prior year balances have been restated to align with the current year mapping of customers to segments.

B2 b) Other operating income

Breakdown of other operating income

	2018 \$000s	2017 \$000s
Dividend income	1	1
Other income	69	19
Income from technology license agreement with Siward	2,351	4,343
Total other operating income	2,421	4,363

Accounting policy

Dividend income is recognised when the right to receive payment is established. Royalty income is recognised on an accruals basis in accordance with the substance of the relevant agreements.

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 new fully paid ordinary shares of Rakon and rights arising from a technology license agreement. Siward has taken up one new appointment to Rakon's Board.

During 2018 a further \$2.4m (31 March 2017: \$4.3m) is recognised on the basis of further work completed with a remaining deferred revenue balance at 31 March 2018 of \$0.1m.

Critical accounting estimates and assumptions – prior year

Apportionment of proceeds

Of the US\$10m proceeds received in February 2017, NZ\$7.2m was attributed to new fully paid ordinary shares based on an independent valuation report. The balance of NZ\$6.9m was allocated to the technology license agreement. Key judgements and assumptions included:

Rakon's volume weighted average share price immediately before the agreement was executed	\$0.18
Premium to reflect the ability of Siward to influence strategy and direction	5% – 10%

Recognition of technology license agreement revenue

The implied royalty rate of 5.2% for the technology license agreement is close to the median royalty rate for licensing of GPS and tracking technologies.

The \$6.9m attributed to the technology license agreement was recognised as revenue on the basis of the stage of completion of the transaction. This involves judgement in assigning value to each of the four key technologies to be transferred and allocation of these between technology transfer and deployment.

This resulted in 99% (2017: 63%) being completed by 31 March 2018 and revenue of \$2,351,000 (2017: \$4,343,000) recognised during 2018 (refer note D6).

B2 c) Other gains – net

	2018	2017
	\$000s	\$000s
Gain/(loss) on disposal of property, plant, equipment, and intangibles ¹	2,155	(330)
Gain from sale of shares in Thinextra ²	1,852	-
	<u>4,007</u>	<u>(330)</u>
Foreign exchange gains/(losses) – net		
Forward foreign exchange contracts		
Held for trading	122	798
Gains/(losses) on revaluation of foreign denominated monetary assets and liabilities ³	495	(29)
Total foreign exchange gains – net	<u>617</u>	<u>769</u>
Total other gains – net	<u>4,624</u>	<u>439</u>

¹ During the year the sale of land and buildings at Argenteuil, France was completed and gain on sale of \$2.1m recognised. The land and buildings were previously classified as 'held for sale'.

² During December 2017 Thinextra undertook an additional capital raising (Series B). During this capital raising Rakon sold 199,763 shares for A\$3.0m to applicants who missed out on a Series B allotment which resulted in a gain of NZ\$1.9m, refer also B4 c).

³ During the prior year derivatives were closed out to take advantage of favourable exchange rates with total cash of \$2.0m being received in that year. Derivatives closed out which related to forecast sales expected to occur during 2018 resulted in a gain of \$1,096,000 (2017: \$905,000) which was recognised in the statement of comprehensive income during 2018.

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

B2 d) Operating expenses

	2018	2017
	\$000s	\$000s
Operating expense by function		
Selling and marketing	9,905	8,723
Research and development	9,712	9,947
General and administration	22,009	23,218
Total operating expenses	41,626	41,888
Operating expenses include		
Depreciation – inclusive of depreciation included in cost of sales (note D3 a)	2,504	3,491
Amortisation (note B5 b)	1,838	2,118
Research and development expense	11,771	12,045
Research and development government grant	(739)	(858)
Research and development tax credit	(1,320)	(1,240)
Restructure costs – inclusive of restructure costs included in cost of sales (note D3 b)	159	3,043
Rental expense on operating leases	2,268	2,172
Costs of offering credit		
Bad debt recoveries/(write-offs)	19	(8)
Governance expenses		
Directors' fees	390	321
Auditors' fees		
Principal auditor's fees	537	446
Breakdown of fees:		
Audit fees for current year	460	352
Half year financial statements procedures	23	22
Government R&D credits reviews	21	47
Annual Shareholders' Meeting procedures	8	-
Treasury advisory services	25	25
Audit services other auditors	23	20
Sundry expenses		
Donations	5	4

Prior Year – restructure costs

Significant reorganisations which took place during the prior year are explained below:

- A reorganisation of the New Zealand operation, including a reduction in headcount. Restructure costs of \$817,000 were incurred and paid out by 31 March 2017
- A proposal for reorganisation 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. Restructure related costs of \$2,242,000 were incurred, refer also note D3 b).

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 (forward foreign exchange contracts, collar options, interest rate swaps). Refer also note D12 b).

Financial instruments by category

31 March 2018	Cash and	At fair value	Derivatives	Total
Assets per balance sheet	receivables	through profit	used for	
	\$000s	and loss	hedging	\$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	Derivatives	Other financial	Total
Liabilities per balance sheet	fair value	used for	liabilities	
	through the	hedging	\$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

31 March 2017	Cash and	At fair value	Derivatives	Total
Assets per balance sheet	receivables	through profit	used for	
	\$000s	and loss	hedging	\$000s
Derivative financial instruments (note D2 b)	-	2	294	296
Trade and other receivables	28,527	-	-	28,527
Cash and cash equivalents (note D2 a)	3,305	-	-	3,305
Total assets per balance sheet	31,832	2	294	32,128

31 March 2017	Liabilities at	Derivatives	Other financial	Total
Liabilities per balance sheet	fair value	used for	liabilities	
	through the	hedging	\$000s	\$000s
Borrowings	-	-	7,790	7,790
Derivative financial instruments (note D2 b)	1	225	-	226
Trade and other payables	-	-	9,175	9,175
Total liabilities per balance sheet	1	225	16,965	17,191

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.

Collectability of trade receivables is reviewed on an ongoing basis. Debts which are known to be uncollectable are written off. A provision for impairment of trade receivables is established when there is objective evidence that the Group will not be able to collect all amounts due, according to the original terms of receivables. The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the effective interest rate. The amount of the provision is recognised in the statement of comprehensive income.

Breakdown of trade and other receivables

	2018	2017
	\$000s	\$000s
Trade receivables	25,932	25,271
Less: provision for impairment of trade receivables	(64)	(79)
Net trade receivables	25,868	25,192
Prepayments	952	767
GST/VAT receivable	-	320
Receivables from related parties (note D9 b)	307	214
Other receivables ¹	3,984	3,121
Total trade and other receivables	31,111	29,614
Less non-current other receivables ¹	2,716	1,365
Current trade and other receivables	28,395	28,249

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

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

Ageing

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.

	2018	2017
	\$000s	\$000s
Up to 3 months	4,475	4,327
3 to 6 months	1,522	518
Over 6 months	167	265
Total overdue trade receivables	6,164	5,110

As of 31 March 2018, trade receivables of \$64,000 (2017: \$79,000) were impaired and provided for. These receivables mainly relate to customers who are in financial difficulty or dispute.

Currencies

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

	2018	2017
	\$000s	\$000s
NZD	606	1,521
USD	17,250	17,956
EUR	12,396	9,726
GBP	837	366
Other	22	45
Total trade and other receivables	31,111	29,614

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 investment in CRI is 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 & 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	Equity accounted			
		2018	2017			Net investment		(loss)/profit	
						2018	2017	2018	2017
						\$000s	\$000s	\$000s	\$000s
Chengdu Shen-Timemaker Crystal Technology Co. Ltd ¹	China	40%	40%	Associate	Equity method	-	5,370		
Chengdu Timemaker Crystal Technology Co. Ltd ¹	China	40%	40%	Associate	Equity method	8,925	2,157		
Shenzhen Taixiang Wafer Co. Ltd ¹	China	40%	40%	Associate	Equity method	425	403		
Total Timemaker Group						9,350	7,930	908	24
Thinextra Pty Limited ³	Australia	21.5%	42%	Associate	Equity method	5,290	4,074	(2,273)	(2,123)
Total carrying amount of associates						14,640	12,004	(1,365)	(2,099)
Centum Rakon India Private Ltd ²	India	49%	49%	Joint Venture	Equity method	2,876	3,722	(550)	45
Total carrying amount of equity accounted associates and joint venture						17,516	15,726	(1,915)	(2,054)

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, refer also to note B4 e) for details of merger within the group during 2018.

² The Group has a 49% interest in Centum Rakon India Private Limited ('CRI'), a joint venture which provides products and services to the frequency control industry.

³ The Group has a 21.5% interest in Thinextra Pty Limited ('Thinextra'), an 'Internet of Things' business, refer note B4 c).

B4 c) Partial sale of investment in Thinextra

Thinextra Limited ('Thinextra') is an 'Internet of Things' (or '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. The Group commenced equity accounting its investment in Thinextra from December 2015.

During 2017 Thinextra undertook additional capital raising (Series B). Following the capital raising Rakon sold 199,763 shares for A\$3.0m in November 2017 to applicants who missed out on a Series B allotment. A resultant gain of NZ\$1.9m was realised with Rakon owning 21.5% of Thinextra immediately after the sale, refer note B2 c).

B4 d) Recognition of net dilution gain in Thinextra

Critical accounting estimate

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

The key judgement applied is that the Directors have concluded that the rights attached to the convertible preference shares over and above the ordinary shares are protective and not substantive in nature. Therefore, the percentage ownership Rakon holds in Thinextra 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 during the year, 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 the date of these financial statements.

Net dilution gain

During the year Thinextra 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 current year (2017: nil).

B4 e) Merger within the Timemaker Group

In June 2017 Chengdu Shen-Timemaker Crystal Technology Co. Limited and Chengdu Timemaker Crystal Technology Co. Limited were merged with the merged entity being Chengdu Timemaker Crystal Technology Co. Limited.

B4 f) Subsequent event – acquisition of remaining shares in CRI

On 27 April 2018 Rakon acquired the remaining 51% of shares in CRI for US\$5.5m. US\$4.125m was paid on 2 May 2018 with the US\$1.375m balance payable within 18 months of when the agreement was signed. The acquisition allows Rakon to leverage CRI's high quality low cost operation, allows alignment of the international operations and provides access to the Indian market.

The subsequent accounting for the acquisition, (including fair value assessment of assets acquired) was not completed until after these financial statements were signed. This was due to the time frame between the acquisition and the issue of these financial statements.

