



BrainChip Holdings Ltd

***Annual Report
2018***

Corporate Directory

Board of Directors

Stephe Wilks (Non-Executive Director and Chair)

Louis DiNardo (Executive Director and Chief Executive Officer)

Julie H. Stein (Non-Executive Director, Audit & Governance Committee Chair)

Emmanuel T. Hernandez (Non-Executive Director, Remuneration & Nomination Committee Chair)

Adam Osseiran (Non-Executive Director)

Steven Liebeskind (Non-Executive Director)

Company Secretary

Kim Clark

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Auditors

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Share Registry

Computershare Investor Services Pty Ltd

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Telephone: 1300 850 505 International: +61 3 9415 4000

Facsimile: +61 8 9323 2033 Online: www.investorcentre.com

Securities Exchange

Australian Securities Exchange Limited

Exchange Centre, 20 Bridge St, Sydney NSW 2000

Code: BRN

ABN: 64 151 159 812

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Letter from the CEO

To our Valued Shareholders,

During financial year ending 31 December 2018, BrainChip made significant strides in furthering our primary goal of establishing the Company as the leading neuromorphic computing company.

Neuromorphic computing is the implementation in silicon, of biologically inspired processing to achieve very fast, low-power learning. Our strategy from the onset, has been to leverage BrainChip's leading edge competency in Spiking Neural Networks (SNN) to provide an integrated circuit device that addresses the high-growth Artificial Intelligence (AI) market. BrainChip's Akida™ Neuromorphic System-on-Chip (NSoC) embodies over a decade of research and development by the Company's founder, Peter van der Made and the hard work of the Company's engineering teams in Aliso Viejo, California and Toulouse, France. The name Akida comes from the Greek word for "spike".

Throughout 2018 the Company refined its strategy to exploit the attributes of an SNN and be selective regarding the Company's go-to-market strategy.



Specifically, the Company has determined that SNNs are particularly well-suited for "Edge" applications where low-power, high performance and small size are paramount. Edge applications include Surveillance Cameras, Vision Guided Robotics and Advanced Driver Assisted Systems (ADAS), and the Industrial Internet-of-Things (IoT). These are all high growth, large volume markets.

As a first of kind its device, Akida is a complete Neuromorphic-System-on-Chip (NSoC) that meets the key requirements of these markets. Akida has been designed to implement native SNNs and the conversion of existing Convolutional Neural Networks (CNNs) to SNNs. This significant advantage allows customers to take advantage of SNN low-power, high speed and small size with their existing intellectual property. The conversion of existing CNNs to an SNN can improve overall system performance for customers and time-to-market for BrainChip.

The 2018 release of the Akida Development Environment (ADE) introduced customers to the tools and design flow of Akida. The ADE allows customers to develop applications and simulate performance in parallel with device development and production. By working with early access customers and providing the market with visibility into the Akida architecture, the Company has honed product definition.

Significant efforts in 2018 have culminated in the recent execution of a Memorandum of Understanding between BrainChip and a world class development and device manufacturing partner. With the formation of this relationship, the Company is well-positioned to progress the development and manufacturing of the device in the coming year and enjoy the benefits of being first to market with a revolutionary technology solution for AI Edge.

2018 also proved to be a challenging year for the Company's effort to market the BrainChip Studio software solution. Through cycles of learning, it became apparent that the strategy of addressing both end-users and Original Equipment Manufacturers (OEMs) was not efficient. In particular, the financial and opportunity cost of engaging end-users, who are slow to adopt and deploy new technology, was much greater than expected. This realisation led the Company to restructure its effort, refine its go-to-market strategy with respect to BrainChip Studio and focus exclusively on marketing to select OEMs that serve end-users.

In 2019, as the Company progresses through development and manufacturing, and to the sales and marketing of Akida, the Company's investment in human capital is one of its most valuable assets. BrainChip has recruited and retained exceptional talent and is led by a team of executives with approximately 200 combined years of successful experience in the semiconductor industry. In addition, the AI Edge market is large with forecasts indicating continued high growth. The Company's strategy is well-defined and reflects this opportunity. Most importantly, customers are receptive to the Akida technology and the potential of Akida improving the performance of their product.

Letter from the CEO

In conclusion, with virtually all of the Company's efforts focused on the introduction and sales of Akida, BrainChip is well positioned to fulfil its vision as the leading neuromorphic computing company and address the high growth opportunities in the AI Edge market with a compelling solution for complex problems.

Sincerely,



Louis DiNardo

Executive Director and Chief Executive Officer
BrainChip Holdings Ltd

Directors' Report

The directors submit their report of the consolidated entity, being BrainChip Holdings Ltd ("BrainChip Holdings" or the "Company" or "BrainChip") and its controlled entities ("Group" or "Consolidated Entity"), for the year ended 31 December 2018.

DIRECTORS

The names and details of the Company's directors in office during the financial period and until the date of this report are as follows:

Stephe Wilks	Non-Executive Director and Chair (appointed 11 February 2019)
Louis DiNardo	Executive Director; Chair (appointed 1 May 2018, resigned 11 February 2019)
Julie H. Stein	Non-Executive Director
Emmanuel Hernandez	Non-Executive Director
Adam Osseiran	Non-Executive Director
Steve Liebeskind	Non-Executive Director (appointed 1 May 2018)
Eric (Mick) Bolto	Non-Executive Director and Chair (resigned 1 May 2018)
Peter van der Made	Executive Director (resigned 1 January 2018)

The names and details of the Company's Secretaries in office during the financial period and until the date of this report are as follows:

Kim Clark	appointed 1 December 2018
Julian Rockett	appointed 25 May 2018 (resigned 1 December 2018)
Naomi Dolmatoff	resigned 25 May 2018

SIGNIFICANT CHANGES IN THE STATE OF AFFAIRS

In January 2018, the Company and Gaming Partners International Corporation ("GPI") entered into a licensing, development and revenue sharing agreement (Joint Development and License Agreement) related to the joint development of video analytic products for worldwide deployment in casino currency security, game table operations and player behaviour applications. The terms of the agreement provide for a total of US\$500,000 in license fees, a non-recurring engineering fee of US\$100,000 for products developed under the agreement, and a long-term revenue sharing for the sale of the developed technology. The companies are working towards execution of a Commercial Agreement with GPI in accordance with the current Joint Development and License Agreement. The Commercial Agreement has not been signed, pending additional integration with GPI and its partners.

In February 2019, the Company implemented a restructuring and cost reduction plan. The estimated reduction is 10% to 15% of total planned spending. The plan includes elimination of expenses associated with BrainChip Studio end-user sales, including a reduction in workforce and a focus on BrainChip Studio Original Equipment Manufacturer (OEM) engagements. In addition, certain key management personnel have agreed to accept a temporary reduction in their salaries.

In March 2019, the Company executed a Memorandum of Understanding with Socionext Americas to develop and manufacture the Akida™ Neuromorphic System-on-Chip (NSoC). The companies will negotiate a definitive agreement to deliver a physical Akida device. The agreement is expected to be finalised within the coming months while the parties begin preliminary work.

PRINCIPAL ACTIVITIES

The principal activity of the Group is the development of software and hardware accelerated solutions for advanced artificial intelligence (AI) and machine learning applications with a primary focus on the development of its Akida Neuromorphic Processor Unit hardware product.

EMPLOYEES

The Group employed 33 employees at 31 December 2018 (2017: 26).

Directors' Report

DIVIDENDS

No dividends have been paid or declared by the Company during the financial year or up to the date of this report.

REVIEW OF OPERATIONS

The financial results of the Group are presented in US dollars, unless otherwise referenced.

Overview

The Group made a net loss after income tax for the year ended 31 December 2018 of \$16,523,186 (2017: \$13,774,013).

Revenues for the year ended 31 December 2018 of \$947,989 increased 252% over the \$269,496 in the same period a year ago. This increase was largely attributable to revenues recognised in the current year from the GPI agreement.

Total expenses for the year ended 31 December 2018 of \$17,601,775 increased 24% from \$14,199,739 incurred in the year ended 31 December 2017. This increase was attributable to:

- 1) Research & development (R&D) expenses of \$3,969,304 for the current period increased 80%, or \$1,763,565 from a year ago. R&D costs comprise the employee and other costs and amortisation of capitalised R&D intangible assets. R&D costs increased due to:
 - a) an increase in the number of technical staff employed for the full financial year in 2018;
 - b) the expensing of such costs related to new projects still considered research;
 - c) an increase in the amortisation expense of the capitalised intangible assets; and
 - d) the write off of capitalised costs related to the Studio project in accordance with the Group's policies.
- 2) Selling & marketing (S&M) expenses of \$1,465,475 for the current period increased 188%, or \$957,592 from a year ago. The increase in S&M expenses reflects the growth in personnel costs including two contracting sale personnel and related costs including such costs as trade show and customer demos, to showcase our products, and travel expenses;
- 3) General & administrative (G&A) expenses of \$4,861,194 for the current period increased 7% overall, or \$316,437 from the same period a year ago which is a result of:
 - a) increased legal and other professional consultants;
 - b) a reduction in employee costs related to the resignation of the CFO, Mr Ryan Benton in September 2018 without replacement during the year; and the resignation of the managing director of BrainChip SAS in the prior year; and
 - c) increased travel expenses related to business development and investor relations activities; and
- 4) Share-based payment expense of \$7,305,802 for the current period increased 5%, or \$364,442 from the same period a year ago. Share-based payments expense represents the current period expense for options, restricted stock units and performance rights issued to directors, employees and consultants, offset by the value of options that have been forfeited during the year.

At the end of the year the Group had consolidated net assets of \$8,879,309 (2017: \$18,066,470), including cash and cash equivalents of \$7,543,326 (31 December 2017: \$16,049,330).

Overall there has been an increase in the amount of cash outflows used in operating activities to \$7,203,204 (2017: \$6,074,542) as noted in the Consolidated Statement of Cash Flows, which reflects the continued focus on attaining the business milestones and strategies of the Group.

Directors' Report

REVIEW OF OPERATIONS (Continued)

Operational Highlights

The Company has developed a revolutionary new spiking neural network (SNN) technology that can learn autonomously, evolve and associate information just like the human brain. The technology is proprietary, fast, completely digital and consumes very low power.

The Company is developing an integrated circuit that addresses the high-performance and high-volume requirements in AI systems at the edge (AI Edge). AI Edge is a rapidly growing market where intelligence is exploited at the point of acquiring data rather than data being transferred to a central processing core in a data centre or in the cloud for analysis and action.

BrainChip's integrated circuit is being developed under the brand Akida, which provides the benefit of small size, low-power and autonomous learning, as well as on-device deep learning for existing data sets of known objects or patterns in data. Development progressed significantly during 2018, with some highlights set out below.

During 2018, the Company achieved a number of key milestones including:

Akida Product Development

The most significant achievements of the Company in 2018 relate to the substantial advancements in the development of Akida. Major highlights are described below and resulted in a broad provisional patent filing with the US patent office. The provisional patent will lead to multiple utility patents filed in multiple jurisdictions.

In July 2018, BrainChip announced the Akida Development Environment (ADE). The development environment is a complete artificial intelligence framework for the revolutionary Akida Neuromorphic System-on-Chip (NSoC). The ADE supports the development of AI Edge products. The ADE includes the Akida execution engine, the necessary data-to-spike converters, and a "model zoo" of spiking neural network applications, as well as conversion of existing Convolutional Neural Networks (CNN) to SNN.

In September 2018, BrainChip announced the Akida architecture for the Company's Neuromorphic System-on-Chip (NSoC). The availability of the Akida architecture to a wide array of potential customers is a significant milestone in the advancement of the Akida design because the most important part of product definition and execution is customer feedback. This feedback allows the Company to incorporate important features as it furthers the chip development.

In October 2018, BrainChip acquired a license to a cybersecurity technology that uses a native SNN, rather than a CNN to SNN conversion, from the University of Thrace in Greece. The acquisition of this license was valuable because cybersecurity represents a large potential market for the application of Akida. Importantly, the native SNN framework of the licensed technology can be implemented efficiently on Akida. This technology has the potential to demonstrate the low-power, high-accuracy nature of Akida in cybersecurity applications.

BrainChip Studio - Original Equipment Manufacturers engagements

Throughout 2018 the Company engaged with end-users to gain a better understanding of their needs and development process. This revealed challenges in addressing many small customers with limited resources and long internal development cycles. This understanding supports the Company's decision to focus on an OEM sales model that provides broad reach and efficiencies in sales expenses.

The Company's success with OEM partners is highly dependent on the OEM's success in marketing their own platform. A number of OEM engagements were announced during the year and are highlighted below.

In January 2018, BrainChip and Gaming Partners International (GPI) signed a Licensing and Development Agreement. This agreement provided for the integration of the Company's pattern recognition technology with GPI's Automated Table System (ATS™). GPI is a leading OEM provider of equipment to the global gaming industry.

In June 2018, BrainChip's visual analytics product was demonstrated in Macau with the GPI ATS™. This was a significant event because global leaders in the gaming industry were provided private demonstrations of the system.

In March 2018, BrainChip and Quantum Corporation demonstrated the interoperability of BrainChip Studio with the StorNext File System. This OEM interoperability shows the Company's ability to search large amounts of video at a significant cost advantage over existing solutions for surveillance and media & entertainment.

Directors' Report

REVIEW OF OPERATIONS (Continued)

Operational Highlights (continued)

In April 2018, the Company signed an agreement with Veritone to integrate BrainChip Studio as a cognitive engine within Veritone's aiWare. aiWare is a cloud-based system that provides a variety of video analytic tools for large scale online searching. This agreement was a significant advancement in the Company's strategy for BrainChip Studio because it represented the first opportunity for this product to be used in an OEM cloud-based solution.

In April 2018, the Company released BrainChip Studio AI-powered video analytic software which added auto-rotated models, Linux support and an Applications Programming Interface (API) for easier system integration with OEM providers.

Investor and Trade Show Presentations

In addition to advancements in technology and product development, visibility to investors and customers regarding the Company's progress is critical to the Company's success. In 2018 the Company attended a number of trade shows and investor conferences to discuss the Company's progress. Several highlights from 2018 are indicated below.

In March 2018, BrainChip attended the 30th Annual ROTH Conference. The ROTH Conference is a leading, invitation only, technology conference in the United States. BrainChip's participation in this conference was an important achievement as it represented the Company's first introduction to the US technology investor market.

In March 2018, BrainChip was showcased at the London Security and Counter Terrorism Exposition where a large number of European law enforcement agencies were provided live demonstrations of BrainChip Studio. This interaction generated significant exposure for the Company and led to a number of field trials.

In September 2018, BrainChip presented at the TechKnow Invest Roadshow in Sydney and Melbourne, Australia. Presenting at this conference was important because this venue provided the Company with significant exposure to the Australian investor market.

In November 2018, BrainChip presented at the AI Edge Summit where the Company showcased the effectiveness of Akida in edge applications for vision in advanced driver assistance systems (ADAS), vision guided robotics and surveillance. These large volume applications require low-power and small size, both of which are features that Akida is uniquely positioned to provide.

Risk

Factors that may impact the Company's performance include commercial viability and delays of new products and technology, delays in the establishment of an effective sales organisation and the global economy. Some of the risks related to this include:

- Risks of delays in new product development as the Company develops advanced products include: internal development, development by partners and integration of the technology with third party providers of intellectual property
- Risks of delays in new product introduction as the Company commercialises advanced products include: wafer fabrication, assembly of products and test operations.
- Risks of delays in sales and marketing of new products include: recruitment and retention of the highly skilled and experienced human resources
- Risks of delays in customer adoption of new products include: adequate training and education, collateral materials, application engineering and customer support.

The Company's performance and success is dependent upon the ability to effectively identify, protect and defend its intellectual property through patents or trade secrets. Some of the risks related to this include:

- Risks of intellectual property or other claims, which are costly to defend, could result in significant damage awards, and could limit the Company's ability to use certain technologies in the future.
- Risks of successful intellectual property infringement claims are successful that may have an adverse effect on our business, consolidated financial position, results of operations, or cash flows.
- Risks of intellectual property infringement protection of the Company's patents, trademarks, trade secrets, copyrights may not be available or feasible in every country in which our products and services could be distributed.
- Risks of intellectual property protection efforts to protect proprietary rights may not be sufficient or effective.

Directors' Report

REVIEW OF OPERATIONS (Continued)

Risk (continued)

- Risks of intellectual property that may not have adequate patent or copyright protection for certain innovations, that the scope of the protection will be insufficient or that an issued patent may be deemed invalid or unenforceable
- Risks that intellectual property held as trade secrets could be compromised by outside parties, or by our employee

Other key risks the Company has identified include:

- Risks of an information technology breach that may result in litigation, and potential liability
- Risks of international operations exposure that could harm our business, operating results, and financial condition including: changes in local political, economic, regulatory, tax, social, and labor conditions, may adversely harm our business
- Risks of human resources recruitment and retention of skilled personnel, motivate and reward key personnel, maintain the Company's corporate culture to successfully execute the Company's business plans.
- Risks of competition addressing the Company's markets and customers with advanced products with similar or better performance.

