

Rakon Everywhere



rakon

Rakon Limited

2019 Annual Meeting of Shareholders



Enabling the
Connected Future



Agenda

- ◀ Welcome & Introduction
- ◀ Items of Business
- ◀ Chair's Address
- ◀ Chief Executive's Review
- ◀ Shareholders' Questions
 - Annual Report and Business Update
- ◀ Ordinary Resolutions
 - Re-elect Brent Robinson
 - Re-elect Keith Watson
 - Authorise directors to fix remuneration of Auditor
- ◀ Special Resolution
 - Approve changes to Constitution
- ◀ General Business
- ◀ Meeting Close / Afternoon Tea



Bruce Irvine
Chair



Brent Robinson
Chief Executive

A. Chair's Welcome and Address

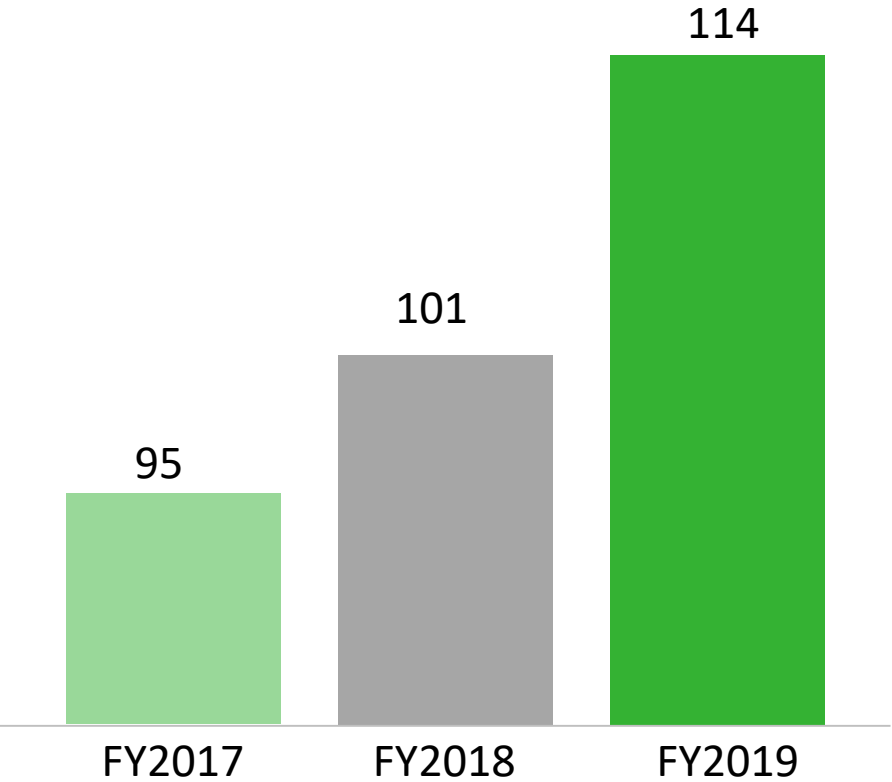
Bruce Irvine

Chair's Address

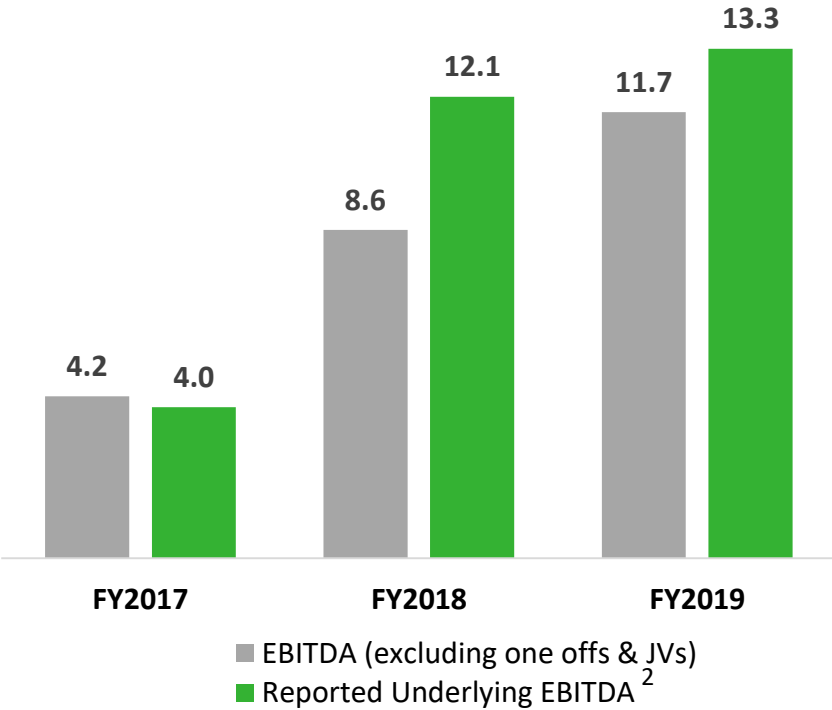


◀ Financial Snapshot

Revenue¹ (\$m)



EBITDA (\$m)



Notes:
¹All figures are presented in New Zealand dollars unless otherwise indicated.
² Refer to note B1 of the FY2019 audited financial statements for an explanation of how 'Non-GAAP Financial Information' is used, including a definition of 'Underlying EBITDA' and reconciliation to NPAT

Chair's Address

< Strategy and Governance

- ❑ **Strategic moves achieve positive outcomes for growth:**
 - 100% ownership of Rakon India
 - Technology and manufacturing partnership with Siward
- ❑ **Waived right to appoint director to Thinxtra**
 - Ceased to have significant influence
 - Change to fair value accounting
- ❑ **Board refresh**
 - New director appointed
- ❑ **New NZX Listing Rules**
 - Adopted from 1 April
 - Changes to Constitution proposed