B4 g) Prior year impairment of investment in CRI

In the prior year the future cash flow projections for the products manufactured in India were lower than at the time of the previous review. This was due to the long range revenue forecasts which had reduced as a result of expected technology replacement resulting in products being manufactured in other cash generating units (CGUs) within the Group. This resulted in an impairment of \$3,164,000 in the prior year. The carrying value is equivalent to the recoverable amount determined on a value in use basis.

B4 h) Commitments and contingent liabilities in respect of associates and joint venture

There are no other commitments or contingent liabilities in respect of the Group's investment in associates and the joint venture.

Joint venture

CRI has received income tax assessments which are in dispute. The Directors of CRI believe the positions are likely to be upheld and accordingly no provision was made in CRI's financial statements. The below summarises the potential impacts on CRI's tax balances if the assessments are upheld:

- 2009/10 – a decrease in tax losses of \$1.0m (tax value \$346,000)
- 2011/12 – an increase in taxable income of \$1.0m (tax value \$346,000)
- 2013/14 – an increase in taxable income of \$0.6m (tax value \$194,000)

B4 i) 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. Figures for the total Timemaker group are an aggregate of Chengdu Timemaker Crystal Technology Co. Limited and Shenzhen Taixiang Wafer Co. Limited.

	Centum Rakon India Private Ltd		Thinextra Pty Ltd	
	2018	2017	2018	2017
	\$000s	\$000s	\$000s	\$000s
Summarised balance sheet				
Current assets				
Cash & cash equivalents	1,159	3,131	11,117	3,792
Other current assets	11,721	10,416	2,091	1,586
Total current assets	12,880	13,547	13,208	5,378
Non-current assets				
	5,518	6,468	10,509	6,058
Current liabilities				
Financial liabilities (excluding trade payables)	2,157	2,843	149	341
Other current liabilities	3,645	2,972	1,400	2,059
Total current liabilities	5,802	5,815	1,549	2,400
Non-current liabilities				
Other non-current liabilities	269	146	-	-
Total non-current liabilities	269	146	-	-
Net assets	12,327	14,054	22,168	9,036

	Centum Rakon India Private Ltd		Thinextra Pty Ltd	
	2018	2017	2018	2017
	\$000s	\$000s	\$000s	\$000s
Summarised statement of comprehensive income				
Revenue	14,951	15,523	615	369
Interest Income	130	137	37	31
Depreciation and amortisation	(1,340)	(2,044)	(1)	55
Interest expenses	(118)	(102)	-	-
(Loss)/profit for the period	(1,121)	97	(7,642)	(4,586)

	Centum Rakon India Private Ltd		Thinextra Pty Ltd	
	2018	2017	2018	2017
	\$000s	\$000s	\$000s	\$000s
Reconciliation of net assets to carrying amount				
Rakon's share in %	49%	49%	21.5%	42%
Rakon's share of associates' and joint venture's net assets	6,040	6,886	4,775	3,821
Goodwill	-	-	515	960
Translation movement	-	-	-	(40)
Gain on share price dilution not recognised	-	-	-	(667)
Cumulative impairment	(3,164)	(3,164)	-	-
Carrying amount	2,876	3,722	5,290	4,074
Movement in carrying amount				
Opening net assets 1 April	3,722	6,798	4,074	1,626
Equity accounted (loss)/profit	(550)	45	(2,273)	(2,123)
Foreign exchange movement	(296)	43	-	(58)
Gain on share price dilution recognised	-	-	4,815	-
Additional capital contribution during the year	-	-	-	4,629
Reduction in carrying value from sale of shares during the year	-	-	(1,326)	-
Impairment booked for the year	-	(3,164)	-	-
Net carrying amount	2,876	3,722	5,290	4,074

	Chengdu Shen-Timemaker Crystal Technology Co. Ltd		Chengdu Timemaker Crystal Technology Co. Ltd		Shenzhen Taixiang Wafer Co. Ltd		Total Timemaker Group	
	2018	2017	2018	2017	2018	2017	2018	2017
	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
Summarised balance sheet								
Current assets								
Cash & cash equivalents	-	-	3,138	1,947	2	2	3,140	1,949
Other current assets	-	13,339	15,450	9,982	1,135	1,113	16,585	24,434
Total current assets	-	13,339	18,588	11,929	1,137	1,115	19,725	26,383
Non-current assets	-	1,389	24,200	18,068	-	1	24,200	19,458
Current liabilities								
Financial liabilities (excluding trade payables)	-	-	8,434	6,621	-	-	8,434	6,621
Other current liabilities	-	1,303	10,364	17,410	73	109	10,437	18,822
Total current liabilities	-	1,303	18,798	24,031	73	109	18,871	25,443
Non-current liabilities								
Other non-current liabilities	-	-	1,678	-	-	-	1,678	-
Total non-current liabilities	-	-	1,678	-	-	-	1,678	-
Net assets	-	13,425	22,312	5,966	1,064	1,007	23,376	20,398

	Chengdu Shen-Timemaker Crystal Technology Co. Ltd		Chengdu Timemaker Crystal Technology Co. Ltd		Shenzhen Taixiang Wafer Co. Ltd		Total Timemaker Group	
	2018	2017	2018	2017	2018	2017	2018	2017
	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
Summarised statement of comprehensive income								
Revenue	-	959	24,481	18,692	-	-	24,481	19,651
Depreciation and amortisation	(74)	(640)	(1,809)	(1,388)	-	-	(1,883)	(2,028)
Interest expenses	-	(15)	(1,017)	(629)	-	-	(1,017)	(644)
(Loss)/profit for the period	(166)	(2,413)	2,469	2,445	-	-	2,304	32

	Chengdu Shen-Timemaker Crystal Technology Co. Ltd		Chengdu Timemaker Crystal Technology Co. Ltd		Shenzhen Taixiang Wafer Co. Ltd		Total Timemaker Group	
	2018	2017	2018	2017	2018	2017	2018	2017
	\$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	-	5,370	8,926	2,386	425	403	9,350	8,159
Other comprehensive income prior year adjustment	-	-	-	(229)	-	-	-	(229)
Goodwill	-	-	-	-	-	-	-	-
Carrying amount	-	5,370	8,926	2,157	425	403	9,350	7,930
Movement in carrying amount								
Opening net assets 1 April							7,930	8,689
Equity accounted profit							908	24
Foreign exchange movement							512	(783)
Carrying amount							9,350	7,930

B5. Non-financial assets & liabilities

B5 a) Inventories

Accounting policy

Inventories are stated at the lower of cost (weighted average cost) or net realisable value. Cost comprises direct materials, direct labour and an 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

	2018 \$000s	2017 \$000s
Raw materials	8,767	7,167
Work in progress	10,896	12,551
Finished goods	4,508	4,568
Total inventories	24,171	24,286

Obsolescence

An inventory obsolescence provision of \$4,584,000 (2017: \$8,181,000) 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 to be lower than cost.

During the year inventory of \$5,141,000 (2017: \$2,077,000) was scrapped of which \$5,141,000 (2017: \$1,618,000) was provided for. The net amount included in cost of sales from an increase in the obsolescence provision was \$1,292,000 (2017: \$3,645,000).

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 \$7.9m (2017: \$8.2m) 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.

During the prior year specific product development projects and projects in progress were reviewed for recoverability. This was based on the expected cash flows to be generated by the projects. It was found the expected cash flows had reduced and were unlikely to support the carrying values. As a result, these specific projects were fully impaired. The impairment was within the New Zealand and France cash generating units. Impairment of goodwill which relates to the same subset of products manufactured in India for the telecommunications market segment is outlined in note B4 g).

Breakdown of intangible assets

	Goodwill \$000s	Patents \$000s	Software \$000s	Product development \$000s	Assets under construction \$000s	Total \$000s
At 31 March 2016						
Cost	2,335	3,409	8,584	9,486	3,988	27,802
Accumulated amortisation & impairment	-	(2,871)	(7,620)	(2,461)	-	(12,952)
Net book value	2,335	538	964	7,025	3,988	14,850
Year ended 31 March 2017						
Opening net book value	2,335	538	964	7,025	3,988	14,850
Foreign exchange differences	(489)	(80)	(27)	(866)	(280)	(1,742)
Additions – acquired separately	-	-	26	-	-	26
Additions – internally developed	-	-	141	29	1,061	1,231
Disposals	-	-	(5)	(534)	-	(539)
Amortisation charge	-	-	(498)	(1,620)	-	(2,118)
Amortisation reversal on disposals	-	-	5	424	-	429
Impairment	(1,846)	-	-	(824)	-	(2,670)
Transfers	-	-	154	822	(976)	-
Closing net book amounts	-	458	760	4,456	3,793	9,467
At 31 March 2017						
Cost	1,846	2,900	8,780	8,781	3,793	26,100
Accumulated amortisation & impairment	(1,846)	(2,442)	(8,020)	(4,325)	-	(16,633)
Net book value	-	458	760	4,456	3,793	9,467

	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 – acquired separately	-	-	13	-	-	13
Additions – internally developed	-	-	-	114	763	877
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 & impairment	(1,846)	(2,442)	(8,175)	(5,760)	-	(18,223)
Net book value	-	504	435	4,504	3,672	9,115

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)
- Recognition of net dilution gain in Thinextra (note B4 d)
- Estimate and judgements not included above are detailed below.

C1 a) Impairment of assets

The Group, as required by NZ IFRS, has assessed as at 31 March 2018 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 D1 a). A minor impairment was noted in relation to spare parts within property, plant and equipment (refer note D1 a). The Directors consider the net asset value 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 have been forecasted based on value-in-use calculations. These calculations require the use of estimates.

The recoverable amount of a CGU is determined based on value-in-use calculations. 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 11%	7.5%
	Gross margin % ²	50% to 52%	n/a
France	Annual sales growth rate ¹	5% to 12%	7.7%
	Gross margin % ²	35%	n/a
China	Annual net profit growth rate ³	3% to 81%	22%
	Free cash flow ³	-403% to 163%	7.6%
India	Annual net profit growth rate ⁴	4% to 161%	33%
	Free cash flow ⁴	-2% to 182%	29%

Free cash flow is used in the above table as the China and India assets are held through Rakon's investment in associates and joint venture.

¹ *Sales growth* – Management has 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 has forecast a future increase in revenues for the NZ and France 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.

⁴ *India, 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

If the sales volumes used in the value-in-use calculation had been 2.5% lower than management's estimates, no impairment would result.