SIGNIFICANT EVENTS AFTER THE BALANCE DATE

In January 2019, the Company partnered with SoftCryptum to deliver BrainChip Studio's AI-powered video analytics to government agencies in European countries.

On 11 February 2019, Mr Stephe Wilks was appointed as Non-Executive Director and Chair of the Board of Directors.

In February 2019, the Company expanded the distribution network of BrainChip Studio in Europe with the engagement of Novo Technologies in Greece and Cypress.

In March 2019, the Company appointed Roger Levinson as Chief Operating Officer. Mr Levinson will be responsible for all aspects of operations including ASIC manufacturing which includes wafer fabrication, product engineering, assembly and test operations, and customer service.

In March 2019, the Company appointed Ken Scarince as Vice President of Finance, Controller. Mr Scarince will be responsible for all aspects of finance, including general accounting, tax, audit, treasury, compliance and financial planning. Mr Scarince replaces the Company's former CFO who left in August 2018.

In March 2019, the Company accepted the resignation of Julie H. Stein as Non-executive director. The resignation is effective 1 April 2019. Ms Stein served on the board since November 2016.

In March 2019, the Company executed a Memorandum of Understanding with Socionext Americas to develop and manufacture the Akida Neuromorphic System-on-Chip (NSoC). The companies will negotiate a definitive agreement to deliver a physical Akida device. The agreement is expected to be finalised within the coming months while the parties begin preliminary work.

No other matters or circumstances have arisen since the end of the financial year which significantly affected or may significantly affect the operations of the Group, the results of those operations, or the state of affairs of the Group in subsequent financial years.

LIKELY DEVELOPMENTS AND EXPECTED RESULTS

It is expected that the Group will further develop the Akida Neuromorphic System-on-Chip (NSoC).

ENVIRONMENTAL REGULATION AND PERFORMANCE

The Group is not subject to any significant environmental regulation under Australian Commonwealth of State Law.

Directors' Report

SHARE ISSUES

The following share issues of the Company were completed during the financial year and to the date of this report:

- 15,000,000 shares issued on 8 June 2018 to Mr Louis DiNardo. The shares are reported as a share-based payment and valued at US\$0.104 (A\$0.14) per share based on the share price at the date of approval by shareholders (AGM);
- 49,500,000 shares issued on 9 October 2018 and 6,000,000 shares issued on 18 October 2018 on conversion of Class D and C Performance Rights (respectively), milestones of which had been attained;
- 10,000,000 shares issued on 9 October 2018 to the Trustee of the BrainChip Long Term Incentive Plan Trust at nil value, available for the conversion of vested equity instruments by participants; and
- 303,030 shares issued on 21 December 2018 to a third party for the performance of services over a 12 month period.

SHARE OPTIONS

As at the date of this report, there were 136,200,000 unissued ordinary shares under option.

There are no participating rights or entitlements inherent in the options and option holders are not entitled to participate in new issues of capital or bonus issues offered or made to shareholders whilst the options remain unexercised.

11,400,000 options were issued, and 39,500,000 options were forfeited, lapsed or cancelled during the financial year and to the date of this report, comprising the following:

- (a) Unlisted options issued to Employees pursuant to the Company's Long Term Incentive Plan:
- 5,100,000 options exercisable at A\$0.19 per share before 13 March 2028, issued on 13 March 2018;
 - 800,000 options exercisable at A\$0.22 per share before 13 March 2028, issued on 13 March 2018;
 - 500,000 options exercisable at A\$0.18 per share, on or before 8 June 2028, issued on 8 June 2018;
 - 600,000 options exercisable at A\$0.14 per share before 16 June 2028, issued on 16 June 2018;
 - 500,000 options exercisable at A\$0.145 per share before 17 July 2028, issued on 17 July 2018, and
 - 400,000 options exercisable at A\$0.14 per share before 5 October 2028, issued on 21 December 2018.
- (b) Unlisted options issued to Consultants pursuant to the Company's Long Term Incentive Plan:
- 2,000,000 unlisted options exercisable at A\$0.19 per share issued on 13 March 2018, expiring 13 March 2028. 25% of the options vested 30 April 2018; 25% vested 30 September 2018 and 50% vest on 13 February 2019;
 - 500,000 options exercisable at A\$0.22 per share before 13 March 2028, issued on 13 March 2018;
 - 1,000,000 options exercisable at A\$0.155 per share on or before 8 June 2028, issued on 8 June 2018.
- (c) Unlisted options forfeited during and since the end of the financial year:
- 20,750,000 unlisted options issued to an employee on 11 August 2017 due to cessation of employment;
 - 500,000 unlisted options issued to a consultant on 14 December 2017 due to termination of contract;
- (d) Unlisted options lapsed during and since the end of the financial year:
- 6,250,000 unlisted options issued to an employee on 11 August 2017 due to cessation of employment;
 - 11,000,000 unlisted options issued to directors expired on 4 December 2018
 - 500,000 unlisted options issued to a consultant on 13 March 2018 due to termination of contract on 26 March 2019.
- (e) Unlisted options cancelled during and since the end of the financial year:
- 500,000 unlisted options issued to a consultant on 21 December 2015 due to termination of contract.

No options were converted to shares in BrainChip Holdings during and since the end of the financial year.

Directors' Report

PERFORMANCE RIGHTS

As at the date of this report, there were 8,500,000 Performance Rights on issue.

The following Performance Rights were issued under the Company's Long Term Incentive Plan during the financial year and to the date of this report:

- 1,000,000 Class B Performance Rights to employees on 8 June 2018; and
- 15,000,000 Class E Performance Rights to Mr Louis DiNardo on 8 June 2018.

The following Performance Rights, the milestones of which had been attained and announced previously, vested during the financial year:

- 1,000,000 Class B Performance Rights on 15 October 2018;
- 6,000,000 Class C Performance Rights on 18 October 2018;
- 49,500,000 Class D Performance Rights on 9 October 2018; and
- 7,500,000 Class E Performance Rights on 8 December 2018.

RESTRICTED STOCK UNITS

As at the date of this report, there were 4,050,000 Restricted Stock Units ("RSU") on issue.

The following restricted stock units were issued during the financial period and to the date of this report pursuant to the Company's Long Term Incentive Plan:

- 2,950,000 Restricted Stock Units were issued to employees on 8 June 2018;
- 50,000 Restricted Stock Units were issued to a contractor on 18 July 2018;
- 650,000 Restricted Stock Units were issued to employees on 21 December 2018 and
- 400,000 Restricted Stock Units were issued to employees on 18 January 2019 (200,000 was granted on 19 November 2018).

No Restricted Stock Units were converted during the year and to the date of this report.

CORPORATE GOVERNANCE

The directors of the Group support and adhere to the principles of corporate governance, recognising the need for the highest standard of corporate behaviour and accountability. Please refer to the 2018 Corporate Governance Statement dated 27 March 2019 released to the ASX and posted on the Company website which outlines the Group's approach to corporate governance and sets out the key charters and policies of the Group.

Directors' Report

INFORMATION ON DIRECTORS

Names, qualifications, experience and special responsibilities

Stephe Wilks – Non-Executive Director and Chair (Appointed 11 February 2019)

Mr Wilks joined the board in February of 2019 and currently serves as Non-Executive Director of ASX listed companies (noted below) and Non-Executive Director and Chair of Interactive Pty Ltd, Australia's largest private IT services company. In addition, he was founder and Managing Director of XYZed, where he developed and managed Australia's first competitive broadband wholesaler, having earlier worked for Optus, British Telecom, and Hong Kong Telecom advising on public affairs, regulatory and government issues. Mr Wilks is a graduate of Macquarie University with Science and Law degrees and received his advanced degree from the University of Sydney in Law and Tax.

Other directorships:

- Non-Executive Director of BluGlass Limited (ASX: BLG) (May 2018 – present);
- Non-Executive Director of DataDot Technology Limited (ASX: DDT) (February 2018 – present).

Louis DiNardo, BA – Executive Director (Appointed 9 December 2016), Chair for period 1 May 2018 to 11 February 2019 and Chief Executive Officer

Mr DiNardo has a strong track record of growing publicly listed and privately owned technology businesses and has worked in venture capital firms where he has successfully backed a number of emerging technology companies. Some of his recent past roles include the President and Chief Executive Officer (CEO) of Exar Corporation, where he was credited for turning around the underperforming NYSE-listed mid-cap semiconductor company by revamping the management team, cutting operating expenses and growing revenue and profit. His efforts helped Exar achieve 16 consecutive quarters of revenue and EPS growth. Before Exar, Mr DiNardo was responsible for investing in and overseeing a portfolio of companies, including programmable logic companies, while he served as a partner at Crosslink Capital from 2008 to 2012 and the Managing Director at Vantage Point Venture Partners from 2007 to 2008. Mr DiNardo also served as President and Chief Executive Officer, as well as Co-Chair of the Board of Directors, at Xicor Corporation from January of 2001 until NASDAQ-listed Intersil Corp acquired the company in July of 2004. He subsequently held senior executive positions at Intersil and became its President and Chief Operating Officer.

Other directorships in the past 3 years:

- Non-Executive Director of Quantum Corporation (NYSE: QTM) (June 2014 – November 2016).

Julie H. Stein, BA, MA, MBA, NACD Leadership Fellow – Non-Executive Director (Appointed 14 November 2016), Lead Independent Director for the period 20 June 2018 to 11 February 2019.

Ms Stein began her career at Goldman Sachs in 1981. Subsequently, she joined the investment banking firm of Salomon Brothers. She co-founded SKS Investments in 1992 and successfully executed a series of joint ventures with major global institutional investors. Over the course of her career, Ms. Stein has been involved in the underwriting, negotiating, structuring and/or placement of financial transactions aggregating over \$10 billion (\$US). Ms Stein holds a B.A. and M.A. from the University of Pennsylvania and an M.B.A. from Columbia University. She is a National Association of Corporate Directors (NACD) Leadership Fellow, holds a Certificate in Cyber Security Management from the Software Engineering Institute of Carnegie Mellon University and she also holds a Certificate from Stanford University Directors' College. Regarding work in the boardroom, Ms Stein sits on the Audit Committee serving the International Board of the not-for-profit JDRF International organization. Ms Stein also serves as the Chair of the Company's Audit & Governance Committee, was appointed the Lead Independent Director from 20 June 2018 to 11 February 2019 and is a Member of the Company's Remuneration & Nomination Committee.

Other directorships in the past 3 years: Nil.

Directors' Report

INFORMATION ON DIRECTORS (Continued)

Names, qualifications, experience and special responsibilities (continued)

Adam Osseiran, A/Prof – Non-Executive Director (Appointed 10 September 2015)

Dr Osseiran has been involved with BrainChip since 2012, providing advice and assistance on several aspects of technology, applications and commercial opportunities. Dr Osseiran is the co-founder of Termite Monitoring and Protection Solutions Pty Ltd, founded in 2013, to exploit the unique Wireless Smart Probe acoustic termite detection technology, operating in the US\$15B global pest control market. He is also Senior Technical Advisor to Mulpin (MRL) Ltd which has developed a new patented concept of embedding electronic components within a multi-layered printed circuit board.

Dr Osseiran is the co-founder and director of Innovate Australia, established to promote and assist Australian innovators and encourage innovation and was the President of the Inventors Association of Australia from 2013-2014. Dr Osseiran holds a Ph.D. in microelectronics from the National Polytechnic Institute of Grenoble, France and a M.Sc. and B.Sc. from the University of Joseph Fourier in Grenoble. Dr Osseiran is currently Associate Professor of Electrical Engineering at Edith Cowan University in Perth, Western Australia. Dr Osseiran serves as a member on the Company's Remuneration & Nomination Committee effective from 1 May 2018.

Other directorships in the past 3 years: Nil.

Emmanuel Hernandez – BSC, CPA, MBA - Non-Executive Director (Appointed 7 July 2017)

Mr. Hernandez is a highly regarded Silicon Valley technology executive with a broad experience of >40 years in the Semiconductor industry, >12 years in the Renewable Energy industry and >10 years in the Communications and Networking industry and cumulative public and private board experience of >16 years.

His professional resume includes key roles with some of Silicon Valley's largest and most successful technology companies including National Semiconductor (acquired by Texas Instruments in 2012), Cypress Semiconductor (NASDAQ: CY) and ON Semiconductor (NASDAQ: ON). Mr. Hernandez served in various finance capacities at National Semi between 1976-1993, then joined Cypress Semi where he served as Chief Financial Officer ("CFO") between 1993-2004. Mr. Hernandez then joined SunPower Corp where he served as CFO between 2005-2008. Mr. Hernandez's executive successes have led him to be a highly sought-after operating consultant and board member including serving as an operating Partner at Khosla Ventures, a prominent Silicon Valley venture capital firm.

Mr. Hernandez has been a Director of ON Semiconductor since 2002. Other previous board service includes SunEdison (renewable energy), Aruba Networks, (enterprise networking) acquired by Hewlett Packard Enterprise in 2015, EnStorage, Inc., (flow battery/storage technology) and Soraa, Inc., (LED and laser technology). Mr Hernandez is Chair of the Company's Remuneration & Nomination Committee and also serves as a member of the Audit & Governance Committee.

Other directorships in the past 3 years:

- ON Semiconductor Corp.; Audit Committee Chair, Governance & Nominating Committee member – 20 November 2002 to present
- SunEdison, Inc.; Executive Chair, Audit Committee member – 12 May 2009 to 29 December 2017

Steve Liebeskind, B Comm, CA ANZ– Non-Executive Director (Appointed 1 May 2018)

Mr. Liebeskind is an experienced front line operational manager with a broad set of skills developed from his time working with Ernst & Young in Australia and Canada. He has held positions of Advisor, CEO and COO for high growth companies in the telecommunications, technology and financial services sector. Mr Liebeskind is a founding principal of Sydney Capital Partners a boutique corporate advisory firm. Mr Liebeskind is a member of the Company's Audit & Governance Committee effective from 1 May 2018.

Other directorships in the past 3 years: Nil.

Directors' Report

INFORMATION ON DIRECTORS (Continued)

Names, qualifications, experience and special responsibilities (continued)

Peter van der Made – Executive Director (Appointed 10 September 2015, resigned 1 January 2018)

Mr van der Made has been at the forefront of computer innovation for 40 years. He is the inventor of a computer immune system at vCIS Technology where he served as Chief Technical Officer, and then Chief Scientist when it was acquired by Internet Security Systems, and subsequently IBM. Previously, he designed a high resolution, high speed colour Graphics Accelerator chip for IBM PC graphics at PolyGraphics Systems. He was the founder of PolyGraphics Systems, vCIS Technology, and BrainChip Inc.

Other directorships in the past 3 years: Nil.

Eric (Mick) Bolto, LLB BA FAICD – Non-Executive Director and Chair (Appointed 3 August 2015; resigned 1 May 2018)

Mr Bolto served as a partner at Mallesons for twenty years where he worked in mergers and acquisitions. He was instrumental in the structuring of and subsequent execution of numerous large-scale transactions in Asia, Australia, Europe and North America. Following his time at Mallesons, Mr Bolto worked in private equity for a long period where he acquired extensive experience in creating strategy and business planning for small to medium enterprises in order to ensure the delivery of viable business results. Mr Bolto also served as a member on the Company's Audit & Governance Committee and Remuneration & Nomination Committee up to his resignation.

Other directorships in the past 3 years: Nil.

COMPANY SECRETARIES

Kim Clark (Appointed 1 December 2018)

Ms Clark is an experienced business professional with 22 years' experience in the Banking and Finance industries and 6 years as a Company Secretary (in-house) of an ASX300 company. Her experience includes debt and capital raising, risk management, mergers and acquisitions, compliance and governance. Ms Clark currently acts as Company Secretary to various ASX listed and unlisted companies in Australia and is the Head of Corporate Services for Boardroom Pty Limited's Queensland office.

Julian Rockett B. Arts, LLB, GDLP - (Appointed 25 May 2018, resigned 1 December 2018)

Mr Rockett background is as a Corporate Lawyer and Company Secretary. His legal background includes advising on IPOs, M&A, RTOs and capital raising for ASX listed companies. His corporate secretarial experience for ASX companies includes representing fin-tech, medical technology, logistics, equity, resources, mining, building, energy as well as media.