- ❑ **Committed to continuous improvement in governance practices**
 - Strengthened compliance with NZX Corporate Governance Code



B. Chief Executive's Review

Brent Robinson

Chief Executive's Review

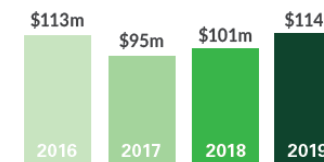


< FY2019, Financial Snapshot

- ❑ **Revenue grew**
 - The telecommunications market delivering the most significant portion of growth
- ❑ **Underlying EBITDA \$13.3m, up from FY2018**
- ❑ **Net Profit After Tax of \$3.4m**
 - Underlying profit an improvement (excluding one-offs in the prior year)
- ❑ **Gross Margin increase**
 - Improving mix with new products
- ❑ **Movement from Net Cash position to Net Debt position**
 - Purchase of Rakon India for \$6 million
 - Increased production capacity in India
 - Increased inventory

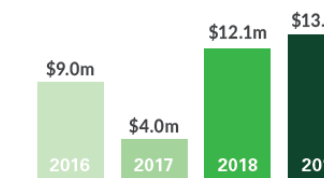
\$114.0m
▲ 12.7%

Revenue



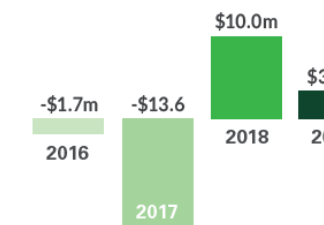
\$13.3m
▲ 9.7%

Underlying EBITDA



\$3.4m
▼ 66.4%

NPAT



Gross Margin

FY2019 45%
FY2018 43%

Net Debt position

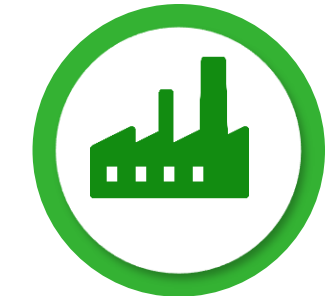


Chief Executive's Review

< FY2019, Key Achievements

■ Rakon India

- Positive earnings contribution
 - 100% ownership
- Operational developments:
 - Independent management team in place
 - Leased additional space, streamlined operations and invested in new equipment
 - Doubled manufacturing capacity: mainly for new products
 - Production output 56% higher than FY2018
 - Increase comes from recent growth in OCXOs for telecommunications, new designs and an increased share of Tier One customers' business