If the gross margin percentage used in the value-in-use calculation had been 1.5% lower than management's estimates, the Group would have recognised an impairment against the carrying amount of net assets of \$1.1m.

If the pre-tax discount rate applied to the cash flow projections was 16.4% instead of 14.0%, the recoverable amount of the CGU would equal its carrying amount.

France CGU

The recoverable amount is estimated to be \$30m (2017: \$14.4m). This exceeds the carrying amount of the CGU at balance date by \$4.4m (2017: \$4.4m).

If the sales used in the value-in-use calculation had been 2.5% lower than management's estimates the Group would have recognised an impairment against the carrying amount of net assets of \$3.9m.

If the gross margin percentage used in the value-in-use calculation had been 1.5% lower than management's estimates the Group would have recognised an impairment against the carrying amount of net assets of \$9.0m.

If the pre-tax discount rate applied to the cash flow projections was 14.2% instead of 13.0%, the recoverable amount of the CGU would equal its carrying amount.

China CGU

The recoverable amount is estimated to be \$13.1m (2017: \$23.1m). This exceeds the carrying amount of the CGU at balance date by \$3.8m (2017: \$15.5m).

If free cash flow was 5.0% lower than management's estimates, no impairment would result.

If the pre-tax discount rate applied to the cash flow projections was 16.7% instead of 14.2%, the recoverable amount of the CGU would equal its carrying amount.

India CGU

The recoverable amount is estimated to be \$5.9m (2017: \$3.7m). This exceeds the carrying amount of the CGU at balance date by \$3.0m (2017: \$3,000).

If free cash flow was 5.0% lower than management's estimates, no impairment would result.

If the pre-tax discount rate applied to the cash flow projections was 48.9% instead of 24.2%, 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	
	2018	2017	2018	2017
New Zealand	2.5%	2.5%	14.0%	15.7%
United Kingdom	2.5%	2.5%	11.1%	12.7%
France	2.5%	2.5%	13.0%	14.0%
China	2.5%	2.5%	14.2%	15.3%
India	2.5%	2.5%	24.2%	27.0%

Prior year impairment

In the prior year, the future cash flow projections for the specific products manufactured in India for the France CGU were lower than at the time of the previous review. This was due to revenue forecasts from these specific products being reduced, as they were replaced by newer technology products which were expected to be manufactured in other locations within the Group. This resulted in an impairment to goodwill of \$1,846,000 (being the carrying value of goodwill as at 31 March 2017).

The investment in CRI was also impaired by \$3,164,000, refer note B4 g).

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. The Group recognises liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. 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 Management 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 Board and Audit and Risk Management Committee oversees how management monitors compliance with the Group's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Group.

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.

Trade and other receivables

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% (2017: 10%) of external revenue with the next most significant customer accounting for 7% (2017: 8%) of external revenue. The Group's most significant customer accounts for \$10m (2017: \$9.5m) revenue, is in the global positioning segment and is supplied out of New Zealand.

The Group has established credit policies under which each new customer is analysed individually for creditworthiness 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 creditworthiness, may transact with the Group only on a prepayment basis.

The Group establishes an allowance for impairment that represents its estimate of incurred losses in respect of trade and other receivables and investments. The main components of this allowance are a specific loss component that relates to individually significant exposures and a collective loss component established for groups of similar assets in respect of losses that have been incurred but not yet identified. The collective loss allowance is determined based on historical data of payment statistics for similar financial assets.

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	
	2018 \$000s	2017 \$000s
Financial assets at fair value through profit or loss (note D2 b)	211	2
Trade and other receivables (note B3 b)	31,111	29,614
Cash and cash equivalents (note D2 a)	10,364	3,305
Forward exchange contracts and collar options used for hedging (note D2 b)	1,412	294
Total exposure to credit risk	43,098	33,215

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 9 May 2018 the facilities with ASB were renewed and have an expiry date of 31 May 2019, refer also note D2 e).

- \$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. Also refer to note D2 e). The \$2.0m increase compared to the previous facility relates to additional working capital for the CRI business and requires the release of securities held by CRI's current banks within four months of the date of the acquisition date (refer note B4 f).

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 EBITDA and 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.

During the year the Company reduced its cash advance facilities after application of proceeds from the partial sale of its investment in Thinxtra (refer note B4 c) and sale of the Argenteuil, France property (refer note B2 c).

Prior year

- \$6.2m 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. The drawn down balance at balance date was \$4.5m and the facility expiry date is May 2018.
- \$7.8m overdraft limit. Interest is payable at the ASB Corporate Indicator Rate plus applicable margin. Also refer to note D2 e).

During the prior year the Company reduced its cash advance facilities after application of proceeds from the investment by Siward. Refer note B2 c) and note D6.

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 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)

31 March 2017	Carrying amount \$000s	6 months or less \$000s	6 – 12 months \$000s	1 – 2 years \$000s	2 – 5 years \$000s
<i>Financial liabilities</i>					
Secured bank loans (note D2 e)	4,500	4,558	-	-	-
Derivatives (note D2 b)	226	(42)	(39)	(145)	-
Trade and other payables (note D2 d)	15,246	(15,246)	-	-	-
Bank overdraft (note D2 e)	3,229	(3,229)	-	-	-
Finance leases (note D2 e)	61	(30)	-	(31)	-
Total financial liabilities	23,262	(13,989)	(39)	(176)	-

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 Management 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), NZD, GBP and EUR.

The Group uses foreign currency forward exchange contracts and collar options to hedge its currency risk. Under the Group's Treasury Management Policy, minimum hedging of 50% and 25% of estimated foreign currency exposure in respect of forecast sales and purchases is required over the next 0 – 12 and 13 – 24 months respectively, subject to any variation approved by the Board. At 31 March 2018, 81% and 25% of currency exposures over the next 0 – 12 and 13 – 24 months respectively are hedged, with outstanding foreign currency forward exchange contracts and collar options.

Exposure to currency risk

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

31 March 2018	USD \$000s	EUR \$000s	GBP \$000s	JPY \$000s
Rakon Limited	15,082	850	153	(602)
Rakon UK Limited	-	-	-	-
Rakon France SAS	1,073	-	12	(15)
Rakon Group	16,155	850	165	(617)

31 March 2017	USD \$000s	EUR \$000s	GBP \$000s	JPY \$000s
Rakon Limited	13,017	229	370	(1,550)
Rakon UK Limited	(47)	10	-	2
Rakon France SAS	7,039	-	(223)	(390)
Rakon Group	20,009	239	147	(1,938)

The following significant exchange rates applied during the year:

NZD	Average rate		Reporting date rate	
	2018	2017	2018	2017
USD	0.7149	0.7022	0.7277	0.7017
EUR	0.6118	0.6567	0.5858	0.6504
GBP	0.5398	0.5687	0.5134	0.5647
JPY	79.2096	79.3065	76.8400	77.9300

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 2017.

	Equity \$000s	Profit or loss \$000s
31 March 2018		
USD	1,795	1,795
EUR	94	94
GBP	18	18
JPY	(69)	(69)
31 March 2017		
USD	2,223	2,223
EUR	27	27
GBP	16	16
JPY	(215)	(215)

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 2017.

	Fair value \$000s	Equity \$000s	Profit or loss \$000s
31 March 2018			
Forward foreign exchange contracts – cash flow hedges			
Net buy NZD sell USD	1,294	(2,719)	-
Forward foreign exchange contracts – held for trading			
Net buy NZD sell USD	159	(353)	(353)
Net buy NZD sell EUR	(91)	(472)	(472)
31 March 2017			
Forward foreign exchange contracts – cash flow hedges			
Net buy NZD sell USD	211	(2,534)	-

A 10% strengthening 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 2017.

	Fair value \$000s	Equity \$000s	Profit or loss \$000s
31 March 2018			
Forward foreign exchange contracts – cash flow hedges			
Net buy NZD sell USD	1,294	2,225	-
Forward foreign exchange contracts – held for trading			
Net buy NZD sell USD	159	288	288

31 March 2018	Fair value \$000s	Equity \$000s	Profit or loss \$000s
Net buy NZD sell EUR	(91)	386	386

31 March 2017	Fair value \$000s	Equity \$000s	Profit or loss \$000s
Forward foreign exchange contracts – cash flow hedges			
Net buy NZD sell USD	211	2,074	-

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 rate interest rate swap agreements.

Profile

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

	2018 \$000s	2017 \$000s
Variable rate instruments		
Financial assets (note D2 a)	10,364	3,305
Financial liabilities	(2,824)	(3,229)
Net variable rate instruments	7,540	76
Fixed rate instruments		
Financial assets	-	-
Financial liabilities	(224)	(206)
Net fixed rate instruments	(224)	(206)

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 2018 was performed on the same basis as 2017.

31 March 2018	Equity \$000s	Profit or loss \$000s
Variable rate instruments	(28)	(28)
Fixed rate instruments	58	58

31 March 2017	Equity \$000s	Profit or loss \$000s
Variable rate instruments	1	1
Fixed rate instruments	85	-

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

For the year ended 31 March 2018 the Group reported a net profit after tax for the year of \$10.0m (2017: loss of \$13.6m) and net operating cash inflows of \$7.9m (2017: inflow of \$9.5m). As at 31 March 2018 the Group had net assets of \$87.1m (2017: \$74.6m), working capital of \$41.0m (2017: \$31.4m) and cash balances of \$7.5m (2017: \$76,000).

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) Prior year

In the prior year the Group was adversely impacted by a challenging market, particularly reduced spend in telecommunications infrastructure resulting in a decline in revenues of \$10.8m in the telecommunication segment. The Group results were also adversely impacted from restructures that were carried out in the New Zealand and France cash generating units. This resulted in non-recurring costs negatively impacting earnings.

The Group ensured funding was in place to assist with operational cash requirements and the ongoing strategic plan for the business through the arrangement of bank facilities and an equity injection from Siward of \$7.2m.

C3 c) Renewal of bank facilities

On 9 May 2018 the facilities with ASB were renewed and have an expiry date of 31 May 2019, 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 EBITDA and 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 12 months from the date of authorisation of these financial statements, under its new facility agreement signed on 9 May 2018 as detailed in note D2 e). 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 the 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, as required by NZ IFRS, has assessed as at 31 March 2018 whether any indicators of impairment exist. In undertaking such an assessment, no indicators of impairment were identified in the current year.