Naomi Dolmatoff, BCom (Finance), AGIA, ACIS - (Appointed 6 October 2017, resigned 25 May 2018)

Ms Dolmatoff is an experienced Company Secretary employed with Company Matters Pty Ltd, a company that provides company secretarial and corporate governance services to a range of ASX listed, private and not-for-profit clients. Naomi has worked with ASX listed entities in the financial services and mining and resources industries. Naomi holds a Bachelor of Commerce (Finance) with distinction from Curtin University and a Graduate Diploma in Applied Corporate Governance. Ms Dolmatoff is also an Associate of both The Governance Institute of Australia and The Institute of Chartered Secretaries and Administrators (UK).

Directors' Report

INTERESTS IN THE SHARES, OPTIONS AND PERFORMANCE RIGHTS OF THE COMPANY

As at the date of this report, the interests of the directors in the shares, options and performance rights of the Company were:

Director	Fully Paid Ordinary Shares	Options over Ordinary Shares	Performance Rights
S Wilks	-	-	-
L DiNardo	11,779,361	50,000,000	7,500,000
J Stein	-	8,000,000	-
A Osseiran ⁽¹⁾	9,338,500	4,000,000	-
E Hernandez	-	8,000,000	-
S Liebeskind ⁽²⁾	11,649,242	6,000,000	-
Total	32,767,103	76,000,000	7,500,000

⁽¹⁾ Held by Adam Osseiran and Rebecca Osseiran-Moisson ATF the Osseiran Family Trust.

⁽²⁾ Equity instruments associated with Mr Liebeskind comprise:

- (i) 2,310,742 fully paid ordinary shares held in the name of Crossfield Intech Nominees Pty Ltd;
- (ii) 9,338,500 fully paid ordinary shares and 3,000,000 options held in the name of Crossfield Intech Nominees Pty Ltd as trustee for the Liebeskind Family Superfund;
- (iii) 3,000,000 options owned directly by Mr Liebeskind.

DIRECTORS' MEETINGS

The number of meetings of directors (including meetings of committees of directors) held during the year and the number of meetings attended by each director was as follows:

	Directors Meetings		Audit & Governance Committee Meetings ⁽¹⁾		Remuneration & Nomination Committee Meetings ⁽¹⁾	
	Eligible to attend	Attended	Eligible to attend	Attended	Eligible to attend	Attended
S Wilks	n/a	n/a	n/a	n/a	n/a	n/a
L DiNardo	7	7	n/a	n/a	n/a	n/a
J Stein	7	7	8	8	8	7
A Osseiran	7	7	n/a	n/a	2	2
E Hernandez	7	7	8	8	8	8
S Liebeskind	5	5	4	4	n/a	n/a
P van der Made	n/a	n/a	-	-	-	-
E Bolto	2	2	4	4	4	4

⁽¹⁾ Directors who are not members of the Audit & Governance Committee or Remuneration & Nomination Committee may be invited to attend meetings of the Committees.

Committee Membership

The Board maintained an Audit & Governance Committee and established a Remuneration & Nomination Committee during the year. The membership of each Committee is set out below:

Audit & Governance Committee	Remuneration & Nomination Committee
J Stein (Chair)	E Hernandez (Chair)
E Hernandez	J Stein
S Liebeskind (member commencing 1 May 2018)	A Osseiran (member commencing 1 May 2018)
E Bolto (member ceasing 1 May 2018)	E Bolto (member ceasing 1 May 2018)

Directors' Report

REMUNERATION REPORT (Audited)

This remuneration report for the year ended 31 December 2018 outlines the remuneration arrangements of the Group in accordance with the requirements of the *Corporations Act 2001* ("the Act") and its regulations. This information has been audited as required by section 308(3C) of the Act.

The remuneration report is presented under the following sections:

1. Introduction
2. Remuneration governance
3. Non-executive Director remuneration arrangements
4. Executive remuneration arrangements
5. Options and performance rights granted as part of remuneration
6. Company performance and the link to remuneration
7. Executive contractual arrangements
8. Equity instruments disclosures
9. Other transactions and balances with Key Management Personnel ("KMP")

1. Introduction

The Remuneration Report details the remuneration arrangements for Key Management Personnel ("KMP") who are defined as those persons having authority and responsibility for planning, directing and controlling the major activities of the Group, including any director of the parent entity.

For the purposes of this Remuneration Report, the term 'executive' includes the executive directors and senior executives of the Parent and the Group.

Details of KMP of the Group are set out below:

Key Management Personnel

Name	Position	Date of appointment	Date of resignation
Directors			
L DiNardo ⁽¹⁾	Executive Director, Chair & Chief Executive Officer	30 September 2016	-
J Stein ⁽²⁾	Non-Executive Director	14 November 2016	-
A Osseiran	Non-Executive Director	10 September 2015	-
E Hernandez	Non-Executive Director	7 July 2017	-
S Liebeskind	Non-Executive Director	1 May 2018	-
P van der Made ⁽³⁾	Executive Director & Chief Technical Officer	10 September 2015	1 January 2018
E Bolto	Non-Executive Chair	3 August 2015	1 May 2018
Other Key Management Personnel			
A Mankar	Chief Development Officer	1 October 2014	-
P van der Made ⁽³⁾	Chief Technical Officer	10 September 2015	-
R Beachler	Senior Vice President of Marketing and Business Development	5 March 2017	-
R Benton	Chief Financial Officer	9 August 2017	14 September 2018

⁽¹⁾ Mr DiNardo was appointed Chair from 1 May 2018 until 11 February 2019.

⁽²⁾ Ms Stein was appointed Lead Independent Director from 20 February 2018 until 11 February 2019.

⁽³⁾ Mr van der Made resigned from the Board of Directors effective 1 January 2018 however continues to be reported as a Key Management Personnel.

Subsequent to the end of the year, the following changes in KMP occurred:

- Mr Stephe Wilks was appointed Non-Executive Director and Chair on 11 February 2019;
- Mr Roger Levinson was appointed Chief Operating Officer on 18 March 2019;
- Mr Ken Scarince was appointed Vice President, Finance on 11 March 2019;
- Ms Julie Stein will resign from the Board of Directors, effective 1 April 2019.

REMUNERATION REPORT (Audited) (Continued)

2. Remuneration governance

Remuneration & Nomination Committee

The Remuneration & Nomination Committee operated throughout the year with the purpose of assisting the Board in establishing the Group's remuneration philosophy, guiding principles and practices and for monitoring their effectiveness. The principal objective of the Company's remuneration programs is to attract, retain and motivate highly talented individuals who can deliver competitive results and financial returns to our shareholders, while accomplishing both our short and long-term plans and goals. The Remuneration & Nomination Committee is specifically tasked with reviewing and making recommendations to the Board in respect of the Group's remuneration policies, short and long-term incentives and equity remuneration, including the structure and amount of remuneration of executives and non-executive directors. The Remuneration & Nomination Committee is also responsible for overseeing the succession planning of the Chief Executive Officer and other top executives.

Remuneration approval process

The Board approves, subject to a recommendation from the Remuneration & Nomination Committee the remuneration arrangements of the non-executive Directors, executive directors and executives and all awards made under the Company's 2018 Long Term Incentive Plan (LTIP). Aggregate fees paid to non-executive directors are paid within the total remuneration fee pool approved by shareholders.

Remuneration Strategy

The remuneration strategy of the Group is evolving towards the following core principles:

- **Alignment with Shareholder Interests.** The Group's current use of equity as part of its remuneration structure enhances alignment between executives' interests with those of our shareholders. Achievement of the Group's objectives are aimed at creating shareholder value, thus directly benefiting executives and non-executive directors as well.
- **Pay for Performance.** The Group has not instituted a cash bonus or variable remuneration program since its inception but achieving or exceeding expected results and performance will be a necessary condition for our executives to realise targeted levels of remuneration, particularly with respect to variable pay and long-term incentives.
- **Market or Peer Company Comparison.** The Company's remuneration program must be competitive with those of our peer companies in order to attract and retain our executives. As a general rule, we target the market median (50th percentile) though we may deviate, up or down, from the median from time to time, due to a variety of factors. The Remuneration & Nomination Committee is not planning to recommend significant changes to its remuneration programs until the Company achieves significant progress in Akida-related developments.
- **Retention.** The Company's remuneration program is designed to attract and retain highly talented individuals critical to our success by providing programs with retentive features. The Group's current use of equity, which is an acceptable methodology internationally, as part of its remuneration structure includes performance and/or time-based vesting in order to retain our executives. Achieving our objectives should lead to creation of shareholder value which would benefit executives and non-executive directors as their equity grants vest over time. Vested shares do not have value until exercise prices are exceeded thereby raising shareholder value over time.
- **Separate Remuneration Structures.** In accordance with best practice corporate governance, the structure of executive and non-executive directors' remuneration is separate and distinct.
- **Risk Analysis.** The Remuneration & Nomination Committee considers the potential for unacceptable risk-taking in its remuneration design. We believe that the design of our executive remuneration does not unduly incentivize our executives to take actions that may conflict with the long-term best interests of the Company and its shareholders. Specifically, the Company provides executives with an appropriate mix of pay elements between cash and equity, with compensation not overly weighted towards any one remuneration component.

Directors' Report

REMUNERATION REPORT (Audited) (Continued)

2. Remuneration governance (continued)

Adoption of 2017 AGM Remuneration Report

At the 2017 AGM (held in May 2018), some 25.04% of shareholders voted against the adoption of the Company's Remuneration Report. Since that time, the Remuneration Committee has continued to review the approach taken to the Company's overall remuneration, and its appropriateness to the Company's circumstances. The Remuneration Committee formed the view that the principal concern of Shareholders at the previous AGM was the various awards to the CEO, and the Company has not proposed any additional awards to the CEO in the current financial year, beyond those already approved by Shareholders. Outside that issue, the Company believes that the appropriate balance has been struck in the current remuneration arrangements as set out in this Report.

3. Non-executive director remuneration arrangements

Remuneration Policy

The Board seeks to set aggregate remuneration for non-executive directors at a level which provides the Company with the ability to attract and retain directors of the highest calibre, highest ethical standard and broad experience, whilst incurring a cost which is competitive.

The Company's constitution and the ASX listing rules specify that the non-executive director fee pool shall be determined from time to time by a general meeting. The last determination was at the Company's 2018 Annual General Meeting, held on 10 May 2018, where shareholders approved an aggregate fee pool of A\$600,000 per year.

Structure

The remuneration of non-executive directors consists of cash and participation in the Group's LTIP by way of an initial grant of options at the Board's discretion and subject to approval by shareholders.

With effect from 1 June 2018, each non-executive member of the Board received a base fee of A\$100,000 per year. The Audit & Governance Committee Chair and the Remuneration & Nomination Committee Chair each received a fee of A\$50,000 per year and each member of those Committees received A\$20,000 per year. The Lead Independent Director also received A\$20,000 per year.

In conjunction with Mr. Wilks' appointment on 11 February 2019, the director fee compensation was reduced with each non-executive director receiving a base fee of A\$90,000 per year. Committee Chairs receive a fee of A\$25,000 per year, while Committee members receive a fee of A\$10,000 per year. The Non-Executive Chair receives an additional fee of A\$60,000 per year.

The total remuneration received by each director during the reporting period is disclosed in Section 7.

4. Executive remuneration arrangements

Remuneration Policy

The Company recognises that if it is to be successful in a relatively nascent industry with its pioneering technology, it must recruit and retain highly talented individuals. Considering the stage of our technology and business development, these individuals also bear the incremental risk of joining an early stage public Company. Although it is not the only factor, remuneration plays a key part in determining the Company's ability to compete for human resources and retain executives, particularly in the technical fields. In doing so, the Remuneration & Nomination Committee, the Board and management aim to design competitive remuneration programs commensurate with executives' positions, responsibilities and experience, and incentivize them to drive towards the achievement of the Company's short and long-term objectives.

Structure

Remuneration consists of the following key elements:

- Fixed remuneration (base salary and superannuation); and
- Variable remuneration (share options and performance rights).

Directors' Report

REMUNERATION REPORT (Audited) (Continued)

4. Executive remuneration arrangements (continued)

Fixed Remuneration

The fixed pay element of the Company's remuneration program for executives are designed to attract and retain top talent in a competitive environment, taking into consideration the role, responsibilities, capabilities and experience of individual executives. In 2018 executives received a fixed base pay and their contracts do not include any guaranteed base pay increases. Fixed remuneration is reviewed annually by the Board. This process consists of a review of the Company's results, individual performance, relevant comparative remuneration internally and externally.

Variable Remuneration

Cash Bonuses

Some executive contracts include a provision for cash bonuses on such terms and conditions as may be determined from time to time by the Board. As at the date of this report, no bonus program has been set by the Board and no cash bonuses have been awarded. The Remuneration & Nomination Committee has no current plans to recommend a bonus program until the Company achieves substantial Akida-related progress.

2018 and 2015 Long Term Incentive Plan (LTIP) Performance Rights Plan (PRP) and Directors' and Officers' Option Plan (DOOP)

The granting of options and Performance Rights is a critical element of the Company's remuneration program for executives as it aligns their interests directly with that the Company. The realisation of value from these equity grants over time, are highly dependent on the success of the Company. As a result, equity grants incentivise our executives to drive towards achievement of our short and long-term objectives.

The Group does not currently grant options, Performance Rights or RSUs to executives on an annual or refresh basis. The market internationally incentivises executives with annual and refresh scenarios. The Remuneration & Nomination Committee will monitor the remuneration program of the Group, particularly from a retention standpoint, but has no current plans to recommend significant changes to our remuneration program until the Company achieves substantial Akida-related progress.

The 2018 Long Term Incentive Plan (LTIP) was adopted by shareholders on 10 May 2018. The Company had share options and performance rights that were issued under the plans current at the time of offer (Performance Rights Plan, 2015 Long Term Incentive Plan and Directors and Officers Option Plan) however all new awards post 10 May 2018 have been issued under the 2018 LTIP.

The objective of the 2018 LTIP is to attract and retain key employees and consultants. It is considered that the LTIP, through the issue of shares, share options, performance rights and restricted stock units ("*LTIP equity instruments*"), will provide eligible participants with opportunity to participate in the future growth of the Company. Share options offered under the LTIP must be offered at no more than a nominal value and under terms to be determined by the Board from time to time. It is not the intention of the Company to apply for quotation of any of the options which are issued under the LTIP.

LTIP equity instruments issued to eligible participants are made under the 2018 LTIP and have historically been issued in accordance with the 2015 LTIP, PRP and DOOP. The number of LTIP equity instruments issued is determined by the policy set by the Board upon recommendation by the Remuneration & Nomination Committee and is based on each eligible participant's role and position within the Group.

The LTIP equity instruments will vest over periods as determined by the Board and eligible participants are able to exercise or convert the LTIP equity instruments any time after vesting and before the expiry date. Where an eligible participant ceases employment prior to the vesting of their LTIP equity instrument, the LTIP equity instrument will generally automatically lapse and be forfeited. Where an eligible participant ceases employment after the vesting but before the exercise of their LTIP equity instrument, unless the eligible participant has been terminated for cause (when their LTIP equity instrument will immediately lapse), the LTIP equity instrument may generally be exercised by the eligible participant within a period after cessation of employment prescribed either under the applicable Plan or offer documentation or a longer period as determined by the Board. Any LTIP equity instruments not exercised within such period will automatically lapse and be forfeited.

Directors' Report

REMUNERATION REPORT (Audited) (Continued)

5. Options and performance rights granted as part of remuneration

(a) Options and performance rights linked to performance criteria

The Board has full discretion in approving specified performance criteria linked with options granted to KMP with the intention to align the interests of management with that of shareholders and reward the execution of corporate strategies that are expected to increase shareholder wealth.

Options and performance rights linked to performance criteria were issued in 2016 to the CEO, Mr DiNardo, as approved by the Board and Shareholders. The performance criteria were selected as they establish specific goals that support adequate capitalisation of the Company, execution of previously established milestones, and introduction and commercialisation of products that support BrainChip's strategic plan.

No options over ordinary shares or performance rights with performance criteria were issued during 2018. There are no unsatisfied performance criteria linked to options and performance rights at year end.