Chief Executive's Review

◀ Rakon India

□ Opportunities

- Cost effective manufacturing platform and benefit of highly skilled work force
- Collaboration with India-based engineers for new product development
- Penetrating growing local market
 - Space and defence; recent Moon mission
 - Telecommunications



Chief Executive's Review

< FY2019, Key Achievements

- ❑ **Siward: high volume, low cost manufacturing partner**
 - Siward successfully audited for supply to significant Rakon Tier One customers
 - New opportunities through expanded product offering
 - Targeting wider telecommunication requirements; large total addressable market

rakon



Chief Executive's Review

◀ Market Opportunities

□ Telecommunications: 5G

- Market upgrade of 4G networks to 5G is a significant opportunity for Rakon
 - Demand for 5G expected to continue for a number of years as spectrum is released, technology developed and new end uses established
 - We believe 5G road map will be gradual and incremental
 - Upgrade of existing 4G infrastructure to support initial roll-out of 5G
 - Deployment of new dedicated 5G infrastructure



Chief Executive's Review

< 4G Base Station Clocking Functions

- In 4G, the BBU and RRU are closely connected together. RRU uses simple clock recovery based on VCXOs as clock references

● **rakon ocxo**

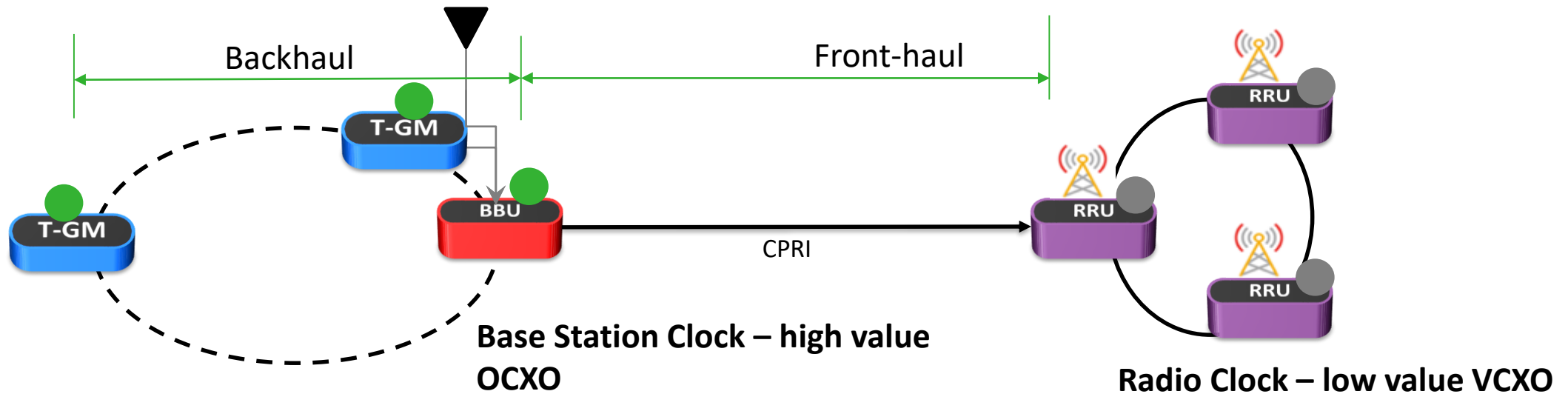
● **rakon vcxo**

BBU – Base Station Unit

RRU – Remote Radio Unit

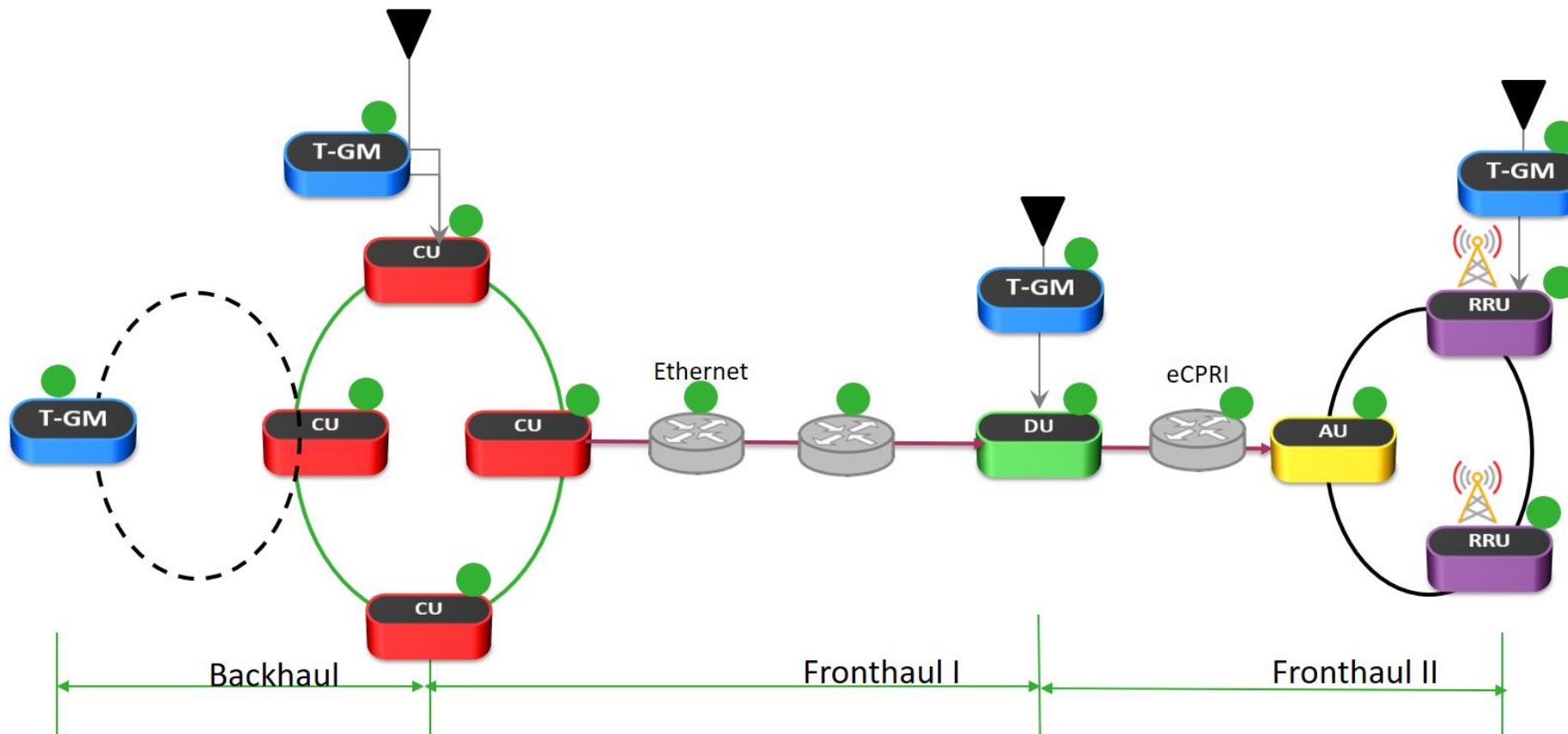
CPRI – Common Public Radio Interface

T-GM – Telecom Grand Master



Chief Executive's Review

◀ 5G Architecture & Oscillators



● rakon OCXO

CU – Centralised Unit

DU – Distribution Unit

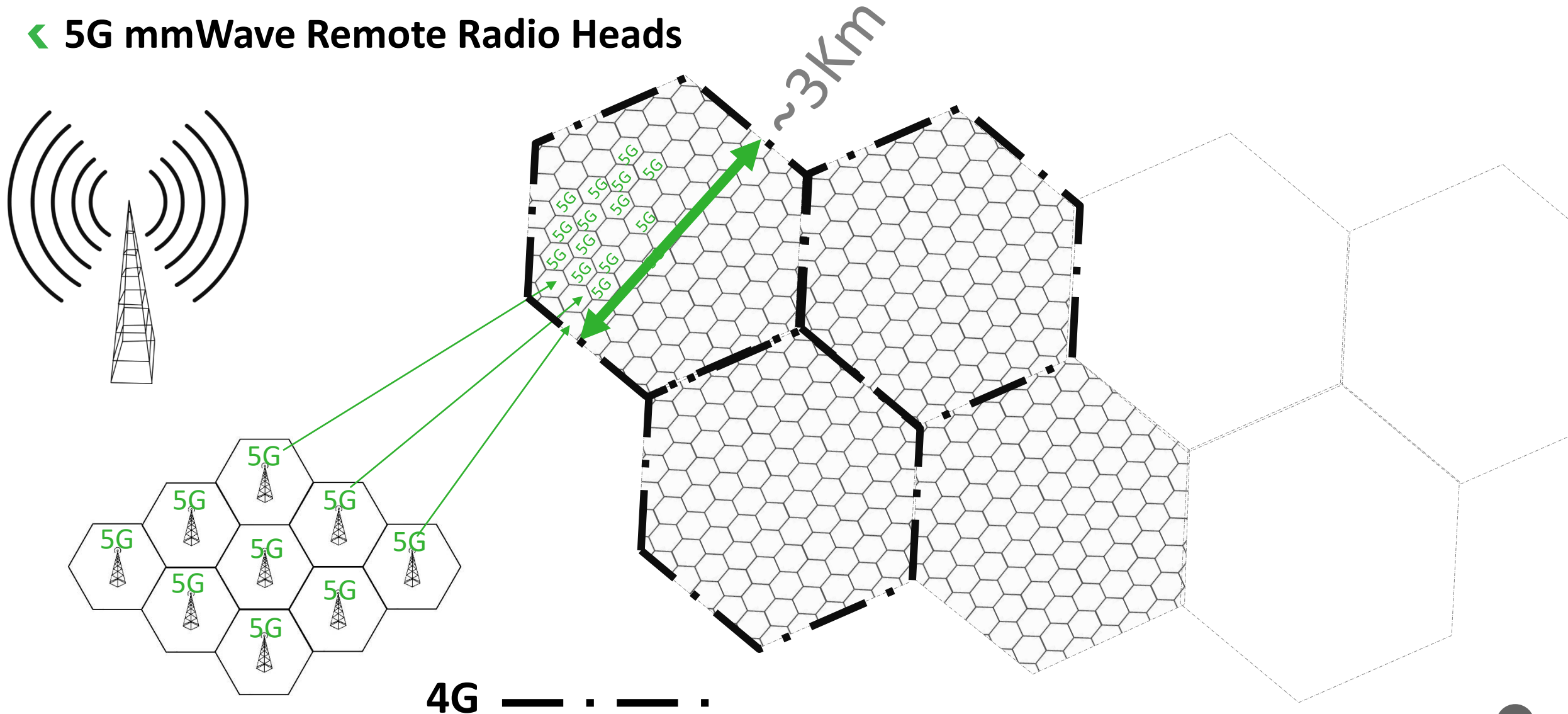
AU – Access Unit

eCPRI – Enhanced
Common Public Radio
Interface

T-GM – Telecom
Grand Master

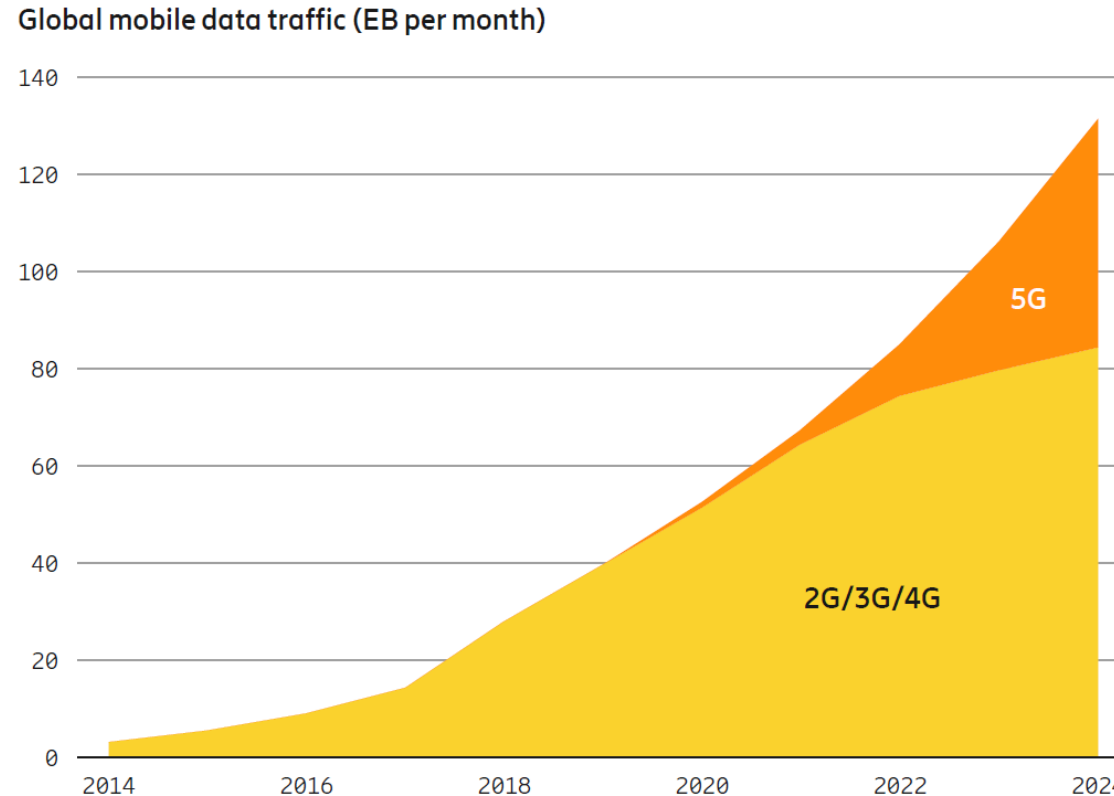
Chief Executive's Review

◀ 5G mmWave Remote Radio Heads



Chief Executive's Review