	2018 \$000s	2017 \$000s
Property, plant & equipment (note D3 a)	120	760
Intangible assets excluding goodwill (note B5 b)	-	824
Goodwill	-	1,846
Investment in CRI (note B4 g)	-	3,164
	120	6,594

Property, plant & equipment

During the year specific equipment spare parts were deemed to be no longer useful due to technical obsolescence or age. As a result, these spare parts were fully impaired. These spare parts are included in the plant and equipment category and form part of the New Zealand cash generating unit, refer also note D3 a).

Prior Year

In the prior year the above impairments were made which are described below.

Property, plant & equipment

During the prior year specific equipment spare parts were deemed to be no longer useful due to technical obsolescence or age. As a result, these spare parts were fully impaired. These spare parts are included in the plant and equipment category and form part of the New Zealand cash generating unit, refer also note D3 a).

Intangible assets excluding goodwill

During the prior year specific product development projects and projects in progress were reviewed for recoverability. This was based on the expected cash flows to be generated by the projects. It was found the expected cash flows on specific items had reduced and were unlikely to support the carrying values. As a result, these specific projects were fully impaired. The impairment was within the New Zealand and France CGUs.

Goodwill and investment in CRI

The future cash flow projections for the specific products manufactured in India were lower than at the time of the previous review. This was due to revenue forecasts from these specific products reducing as they are replaced by newer technology products which were expected to be manufactured in other locations within the Group. This resulted in an impairment of goodwill held in the France CGU and an impairment to the Group's investment in CRI (refer note B4 g).

Following these impairment assessments, the Directors considered the net asset value of the Group to be appropriate.

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 entity expects to pay.

Breakdown of employee benefits expenses

	2018	2017
	\$000s	\$000s
Wages and salaries	37,216	37,223
Contributions to defined contribution plans	570	583
Decrease in liability for French retirement indemnity plan (note D3 b)	(23)	(74)
Increase in liability for long service leave (note D3 b)	114	15
Redundancy cost (note D3 b)	159	3,043
Employee share scheme (note D5)	8	42
Total employee benefits expenses	38,044	40,832

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

	2018	2017
	\$000s	\$000s
Financial income		
Interest income	3	3
Financial expenses		
Interest expense on bank borrowings	(492)	(1,416)
Unwinding of provision discount	(12)	(19)
Total financial expenses	(504)	(1,435)
Net finance costs	(501)	(1,432)

D1 d) Income tax expense

	2018	2017
	\$000s	\$000s
Current tax	(616)	(525)
Deferred tax (expense)/credit (note D4)	(382)	458
Income tax expense	(998)	(67)

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.

	2018	2017
	\$000s	\$000s
Reconciliation of income tax expense		
Profit/(loss) before tax	10,997	(13,491)
Tax calculated at domestic tax rates applicable to profits in the respective countries	(2,943)	3,904
Foreign exchange difference in income tax calculation	15	(8)
Expenses not deductible	(73)	(119)
Non-taxable income	1,890	157
Expenses deductible for tax purposes	18	-
Prior year adjustment	296	(193)
Associate and joint venture results reported net of tax	(541)	(586)
Recognition and utilisation of previously unrecognised tax losses	610	-
Tax losses for which no deferred income tax asset was recognised	(270)	(3,222)
Income tax expense	(998)	(67)

The weighted average applicable tax rate was 9% (2017: -0.5%).

D2. Other financial assets and liabilities

D2 a) Cash and cash equivalents

Accounting policy

Cash and cash equivalents comprise of cash balances, call deposits, 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.

Breakdown of cash and cash equivalents

	2018	2017
	\$000s	\$000s
Cash at bank and on hand	10,364	3,305

Cash, cash equivalents and bank overdrafts include the following for the purposes of the cash flow statement

Cash and cash equivalents	10,364	3,305
Bank overdrafts (note D2 e)	(2,824)	(3,229)
Total cash and cash equivalents	7,540	76

D2 b) Derivative financial instruments

	2018	2018	2017	2017
	Assets	Liabilities	Assets	Liabilities
	\$000s	\$000s	\$000s	\$000s
Interest rate swaps – cash flow hedge	-	126	-	145
Forward foreign exchange contracts – held for trading	211	91	2	1
Forward foreign exchange contracts – cash flow hedges	1,242	-	211	-
Forward foreign exchange collar option – cash flow hedges	170	96	83	80
Total derivative financial instruments	1,623	313	296	226
Less: non-current forward foreign exchange – cash flow hedges	334	78	115	-
Current - derivative financial instruments	1,289	235	181	226

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 2018 were \$33,624,000 (2017: \$23,087,000).

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 as of 31 March 2018 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 7.17%, expiring June 2020. The interest rate swap, with a fair value of -\$126,000 (2017: -\$145,000), is exposed to fair value movements if interest rates change.

D2 c) Recognised fair value measurements

The Group considers the below methods in estimating the fair value of a financial instrument:

- Level 1 – the fair value is calculated using quoted prices in active markets
- Level 2 – the fair value is estimated using inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (as prices) or indirectly (derived from prices)
- Level 3 – the fair value is estimated using inputs for the asset or liability that are not based on observable market data. Investments in unlisted equity shares for which there is currently no active market are valued at cost less impairment.

For financial instruments not quoted in active markets, the Group uses valuation techniques such as present value techniques, comparison to similar instruments for which market observable prices exist and other relevant models used by market participants. These valuation techniques use both observable and unobservable market inputs.

If all significant inputs required to fair value an instrument are observable, the instrument is included in Level 2. The Group's foreign exchange contracts, collar options and interest rate swaps are Level 2 at 31 March 2018 and 31 March 2017.

	2018 \$000s	2017 \$000s
<i>Financial assets – derivative instruments</i>		
Foreign exchange contracts and collar options – held for trading	211	2
Foreign exchange contracts and collar options – cash flow hedges	1,412	294
	1,623	296
<i>Financial liabilities – derivative instruments</i>		
Interest rate swaps	126	145
Foreign exchange contracts and collar options – held for trading	91	1
Foreign exchange contracts and collar options – cash flow hedges	96	80
	313	226

Specific valuation techniques include the fair value of forward foreign exchange contracts and collar options determined using forward exchange rates at the balance date, with the resulting value discounted back to present value.

There were no transfers between categories during the year.

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

	2018 \$000s	2017 \$000s
Trade payables	7,015	4,418
Amounts due to related parties (note D9 b)	1,874	3,287
Employee entitlements	7,803	5,978
Accrued expenses	1,839	1,563
GST/VAT payable	576	-
Total trade and other payables	19,107	15,246

The carrying amounts of trade and other payables are assumed to be 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

	2018	2017
	\$000s	\$000s
Current		
Obligations under finance lease	31	30
Other borrowings	67	-
Bank overdrafts	2,824	3,229
Bank borrowings	-	4,500
Current borrowings	2,922	7,759
Non-current		
Obligations under finance lease	-	31
Bank borrowings	-	-
Non-current borrowings	-	31

Bank borrowings

During the year the Company reduced its bank borrowings after application of proceeds from the partial sale of its investment in ThinXtra (refer note B4 c) and sale of the Argenteuil, France property (refer note B2 c).

Prior to expiry, the facilities were renewed on similar terms and conditions (refer note C2 b). The average interest rate during the year on this facility was 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:

	2018	2017
	\$000s	\$000s
6 months or less	2,922	7,759
6 – 12 months	-	-
1 – 5 years	-	31
Over 5 years	-	-
Total bank borrowings including overdraft	2,922	7,790

Prior year

During the prior year the Company reduced its borrowings after application of proceeds from Siward. Refer note D6.

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.

Impairment

During the year specific equipment spare parts were deemed to be no longer useful due to technical obsolescence or age. As a result, these spare parts were fully impaired. These spare parts were included in the plant and equipment category and form part of the New Zealand cash generating unit. A similar exercise was performed in the prior year.

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
At 31 March 2016							
Cost	7,304	10,116	82,251	5,132	2,654	3,331	110,788
Accumulated depreciation & impairment	(4,619)	(8,234)	(73,665)	(4,768)	(2,268)	-	(93,554)
Net book value	2,685	1,882	8,586	364	386	3,331	17,234
Year ended 31 March 2017							
Opening net book value	2,685	1,882	8,586	364	386	3,331	17,234
Foreign exchange differences	(164)	(25)	(10)	17	42	17	(123)
Additions	-	640	858	180	7	728	2,413
Disposals	-	(38)	(1,566)	(89)	(130)	-	(1,823)
Assets classified as held for sale	(1,969)	-	-	-	-	-	(1,969)
Depreciation charge	(23)	(554)	(2,579)	(266)	(69)	-	(3,491)
Depreciation reversal on disposals	-	19	1,055	61	129	-	1,264
Impairment	-	(10)	(736)	-	(14)	-	(760)
Transfers	-	141	1,938	6	-	(2,085)	-
Closing net book amounts	529	2,055	7,546	273	351	1,991	12,745
At 31 March 2017							
Cost	4,887	10,281	82,083	5,119	2,376	1,991	106,737
Accumulated depreciation & impairment	(4,358)	(8,226)	(74,537)	(4,846)	(2,025)	-	(93,992)
Net book value	529	2,055	7,546	273	351	1,991	12,745
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 & 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

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 of the time served, probability of attainment and discount rates. An actuarial valuation was performed at 31 March 2018.

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 has been 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

France restructure

In September 2013 the proposal for reorganisation was accepted by the Work Inspection Administration and the Workers Councils in France and communicated to the employees of Rakon France SAS as a plan to restructure.

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. Restructure related costs of \$2,242,000 were incurred.

At 31 March 2018 the balance of the restructuring provision represents the estimated costs to complete the Rakon France September 2013 and November 2016 plans to restructure.