Details of options over ordinary shares in the Company provided as remuneration with linked performance conditions in the prior years are as follows:

	Year	Options awarded during the year	Grant Date	Vesting criteria	Fair value per option	Total Fair Value	Exercise price per option	Expiry date	Options vested during the year	Options lapsed during the year
Directors		Number			US\$	US\$	US\$		Number	Number
L DiNardo	2016	21,000,000	28/09/2016	refer table below	\$0.064	1,334,151	\$0.172	30/09/2021	3,750,000	-
	2017	6,000,000	16/02/2017		\$0.175	1,050,104	\$0.173	30/09/2021	1,500,000	-
R Beachler	2017	12,000,000	05/03/2017	refer table below	\$0.166	1,995,992	\$0.209	31/03/2022	3,000,000	-

The performance criteria of the above Options issued in prior years is as follows:

Tranche	Number of Options awarded	Grant Date	Performance criteria	Vesting period	Expiry date
Mr DiNardo: Tranche 1	15,000,000	28/09/2016	Upon the Company raising funds necessary to attain Milestone 4 of the Share Purchase Agreement dated 10 September 2015	25% over 4 year period from achievement of the performance criteria.	30/09/2021
Mr DiNardo: Tranche 2	6,000,000	28/09/2016	Upon the announcement to the ASX by BrainChip of an unconditional binding licensing or commercial agreement that has an obligation to pay a license fee of A\$500,000 in accordance with an agreed timetable	25% over 4 year period from achievement of the performance criteria.	30/09/2021
Mr DiNardo: Tranche 3	6,000,000	28/09/2016	Commercial introduction of the PCIe SNAPvision solution. "Introduction" means a fully qualified card with all supporting collateral material including a User's Manual.	25% over 4 year period from achievement of the performance criteria.	30/09/2021
TOTAL	27,000,000				
Mr Beachler: Tranche 1	6,000,000	5/03/2017	Completion of an approved marketing plan for 2017/2018, as certified by the Board	25% over 4 year period from achievement of the performance criteria.	31/03/2022
Mr Beachler: Tranche 2	6,000,000	5/03/2017	Commercial introduction of the PCIe SNAPvision solution. "Introduction" means a fully qualified card with all supporting collateral material including a User's Manual.	25% over 4 year period from achievement of the performance criteria.	31/03/2022
TOTAL	12,000,000				

Directors' Report

REMUNERATION REPORT (Audited) (Continued)

5. Options and performance rights granted as part of remuneration (continued)

(b) Options and performance rights with no linked performance criteria

Options were also issued to KMP with no performance criteria however included a service condition of a 4-year vesting period from the date of issue of the options to encourage the retention of staff. Details of these Options over ordinary shares in the Company (issued in prior years) are set out in the table below:

	Year	Options awarded during the year	Grant Date	End of Vesting Period	Fair value per option [^]	Total Fair Value	Exercise price per option	Expiry date	Options vested during 2018	Options lapsed during 2018
		Number			US\$	US\$	US\$		Number	Number
L DiNardo	2016	23,000,000	28/09/2016	30/09/2020	\$0.064	1,461,607	\$0.172	30/09/2021	5,750,000	-
A Osseiran	2015	2,000,000	04/12/2015	11/12/2015	\$0.110	219,227	\$0.161	30/11/2018	-	2,000,000
A Osseiran	2017	1,000,000	31/05/2017	01/02/2018	\$0.112	112,465	\$0.182	01/02/2023	1,000,000	-
		1,000,000	31/05/2017	01/02/2019	\$0.118	118,423	\$0.182	01/02/2024	-	-
		1,000,000	31/05/2017	01/02/2020	\$0.123	122,892	\$0.182	01/02/2025	-	-
		1,000,000	31/05/2017	01/02/2021	\$0.127	126,616	\$0.182	01/02/2026	-	-
J Stein	2017	2,000,000	31/05/2017	31/01/2018	\$0.116	232,278	\$0.138	31/01/2023	2,000,000	-
		2,000,000	31/05/2017	31/01/2019	\$0.121	242,700	\$0.138	31/01/2024	-	-
		2,000,000	31/05/2017	31/01/2020	\$0.125	250,145	\$0.138	31/01/2025	-	-
		2,000,000	31/05/2017	31/01/2021	\$0.128	256,101	\$0.138	31/01/2026	-	-
E Hernandez	2017	2,000,000	7/07/2017	07/07/2018	\$0.101	201,987	\$0.125	7/07/2023	2,000,000	-
		2,000,000	7/07/2017	07/07/2019	\$0.106	209,581	\$0.125	7/07/2024	-	-
		2,000,000	7/07/2017	07/07/2020	\$0.109	215,655	\$0.125	7/07/2025	-	-
		2,000,000	7/07/2017	07/07/2021	\$0.111	211,730	\$0.125	7/07/2026	-	-
R Beachler	2017	8,000,000	05/03/2017	21/03/2021	\$0.166	1,330,662	\$0.209	31/03/2022	2,000,000	-

[^] For details on valuation of the options issued in the current year, including models and assumptions used, please refer to Note 24.

Details of Performance Rights over ordinary shares in the Company provided as remuneration to KMPs, of which there are no performance conditions however included a service condition to encourage the retention of staff, are set out in the table below:

Class E Performance Rights						
	Year	Performance rights awarded during the year (Number)	Grant Date	Fair value per performance right at grant date (US\$)	Expiry Date	Number converted
L DiNardo	2018	15,000,000	10/5/2018	\$0.104	08/06/2028	7,500,000

Directors' Report

REMUNERATION REPORT (Audited) (Continued)

6. Company performance and the link to remuneration

The actual remuneration earned by executives and non-executive directors during 2018 is set out in section 7 of this report. Shareholders can see the remuneration earned and the value ascribed to share-based payments which were vesting during the year. These share-based payment values were calculated at the date of grant using the Black Scholes model and the costs are expensed over the vesting period.

Remuneration, in the form of share-based payments, awarded to executives has in the past been largely in recognition of the service provided, however as outlined in section 5 of this report the award of options to Mr DiNardo in 2016 was made with over half the award being subject to specific performance criteria. In 2017, Mr Beachler also received options in the Company with specific performance criteria as noted in section 5 above.

BrainChip's 2018 LTIP gives the Board the ability to add performance criteria as appropriate to the specific terms as and when options or performance rights are offered to participants. The granting of options and performance rights is carried out to attain services and encourage retention and, is a performance incentive which allows executives to share the rewards of the success of the Company.

The table below shows information on the Group's earnings and movements in shareholder wealth for the past five years up to and including the current financial year.

	2018	2017	Restated ⁽¹⁾ 2016	2015	2014
Net loss after tax US\$ million	16.52	13.77	5.10	27.36	0.36
Closing share price AUD	\$0.105	\$0.185	\$0.28	\$0.26	-
Closing share price USD	\$0.074	\$0.144	\$0.202	\$0.189	-
Loss per share (US cents)	1.64	1.59	0.69	8.43	0.14
Net tangible assets US cents per share	0.68	1.77	0.38	0.25	(3.77)

⁽¹⁾ 2016 results have been restated after the finalisation of the fair value of the acquisition of BrainChip SAS.

No dividends were issued in the past five years including the current financial year.

7. Executive contractual arrangements

Details for executive contractual arrangements for KMP are detailed below:

Name	Louis DiNardo
Title	Chief Executive Officer and Executive Director
Term of agreement	Open agreement with no fixed term
Details	Base fee of US\$400,000 plus benefits under health and welfare benefit plans, practices, policies and programs provided by BrainChip Inc.
Termination	Terminated at any time with or without cause or notice by either himself or BrainChip Inc. Mr DiNardo is entitled to 12 months' severance pay upon termination by BrainChip Inc. at any time without cause. The amount is payable over 12 months from the date of termination.

Name	Peter van der Made
Title	Chief Technical Officer
Term of agreement	Open agreement with no fixed term
Details	Base fee of US\$300,000 plus benefits under health and welfare benefit plans, practices, policies and programs provided by BrainChip Inc. Mr van der Made will be entitled to a cash bonus on such terms and conditions as determined from time to time by the Board (Annual Bonus). The Annual Bonus may be an amount up to fifty percent (50%) of the base salary in effect at the end of any fiscal year. No bonuses have been paid to date.
Termination	Terminated at any time with or without cause or notice by either himself or BrainChip Inc. Mr van der Made is entitled to 12 months' severance pay upon termination by BrainChip Inc. at any time without cause. The amount is payable over 12 months from the date of termination.

Directors' Report

REMUNERATION REPORT (Audited) (Continued)

7. Executive contractual arrangements (continued)

Name	Anil Mankar
Title	Chief Development Officer
Term of agreement	Open agreement with no fixed term
Details	Base fee of US\$300,000 plus benefits under health and welfare benefit plans, practices, policies and programs provided by BrainChip Inc. Mr Mankar will be entitled to a cash bonus on such terms and conditions as determined from time to time by the Board (Annual Bonus). The Annual Bonus may be an amount up to fifty percent (50%) of the base salary in effect at the end of any fiscal year. No bonuses have been paid to date.
Termination	Terminated at any time with or without cause or notice by either himself or BrainChip Inc. Mr Mankar is entitled to 24 months' severance pay upon termination by BrainChip Inc. at any time without cause. The amount is payable over 24 months from the date of termination.

Name	Robert Beachler
Title	Senior Vice President of Marketing and Business Development
Term of agreement	Open agreement with no fixed term
Details	Base fee of US\$300,000 plus benefits under health and welfare benefit plans, practices, policies and programs provided by BrainChip Inc.
Termination	Terminated at any time with or without cause or notice by either himself or BrainChip Inc. Mr Beachler is entitled to 12 months' severance pay upon termination by BrainChip Inc. at any time without cause. The amount is payable over 12 months from the date of termination.

Name	Ryan Benton (ceased as KMP on 14 September 2018)
Title	Chief Financial Officer
Term of agreement	Open agreement with no fixed term
Details	Base fee of US\$300,000 plus benefits under health and welfare benefit plans, practices, policies and programs provided by BrainChip Inc.
Termination	Terminated at any time with or without cause or notice by either himself or BrainChip Inc. Mr Benton is entitled to 12 months' severance pay upon termination by BrainChip Inc. at any time without cause. The amount is payable over 12 months from the date of termination.

There are no other formalised KMP employment agreements.

Directors' Report

REMUNERATION REPORT (Audited) (Continued)

7. Executive contractual arrangements (continued)

Remuneration of KMP

2018	Short Term		Post-Employment	Share-based Payment ⁽⁵⁾	Termination	Total	Performance related
	Salary and Fees ⁽⁴⁾	Annual leave	Super-annuation	Equity Instruments			
	US\$	US\$	US\$	US\$	US\$	US\$	%
Non-Executive Directors							
J Stein	102,732	-	-	287,805	-	390,537	-
A Osseiran	67,660	-	-	141,360	-	209,020	-
E Hernandez	94,042	-	-	335,488	-	429,530	-
S Liebeskind ⁽¹⁾	55,246	-	-	-	-	55,246	-
E Bolto ⁽¹⁾	19,871	-	-	37,457	-	57,328	-
Executive Directors							
L DiNardo	405,897	12,516	-	3,826,121	-	4,244,534	15%
Other Key Management Personnel							
A Mankar	313,341	5,836	8,250	-	-	327,427	-
P van der Made ⁽²⁾	313,341	5,747	-	-	-	319,088	-
R Beachler	313,341	3,528	7,500	1,129,177	-	1,453,546	49%
R Benton ⁽³⁾	247,895	10,007	-	160,388	-	418,290	8%
Totals	1,933,366	37,634	15,750	5,917,796	-	7,904,546	

⁽¹⁾ Mr Bolto resigned, and Mr Liebeskind was appointed, as a non-executive director on 1 May 2018. The Board engaged Mr Bolto as a consultant to the Company from 1 May 2018.

⁽²⁾ Mr van der Made resigned as an executive director on 1 January 2018 however continues to be reported as a KMP in his role as Chief Technology Officer.

⁽³⁾ Mr Benton ceased to be KMP upon his resignation as CFO, effective 14 September 2018. The share-based payment expense relates to 6,250,000 options which vested prior to his resignation.

⁽⁴⁾ No bonuses were awarded to any KMP during the year.

⁽⁵⁾ Share-based payment "remuneration" represents the current period expense in respect of options and performance rights issued, offset by the value of options and performance rights that have been forfeited during the year.

Directors' Report

REMUNERATION REPORT (Audited) (Continued)

7. Executive contractual arrangements (continued)

Remuneration of KMP

2017	Short Term		Post-Employment	Share-based Payment	Termination	Total	Performance related
	Salary and Fees ⁽⁸⁾	Annual leave	Super-annuation	Options			
	US\$	US\$	US\$	US\$	US\$	US\$	%
Non-Executive Directors							
E Bolto ⁽¹⁾	100,002	-	-	167,143	-	267,145	-
J Stein ⁽²⁾	111,541	-	-	458,441	-	569,982	-
A Osseiran	38,463	-	-	222,857	-	261,320	-
E Hernandez ⁽³⁾	22,457	-	-	210,456	-	232,913	-
Executive Directors							
L DiNardo	429,531	19,999	-	1,810,816	-	2,260,346	63%
P van der Made	312,127	(4,806)	-	-	-	307,321	-
Other Key Management Personnel							
A Mankar	312,127	6,346	-	-	-	318,473	-
R Benton ⁽⁴⁾	136,855	2,075	-	579,701	-	718,631	4%
R Beachler ⁽⁵⁾	266,160	6,656	-	1,623,250	-	1,896,066	68%
N Drossler ⁽⁶⁾	86,863	(703)	-	(13,038)	111,504	184,626	-
H DoDuy ⁽⁷⁾	145,407	29,071	78,500	-	69,391	322,369	-
Totals	1,961,533	58,638	78,500	5,059,626	180,895	7,339,192	

(1) Short term remuneration for Mr Bolto includes consulting fees of \$38,462 (refer section 9).

(2) Short term remuneration for Ms Stein includes consulting fees of \$61,540 (refer section 9).

(3) Mr Hernandez was appointed as non-executive director on 7 July 2017.

(4) Mr Benton was appointed Chief Financial Officer of BrainChip on 20 October 2017 which follows Mr Benton's appointment as Chief Financial Officer of BrainChip's subsidiary, BrainChip Inc. on 9 August 2017.

(5) Mr Beachler was appointed Senior Vice President of Marketing and Business Development on 5 March 2017.

(6) Ms Drossler resigned as VP Finance and Administration 5 May 2017 and ceased as KMP on that date.

(7) Mr DoDuy resigned as President of BrainChip SAS on 22 December 2017 and ceased as KMP on that date.

(8) No bonuses were awarded to any KMP during the year.

Directors' Report

REMUNERATION REPORT (Audited) (Continued)

8. Equity Instruments Disclosure

Shareholdings of KMP (including nominees)

Shares held in BrainChip Holdings by KMP are summarised as follows:

	Balance held at 1 January 2018	Acquired / Disposed	Shares issued as remuneration	Conversion of Performance Rights	Sale of shares to satisfy US Tax liability ⁽¹⁾	Net change other	Balance held at 31 December 2018
Directors							
L DiNardo	-	-	15,000,000	9,500,000	(12,720,639)	-	11,779,361
J Stein	-	-	-	-	-	-	-
A Osseiran ⁽²⁾	8,438,500	-	-	900,000	-	-	9,338,500
E Hernandez	-	-	-	-	-	-	-
S Liebeskind ⁽³⁾	-	-	-	900,000	-	10,749,242	11,649,242
E Bolto ⁽⁵⁾	-	-	-	-	-	-	-
Other KMPs							
A Mankar ⁽⁴⁾	109,135,000	(4,500,000)	-	17,250,000	-	-	121,885,000
P van der Made	161,305,508	(4,500,000)	-	19,500,000	-	-	176,305,508
R Beachler	-	-	-	1,500,000	(799,696)	-	700,304
R Benton ⁽⁶⁾	-	-	-	500,000	(226,376)	(273,624)	-
Total	278,879,008	(9,000,000)	15,000,000	50,050,000	(13,746,711)	10,475,618	331,657,915

⁽¹⁾ Shares sold on market by the employee and/or the BrainChip Long Term Incentive Plan Trustee to satisfy US tax responsibilities.

⁽²⁾ Shares held indirectly by Adam Osseiran and Rebecca Osseiran-Moisson ATF the Osseiran Family Trust.

⁽³⁾ Shares held indirectly upon appointment as director comprise 2,310,742 fully paid shares in the name of Crossfield Intech Nominees Pty Ltd and 8,438,500 fully paid shares via Crossfield Intech Nominees Pty Ltd as trustee for the Liebeskind Family Superfund.

⁽⁴⁾ 99,135,000 fully paid ordinary shares are held by Merrill Lynch (Australia) Nominees Pty Ltd on behalf of Mr Mankar.

⁽⁵⁾ Mr Bolto resigned as a director on 1 May 2018.

⁽⁶⁾ Mr Benton ceased to be KMP upon his resignation as CFO, effective 14 September 2018.

Options holdings of Key Management Personnel (including nominees)

No options were granted to KMP during the current year. Refer to section 5 for options granted to KMP in prior years. There were no alterations to the terms and conditions of options awarded as remuneration since their award date. No options were exercised or lapsed during the current year.