Expected Growth in Mobile Data Traffic



Source: Market Realist / Ericsson Mobility Report 2018

◀ Rakon is designed into all Tier One 5G equipment providers

◀ 5G examples

- ◻ Broadband to the home, M2M, Autonomous vehicles, IoT

Chief Executive's Review



◀ Market Opportunities

□ Space Market: 'New Space'

- The need for connectivity everywhere increases the need for satellite connections for communications
- In FY2019 Rakon received its first order for a New Space OCXO for a new Low Earth Orbit (LEO) constellation
 - LEO technology a major disruptor to the traditional geosynchronous orbit (GEO) satellite market
 - LEO development represents a new opportunity for Rakon's oscillator technology



Chief Executive's Review

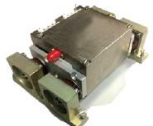


◀ R&D

- ▣ Enables Rakon to retain position as a leading provider
 - In FY2019 Rakon introduced 15 new products enabling our customers to advance their technology
 - Several world-first releases
 - Rakon is investing in new manufacturing processes to address market needs for smaller, leading edge oscillator performance



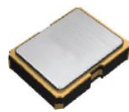
Space crystal resonators following the guidelines of high reliability standards



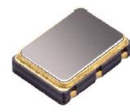
VCOs for radar applications



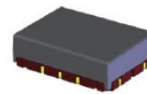
XOs and VCXOs for New Space satellite constellations



High temperature global positioning TCXOs



XOs for avionics and high reliability applications



5G Ultra-Stable TCXOs



ASIC OCXOs for telecommunications equipment



OCXOs for New Space satellite constellations



OCXOs for 4G and 5G equipment



Long holdover and Digital OCXOs for 5G equipment

Chief Executive's Review

◀ People & Capability

□ Shift to global management structure

- FY2018 – FY2019 created four new leadership positions
- July 2019 new position created: Chief Operating Officer
 - Sinan Altug appointed