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 2016	2,109	474	192	-	2,775
Charged/(credited) to the statement of comprehensive income	(74)	15	3,043	628	3,612
Used during the year	(94)	(72)	(2,402)	-	(2,568)
At 31 March 2017	1,941	417	833	628	3,819
Charged/(credited) 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
Represented by					
Current portion	95	427	439	-	961
Non-current portion	2,051	43	-	640	2,734
Total provisions for other liabilities and charges	2,146	470	439	640	3,695

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:

	2018 \$000s	2017 \$000s
Deferred tax assets		
Deferred tax assets to be recovered after more than 12 months	4,708	5,340
Deferred tax assets to be recovered within 12 months	1,198	1,352
Total deferred tax assets	5,906	6,692
Deferred tax liabilities		
Deferred tax liabilities to be recovered after more than 12 months	(209)	(19)
Deferred tax liabilities to be recovered within 12 months	(35)	(5)
Total deferred tax liabilities	(244)	(24)
Net deferred tax asset	5,662	6,668

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

	2018 \$000s	2017 \$000s
At 31 March 2017	6,668	6,504
Foreign exchange differences	112	(186)
Losses transferred to subsidiaries	(389)	(148)
Deferred tax on cash flow hedge	(347)	40
Income statement (expense)/credit (note D1 d)	(382)	458
At 31 March 2018	5,662	6,668

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 2016	687	-	538	2,097	3,182	6,504
(Charged)/credited to income statement	(464)	-	(124)	1,061	(15)	458
Losses transferred to subsidiaries	-	-	-	-	(148)	(148)
Charged to equity	-	-	-	40	-	40
Foreign exchange difference	-	-	-	(186)	-	(186)
At 31 March 2017	223	-	414	3,012	3,019	6,668
(Charged)/credited to income statement	(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

¹ Includes deferred tax arising from financial arrangements and inventory provisioning.

At balance date Rakon Limited had total tax losses of \$29,266,000 (2017: \$32,834,00) of which \$9,396,000 (2017: \$10,782,000) are recognised in deferred income tax assets. Accordingly, \$19,901,000 (2017: \$22,081,000) 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 \$2,180,000 (2017: \$1,819,000) 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 the related tax benefit is expected to be realised through future taxable profits.

During the prior year a New Zealand IRD tax audit was completed for the years 2011 to 2015 resulting in the forfeiture of \$4,101,000 of tax losses.

D5. Other reserves

	Foreign currency translation reserve \$000s	Hedging reserve \$000s	Share option reserve \$000s	Total \$000s
At 31 March 2016	(23,911)	104	3,014	(20,793)
Cash flow hedges				
Fair value gains/(losses) in year	-	999	-	999
Tax on fair value gains	-	45	-	45
Transfers to sales	-	19	-	19
Tax on transfers to income tax expense	-	(5)	-	(5)
Currency translation differences				
Subsidiaries	(4,365)	-	-	(4,365)
Associates and joint venture	798	-	-	798
Other				
Fair value of share options issued	-	-	42	42
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 losses	-	260	-	260
Transfers to sales	-	558	-	558
Tax on transfers to income tax expense	-	(156)	-	(156)
Currency translation differences				
Subsidiaries	2,982	-	-	2,982
Associates and joint venture	(216)	-	-	(216)
Other				
Fair value of share options issued	-	-	8	8
At 31 March 2018	(24,712)	894	3,064	(20,754)

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.

Breakdown of share capital

	Number of shares	Ordinary shares \$	\$ per share
At 1 April 2016	191,038,591	173,881,000	\$0.91
<i>Shares issued</i>			
Ordinary shares – cash	38,016,681	7,154,000	\$0.19
At 31 March 2017	229,055,272	181,035,000	\$0.79
<i>Shares issued</i>			
Ordinary shares – cash	-	(11,000)	-
At 31 March 2018	229,055,272	181,024,000	\$0.79

At 31 March 2018 the total number of ordinary shares, including treasury shares, is 229,055,272 shares (2017: 229,055,272) made up as follows:

- 226,961,983 are fully paid shares (2017: 226,961,983)
- 321,972 unpaid ordinary shares were on issue and held in trust on behalf of participants in the Rakon Share Plan (2017: 321,972)
- 1,771,317 unpaid ordinary shares were on issue and held by Rakon ESOP Trustee Limited for future allocation to participants (2017: 1,771,317).

Prior Year

Investment by Siward

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 new fully paid ordinary shares of Rakon and rights arising from a technology license agreement. Siward has taken up one new appointment to Rakon's Board. Refer also note B2 c).

D7. Contingencies

It is not anticipated that any material liabilities will arise from the contingent liabilities.

D8. Commitments

D8 a) Capital commitments

Capital expenditure contracted for at the balance date but not yet incurred is as follows:

	2018	2017
	\$000s	\$000s
Property, plant and equipment	326	98
Intangible assets	107	36
Total capital commitments	433	134

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

The Group has one finance lease for photocopiers with a carrying amount of \$31,000 (2017: \$65,000). This lease contract expires in 2019.

	2018	2017
	\$000s	\$000s
No later than 1 year	31	30
Later than 1 year and no later than 5 years	-	31
Total minimum lease payments	31	61
Less amounts representing finance charges	(1)	(3)
Present value of minimum lease payments	30	58
Included in the financial statements as		
Current borrowings (note D2 e)	31	30
Non-current borrowings (note D2 e)	-	31
Total finance lease included in borrowings	31	61

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 8 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 charged to the statement of comprehensive income during the year is disclosed in note B2 c).

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

	2018 \$000s	2017 \$000s
No later than 1 year	2,155	1,755
Later than 1 year and no later than 5 years	5,904	4,566
Later than 5 years	1,640	2,228
Total non-cancellable operating leases	9,699	8,549

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 arms length.

D9 a) Key management compensation

	2018 \$000s	2017 \$000s
Salaries and other short term employee benefits	3,437	3,081
Share based payments	15	26
	3,452	3,107

D9 b) Year end balances arising from sale/purchases of goods/services and plant, equipment and intangibles

	2018 \$000s	2017 \$000s
Intangible, plant and equipment sales to joint venture, Centum Rakon India Private Limited	-	4
Sales to joint venture, Centum Rakon India Private Limited	125	297
Purchases from joint venture, Centum Rakon India Private Limited	(13,204)	(13,534)
Purchases from associate, Chengdu Shen-Timemaker Crystal Technology Co. Limited	(243)	(189)
Engineering support charges to joint venture, Centum Rakon India Private Limited	47	68
Net income statement impact	(13,275)	(13,354)

Receivables from joint venture, Centum Rakon India Private Limited, to

Rakon Limited	14	14
Rakon France SAS	50	48
Total receivables from joint venture, Centum Rakon India Private Limited	64	62

Receivables from joint venture, Rakon HK Limited, to

Rakon Limited	89	148
Rakon Investment HK Limited	4	4
Total receivables from joint venture, Rakon HK Limited	93	152

Payables to joint venture, Centum Rakon India Private Limited, from

Rakon Limited	5	-
Rakon France SAS	1,853	3,256
Total payables to joint venture, Centum Rakon India Private Limited	1,858	3,256

Payables to associate, Chengdu Shen-Timemaker Crystal Technology Co. Limited, from

Rakon Limited	-	31
Total payables to associate, Chengdu Shen-Timemaker Crystal Technology Co. Limited	-	31

	2018	2017
	\$000s	\$000s
Following are sales and purchases to/from Siward Crystal Technologies Co. Limited		
Sales	190	-
Purchases	(174)	-
Engineering support services	115	-
Net income statement impact	131	-

Receivables from, Siward Crystal Technology Co. Limited, to		
Rakon Limited	150	1
Total receivables, Siward Crystal Technology Co. Limited	150	1

Payables to, Siward Crystal Technology Co. Limited, from		
Rakon Limited	9	-
Rakon France SAS	7	-
Total payables to, Siward Crystal Technology Co. Limited	16	-

Refer also to note B2 b) for explanation of the investment by Siward and attribution of proceeds.

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. During the prior year 38,016,681 ordinary shares were issued, refer note D6 a) and note D6.

	2018	2017
	\$000s	\$000s
Weighted average number of ordinary shares on issue (note D6 a)	226,962	195,281
Continuing operations		
Earnings/(loss) attributable to equity holders of the Group	9,999	(13,558)
Basic earnings/(losses) per share (cents per share)	4.4	(6.9)

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. During the prior year 38,016,681 ordinary shares were issued, refer note D6.

	2018	2017
	\$000s	\$000s
Weighted average number of ordinary shares on issue (note D6 a)	226,962	195,281
Adjustments for dilutive potential ordinary shares (restricted ordinary shares and share options)	3,622	3,622
Weighted average number of ordinary shares for diluted earnings per share	230,584	198,903
Continuing operations		
Earnings/(loss) attributable to equity holders of the Group	9,999	(13,558)
Diluted earnings/(losses) per share (cents per share)	4.3	(6.8)

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 (2017: \$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 2018 (2017: nil). The Trust Deed makes provision for the Company to require repayment of the loans in certain circumstances.

As at 31 March 2018, 321,972 (31 March 2017: 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 (2017: 0.14%).

D11 c) Rakon Employee Share Option Scheme (2015)

In July 2014 Rakon Limited established an employee share option scheme with 4,800,000 options issued to selected employees. Each option granted will convert to one ordinary share on exercise. A participant may exercise up to half of his or her options any time after the second and third anniversaries, subject to the weighted average share price on the 10 days preceding the date of exercise, exceeding a benchmark share price. Options lapse on their fourth anniversary.

	Option price	2018 Number of options	2017 Number of options
Opening balance	-	3,300,000	4,700,000
Granted	0.25	-	-
Cancelled	0.25	-	(1,400,000)
Balance outstanding	0.25	3,300,000	3,300,000

Share options outstanding at 31 March 2018 and expiring in the year to 31 March 2019:

	Exercise price	Benchmark price	2018 Number of options	2017 Number of options
Year ended 31 March 2019	0.25	0.30	3,300,000	3,300,000

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 4.0%. 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.

During the year no options were cancelled due to participants ceasing employment (2017: 1,400,000). There have been no allocations since July 2014.

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 along with the associated sections. 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 New Zealand Stock Exchange (NZX) (Main Board) Listing Rules.

These consolidated financial statements for the year ended 31 March 2018 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 assets held for sale – measured at cost.

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 assets at fair value through profit or loss or loans and receivables. 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.

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).

Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise when the Group provides money, goods or services directly to a customer with no intention of selling the receivable. They are included in current assets, except for those with maturities greater than 12 months after the balance date which are classified as non-current assets. The Group's loans and receivables comprise 'trade and other receivables' and 'cash and cash equivalents' in the balance sheet.

Purchases and sales of financial assets are recognised on trade date (the date on which the Group commits to purchase or sell the asset). Loans and receivables are carried at amortised cost using the effective interest method.

Derivative financial instruments

The Group uses derivative financial instruments to hedge its exposure to foreign exchange and interest rate risks. The Group does not hold or issue derivative financial instruments for trading purposes. However, derivatives that do not qualify for hedge accounting are accounted for as trading instruments.