	Balance at beginning of period 1 January 2018	Granted as remuner- ation	Exercised	Net change other	Balance at end of period 31 December 2018	Vested and not exercise- able	Vested and exercisable
Directors							
L DiNardo	50,000,000	-	-	-	50,000,000	-	16,750,000
J Stein	8,000,000	-	-	-	8,000,000	-	2,000,000
A Osseiran ⁽¹⁾	6,000,000	-	-	(2,000,000)	4,000,000	-	1,000,000
E Hernandez	8,000,000	-	-	-	8,000,000	-	2,000,000
S Liebeskind ⁽²⁾	-	-	-	6,000,000	6,000,000	-	6,000,000
E Bolto ⁽³⁾	7,900,000	-	-	(7,900,000)	-	-	-
Other KMPs							
A Mankar	-	-	-	-	-	-	-
P van der Made	-	-	-	-	-	-	-
R Beachler	20,000,000	-	-	-	20,000,000	-	5,000,000
R Benton ⁽⁴⁾	27,000,000	-	-	(27,000,000)	-	-	-
Total	126,900,000	-	-	(30,900,000)	96,000,000	-	32,750,000

⁽¹⁾ 2,000,000 options held by Dr Osseiran lapsed during the year.

⁽²⁾ Mr Liebeskind was appointed as a non-executive director on 1 May 2018. Mr Liebeskind held 3,000,000 options directly and 3,000,000 indirectly via Crossfield Intech Nominees Pty Ltd as trustee for the Liebeskind Family Superfund.

⁽³⁾ Mr Bolto resigned as a director on 1 May 2018.

⁽⁴⁾ Mr Benton ceased to be KMP upon his resignation as CFO, effective 14 September 2018, resulting in 20,750,000 unvested options being forfeited, and the lapsing of 6,250,000 vested options.

Directors' Report

REMUNERATION REPORT (Audited) (Continued)

8. Equity Instruments Disclosure (continued)

Performance Rights held by KMP (including nominees)

The table below discloses the number of Performance Rights held by KMP that were granted and vested during the year. No performance rights lapsed during the year.

	Balance at beginning of period 1 January 2018	Granted as remuneration	Exercised	Other	Balance at end of period 31 December 2018	Vested and exercisable	Value of performance rights exercised US\$
Directors							
L DiNardo ⁽¹⁾⁽²⁾	2,000,000	15,000,000	(9,500,000)	-	7,500,000	-	2,080,667
J Stein	-	-	-	-	-	-	-
A Osseiran ⁽²⁾⁽⁶⁾	900,000	-	(900,000)	-	-	-	85,823
E Hernandez	-	-	-	-	-	-	-
S Liebeskind ⁽²⁾⁽³⁾⁽⁶⁾	-	-	(900,000)	900,000	-	-	85,823
E Bolto	-	-	-	-	-	-	-
Other KMPs							
A Mankar ⁽²⁾⁽⁶⁾	17,250,000	-	(17,250,000)	-	-	-	1,644,936
P van der Made ⁽²⁾⁽⁴⁾⁽⁶⁾	19,500,000	-	(19,500,000)	-	-	-	1,859,493
R Beachler ⁽²⁾⁽⁵⁾	1,500,000	-	(1,500,000)	-	-	-	139,298
R Benton ⁽⁵⁾	500,000	-	(500,000)	-	-	-	43,940
Total	41,650,000	15,000,000	(50,050,000)	900,000	7,500,000	-	5,939,980

(1) Mr DiNardo was awarded 15,000,000 performance rights on 8 June 2018 as part of his remuneration.

7,500,000 performance rights vested on 8 December 2018 and were converted to fully paid shares on 20 December 2018. 7,500,000 performance rights will vest on 8 June 2019 subject to continuous service being provided.

(2) Upon the achievement of Milestone 4 on 9 October 2018, being the announcement on the ASX that BrainChip had executed an unconditional binding licensing agreement that had an upfront payment of no less than A\$500,000, the Class D performance rights held by KMPs were converted to fully paid ordinary shares.

(3) Mr Liebeskind was appointed as a non-executive director on 1 May 2018. Mr Liebeskind held 900,000 Class D Performance Rights indirectly via Crossfield Intech Nominees Pty Ltd as trustee for Liebeskind Family Super Fund.

(4) 6,000,000 Class C performance rights held by Mr van der Made were converted to fully paid ordinary shares during the year.

(5) 1,000,000 and 500,000 Class B performance rights held by Mr Beachler and Mr Benton (respectively) were converted to fully paid ordinary shares during the year.

(6) Dr Osseiran, Mr Liebeskind, Mr Mankar and Mr van der Made exercised performance rights received in the Acquisition of BrainChip Holdings in 2015. The exercise and value on exercise are disclosed due to their position as a KMP.

Performance rights do not carry any voting or dividend rights and can only be exercised once the vesting conditions have been met, until their expiry date.

For details on the vesting conditions of each class of Performance Rights please refer to note 21(e).

9. Other transactions and balances with KMP

In the prior year, Mr. Bolto and Ms. Stein each had a consulting agreement with the Company for ad hoc services as requested by the CEO from time to time effective from 1 December 2016 through 31 August 2017 at a rate of A\$10,000 per month during active assignments. These consulting services are outside the scope of what is expected of Mr. Bolto and Ms. Stein in their roles as non-executive directors of the Company. The agreements were terminated effective from 31 August 2017. Fees paid during 2017 to Mr. Bolto totalled \$38,462 and to Ms. Stein totalled \$61,540.

In the prior year, accrued termination salary payable as at 31 December 2017 to Mr DoDuy, a KMP at the time of his resignation, totalled \$51,800.

No further transactions with other Key management personnel have been incurred, other than reported above.

End of Audited Remuneration Report.

Directors' Report

INDEMNIFICATION AND INSURANCE OF DIRECTORS AND OFFICERS

During the financial year, the Company paid a premium in respect to a contract of insurance to insure directors and officers of the Company and related bodies corporate against those liabilities for which insurance is permitted under section 199B of the Corporations Act 2001. Disclosure of the nature of the liabilities and the amount of the premium is prohibited under the conditions of the contract of insurance.

INDEMNIFICATION OF AUDITORS

To the extent permitted by law, the Company has agreed to indemnify its auditors, Ernst & Young, as part of the terms of its audit engagement agreement against claims by third parties arising from the audit (for an unspecified amount). No payment has been made to indemnify Ernst & Young during or since the financial year.

AUDITOR INDEPENDENCE

The Directors received the Independence Declaration, as set out on page 28, from Ernst & Young.

NON-AUDIT SERVICES

No non-audit services were provided by the entity's auditor, Ernst & Young during the current and the prior year.

Signed in accordance with a resolution of the Directors.



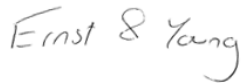
Stephen Wills
Chair
Sydney, Australia, 27 March 2019

Auditor's Independence Declaration to the Directors of BrainChip Holdings Ltd

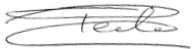
As lead auditor for the audit of the financial report of BrainChip Holdings Ltd for the financial year ended 31 December 2018, I declare to the best of my knowledge and belief, there have been:

- a) no contraventions of the auditor independence requirements of the *Corporations Act 2001* in relation to the audit; and
- b) no contraventions of any applicable code of professional conduct in relation to the audit.

This declaration is in respect of BrainChip Holdings Ltd and the entities it controlled during the financial year.



Ernst & Young



Philip Teale
Partner
27 March 2019

Consolidated Statement of Profit or Loss and Other Comprehensive Income for the year ended 31 December 2018

	Note	31 December 2018 \$US	31 December 2017 \$US
Continuing operations			
Revenue from contracts with customers	5	947,989	269,496
Research & development expenses	6(a)	(3,969,304)	(2,205,739)
Selling & marketing expenses	6(b)	(1,465,475)	(507,883)
General & administrative expenses	6(c)	(4,861,194)	(4,544,757)
Share-based payment expense	24(a)	(7,305,802)	(6,941,360)
Operating Loss		(16,653,786)	(13,930,243)
Finance income	7(a)	130,600	128,480
Finance expense	7(b)	-	(622)
Loss from continuing operations before income tax		(16,523,186)	(13,802,385)
Income tax expense	9(c)	-	-
Loss from continuing operations after income tax		(16,523,186)	(13,802,385)
Gain from discontinued operations after tax	30	-	28,372
Net loss for the year		(16,523,186)	(13,774,013)
Other comprehensive income/(loss)			
<i>Other comprehensive income not to be reclassified to profit or loss in subsequent periods (net of tax):</i>			
Remeasurement gains/(losses) on defined benefit plans		34,094	(1,515)
<i>Items that may be reclassified subsequently to profit or loss (net of tax):</i>			
Exchange differences on translation of foreign operations		(1,030)	76,142
Other comprehensive income for the year, net of tax		33,064	74,627
Total comprehensive loss for the year, net of tax		(16,490,122)	(13,699,386)
		US cents per share	US cents per share
Loss per share from continuing operations attributable to ordinary equity holders of the Company			
Basic and diluted loss per share		(1.64)	(1.59)
Gain per share from discontinued operations attributable to ordinary equity holders of the Company			
Basic and diluted gain per share		(0.00)	(0.00)
Loss per share attributable to ordinary equity holders of the Company			
Basic and diluted loss per share	10	(1.64)	(1.59)

The above statement of comprehensive income should be read in conjunction with the accompanying notes.

Consolidated Statement of Financial Position

As at 31 December 2018

	Note	31 December 2018 \$US	31 December 2017 \$US
CURRENT ASSETS			
Cash and cash equivalents	11	7,543,326	16,049,330
Trade and other receivables	12	461,129	358,975
Inventory		20,864	20,563
Other assets	13	139,789	333,600
Total current assets		8,165,108	16,762,468
NON-CURRENT ASSETS			
Plant and equipment	14	226,456	192,307
Intangible assets and goodwill	15	1,735,122	2,814,027
Other assets		38,950	41,512
Total non-current assets		2,000,528	3,047,846
TOTAL ASSETS		10,165,636	19,810,314
CURRENT LIABILITIES			
Trade and other payables	16	723,541	1,160,337
Financial liabilities	18	-	-
Other liabilities	19	-	-
Employee benefits liabilities	17	228,962	208,129
Total current liabilities		952,503	1,368,466
NON-CURRENT LIABILITIES			
Financial liabilities	18	226,873	236,342
Defined benefit plan	20	106,951	139,036
Total non-current liabilities		333,824	375,378
TOTAL LIABILITIES		1,286,327	1,743,844
NET ASSETS		8,879,309	18,066,470
EQUITY			
Contributed equity	21(a)	55,143,789	53,570,901
Share-based payments reserve	22	16,463,527	10,733,454
Foreign currency translation reserve	22	80,526	81,556
Other equity reserve	22	247,872	247,872
Accumulated losses	23	(63,056,405)	(46,567,313)
TOTAL EQUITY		8,879,309	18,066,470

The above statement of financial position should be read in conjunction with the accompanying notes.

Consolidated Statement of Cash Flows

For the year ended 31 December 2018

	Note	31 December 2018 US\$	31 December 2017 US\$
CASH FLOWS USED IN OPERATING ACTIVITIES			
Receipts from customers		909,662	312,131
Payments to suppliers and employees		(8,694,093)	(6,602,048)
Interest received		97,339	23,846
Grants received from third parties		232,449	15,916
R&D credits received from third parties		251,439	170,393
Other income		-	5,220
Net cash flows used in operating activities	11	(7,203,204)	(6,074,542)
CASH FLOWS USED IN INVESTING ACTIVITIES			
Payments for property, plant and equipment		(86,738)	(125,118)
Payments for purchase of patents		(457,273)	(229,176)
Payments for capitalised research and development		(686,189)	(543,389)
Proceeds from sale of royalty interests		-	32,289
Net cash flows used in investing activities		(1,230,200)	(865,394)
CASH FLOWS FROM FINANCING ACTIVITIES			
Receipts from the issue of shares		-	20,888,073
Payment of share issue costs		(26,560)	(1,330,195)
Repayment of loans to third parties		(2,092)	(308,281)
Net cash flows (used in)/generated from financing activities		(28,652)	19,249,597
Net (decrease)/increase in cash and cash equivalents		(8,462,056)	12,309,661
Net foreign exchange differences		(43,948)	145,718
Cash at the beginning of the financial period		16,049,330	3,593,951
Cash and cash equivalents at the end of the period	11	7,543,326	16,049,330

The above cash flow statement should be read in conjunction with the accompanying notes.

Consolidated Statement of Changes in Equity

For the year ended 31 December 2018

	Contributed equity US\$	Share-based payment reserve US\$	Other reserves US\$	Foreign currency reserve US\$	Accumulated losses US\$	Total equity US\$
At 1 January 2017	34,013,023	3,792,094	247,872	5,414	(32,791,785)	5,266,618
Loss for the year	-	-	-	-	(13,774,013)	(13,774,013)
Other comprehensive income	-	-	-	76,142	(1,515)	74,627
Total comprehensive loss for the period	-	-	-	76,142	(13,775,528)	(13,699,386)
Issue of share capital	20,888,073	-	-	-	-	20,888,073
Share issue costs	(1,330,195)	-	-	-	-	(1,330,195)
Share-based payment – Note 24(a)	-	6,941,360	-	-	-	6,941,360
At 31 December 2017	53,570,901	10,733,454	247,872	81,556	(46,567,313)	18,066,470

	Contributed equity US\$	Share-based payment reserve US\$	Other reserves US\$	Foreign currency reserve US\$	Accumulated losses US\$	Total equity US\$
At 1 January 2018	53,570,901	10,733,454	247,872	81,556	(46,567,313)	18,066,470
Loss for the year	-	-	-	-	(16,523,186)	(16,523,186)
Other comprehensive loss	-	-	-	(1,030)	34,094	33,064
Total comprehensive loss for the period	-	-	-	(1,030)	(16,489,092)	(16,490,122)
Issue of share capital	1,599,448	-	-	-	-	1,599,448
Share issue costs	(26,560)	-	-	-	-	(26,560)
Share-based payment – Note 24(a)	-	5,730,073	-	-	-	5,730,073
At 31 December 2018	55,143,789	16,463,527	247,872	80,526	(63,056,405)	8,879,309

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

1. CORPORATE INFORMATION

The annual financial report of BrainChip Holdings Ltd (“Company”) and its controlled entities (“Consolidated Entity” or “Group”) for the year ended 31 December 2018 was authorised for issue in accordance with a resolution of the Directors on 27 March 2019.

BrainChip Holdings is a for-profit Company limited by shares, incorporated and domiciled in Australia, and whose shares are publicly traded on the Australian Securities Exchange.

The address of the registered office is Level 12, 225 George Street, Sydney NSW 2000, Australia.

The nature of the operations and principal activities of the Group are described in the Directors’ Report.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of preparation

The financial report is a general purpose financial report, which has been prepared in accordance with the requirements of the Corporations Act 2001 and Australian Accounting Standards and other authoritative pronouncements of the Australian Accounting Standards Board. The financial report has been prepared on a historical cost basis.

The financial report is presented in US dollars, being the functional currency of the Company.

Except for the adoption of new and amended standards, the policies are consistently applied.

New standards, interpretation and amendments adopted by the Group

The Group applied for the first time all new and amended Accounting Standards and Interpretations, which are effective for annual periods beginning 1 January 2018. Although these new and amended standards and Interpretations applied for the first time in 2018, they did not have a material impact on the annual consolidated financial statements of the Group.

AASB 15 Revenue from Contracts with Customers

AASB 15 supersedes AASB 118 *Revenue* and related Interpretations and it applies to all revenue arising from contracts with customers, unless those contracts are in the scope of other standards. The new standard establishes a five-step model to account for revenue arising from contracts with customers. Under AASB 15, revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer.

The standard requires entities to exercise judgement, taking into consideration all of the relevant facts and circumstances when applying each step of the model to contracts with their customers. The standard also specifies the accounting for the incremental costs of obtaining a contract and the costs directly related to fulfilling a contract.

The Group adopted AASB 15 using the full retrospective method of adoption. The effect of the transition on the current period has not been disclosed as the standard provides an optional practical expedient. The Group did not apply any of the other available optional practical expedients. *The Group determined there was no material financial effect of adopting AASB 15.*

The Group disaggregated revenue recognised from contracts with customers into categories that depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors. Refer to Note 5 for the disclosure on disaggregated revenue.

AASB 9 Financial Instruments

AASB 9 *Financial Instruments* replaces AASB 139 *Financial Instruments: Recognition and Measurement* for annual periods beginning on or after 1 January 2018, bringing together all three aspects of the accounting for financial instruments: classification and measurement; impairment; and hedge accounting.

AASB 9 sets out requirements for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. The Group has adopted AASB 9 retrospectively in accordance with the standard; changes in accounting policies resulting from the adoption of AASB 9 *did not have a material impact on the Company’s consolidated financial statements.*

AASB 9 largely retains the existing requirements of AASB 139 for the classification and measurement of financial liabilities, however, it eliminates the previous AASB 139 categories for financial assets held to maturity, receivables and available for sale. Under AASB 9, on initial recognition a financial asset is classified as measured at:

- Amortised cost;
- Fair Value through Other Comprehensive Income (“FVOCI”) – debt investment;
- FVOCI – equity investment; or
- Fair Value through Profit or Loss (“FVTPL”)

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(a) Basis of preparation (continued)

The classification of financial assets under AASB 9 is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. A financial asset (unless it is a trade receivable without a significant financing component that is initially measured at the transaction price) is initially measured at fair value plus, for an item not at FVTPL, transaction costs that are directly attributable to its acquisition. For financial assets measured at amortised cost, these assets are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by impairment losses.