Darren Robinson
Sales & Marketing Director



Sinan Altug
Chief Operations Officer



Margo Thomas
General Manager, Global People & Capability



Anand Rambhai
Chief Financial Officer



Roy Cann
Head of Global Engineering



Scott Stemper
Global Quality Manager



Cliff Hand
Senior Programme Manager, Global Integration



Maureen Shaddick
Company Secretary

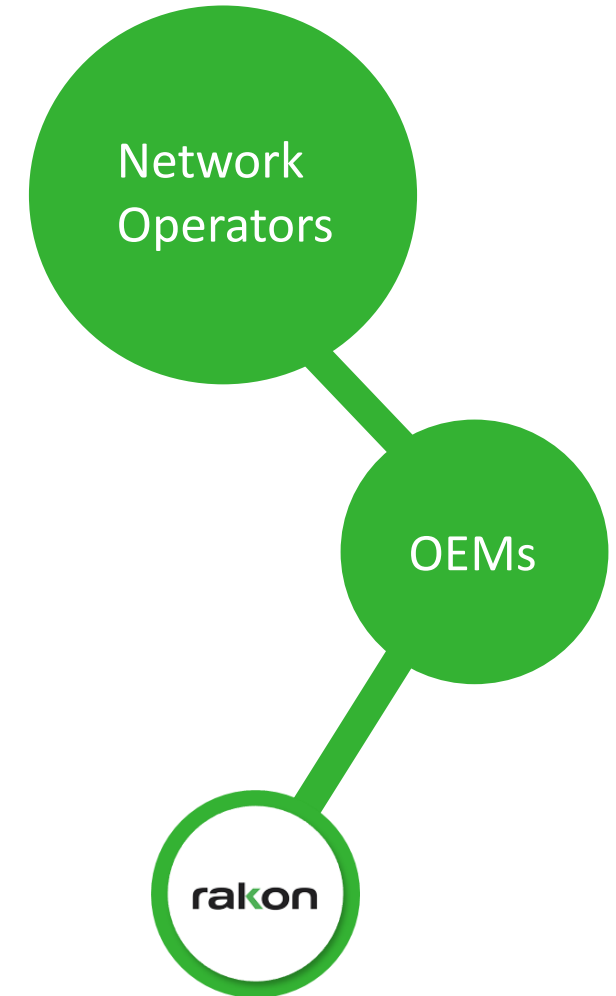


Borja Thomas (Thomas)
Head of Global Product Management

Chief Executive's Review

◀ Market Impact

- ❑ **Telecommunication market represents a significant part of Rakon's business**
 - Influenced by macro, global and regulatory factors
 - Rakon one of many players
 - Designed into all Tier One equipment providers
 - Providers are dependent on orders from network operators. Can be a waiting game, making forecasting challenging



Chief Executive's Review

< FY2020 Outlook

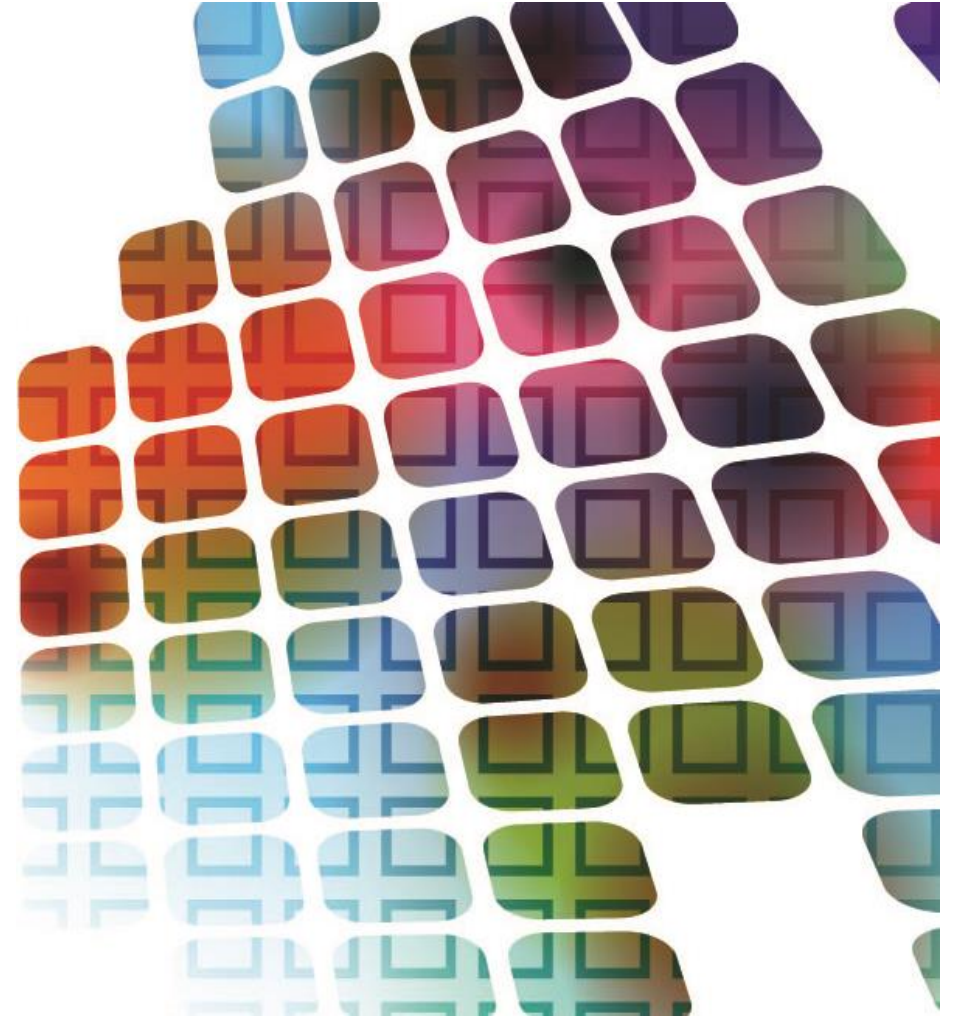
- ❑ **Our global markets and operations are well established. Rakon is in a great position to respond to current and future demand**
- ❑ How does this opportunity translate to expectations for current year?
 - While we are confident we will get a good share of business, phasing of customer orders means returns are likely to remain flat compared to FY2019