Derivative financial instruments are initially recognised at fair value on the date a derivative contract is entered into and are re-measured at their fair value at subsequent reporting dates. The method of recognising the resulting gain or loss, depends on whether the derivative is designated as a hedging instrument and if so, the nature of the item being hedged. The Group designates certain derivatives as hedges of a particular risk associated with a recognised liability or a highly probable forecast transaction (cash flow hedge).

The Group documents at the inception of the transaction, the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in cash flows of hedged items.

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

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income. The gain or loss relating to the ineffective portion is recognised immediately in the statement of comprehensive income within other gains/(losses) – net.

Amounts accumulated in equity are recycled in the statement of comprehensive income in the periods when the hedged item affects profit or loss (for example, when the forecast sale that is hedged takes place). The gain or loss relating to the effective portion of interest rate swaps hedging variable rate borrowings, is recognised in the statement of comprehensive income within finance costs. The gain or loss relating to the effective portion of forward foreign exchange contracts hedging export sales, is recognised in the statement of comprehensive income within sales. The gain or loss relating to the effective portion of forward foreign exchange contracts hedging raw materials purchases, is recognised in the statement of comprehensive income.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any 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 statement of comprehensive income. 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 statement of comprehensive income within other gains/(losses) – net.

Certain derivative instruments do not qualify for hedge accounting. Changes in the fair value of any derivative instrument that does not qualify for hedge accounting are recognised immediately in the statement of comprehensive income within other gains/(losses) – net.

D12 c) Changes in accounting policy and disclosures

New standards, amendments and interpretations adopted by the Group as of 1 April 2018

There are no new standards, amendments and interpretations adopted by the Group as of 1 April 2018.

New standards, amendments and interpretations not yet adopted

Certain new accounting standards and interpretations have been published that are not mandatory for 31 March 2018 reporting periods and have not been early adopted by the Group. The Group's assessment of the impact of these new standards and interpretations is set out below.

NZ IFRS 9 Financial instruments

NZ IFRS 9 addresses the classification, measurement and de-recognition of financial assets and financial liabilities, introduces new rules for hedge accounting and a new impairment model for financial assets.

Management has yet to assess the financial impact of applying the new standard on the Group's financial statements however have identified the following areas that will be affected:

- Financial assets not in a hedge relationship appear to satisfy the conditions for classification as fair value through profit or loss and hence there would be no change to the accounting for these.
- Financial assets in a hedge relationship would continue to be accounted for under the hedge accounting rules.
- Financial liabilities not in a hedge relationship appear to satisfy the conditions for classification as fair value through profit or loss or amortised cost and hence there would be no change to the accounting for these.
- Financial liabilities in a hedge relationship would continue to be accounted for under the hedge accounting rules.
- There is no change to the Balance Sheet.
- The new impairment model requires the recognition of impairment provisions based on expected credit losses rather than only incurred credit losses as is the case under IAS 39. It applies to financial assets classified at amortised cost, debt instruments measured at fair value through other comprehensive income, contract assets under IFRS 15 Revenue from Contracts with Customers, lease receivables, loan commitments and certain financial guarantee contracts.

The new hedge accounting rules will align the accounting for hedging instruments more closely with the Group's risk management practices. As a general rule, more hedge relationships might be eligible for hedge accounting, as the standard introduces a more principles-based approach.

The new standard also introduces expanded disclosure requirements and changes in presentation. These are expected to change the nature and extent of the Group's disclosures about its financial instruments, particularly in the year of the adoption of the new standard.

NZ IFRS 9 must be applied for financial years commencing on or after 1 January 2018.

NZ IFRS 15 Revenue from contracts with customers

The IASB has issued a new standard for the recognition of revenue. This will replace IAS 18 which covers contracts for goods and services and IAS 11 which covers construction contracts. The new standard is based on the principle that revenue is recognised when control of a good or service transfers to a customer. The standard permits either a full retrospective or a modified retrospective approach for the adoption.

Management has yet to assess the effects of applying the new standard on the Group's financial statements.

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 accounting for lessors will not significantly change.

The new standard must be applied for financial years commencing on or after 1 January 2019. At this stage, the Group does not intend to adopt the standard before its effective date. The standard will affect primarily the accounting for the Group's operating leases with the main impact increasing lease assets and increasing financial liabilities. Management has yet to assess and quantify the effects of applying the new standard on the Group's financial statements.

There are no other standards that are not yet effective and that would be expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

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.

Group companies

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 (group of units) and then, to reduce the carrying amount of the other assets in the unit (group of units) 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.

Refer also note C1 a).

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

	2018	2017
	\$000s	\$000s
Imputation credit available for use in subsequent periods	11,202	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	
				2018	2017
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



Independent Auditor's Report

To the shareholders of Rakon Limited

Rakon Limited's financial statements comprise:

- the balance sheet as at 31 March 2018;
- 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 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 2018, 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: \$1,011,000, 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 of intangible assets and property, plant and equipment
- Accounting for the investment in Thinextra Limited
- Valuation of research and development costs (“R&D”) associated with the development of new products, included within product development and assets under construction categories of intangible assets.

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 the two segments, New Zealand and France, which make up 100% of external revenue. We conducted specific audit procedures over the investments in Timemaker, Centum Rakon India and Thinextra.



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 this matter
<p>Impairment risk of intangible assets and property, plant and equipment</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 risk to non-financial assets held by the Group. Market capitalisation of the Group at 31 March 2018 was \$45.8 million compared to the carrying value of the net assets of \$87.1 million.</p> <p>The Directors performed an assessment of impairment on an asset class basis, as well as performing a business valuation, using a discounted cash flow model to support the valuation of the Group as a whole on a value in use basis.</p> <p>The key assumptions used by the Directors and management in the discounted cash flow model are included in note C1a of the financial statements which include:</p> <ul style="list-style-type: none">• Revenue and margin growth rates• Terminal growth rates• Discount rates. <p>The results of the Directors' assessment is detailed in note C1a.</p>	<p>Our audit procedures included the following:</p> <ul style="list-style-type: none">• We updated our understanding of management's business processes and controls applied in their assessment of indicators of impairment of non-financial assets and determining any impairment required. We assessed the results of management's impairment assessment. Specifically, we:<ul style="list-style-type: none">- Considered the historical recoverability of the inventory balances and whether there is any indication of impairment- Assessed whether there were any 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.• We compared cash flow forecasts used as the basis for management's assessment in the discounted cash flow models to the latest Board approved budgets and long-term forecasts.• We tested the mathematical accuracy of the underlying model and agreed the carrying value of each CGU to the audited financial records.• We assessed the reliability of management's forecasts by performing a look back analysis of historical forecasts against actual results.• We considered key assumptions used in the discounted cash flow models, in particular the estimated revenue growth rates and margins, 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.• We engaged our valuation expert to assist in our assessment of the reasonableness of key assumptions used by management.

In particular, we obtained an understanding of the terminal growth rates and discount rates used by management and challenged the reasonableness of those rates by comparing them to relevant industry rates.

- We performed sensitivity analyses on the terminal growth rates and discount rates used in the impairment calculations.
- We 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.
- We assessed the adequacy of disclosures in the financial statements to ensure that this is compliant with the requirements of NZ IFRS.

As a result of these procedures we did not propose any adjustments.

Accounting for the investment in Thinxtra Limited

Rakon holds ordinary shares in Thinxtra Limited (“Thinxtra”), an equity accounted associate investment. During the year Thinxtra issued a number of convertible preference shares to other parties. Rakon did not participate in the convertible preference share offer. Rakon also sold 199,763 ordinary shares as disclosed in note B4c.

In calculating Rakon’s share of the net assets of it’s investment at 31 March 2018 and at the date Rakon sold some of their ordinary shares, as well as the dilution gain recognised in the statement of comprehensive income, the Directors have applied judgement as detailed in note B4d.

The key judgement applied is that certain rights attached to the convertible preferences shares over and above the ordinary shares are protective and not substantive in nature. Therefore, the convertible preference shares are treated as one pool for the purposes of determining the proportion of ownership held by Rakon in Thinxtra. That is, the percentage of ownership is based on Rakon’s proportion of shares including all convertible preference shares, as these shares in substance hold the same voting rights as ordinary shares.

Our audit procedures included the following:

- We read the shareholder agreements that set out the rights attached to ordinary and convertible preference shares to gain an understanding of the respective rights.
- We discussed these rights with management of Rakon and Thinxtra, to confirm and corroborate our understanding.
- We consulted with our accounting technical team to determine the appropriate accounting treatments.
- We considered alternate views and market evidence of recent trades in ordinary and convertible preference shares.

As a result of these procedures we have concluded that the accounting treatment for Thinxtra is appropriate, however this is an area of judgement and appropriate disclosures have been made in note B4d.

Key audit matter

Valuation of research and development costs associated with the development of new products

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 \$7.9 million at 31 March 2018. There is the risk that the costs that are being capitalised for development may not meet the criteria for capitalisation as an intangible asset under NZ IFRS.

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
- Global positioning products
- Space and defence products.

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.

How our audit addressed this matter

Our audit procedures included the following:

- 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 recognition of the 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 looking at and comparing the level of sales currently being achieved.
- We challenged the Directors' assessment of the future income expected from new telecommunications infrastructure products by looking at and comparing the level of sales generated from previous generations of telecommunications infrastructure products and market forecast reports.
- In terms of the carrying value of R&D associated with the development of new products, we challenged management's forecasts with respect to the assumptions applied to those specific forecasted revenues. Our procedures included:
 - Reviewing communications with customers on the extent of new product development;
 - Understanding the level of orders in place confirmed with customers.

As a result of these procedures we did not propose any adjustments.

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 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 to be included in the annual report 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 auditors' 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:

PricewaterhouseCoopers

Chartered Accountants
17 May 2018

Auckland

Shareholder Information

Directors

Non-executive directors receive fees determined by the Board on the recommendation of the Remuneration Committee plus reasonable travelling, accommodation and other expenses incurred in the course of performing duties or exercising powers as directors. Shareholders approved a total pool of \$360,000 for the remuneration of non-executive directors in September 2012. Annual directors' fees were set at \$120,000 for the Chairman and \$60,000 for each non-executive director with effect from 1 April 2017.

Brent Robinson and Darren Robinson (ceased as a director 16 September 2016) are employed by Rakon as Managing Director and Sales & Marketing Director respectively and receive salary and other remuneration and benefits in respect of their employment. Darren Robinson ceased as a director on 16 September 2016 and continues to be employed as Rakon's Sales & Marketing Director.