Interest income, foreign exchange gains and losses and impairment are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.

As of 31 December 2018, the Company's financial instruments consist of cash and cash equivalents, trade and other receivables and trade and other payables.

Cash and cash equivalents and trade and other receivables previously designated as receivables under AASB 139 are now classified as amortised cost under AASB 9. The trade and other payables are designated as other financial liabilities, which are measured at amortised cost.

The cash and cash equivalents, trade and other receivables, trade and other payables approximate their fair value due to their short-term nature.

Other financial liabilities (as reported in the balance sheet) are reported as financial liabilities and measured through the fair value through the profit and loss.

The Group classified the fair value of the financial instruments according to the following fair value hierarchy based on the amount of observable inputs used to value the instruments:

The three levels of the fair value hierarchy are:

- Level 1 – Values based on unadjusted quoted prices available in active markets for identical assets or liabilities as of the reporting date.
- Level 2 – Values based on inputs, including quoted prices, time value and volatility factors, which can be substantially observed or corroborated in the marketplace. Prices in Level 2 are either directly or indirectly observable as of the reporting date.
- Level 3 – Values based on prices or valuation techniques that are not based on observable market data.

Impairment of financial assets

AASB 9 replaces the 'incurred loss' model in AASB 139 with an 'expected credit loss' ("ECL") model. The new impairment model is applied to financial assets measured at amortised cost, contract assets and debt investments at Fair Value Through Other Comprehensive Income ("FVOCI"), but not to investments in equity instruments.

Under AASB 9, loss allowances are measured on either of the following bases:

- 12-month ECLs: these are ECLs that result from possible default events within the 12 months after the reporting date; and
- Lifetime ECL: these are ECLs that result from all possible default events over the expected life of a financial instrument.

ECLs are probability-weighted estimates of credit losses. Credit losses are measured at the present value of all cash shortfalls (i.e. the difference between the cash flows due to the Group in accordance with the contract and the cash flows that the Group expects to receive). ECLs are discounted at the effective interest rate of the financial asset.

The Group has adopted a simplified approach for trade receivables on the initial transaction date (1 January 2018) with an amount equal to the full ECL to be recognised. *As the ECL assessment has resulted in an immaterial credit loss, no impairment allowance has been recognised by the Group.*

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(a) Basis of preparation (continued)

Going concern

This financial report has been prepared on the going concern basis, which contemplates the continuity of normal business activity and the realisation of assets and settlement of liabilities in the normal course of business.

During the period ended 31 December 2018, the Group incurred a net loss after tax of \$16,523,186 and a cash outflow from operating activities of \$7,203,204.

At 31 December 2018, the Group had cash and cash equivalents of \$7,543,326, net assets of \$8,879,309 and a net working capital of \$7,212,605.

The Company has prepared a detailed cash budget showing the need to generate additional commercial agreements or receive additional funds in order to finance the Group for the next twelve months.

This creates a material uncertainty that may cast doubt as to whether the Group will continue as a going concern and, therefore, whether it will settle its liabilities and commitments in the normal course of business.

The Directors have considered the funding and operational status of the business in arriving at their assessment of going concern and believe that the going concern basis of preparation is appropriate, based upon the following:

- The ability to further vary cash flows depending upon the achievement of new commercial agreements; and
- The ability of the Group to obtain funding through various sources, including debt and equity issues which are currently being investigated by management.

The Directors have reasonable expectations that they will be able to generate additional commercial agreements or raise the funds needed for the Group to continue to execute the business plan of the Group in the medium term. However, cashflows can be adjusted by controlling headcount and R&D and marketing expenses to ensure that the Company can pay its debts as and when they fall due until such funding is secured, or new commercial agreements are in place.

Should the Group not achieve the matters set out above, there is uncertainty whether the Group would continue as a going concern and therefore whether it would realise its assets and extinguish its liabilities in the normal course of business and at the amounts stated in the financial report. The financial report does not include adjustments relating to the recoverability or classification of the recorded asset amounts or to the amounts or classification of liabilities that might be necessary should the Group not be able to continue as a going concern.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(b) Statement of compliance

The financial report complies with Australian Accounting Standards as issued by the Australian Accounting Standards Board. The financial report also complies with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board.

The following Standards and Interpretations have been issued by the AASB, are relevant to the Group, but are not yet effective and have not been adopted by the Group for the period ending 31 December 2018. Unless otherwise stated, the Group has yet to fully assess the impact of these Standards and Interpretations when applied in future periods.

Reference	Title	Summary	Application date of standard*	Application date for Group	Impact on Group
AASB 16	Leases	<p>AASB 16 requires lessees to account for all leases under a single on-balance sheet model in a similar way to finance leases under AASB 117 <i>Leases</i>. The standard includes two recognition exemptions for lessees – leases of 'low-value' assets (e.g., personal computers) and short-term leases (i.e., leases with a lease term of 12 months or less). At the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset).</p> <p>Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset.</p> <p>Lessees will be required to remeasure the lease liability upon the occurrence of certain events (e.g., a change in the lease term, a change in future lease payments resulting from a change in an index or rate used to determine those payments). The lessee will generally recognise the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset.</p> <p>Lessor accounting is substantially unchanged from today's accounting under AASB 117. Lessors will continue to classify all leases using the same classification principle as in AASB 117 and distinguish between two types of leases: operating and finance leases.</p>	1 January 2019	1 January 2019	The Group is still assessing the impact of applying this new accounting standard as at the date of this report.
AASB 2018-1 Amendments to Australian Accounting Standards – Annual Improvements 2015-2017 Cycle	<i>Annual Improvements to IFRS Standards 2015-2017 Cycle</i> †	<p>The amendments clarify certain requirements in:</p> <ul style="list-style-type: none"> AASB 3 Business Combinations and AASB 11 Joint Arrangements - previously held interest in a joint operation AASB 112 Income Taxes - income tax consequences of payments on financial instruments classified as equity AASB 123 Borrowing Costs - borrowing costs eligible for capitalisation. 	1 January 2019	1 January 2019	The Group has assessed the impact of applying this new accounting standard. The Group does not expect a significant impact.
AASB Interpretation 23 Uncertainty over Income Tax Treatments, and relevant amending standards	<i>Uncertainty over Income Tax Treatments</i>	<p>The Interpretation clarifies the application of the recognition and measurement criteria in AASB 112 <i>Income Taxes</i> when there is uncertainty over income tax treatments. The Interpretation specifically addresses the following:</p> <ul style="list-style-type: none"> Whether an entity considers uncertain tax treatments separately The assumptions an entity makes about the examination of tax treatments by taxation authorities How an entity determines taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates How an entity considers changes in facts and circumstances. 	1 January 2019	1 January 2019	The Group has assessed the impact of applying this new accounting standard. The Group does not expect a significant impact.

* Designates the beginning of the applicable annual reporting period unless otherwise stated.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

(c) Basis of consolidation

The consolidated financial statements comprise the financial statements of the parent entity and its subsidiaries (the 'Group') as at 31 December each year. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if and only if the Group has:

- Power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee)
- Exposure, or rights, to variable returns from its involvement with the investee, and
- The ability to use its power over the investee to affect its returns

When the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- The contractual arrangement with the other vote holders of the investee
- Rights arising from other contractual arrangements
- The Group's voting rights and potential voting rights

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the statement of comprehensive income from the date the Group gains control until the date the Group ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income are attributed to the equity holders of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies. All intra-Group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

(d) Foreign currency translation

(i) Functional and presentation currency

The functional currency of each entity within the Group is the currency of the primary economic environment in which that entity operates. The consolidated financial statements are presented in United States Dollars which is the parent entity's functional and presentation currency. The United States Dollar is also the functional currency of all subsidiaries in the Group except for BrainChip SAS which has a functional currency of Euros.

(ii) Transactions and balances

Transactions in foreign currencies are initially recorded in the functional currency by applying the exchange rates ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the rate of exchange at the reporting date.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate as at the date of the initial transaction. All exchange differences arising from the above policies are recognised in the profit and loss.

(iii) Translations of subsidiary Companies' functional currency to presentation currency

The results of non-US\$ reporting subsidiaries, if any, are translated into United States Dollars (presentation currency). Income and expenses are translated at the exchange rates at the date of the transactions. Assets and liabilities are translated at the closing exchange rate for each balance sheet date. Share capital, reserves and accumulated losses are converted at applicable historical rates.

Exchange variations resulting from the translation are recognised in the foreign currency translation reserve in equity. On consolidation, exchange differences arising from the translation of monetary items considered to be part of the net investment in subsidiaries are taken to the foreign currency translation reserve. If a subsidiary were sold, the proportionate share of the foreign currency translation reserve would be transferred out of equity and recognised in the statement of comprehensive income.

(e) Operating segments

An operating segment is a component of an entity that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the same entity), whose operating results are regularly reviewed by the entity's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance and for which discrete financial information is available. This includes start-up operations which are yet to earn revenues. Management will also consider other factors in determining operating segments such as the existence of a line manager and the level of segment information presented to the board of directors.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

(f) Cash and cash equivalents

Cash and cash equivalents in the statement of financial position comprise cash at bank and in hand and short-term deposits that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

For the purposes of the Statement of cash flows, cash and cash equivalents consist of cash and cash equivalents as defined above, net of outstanding bank overdrafts. Bank overdrafts are included within interest bearing loans and borrowings in the current liabilities on the statement of financial position.

(g) Trade and other receivables

A receivable represents the Group's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due).

Trade receivables are initially measured at transaction value and other receivables are initially recognised at fair value plus transaction costs. Trade and other receivables are subsequently measured at amortised cost using the effective interest method, less any provision for impairment. Trade receivables generally have 30-60 day payment terms.

Collectability of trade and other receivables is reviewed on an ongoing basis in accordance with the expected credit loss ("ECL") model.

(h) Property, plant and equipment

Plant and equipment is stated at historical cost less accumulated depreciation.

Capital work-in-progress is stated at cost and comprises all costs directly attributable to bringing the assets under construction ready to their intended use. Capital work-in-progress is transferred to property, plant and equipment at cost on completion.

Depreciation is calculated on a straight-line basis over the estimated useful life of the asset which ranges between 3 and 25 years.

Derecognition

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset.

Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the item) is included in the statement of comprehensive income in the period the item is derecognised.

(i) Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses. Internally generated intangibles, excluding capitalised development costs, are not capitalised and the related expenditure is reflected in profit or loss in the period in which the expenditure is incurred. The useful lives of intangible assets are assessed as either finite or indefinite.

Intangible assets with finite lives are amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit or loss in the expense category that is consistent with the function of the intangible assets.

Intangible assets with indefinite useful lives are not amortised, but are tested for impairment annually, either individually or at the cash-generating unit level. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the statement of profit or loss when the asset is derecognised.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

(j) Research and development costs

Research costs are expensed as incurred. Development expenditures on an individual project are recognised as an intangible asset when the Group can demonstrate:

- the technical feasibility of completing the intangible asset so that the asset will be available for use or sale;
- its intention to complete and its ability and intention to use or sell the asset;
- how the asset will generate future economic benefits;
- the availability of resources to complete the asset; and
- the ability to measure reliably the expenditure during development.

Following initial recognition of the development expenditure as an asset, the asset is carried at cost less any accumulated amortisation and accumulated impairment losses. Amortisation of the asset begins when development is complete and the asset is available for use. It is amortised over the period of expected future benefit. Amortisation is recorded in profit and loss. During the period of development, the asset is tested for impairment annually.

Patents and licences

The Group made upfront payments to purchase patents and licences. The patents have been granted for a period of 20 years by the relevant government agency with the option of renewal at the end of this period.

A summary of the policies applied to the Group's intangible assets is, as follows:

	PATENTS	DEVELOPMENT COSTS
USEFUL LIFE	Finite (5 - 20 years)	Finite (5 - 20 years)
AMORTISATION METHOD	Amortised on a straight-line basis over the period of the patent	Amortised on a straight-line basis over the period of expected future sales from the related project
INTERNALLY GENERATED OR ACQUIRED	Acquired	Internally generated

(k) Trade and other payables

Trade payables and other payables are carried at amortised cost and are not discounted due to their short-term nature. They represent liabilities for goods and services provided to the Group prior to the end of the financial year that are unpaid and arise when the Group becomes obliged to make future payments in respect of the purchase of these goods and services. The amounts are unsecured and usually paid within 30 days of recognition.

(l) Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the reporting date. The discount rate used to determine the present value reflects current market assessments of the time value of money and the risks specific to the liability. The increase in the provision resulting from the passage of time is recognised in finance costs.

(m) Issued capital

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.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

(n) Share-based payment transactions

The Group provides benefits to employees, consultants and service providers (including Directors) (“eligible participants”) in the form of share-based payment transactions, whereby employees render services in exchange for shares or rights over shares (equity-settled transactions).

The 2018 Long Term Incentive Plan (LTIP) was adopted by shareholders on 10 May 2018. The Company had share options and performance rights that were issued under the plans current at the time of offer (Performance Rights Plan, 2015 Long Term Incentive Plan and Directors and Officers Option Plan) however all new awards post 10 May 2018 have been issued under the 2018 LTIP.

The cost of these equity-settled transactions to employees is measured by reference to the fair value at the date at which they are granted. The fair value is determined by using a Black Scholes model. Further details of which are given in Note 24.

In valuing equity-settled transactions, no account is taken of any vesting conditions, other than conditions linked to the price of the shares of the Company (market conditions) if applicable.

The cost of equity-settled transactions is recognised, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled (the vesting period), ending on the date on which the relevant employees become fully entitled to the award (the vesting date).

At each subsequent reporting date until vesting, the cumulative charge to the statement of comprehensive income is the product of (i) the grant date fair value of the award; (ii) the current best estimate of the number of awards that will vest, taking into account such factors as the likelihood of employee turnover during the vesting period and the likelihood of non-market performance conditions being met; and (iii) the expired portion of the vesting period.

The charge to the statement of comprehensive income for the period is the cumulative amount as calculated above less the amounts already charged in previous periods. There is a corresponding credit to equity.

Until an award has vested, any amounts recorded are contingent and will be adjusted if more or fewer awards vest than were originally anticipated to do so. Any award subject to a market condition is considered to vest irrespective of whether or not the market condition is fulfilled, provided that all other conditions are satisfied.

If a non-vesting condition is within the control of the Group, Company or the eligible participant, the failure to satisfy the condition is treated as a cancellation. If a non-vesting condition within the control of neither the Group, Company nor eligible participant is not satisfied during the vesting period, any expense for the award not previously recognised is recognised over the remaining vesting period, unless the award is forfeited.

If the terms of an equity-settled award are modified, as a minimum an expense is recognised as if the terms had not been modified. An additional expense is recognised for any modification that increases the total fair value of the share-based payment arrangement, or is otherwise beneficial to the employee, as measured at the date of modification.

If an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately. However, if a new award is substituted for the cancelled award and designated as a replacement award on the date that it is granted, the cancelled and new award are treated as if they were a modification of the original award, as described in the previous paragraph.

Share-based payments to non-employees are measured at the fair value of goods or services received or the fair value of the equity instruments issued if it is determined the fair value of the goods or services cannot be reliably measured and are recorded at the date the goods or services are received.

The dilutive effect, if any, of outstanding options is reflected as additional share dilution in the computation of earnings per share.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

(o) Employee benefits

(i) Wages, salaries and annual leave

Liabilities for wages and salaries, including non-monetary benefits and annual leave expected to be settled wholly within 12 months of the reporting date are recognised in respect of employees' services up to the reporting date. They are measured at the amounts expected to be paid when the liabilities are settled.

(ii) Superannuation

Contributions made by the Group to employee superannuation funds, which are defined contribution plans, are charged as an expense when incurred.

(iii) Defined benefit plan

The Group's net obligation in respect of defined benefits plans is calculated by estimating the discounted amount of future benefit that employees have earned in the current and prior periods. The calculation of defined benefit plan obligations is performed annually by a qualified actuary using the projected unit credit method, taking into account staff turnover and mortality probability.

Re-measurements of the net defined benefit liability, which comprise actuarial gains and losses, are recognised immediately in OCI. The Group determines the net interest expense on the defined benefit liability for the period by applying the discount rate used to measure the net defined benefit obligation. Net interest expense and other expenses related to defined benefit plans are recognised in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss.

(p) Revenue from contracts with customers

The Group accounts for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of the consideration is probable.