Chief Executive's Review

< Future

- **Rakon is a technology leader**
 - Global footprint, broad product offering, strong ecosystem of customer relationships and a trusted brand with a 50 year heritage
- **Rakon expects to stay at the forefront of the frequency control product industry**
 - Whatever the application may be, within every node, within every network, a stable and reliable timing and frequency reference is required for the successful transfer of data



Rakon Everywhere



rakon

C. Shareholders' Questions

D. Resolutions

Ordinary Resolution



Resolution 1: Re-election of Director

- That **Brent John Robinson**, who retires by rotation and is eligible for re-election, be re-elected as a director of Rakon Limited



Ordinary Resolution



◀ Resolution 2: Re-election of Director

- That **Robert Keith Hamilton Watson**, who retires following appointment by the Board and is eligible for re-election, be re-elected as a director of Rakon Limited



Ordinary Resolution

◀ Resolution 3: Fixing Remuneration of Auditor

- That the directors are authorised to fix the remuneration of Rakon Limited's Auditor, PricewaterhouseCoopers for the following year



E. Special Resolution

Special Resolution

◀ 4. Amend Constitution

- That **Rakon Limited**, amend its existing Constitution, in the manner and form signed by the Chair and tabled at the Annual Meeting for the purpose of identification



Proxy Votes Received



◀ As at 7 August


Resolution 1: Re-election of Director

	Proxy votes lodged	For	%	Against	%	Discretionary	%
Brent Robinson	67,292,225	64,904,423	96.45%	657,372	0.98%	1,730,430	2.57%

Resolution 2: Re-election of Director

	Proxy votes lodged	For	%	Against	%	Discretionary	%
Keith Watson	67,298,829	65,148,586	96.80%	415,781	0.62%	1,734,462	2.58%

Resolution 3: Fixing Remuneration of Auditor

Auditor: 	Proxy votes lodged	For	%	Against	%	Discretionary	%
	67,284,640	64,641,773	96.07%	942,865	1.40%	1,700,002	2.53%

Resolution 4: Special Resolution; amendment of existing Constitution

	Proxy votes lodged	For	%	Against	%	Discretionary	%
Amend Constitution	67,210,363	65,190,070	96.99	202,247	0.30%	1,818,046	2.71%

F. General Business and Shareholders' Questions

Meeting Closed

Disclaimer



- ◀ This presentation contains not only a review of operations, but also some forward looking statements about Rakon Limited and the environment in which the company operates. Because these statements are forward looking, Rakon Limited's actual results could differ materially
- ◀ Although management and directors may indicate and believe that the assumptions underlying the forward looking statements are reasonable, any of the assumptions could prove inaccurate or incorrect and, therefore, there can be no assurance that the results contemplated in the forward looking statements will be realised
- ◀ Media releases, management commentary and investor presentations are all available on the company's website and contain additional information about matters which could cause Rakon Limited's performance to differ from any forward looking statements in this presentation. Please read this presentation in the wider context of material previously published by Rakon Limited



Rakon Everywhere