The following people held office as Directors and received the following remuneration including benefits during the year:

Name	Category	Remuneration	
		2018	2017
Bryan Mogridge	Independent Chairman	\$120,000	\$120,000
Bruce Irvine	Independent	\$60,000	\$60,000
Keith Oliver ¹	Independent	\$60,000	\$3,548
Brent Robinson	Executive	\$725,902	\$688,692
Yin Tang Tseng ¹	Non-Executive	\$60,000	\$3,548
Roger Yao ²	Non-Executive (Alternate Director of Yin Tang Tseng)	-	-
Lorraine Witten ¹	Independent	\$60,000	\$3,548
Warren Robinson ³	Non-Executive	\$30,000	\$60,000
Darren Robinson ⁴	Executive	-	\$558,286
Herbert Hunt ⁵	Independent	-	\$15,645
Sir Peter Maire ⁶	Non-Executive	-	\$55,000

¹ Appointed as a Director effective 10 March 2017

² Appointed by Yin Tang Tseng as his Alternate Director effective 27 June 2017

³ Ceased as a Director of Rakon Limited effective 17 August 2017

⁴ Ceased as a Director of Rakon Limited effective 16 September 2016

⁵ Resigned as a Director of Rakon Limited effective 4 July 2016

⁶ Resigned as a Director of Rakon Limited effective 22 February 2017

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 2018 are included in the relevant bandings for remuneration disclosed on page 58 of this Annual Report.

The following people held office as Directors of subsidiary companies at 31 March 2018:

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

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 a policy of 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 made in the Company's interests register for the year 1 April 2017 to 31 March 2018:

Bryan William Mogridge

Shareholder in:

- Beneficial interest in 61,616 ordinary shares in Thinxtra Limited following the purchase of 1,616 shares by the Mogridge Family Trust on 10 November 2017 for a total consideration of \$27,624.

Bruce Robertson Irvine

Director of:

- Resigned as Director of Christchurch City Holdings Limited on 1 April 2017.
- Appointed as Director of Amaia Day Spa Limited on 2 June 2017.
- Appointed as Director of USC Investments Limited on 3 November 2017.
- Appointed as Director of J.S. Ewers Limited on 1 December 2017.
- Appointed as Director of Cowes Bay Holdings (NZ) Limited on 26 April 2018.

Keith William Oliver

Director of:

- Appointed as Director of Vigil Nominees No.2 Limited on 19 December 2017.

Brent John Robinson

Director of:

- Resigned as Director of Thinxtra Pty. Limited on 22 September 2017.

Warren John Robinson

Director of:

- Ceased as Director of Rakon Limited on 17 August 2017.

Lorraine Mary Witten

Director of:

- Resigned as Director of Kordia Group Limited on 30 April 2017.
- Appointed as Director of TIL Logistics Group Limited on 6 December 2017.
- Resigned as Director of Wellington Regional Economic Development Agency on 31 December 2017.

Directors' shareholdings

Directors' shareholdings are shown as at balance date.

Name	Category	2018
Bryan Mogridge	shares held with beneficial interest	2,015,926
	shares held with non-beneficial interest ¹	2,093,299
Brent Robinson	shares held with beneficial interest	34,846,237
	held by associated persons	10,339,845
Warren Robinson	shares held with beneficial interest	24,930,823
	held by associated persons	20,255,259
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

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 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	26	\$230,001 – \$240,000	1
\$110,001 – \$120,000	9	\$240,001 – \$250,000	2
\$120,001 – \$130,000	11	\$250,001 – \$260,000	2
\$130,001 – \$140,000	11	\$260,001 – \$270,000	2
\$140,001 – \$150,000	8	\$280,001 – \$290,000	2
\$150,001 – \$160,000	6	\$290,001 – \$300,000	1
\$160,001 – \$170,000	8	\$310,001 – \$320,000	1
\$170,001 – \$180,000	5	\$350,001 – \$360,000	1
\$180,001 – \$190,000	6	\$370,001 – \$380,000	1
\$190,001 – \$200,000	5	\$460,001 – \$470,000	1
\$200,001 – \$210,000	2	\$540,001 – \$550,000	1
\$210,001 – \$220,000	7	\$590,001 – \$600,000	1
\$220,001 – \$230,000	3		

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

Substantial security holders

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

According to the notices given under the 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 2018 in respect of the number of voting securities below. As at 31 March 2018, the Company had one class of shares on issue, comprising of 229,055,272 voting shares:

Name	Shareholding	Shareholding	%
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 security holders as at 26 April 2018

Size of shareholding	Number of holders	%	Total number held	%
1 – 99	15	0.32	792	0.00
100 – 199	54	1.16	7,028	0.00
200 – 499	197	4.22	60,139	0.03
500 – 999	283	6.07	185,063	0.08
1,000 – 1,999	662	14.19	863,669	0.38
2,000 – 4,999	1,164	24.95	3,591,618	1.57
5,000 – 9,999	701	15.02	4,573,198	2.00
10,000 – 49,999	1,204	25.80	23,844,200	10.41
50,000 – 99,999	172	3.69	11,472,946	5.01
100,000 – 499,999	177	3.79	32,680,606	14.27
500,000 – 999,999	15	0.32	10,116,194	4.42
1,000,000 – 99,999,999	22	0.47	141,659,819	61.85
Total	4,666	100.00	229,055,272	100.00

Largest security holders as at 26 April 2018

Name	Shareholding	%
Siward Crystal Technology Co. Limited	38,016,681	16.60
Warren John Robinson & Trusts Limited	24,930,823	10.88
New Zealand Central Securities Depository Limited	19,408,211	8.47
Brent John Robinson	9,915,414	4.33
Darren Paul Robinson	9,914,180	4.33
JBWere (NZ) Nominees Limited (52093 A/C)	8,753,630	3.82
Tahia Investments Limited	5,441,945	2.38
Etimes Group International Limited	3,697,716	1.61
Iconic Investments Limited	2,358,192	1.03
Rakon ESOP Trustee Limited	2,093,289	0.91
Michael Walter Daniel & Nigel Geoffrey Ledgard Burton & Michael Murray Benjamin (Wairahi A/C)	2,000,000	0.87
Fergus David Elliott Brown	1,837,484	0.80
Craig John Thompson	1,734,829	0.76
HLR Holdings Company Limited	1,584,736	0.69
Stuart Robert Kidd	1,529,000	0.67
F B Trustee Limited	1,507,435	0.66
Trevor John Logan	1,500,000	0.65
Han Meng Tee & Nuanla Or Sodrung	1,255,000	0.55
Pat Redpath O'Connor & Kay O'Connor & Robert Norman Burnes (Hillview A/C)	1,072,430	0.47
Ling Te Hu	1,058,824	0.46

New Zealand Central Securities Depository Limited (NZCSD) is a depository system that allows electronic trading of securities to members. As at 26 April 2018, the eight largest shareholdings in the Company held through NZCSD were:

Name	Shareholding
Accident Compensation Corporation	10,397,262
BNP Paribas Nominees (NZ) Limited	6,391,658
HSBC Nominees (New Zealand) Limited	1,306,235
JPMorgan Chase Bank NA NZ Branch	679,739
Citibank Nominees (New Zealand) Limited	265,080
BNP Paribas Nominees (NZ) Limited	195,079
Public Trust Class 10 Nominees Limited	106,977
ANZ Custodial Services New Zealand Limited	66,181

Waivers

The Company had no NZX waivers granted or published by NZX within or relied upon within the 12 months ending 31 March 2018.

Credit rating

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

Donations

In accordance with section 211(1)(h) of the Companies Act 1993, the Company records that it donated a total of \$5,000 to various charities in the 12 months ended 31 March 2018. The Company's subsidiaries did not make any donations in the 12 months ended 31 March 2018.

Corporate Governance Report

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

The Board considers that its corporate governance framework is in line with the NZX Corporate Governance Code released in 2017 (NZSX Code), except as stated within this report. In this regard, there are several items which Rakon is progressing to ensure compliance with the NZX Code. The information in this report is current as at the date of release of this Annual Report 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's 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, staff and suppliers in all activities conducted by or in the interests of the Company.

These standards, as well as 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 August 2015. The Code will be reviewed again in FY2019. Additional guidance for Directors is provided in the Board Charter which was last reviewed in March 2018.

The Code of Conduct requires Directors and employees to promptly report material breaches of the Code. A separate Whistle Blowing Policy will be developed by the Board in FY2019.

Rakon has in place processes to enable training for all new and existing employees to ensure awareness and understanding of the Business Code of Conduct.

Rakon has a Financial Product Trading Policy to mitigate the risk of insider trading in Rakon securities by employees and Directors. A copy of this is available on Rakon's website. This was last reviewed and updated in March 2018. Additional trading restrictions apply to Restricted Persons including Directors and certain employees. Details of Directors' share dealings are on page 57 of the 2018 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.

Rakon's Board operates under a written Charter which sets out the structure of the Board; the procedures for the nomination, resignation and removal of Directors; outlines the responsibilities and roles of the Chairman and Directors; 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 that 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 Chairman 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.

Board Composition and Appointment

The number of elected Directors and the procedure for their retirement and re-election at Annual Shareholders' Meetings are set out in the Constitution of the Company.

While the nomination process for new Director appointments is the responsibility of the whole Board, the Nomination Committee is responsible for identifying and recommending candidates, 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.

At each Annual Shareholders' Meeting, one-third of the current Directors retire by rotation and are eligible for re-election. Any Directors appointed since the previous annual meeting must also retire and are eligible for election. In accordance with the Constitution, the Board has resolved that the Managing Director will not be required to retire by rotation.

The Board supports the separation of the roles of Chairman and CEO and the appointment of an independent chairman.

In compliance with the new NZX Code, Rakon will provide written agreements to existing and new Directors in FY2019.

The Board currently comprises of six Directors: an independent Chairman, three independent Directors, one non-executive Director and the Managing Director. In order for a director to be independent, the Board has determined that he or she must not be an executive of Rakon and must have no disqualifying relationships. The Board follows the guidelines of the NZX Listing Rules.

Information on each Director is available on the Rakon website and on page 56 of the 2018 Shareholder Information which accompanies the 2018 Annual Report. Director's interests are disclosed on page 57 of the 2018 Annual Report.

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.

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 will be undertaken in FY2019.