Revenues from license and product sales are recognised when an identified performance obligation is satisfied, and the customer obtains and accepts control of the Company's product. This means that the customer can direct the use, and obtain substantially all of the remaining benefits, from the use of the license and product. Sales of product and licenses generally occur at a point in time, typically upon delivery to the customer. In instances where the Group has significant obligations to maintain or update licences, the revenue is recognised over time.

Revenue from development service is generally recognised as the Company creates or enhances an asset that the customer controls.

The Group determined that the input method is the best method in measuring progress of the development services revenue because there is a direct relationship between the Group's effort (i.e., labour hours incurred) and the transfer of service to the customer. The Group recognises revenue on the basis of the labour hours expended relative to the total expected labour hours to complete the service.

Taxes collected from customers relating to product and service sales and remitted to governmental authorities are excluded from revenues. The Company expenses incremental costs of obtaining a contract as and when incurred because the expected amortisation period of the asset that the Company would have recognised is one year or less.

(q) Government grants

Government grants are recognised where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognised as income on a systematic basis over the periods that the related costs, for which it is intended to compensate, are expensed. When the grant relates to an asset, it is recognised as income in equal amounts over the expected useful life of the related asset.

When the Group receives grants of non-monetary assets, the asset and the grant are recorded at nominal amounts and released to profit or loss over the expected useful life of the asset, based on the pattern of consumption of the benefits of the underlying asset by equal annual instalments.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

(r) Income tax

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

Deferred income tax is provided for using the full liability, balance sheet method.

Deferred income tax liabilities are recognised for all taxable temporary differences, except:

- when the deferred income tax liability arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- when the taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, except where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred income tax assets are recognised for all deductible temporary differences, carry-forward of unused tax assets and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry-forward of unused tax assets and unused tax losses can be utilised, except:

- when the deferred income tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- when the deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred income tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilised.

Unrecognised deferred income tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Income taxes relating to items recognised directly in equity are recognised in equity and not in the Statement of comprehensive income.

Deferred tax assets and deferred tax liabilities are offset only if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred tax assets and liabilities relate to the same taxable entity and the same taxation authority.

(s) Other taxes

Revenues, expenses and assets are recognised net of the amount of GST except:

- when the GST incurred on a purchase of goods and services is not recoverable from the taxation authority, in which case the GST is recognised as part of the cost of acquisition of the asset or as part of the expense item as applicable; and
- receivables and payables, which are stated with the amount of GST included.

The net amount of GST recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the statement of financial position.

Cash flows are included in the statement of cash flows on a gross basis and the GST component of cash flows arising from investing and financing activities, which is recoverable from, or payable to, the taxation authority are classified as operating cash flows.

Commitments and contingencies are disclosed net of amounts of GST recoverable from, or payable to, the taxation authority.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

(t) Earnings per share

Basic earnings per share is calculated as net profit attributable to members of the parent, adjusted to exclude any costs of servicing equity (other than dividends) and preference share dividends, divided by the weighted average number of ordinary shares, adjusted for any bonus element.

Diluted earnings per share are calculated as net profit attributable to members of the parent adjusted for:

- cost of servicing equity (other than dividends) and preference share dividends;
- the after tax effect of dividends and interest associated with dilutive potential ordinary shares that have been recognised as expenses; and
- other non-discriminatory changes in revenues or expenses during the period that would result from the dilution of potential ordinary shares;

divided by the weighted average number of ordinary shares and dilutive potential ordinary shares, adjusted for any bonus element.

3. SIGNIFICANT ACCOUNTING JUDGEMENTS, ESTIMATES AND ASSUMPTIONS

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts in the financial statements. Management continually evaluates its judgements and estimates in relation to assets, liabilities, contingent liabilities, revenue and expenses. Management bases its judgements and estimates on historical experience and on other various factors it believes to be reasonable under the circumstances, the result of which form the basis of the carrying values of assets and liabilities that are not readily apparent from other sources.

Management has identified the following critical accounting policies for which significant judgements, estimates and assumptions are made. Actual results may differ from these estimates under different assumptions and conditions and may materially affect financial results or the financial position reported in future periods.

Further details of the nature of these assumptions and conditions may be found in the relevant notes to the financial statements.

• Revenue from contracts with customers

Judgement was applied in determining whether applicable contracts were considered a contract with a customer, where goods and/or services are delivered in exchange for consideration, or a co-development agreement where the risks and benefits that result from the activity are shared. In all instances, management concluded that a contract with a customer had been negotiated and AASB 15 was applicable.

The revenue recognition standard states that if a contract has more than one performance obligation, judgement is required in determining the allocation of the transaction price to each performance obligation (or distinct good and service) in an amount that depicts the amount of consideration to which the entity expects to be entitled in exchange for transferring the promised goods or services to the customer.

Determining the performance obligation in a contract comprising license revenue and development service revenue
The Group determined that both license and development service revenue is capable of being distinct and identifiable in a specific contract, comprising the delivery of the perpetual license and the engineering services provided to specifically enhance the license to the specifications of the customer.

Determining the timing of satisfaction of the development service revenue

The Group concluded that development service revenue is to be recognised over time because the customer simultaneously receives and consumes the benefits provided by the Group; Brainchip is enhancing an asset that the customer controls, and the work completed does not create an alternative use to the Group.

The Group determined that the input method is the best method in measuring progress of the development services revenue because there is a direct relationship between the Group's effort (i.e., labour hours incurred) and the transfer of service to the customer. The Group recognises revenue on the basis of the labour hours expended relative to the total expected labour hours to complete the service.

• Share-based payment transactions

The Group measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. The fair value is determined by using a Black Scholes model, using the assumptions as discussed in Note 24. The accounting estimates and assumptions relating to equity-settled share-based payments would have no impact on the carrying amounts of assets and liabilities in the next annual reporting period but may impact expenses and equity.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

3. SIGNIFICANT ACCOUNTING JUDGEMENTS, ESTIMATES AND ASSUMPTIONS (Continued)

- **Impairment of non-financial assets other than goodwill**

The Group assesses impairment of all non-financial assets other than goodwill at each reporting date by evaluating the carrying value of the asset and the recoverable amount, which is the higher of fair value less costs to sell and its value in use. This requires assessment of conditions specific to the Group and to the particular asset which may lead to an impairment being recognised.

- **Goodwill**

Goodwill arises on the acquisition of a business. Goodwill is not amortised. Instead, goodwill is tested annually for impairment, or more frequently if events or changes in circumstances indicate that it might be impaired and is carried at cost less accumulated impairment losses. Impairment losses on goodwill are taken to profit or loss and are not subsequently reversed.

- **Impairment of goodwill**

The Group is organised into one operating segment, being the technological development of designs that can be licensed to original equipment manufacturer and semiconductor manufacturers of Chips based on artificial neural networks. All the activities of the Group are interrelated, and each activity is dependent on the others. As such, BrainChip has only one cash generating unit and, therefore goodwill has been allocated to, and the impairment testing is performed at, the consolidated level. The recoverable amount of goodwill has been assessed utilising fair value less cost of disposal, using a market comparison approach based on the market capitalisation of the Group at balance sheet date. This approach was supported by external sources of information, being recent transactions within the semiconductor industry that have provided evidence that fair value exceeds market capitalisation (i.e. purchase consideration exceeds market capitalisation), as well as internal information including the high liquidity of the Group's shares.

- **Development costs**

The Group capitalises development costs for a project in accordance with the accounting policy. Initial capitalisation of costs is based on management's judgement that technological and economic feasibility is confirmed. In determining the amounts to be capitalised, management makes assumptions regarding the expected future cash generation of the project, discount rates to be applied and the expected period of benefits. At 31 December 2018, the carrying amount of capitalised development costs was \$Nil (2017: \$1,135,132).

- **Defined benefit plans**

The cost of the defined benefit pension plan and the present value of the pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These includes the determination of the discount rate, future salary growth, mortality rates and employee turnover rate. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date. Further details about defined benefit plans are provided in Note 20.

Further details of the nature of these assumptions and conditions may be found in the relevant notes to the financial statements.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

4. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

Overview

This note presents information about the Group's exposure to credit, liquidity and market risks, its objectives, policies and processes for measuring and managing risk, and the management of capital.

The Group does not use any form of derivatives as it is not at a level of exposure that requires the use of derivatives to hedge its exposure. Exposure limits are reviewed by management on a continuous basis. The Group does not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes.

The Board of Directors has overall responsibility for the establishment and oversight of the risk management framework. Management monitors and manages the financial risks relating to the operations of the Group through regular reviews of the risks.

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 cash and cash equivalents and receivables from customers.

Presently, the Group undertakes technology development activities in the USA and France, and is exposed to credit risk from its operating activities (primarily trade and other receivables).

Cash and cash equivalents and investment securities

The Group limits its exposure to credit risk by only investing in liquid securities and only with counterparties that have an acceptable credit rating.

Trade and other receivables

The Group operates primarily in technology development and has trade receivables. There is risk that these receivables may not be recovered however the Group does not consider this to be likely. The Group reviews the collectability of trade and other receivables on an ongoing basis and measures the expected credit loss at each reporting date (see Note 12).

Exposure to credit risk

The carrying amount of the Group's financial assets represents the maximum credit exposure. The Group's maximum exposure to credit risk at the reporting date was:

		Carrying amount	
	Note	2018 US\$	2017 US\$
Cash and cash equivalents	11	7,543,326	16,049,330
Trade and other receivables	12	461,129	358,975

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.

The Group manages liquidity risk by maintaining adequate cash reserves from funds raised in the market and by continuously monitoring forecast and actual cash flows. The Group does not have any external borrowings.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

4. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (Continued)

Liquidity risk (continued)

The following are the contractual maturities of financial liabilities, including estimated interest payments and excluding the impact of netting agreements:

	Carrying amount US\$	Contractual cash flows US\$	6 mths or less US\$	6-12 mths US\$	1-5 years US\$
31 December 2018					
Trade and other payables	723,541	723,541	723,541	-	-
Financial liabilities	226,873	233,890	-	-	233,890
	<u>950,414</u>	<u>957,431</u>	<u>723,541</u>	<u>-</u>	<u>233,890</u>
31 December 2017					
Trade and other payables	1,160,337	1,160,337	1,132,617	27,720	-
Financial liabilities	236,342	243,603	-	-	243,603
	<u>1,396,679</u>	<u>1,403,940</u>	<u>1,132,617</u>	<u>27,720</u>	<u>243,603</u>

Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates, 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, while optimising the return.

Foreign currency risk

The Group is exposed to fluctuations in foreign currencies arising from the purchase of goods and services in currencies other than the transacting entity's functional currency. The legal parent, BrainChip Holdings, holds cash balances in AUD. As a result of this, the Group's statement of financial position can be affected by movements in the USD/AUD exchange rate when translating to the USD functional currency.

In respect of other monetary assets and liabilities denominated in foreign currencies (AUD), the Group's policy is to ensure that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances.

The Group's exposure to foreign currency risk at the balance sheet date was negligible.

Interest rate risk

The Group is exposed to interest rate risk (primarily on its cash and cash equivalents), which is the risk that a financial instrument's value will fluctuate as a result of changes in the market interest rates on interest-bearing financial instruments. The Group does not use derivatives to mitigate these exposures.

The Group adopts a policy of ensuring that as far as possible it maintains excess cash and cash equivalents in interest bearing accounts.

The Group's exposure to interest rate risk at the balance sheet date was negligible.

Fair values

Fair values versus carrying amounts

The carrying amounts of financial assets and liabilities approximate fair value. The basis for the assessment of fair values versus carrying value of financial instruments is described below.

- (i) Trade and other receivables, trade and other payables and current financial liabilities:
Trade and other receivables, trade and other payables and current financial liabilities are short term in nature. As a result, the fair value of these instruments is considered to approximate its fair value.
- (ii) Non-current financial liabilities:
Non-current financial liabilities have been discounted using the variable market rate to calculate the fair value.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

4. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (Continued)

Capital Management

Capital managed by the Board includes contributed equity totalling \$55,143,789 and other equity reserves of \$247,872 at 31 December 2018 (2017: \$53,570,901 and \$247,872 respectively). When managing capital, management's objective is to ensure the entity continues as a going concern as well as to maintain optimal returns to shareholders and benefits for other stakeholders. Management also aims to maintain a capital structure that ensures the lowest cost of capital available to the entity. Managed capital is disclosed on the face of the Statement of financial position and comprises contributed equity and reserves.

Management may adjust the capital structure fund the continued development of the Company's pioneering AI technology and keep the Company operational. As the market is constantly changing, management may issue new shares or sell assets to raise cash, change the amount of dividends to be paid to shareholders (if at all) or return capital to shareholders.

During the financial year ending 31 December 2018, management did not pay a dividend and does not expect to pay a dividend in the foreseeable future.

The Group encourages employees to be shareholders through the Long Term Incentive Plan.

There were no changes in the Group's approach to capital management during the year. Risk management policies and procedures are established with regular monitoring and reporting.

Neither the Company nor any of its subsidiaries are subject to externally imposed capital requirements.

5. REVENUE FROM CONTRACTS WITH CUSTOMERS

	2018 US\$	2017 US\$
(a) Types of good and services		
Product revenue	108,140	10,131
License revenue ⁽¹⁾	327,349	73,709
Development service revenue ^{(1) (2)}	512,500	185,656
Total revenue from contracts with customers	947,989	269,496
⁽¹⁾ \$200,000 of license revenue and \$300,000 of development service revenue has been recognised from one customer in 2018 which was deemed to have satisfied the requirements of Milestone 4 – refer Note 21(e).		
⁽²⁾ Development service revenue includes (i) further development of existing licensed technology; and/or (ii) engineering services for existing licensed technology.		
(b) Timing of revenue recognition		
Services transferred over time	512,500	185,656
Sale of product and license transferred at a point in time	435,489	83,840
Total revenue	947,989	269,496

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

6. EXPENSES ⁽¹⁾

	2018 US\$	2017 US\$
(a) Research & development expenses		
Employee expenses	1,990,710	1,387,511
Grants received/receivable	(332,283)	(326,137)
Amortisation of intangible assets	1,098,396	1,108,423
Write off of intangible assets	813,228	-
Other expenses	399,253	35,942
Total research & development expenses	<u>3,969,304</u>	<u>2,205,739</u>
(b) Selling & marketing expenses		
Employee expenses	785,715	422,039
Contractor fees	309,364	-
Other expenses	370,396	85,844
Total selling & marketing expenses	<u>1,465,475</u>	<u>507,883</u>
(c) General and administration expenses		
Director fees and key management personnel employee expenses	1,707,500	1,822,682
Employee expenses	364,182	359,589
Legal and professional fees	1,843,813	1,380,086
Travel and accommodation expenses	293,260	299,809
Depreciation of plant & equipment	51,610	75,792
Office rent	237,577	218,136
Other	363,252	388,663
Total general & administrative expenses	<u>4,861,194</u>	<u>4,544,757</u>

⁽¹⁾ Certain comparative expenditures have been reclassified to align with the current period reporting presentation. Significant adjustments comprise amortisation of intangible assets being included in Research & development expenses, and the segregation of Selling & marketing expenses from General & administrative expenses.

7. FINANCE INCOME AND EXPENSE

(a) Finance income		
Interest received	107,448	29,784
Foreign exchange gain	23,152	98,696
Total finance income	<u>130,600</u>	<u>128,480</u>
(b) Finance expense		
Interest expense	-	622
Total finance expense	<u>-</u>	<u>622</u>

8. DIVIDENDS PAID AND PROPOSED

No dividends have been paid or declared by the Company during the financial period or up to the date of this report.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

9. INCOME TAX

	2018 US\$	2017 US\$
(a) Major components of income tax expense		
Consolidated income statement		
<i>Current income tax:</i>		
Current income tax expense/(benefit)	-	-
Tax losses previously not recognised	-	-
<i>Deferred tax asset not recognised</i>	-	-
Income tax (benefit)/expense reported in the statement of comprehensive income	-	-
(b) Amounts charged or credited directly to equity		
<i>Current income tax related to items charged or credited directly to equity</i>		
	-	-
<i>Deferred income tax related to items charged or credited directly to equity</i>		
	-	-
Income tax (benefit)/expense reported in equity	-	-
(c) A reconciliation between tax expense and the product of accounting loss before income tax multiplied by the Group's applicable income tax rate is as follows:		
Accounting loss before tax	16,523,186	13,774,013
At statutory income tax rate of 27.5% (2017: 27.5%)	(4,543,877)	(3,787,854)
Non-deductible (income) / expenses	452,887	1,883,943
Effect of lower/(higher) taxation rates of foreign subsidiaries	(985,749)	(862,944)
Other	(567,597)	(272,245)
Unrecognised tax losses and deferred income tax assets	5,644,336	3,039,100
Income tax expense/(benefit) reported in statement of profit or loss and other comprehensive income	-	-
Effective income tax rate	0%	0%
(d) Deferred tax relates to the following:		
	Consolidated Statement of financial position	
	2018	2017
Accrued expenses	68,855	46,734
Tax losses	7,249,575	4,381,352
Business related expenditure, Borrowing costs	-	-
Share-based compensation	4,822,847	1,688,584
Intangible assets	35,986	26,926
Deferred State Tax deduction	(254,391)	(254,391)
Other	14,281	403,612
Not recognised	(11,937,153)	(6,292,817)
Net deferred tax liability	-	-
Deferred tax income/ (expense)	-	-
(e) Unrecognised losses		
At 31 December 2018, there are unrecognised losses of \$7,249,575 (tax effected), for the Group (2017: \$4,381,352 (tax effected)).		