Diversity

Rakon recognises the value of diversity of thinking and skills. This can arise through a number of different characteristics including but not limited to the following; gender, ethnic background, religion, age, marital status, culture, disability, economic background, education, language, physical appearance and sexual orientation. Different backgrounds, communication styles, life-skills and interpersonal skills are also considered of value in building diverse teams.

In FY2019, Rakon will look to develop a formal Diversity and Inclusion Policy and will set objectives for promoting diversity and inclusion within the Company.

As at 31 March 2018, females represented 14% (FY17: 14%) of Directors and officers of the Company. Officers are defined as being the Chief Executive Officer and specific direct reports of the CEO having key functional responsibility.

	31 March 2018	31 March 2017
Directors		
Females	1	1
Males	5	6
Officers		
Females	1	1
Males	7	6

Board Meetings and Attendance

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

The table below sets out Director attendance at Board and committee meetings during FY2018. In total, there were thirteen Board meetings, two Audit and Risk Management Committee meetings, three Remuneration Committee meetings and two Nomination Committee meetings.

	Board Meetings	Audit & Risk Management Committee	Remuneration Committee	Nomination Committee
Total number of meetings held	13	2	3	2
Bryan Mogridge	13	2	3	2
Bruce Irvine	12	2	-	-
Keith Oliver	13	-	3	2
Brent Robinson	13	-	-	-
Warren Robinson ¹	5	1	-	-
Lorraine Witten	11	-	3	2
Roger Yao: Alternate director appointment for Yin Tang Tseng ²	12	-	-	-

¹ Ceased as Director of Rakon Limited 17 August 2017.

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 Chairman of Siward Crystal Technology Co. Limited, a substantial shareholder (16.6%) in Rakon.

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 Board committees review and analyse policies and strategies that are within their terms of reference. They examine 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 committee Charters are on the Rakon website.

Minutes of each committee meeting are forwarded to all members of the Board, who are all entitled to attend any committee meeting. Each committee is empowered to seek any information it requires from employees in pursuing its duties and to obtain independent legal or other professional advice.

The membership and performance of each committee is to be evaluated as part of the Board performance evaluation, to be undertaken in FY2019.

The current committees of the Board are the Audit and Risk Management Committee (ARMC), the Remuneration Committee and the Nomination Committee.

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

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.

Audit and Risk Management Committee

The Audit and Risk Management Committee is responsible for overseeing the risk management (including treasury and financing policies), insurance, accounting and audit activities of Rakon; and for reviewing the adequacy and effectiveness of internal controls, meeting with and reviewing the performance of external auditors, reviewing the consolidated financial statements and making recommendations on financial and accounting policies.

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 this recommendation.

Members as at 31 March 2018 were Bruce Irvine (Chair), Bryan Mogridge, and Lorraine Witten. The committee Chair is not the Chair of the Board.

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

Remuneration Committee

The Remuneration Committee is responsible for overseeing management succession planning, establishing employee incentive schemes, reviewing and approving the compensation arrangements for the executive Director and senior management, and recommending to the full Board the compensation of Directors. Management may attend meetings only at the invitation of the Committee.

Members as at 31 March 2018 were Bryan Mogridge (Chair), Keith Oliver, and Lorraine Witten.

Nomination Committee

The Nomination Committee is responsible for ensuring the Board is composed of Directors who contribute to the successful management of the Group, ensuring formal review of the performance of the Board, individual Directors and the Board's committees, and ensuring that effective induction and training programmes are in place for new and existing Directors. Management may attend meetings only at the invitation of the Committee.

The members of the Nomination Committee as at 31 March 2018 were Bryan Mogridge (Chair), Keith Oliver and Lorraine Witten.

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. Rakon has a Continuous Disclosure Policy to ensure that material information is identified, reported, assessed and, where required, disclosed to the market in a timely manner. This was adopted by the Board in March 2018.

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.

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 Management committee oversees the quality and integrity of external financial reporting, including the accuracy, completeness, 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 2018, the Directors believe that proper accounting records have been kept that enable the determination of the Company's financial position with reasonable accuracy, and facilitate 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 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 against these in the Chair and CEO's commentary in shareholder reports.

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, Pont Sainte Marie – France 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 a clean green 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 staff, customers and the communities in which it operates.

Principle 5 – Remuneration

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

Remuneration of Directors and senior executives is the key responsibility of the Remuneration Committee. External advice is sought on a regular basis to ensure that remuneration is benchmarked to the market for senior management, Director and Board positions. While Rakon has established guidelines in place in regard to remuneration, it will look to develop a formal Remuneration Policy in FY2019.

Director Remuneration

The total remuneration available for Directors is fixed 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 Annual Shareholders' Meeting in September 2012. There have been no increases in the individual amounts paid for Board roles since 2008. The only increases have been to the annual pool to allow for the appointment of an increased number of Directors.

Any proposed increases in non-executive Director fees and remuneration will be put to shareholders for approval. If independent advice is sought by the Board, it will be disclosed to shareholders as part of the approval process.

Board Role	Approved Remuneration
Chairman	\$120,000
Non-executive Director	\$60,000
Executive Director	-

Details of individual Directors' remuneration are detailed on page 56 of the 2018 Annual Report.

Executive Remuneration

In general, executive remuneration comprises a fixed base salary and an at-risk short-term incentive payable annually. Some executives also receive fringe benefits and/or a long term incentive in the form of a share plan that has been made available to participating executives and senior managers. At-risk incentives are paid against targets agreed with executives at the commencement of the period and are based on financial measures including earnings targets and progress against objectives related to the strategic plan and other personal objectives.

Executives' remuneration and entitlements are detailed under Employees Remuneration information on page 58 of the 2018 Annual Report.

CEO Remuneration

The review and approval of the CEO's remuneration is the responsibility of the Board.

External advice is sought on the remuneration of the CEO and was last obtained in 2016.

The CEO's remuneration comprises a fixed base salary, fringe benefits, and an at-risk short-term incentive payable annually. At-risk incentives are paid against targets agreed with the CEO, and are based on financial measures including earnings targets and progress against objectives related to the strategic plan and other personal objectives.

	Salary	Benefits	Subtotal	At Risk Incentive		Total Remuneration
				STI ¹	% STI against maximum	
FY2018	\$619,358	\$33,044	\$652,402	\$73,500	40%	\$725,902
FY2017	\$656,053	\$32,639	\$688,692	-	0%	\$688,692

¹ STI (short term incentive) is based on payments made in the period but relates to assessment of performance in the prior period.

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. The Board delegates day to date management of the risk to the Chief Executive Officer. In addition, the Audit and Risk Management Committee provides an additional and more specialised oversight of Company risks in addition to the oversight provided by the Board. The Audit and Risk Management Committee's Charter details the specific responsibilities of the Committee in regard to risk assurance.

The executive team and senior management are required to regularly identify the major risks affecting the business and develop structures, practices and processes to manage and monitor these risks. Each half year the Chief Financial Officer also reports on other risks including fraud, and on internal control and insurances.

The Board is satisfied that major risks are reviewed and also intends to implement a more detailed risk management framework in FY2019.

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

More details of Rakon's financial risk management are available on pages 25 to 29 of the 2018 Annual Report.

Health and Safety

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 ensuring that the systems used to identify and manage health and safety risks are fit for purpose, being effectively implemented, regularly reviewed and continuously improved.

Rakon has a number of operational subsidiary businesses in New Zealand, France and the UK, 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, and a monthly report to the Board provides an update on Key Performance Indicators, activities and key events. The Board is satisfied that there is a comprehensive health and safety system and processes in place.

Incident rates is a key measure reported to the Board for the operational subsidiary businesses. The Company has achieved a low level of Lost Time Injuries with only one incurred in the year to 31 March 2018.

Rakon is currently formalising a Health & Safety Policy to ensure 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, so that Rakon's external financial reporting is viewed as being highly objective and without bias.

The Audit and Risk Management Committee (ARMC) 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.

The Committee meets regularly with the external auditor to approve its 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 ARMC also assesses the auditor's independence on an annual basis.

For the financial year ended 31 March 2018, PricewaterhouseCoopers (PwC) was the external auditor for Rakon Limited. PwC was re-appointed under the Companies Act 1993 at the 2017 Annual Meeting. The last audit partner rotation was in 2016.

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 FY2018 were the review of the Callaghan Innovation Growth Grant claim and other non-audit related services that involved the provision of advice rather than recommendations. These were deemed to have no effect on the independence or objectivity of the auditor in relation to audit work. The amount of fees paid to PwC for audit and non-audit work are identified on page 14 of the 2018 Annual Report. An External Auditor Independence Policy will be prepared in FY2019 to formally set out the services that may or may not be performed by the external auditor.

PwC has provided the ARMC with written confirmation that, in its view, it was able to operate independently during the year.

PwC attends the Annual Shareholders' Meeting, and the lead audit partner is available to answer questions from shareholders at that meeting. PwC attended the 2017 Annual Shareholders' Meeting.

Rakon has a number of internal controls overseen by the ARMC and/or the Board. These include controls for computerised information system, cyber risk and information security, business continuity management, insurance, health and safety, conflicts of interest, and prevention and identification of fraud. The Company does not have an internal audit function.

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.

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

- Annual and Interim Reports
- Market announcements
- Annual Shareholders' Meeting
- 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 Annual Shareholders' Meeting and may raise matters for discussion at this event, and may vote on major decisions that affect Rakon. Voting is by poll, upholding the 'one share, one vote' philosophy.

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

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, the New Zealand Shareholders' Association, regulators, staff, customers and suppliers.

Exercise of disciplinary powers

No disciplinary action has been taken by either the NZX or the FMA against the Company during the financial year ended 31 March 2018.

Directory

Registered Office

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Mailing Address

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Directors

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Bryan Mogridge
Keith Oliver
Brent Robinson
Roger Yao
Yin Tang Tseng
Lorraine Witten

Principal Lawyers

Bell Gully
PO Box 4199
Shortland Street
Auckland 1140

Auditors

PricewaterhouseCoopers
Private Bag 92162
Auckland 1142

Share Registrar

Computershare Investor Services Limited
Private Bag 92119
Victoria Street West
Auckland 1142

Managing Your Shareholding Online:

To change your address, update your payment instructions
or view your investment portfolio including transactions, please visit:

www.investorcentre.com/nz

General enquiries can be directed to:

enquiry@computershare.co.nz

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Bankers

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rakon