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

10. LOSS PER SHARE

	2018 US\$	2017 US\$
Net loss attributable to ordinary shareholders for basic and diluted earnings per share	(16,523,186)	(13,774,013)
	US cents per share	US cents per share
Basic and diluted loss per share	(1.64)	(1.59)
	Number	Number
Weighted average number of ordinary shares for basic loss per share ⁽³⁾	1,006,859,664	863,653,555
Effect of the dilution of share options and performance rights ^{(1) (2)}	-	-
Weighted average number of ordinary shares adjusted for the effect of dilution	<u>1,006,859,664</u>	<u>863,653,555</u>

- ⁽¹⁾ At 31 December 2018, the Company had on issue 162,950,000 (2017: 190,550,000) share options that are excluded from the calculation of diluted loss per share for the current period. The options are either contingency issuable potential ordinary shares or considered anti-dilutive as their inclusion reduced the loss per share however these options may be dilutive in the future.
- ⁽²⁾ At 31 December 2018, the Company had on issue 8,500,000 (2017: 56,500,000) performance rights and 3,850,000 (2017: Nil) restricted stock units that are excluded from the calculation of diluted loss per share for the current period. The performance rights and restricted stock units are contingently issuable at the balance sheet date and have therefore been excluded from diluted earnings per share.
- ⁽³⁾ Weighted average number of ordinary shares has been adjusted for all periods to 31 December 2017 by a factor of approximately 1.02 as a result of a rights issue to institutional and sophisticated investors in November 2017.

11. CASH AND CASH EQUIVALENTS

	2018 US\$	2017 US\$
Cash at bank and in hand	5,505,494	16,049,330
Term deposits	2,037,832	-
Total	<u>7,543,326</u>	<u>16,049,330</u>
Reconciliation of the net loss after tax to net cash flows from operations		
Loss after tax	(16,523,186)	(13,774,013)
Non-cash adjustment to reconcile loss before tax to net cash flows:		
Depreciation	51,610	75,792
Amortisation	1,098,396	1,108,423
Write off of intangible assets	813,228	
Share-based payments	7,305,802	6,941,360
Other income classified as investing	-	(32,289)
Foreign exchange (gain)/loss	(10,991)	(98,696)
Working capital adjustments:		
Decrease in trade and other receivables	126,581	121,645
Increase in inventory	(301)	(19,128)
(Increase)/decrease in prepayments	(34,924)	6,898
Decrease/(increase) in other assets	2,561	(135,952)
Decrease in financial liabilities	(9,469)	(287,507)
(Decrease)/Increase in defined benefits plan	(32,084)	29,398
Increase in employee provisions	20,832	105,360
Decrease in trade and other payables	(11,259)	(115,833)
Net cash flows used in operating activities	<u>(7,203,204)</u>	<u>(6,074,542)</u>

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

12. TRADE AND OTHER RECEIVABLES

	2018 US\$	2017 US\$
<i>Current</i>		
Trade receivables	114,795	81,138
Research tax credit ⁽¹⁾	336,582	269,537
Other receivables	9,752	8,300
	<u>461,129</u>	<u>358,975</u>

⁽¹⁾ BrainChip SAS recognised research credits from the French regulatory authorities as receivable according to the French tax regulations.

Trade receivables are non-interest bearing and generally on terms of 30-90 days. As at year end, there is no allowance for expected credit loss recorded.

13. OTHER ASSETS

<i>Current</i>		
Grants receivable from third parties ⁽¹⁾	-	236,081
Prepayments	126,504	91,580
Interest receivable	13,285	5,939
	<u>139,789</u>	<u>333,600</u>

⁽¹⁾ Other current assets are grants to be received from various French government agencies.

14. PLANT & EQUIPMENT

Plant and equipment

Plant and equipment – Gross carrying value at cost	385,299	301,846
Accumulated depreciation	(158,843)	(109,539)
Net carrying amount	<u>226,456</u>	<u>192,307</u>

Movement in plant and equipment

At 1 January net of accumulated depreciation	192,307	140,209
Additions	86,738	125,119
Depreciation charge for the year	(51,610)	(75,792)
Net foreign exchange movements	(979)	2,771
At 31 December net of accumulated depreciation	<u>226,456</u>	<u>192,307</u>

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

15. INTANGIBLE ASSETS AND GOODWILL

	2018 US\$	2017 US\$
Patents and licenses (a)	829,664	773,437
Capitalised research & development costs (b)	-	1,135,132
Goodwill	905,458	905,458
	<u>1,735,122</u>	<u>2,814,027</u>
(a) Patents and licenses with finite useful life – at cost	970,212	841,869
Accumulated amortisation	(140,548)	(68,432)
	<u>829,664</u>	<u>773,437</u>
Movement in patents		
At 1 January	773,437	34,931
Additions	130,556	795,747
Amortisation	(73,397)	(60,538)
Net foreign exchange movements	(932)	3,297
At 31 December	<u>829,664</u>	<u>773,437</u>
(b) Capitalised research & development costs	-	2,738,355
Accumulated amortisation	-	(1,603,223)
	<u>-</u>	<u>1,135,132</u>
Movement in capitalised research & development costs		
At 1 January	1,135,132	1,491,930
Additions	686,189	543,389
Amortisation	(1,024,999)	(1,047,885)
Write off	(813,228)	-
Net foreign exchange movements	16,906	147,698
At 31 December	<u>-</u>	<u>1,135,132</u>

The uncertainty of revenue has resulted in the write off of carry forward capitalised research & development costs related to BrainChip Studio at 31 December 2018. All other projects were fully amortised by the end of the year in line with the Group's amortisation policy.

As at 31 December 2018, the Group performed an impairment assessment based on the fair value less cost of disposal (Level 2 in the fair value hierarchy) to confirm the recoverability of the Group's net assets. Based on the Group's assessment as at 31 December 2018, the market capitalisation of the Group was above the book value of its equity, which shows that the estimated recoverable amount was sufficient to recover the consolidated net assets at 31 December 2018. Assumptions used within the Group's fair value less cost of disposal determination included the Group's share price of A\$0.105 at 31 December 2018 and the foreign exchange rate of \$0.70 AUD/USD at 31 December 2018.

As at 31 December 2018, the Group considered indicators of impairment of these assets and determined that there was none other than those noted above.

16. TRADE AND OTHER PAYABLES

	2018 US\$	2017 US\$
<i>Current</i>		
Trade creditors and accruals	676,479	1,119,627
VAT and other taxes payable to foreign authorities	47,062	40,710
	<u>723,541</u>	<u>1,160,337</u>

17. EMPLOYEE BENEFITS LIABILITIES

Provision for annual leave	228,962	208,129
	<u>228,962</u>	<u>208,129</u>

The nature of the provision is described in note 2(o).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

18. FINANCIAL LIABILITIES

	2018 US\$	2017 US\$
<i>Current</i>		
Advances from third parties (a)	-	-
<i>Non-Current</i>		
Advances from third parties (b)	226,873	236,342
	<u>226,873</u>	<u>236,342</u>
(a) Reconciliation of financial liabilities – current		
Opening balance	-	220,562
Repayment of advance from third parties	-	(239,016)
Interest charged on advances	-	2,779
Foreign exchange movements	-	15,675
	<u>-</u>	<u>-</u>
(b) Reconciliation of financial liabilities – non-current ⁽¹⁾		
Opening balance	236,342	277,232
Repayment of advances from third parties	(2,092)	(72,600)
Fair value remeasurement	3,292	1,284
Foreign exchange movements	(10,669)	30,426
	<u>226,873</u>	<u>236,342</u>

⁽¹⁾ Non-current advances include loans from various French government agencies which are granted without any interest and are to be repaid under certain conditions. The benefit of the government loan at a below-market rate of interest is treated as a government grant.

19. OTHER LIABILITIES

	2018 US\$	2017 US\$
Deferred income in relation to research & development projects ⁽¹⁾	-	-
(a) Reconciliation of other liabilities		
Opening balance	-	287,507
Grant revenue released to the statement of profit and loss	-	(309,943)
Foreign exchange movement	-	22,436
	<u>-</u>	<u>-</u>

⁽¹⁾ Deferred income relates to grants acquired from third parties before all attached conditions have been complied with. Deferred income has been recognised on a systematic basis over the periods that the related research and development costs are expensed.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

20. DEFINED BENEFIT PLAN

	2018 US\$	2017 US\$
Net employee defined benefit liabilities	106,951	139,036

BrainChip SAS has a defined benefit pension plan which is governed by the employment laws of France. Pension plans that are defined benefit schemes (in which the Company guarantees an amount or defined level of benefits) are recognised on the balance sheet based on an actuarial valuation of the obligations at period-end.

This valuation uses the projected unit credit method, taking into account staff turnover and mortality probability.

The defined benefit plan is administered by the French regulatory authority and is legally separated from the Group. The authority is required by law to act in the best interests of the plan participants and is responsible for setting certain policies (eg investment, contribution and indexation policies) of the fund.

The defined benefit plan exposes the Group to actuarial risks, such as longevity risk, currency risk, interest rate risk, and market (investment) risk.

	2018 US\$	2017 US\$
(a) Movement in net defined benefit liability		
At 1 January	139,036	108,123
Included in profit or loss		
Current service costs	14,973	12,833
Finance costs	1,892	1,901
Included in OCI		
Actuarial losses/(gains)	(42,674)	1,370
Foreign exchange movement	(6,276)	14,809
At 31 December	106,951	139,036

(b) Defined benefit obligation

The following were the principal actuarial assumptions at the reporting date:

Discount rate	1.6%	1.3%
Future salary growth	1.5%	1.5%
Retirement at employee's initiative	45.0%	45.0%
Turnover rate (weighted average)	1.0%	1.0%

Assumptions regarding future mortality have been based on published statistics and mortality tables provided by the French government.

(c) Sensitivity analysis

Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below:

	Increase US\$	Decrease US\$
Discount rate (+/-1% movement)	13,330	(10,522)
Future salary growth (+/-1.0 % movement)	(10,821)	13,387

Although the analysis does not take account of the full distribution of cashflows expected under the plan, it does provide an approximation of the sensitivity of the assumptions shown.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

21. CONTRIBUTED EQUITY

	2018 US\$	2017 US\$
(a) Ordinary Shares		
Issued and fully paid	55,143,789	53,570,901
(b) Movements in ordinary shares on issue		
	Number	US\$
At 1 January 2017	808,200,426	34,013,023
Issue of shares pursuant to private placement ⁽¹⁾	40,000,000	4,597,620
Conversion of Performance Rights	1,000,000	-
Issue of shares pursuant to private placement ⁽²⁾	119,380,063	16,290,453
Conversion of Performance Rights	500,000	-
Share issue costs incurred	-	(1,330,195)
At 31 December 2017	969,080,489	53,570,901
At 1 January 2018	969,080,489	53,570,901
Issue of shares as remuneration to Mr Louis DiNardo ⁽³⁾	15,000,000	1,563,870
Issue of shares to the Trustee of the BrainChip LTIP – refer Note 21(c)	10,000,000	-
Conversion of Performance Rights – refer Note 21(e)	49,500,000	-
Conversion of Performance Rights – refer Note 21(e)	6,000,000	-
Issue of shares to third party for services performed ⁽⁵⁾	303,030	35,578
Share issue costs incurred	-	(26,560)
At 31 December 2018	1,049,883,519	55,143,789

⁽¹⁾ On 5 June 2017, 40,000,000 shares were issued at an issue price of A\$0.15 per share pursuant to a private placement to institutional and sophisticated investors raising A\$6,000,000.

⁽²⁾ On 7 November 2017, 119,380,063 shares were issued at an issue price of A\$0.18 per share pursuant to a private placement to institutional and sophisticated investors raising A\$21,488,411.

⁽³⁾ On 8 June 2018, 15,000,000 shares were issued to Mr Louis DiNardo. The shares were fair valued based on the share price of A\$0.14 (US\$0.104) on 10 May 2018, being the date of approval by shareholders at the AGM. The value of the shares issued are reported as a share-based payment expense.

⁽⁴⁾ On 9 October 2018, 10,000,000 shares were issued to the Trustee of the BrainChip Long Term Incentive Plan.

⁽⁵⁾ On 21 December 2018, 303,030 shares were issued to a third party for services performed over a 12 month period commencing 18 August 2018.

	2018 Number	2017 Number
(c) Treasury shares		
Issued and fully paid	1,500,000	-
<i>Movements in Treasury shares</i>		
At 1 January	-	-
Shares issued to Trust from BrainChip Holdings Ltd ⁽¹⁾	10,000,000	-
Shares Issued on conversion of Performance Rights - refer Note 21(e)(2)	(1,000,000)	-
Shares Issued on conversion of Performance Rights - refer Note 21(e)(5)	(7,500,000)	-
At 31 December	1,500,000	-

⁽¹⁾ The BrainChip Long Term Incentive Plan Trust was established on 2 August 2018 and Solium Nominees (Australia) Pty Limited was appointed as the Plan Trustee. On 9 October 2018, 10,000,000 shares were issued to the Trust at no value in the name of the Trustee to be held for the conversion of vested options, performance rights and restricted stock units of the LTIP.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

21. CONTRIBUTED EQUITY (Continued)

(d) Terms and conditions of contributed equity

Holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at shareholder meetings. In the event of winding up the Company the holders are entitled to participate in the proceeds from the sale of all surplus assets in proportion to the number of and amounts paid up on shares held.

(e) Performance Rights movements

	Opening balance 1 January 2018	Converted	Allocated	Closing balance 31 December 2018
Class B Performance Rights ^{(1) (2)}	1,000,000	(1,000,000)	1,000,000	1,000,000
Class C Performance Rights ^{(1) (3)}	6,000,000	(6,000,000)	-	-
Class D Performance Rights ^{(1) (4)}	49,500,000	(49,500,000)	-	-
Class E Performance Rights ⁽⁵⁾	-	(7,500,000)	15,000,000	7,500,000
	<u>56,500,000</u>	<u>(64,000,000)</u>	<u>16,000,000</u>	<u>8,500,000</u>

⁽¹⁾ 198,000,000 performance rights were approved by shareholders on 30 July 2015 to be allocated to the shareholders of BrainChip Inc. as part consideration for the Acquisition of BrainChip Holdings. Of this amount 186,000,000 Performance Rights were issued on 10 September 2015 to BrainChip Inc. shareholders.

The remaining 12,000,000 performance rights were set aside to be issued at the Board's discretion and were issued to employees by 30 June 2018.

⁽²⁾ 1,000,000 Class B Performance Rights were converted to shares in BrainChip Holdings held by the Trustee of the BrainChip LTIP Trust on 15 October 2018, the milestones of which had been previously attained.

⁽³⁾ 6,000,000 Class C Performance Rights were converted to shares in BrainChip Holdings on 18 October 2018, the milestones of which had been previously attained.

⁽⁴⁾ 49,500,000 Class D Performance Rights were converted to shares in BrainChip Holdings on 9 October 2018, after approval by the Board that the Milestone had been achieved. Of the total converted, 46,500,000 had been held by shareholders and 3,000,000 had been issued to employees from the unallocated pool held at 31 December 2015.

⁽⁵⁾ The Board approved the issue of 15,000,000 Performance Rights which were issued to Mr Louis DiNardo on 8 June 2018 after approval was provided by shareholders at the AGM on 10 May 2018. 7,500,000 Performance Rights were converted to shares held by the Trustee of the BrainChip LTIP Trust on 8 December 2018 after achievement of the vesting condition.

The performance rights have the following milestones attached to them:

- Class B Performance Rights: upon announcing on the ASX that BrainChip has implemented the race car demonstration in hardware to visually illustrate the capability and scalability of BrainChip's SNAP technology to prospective licensees (Milestone 2) (as announced to ASX on 30 October 2015);
- Class C Performance Rights: upon announcing on the ASX that BrainChip has released a software API specification and RTL design solution for implementing customer Client/Server neural network applications using BrainChip hardware technology (Milestone 3) (as announced to ASX on 15 March 2016); and
- Class D Performance Rights: upon announcing on the ASX that BrainChip has executed an unconditional binding licensing agreement that has an upfront payment of no less than A\$500,000 (Milestone 4).
- Class E Performance Rights: 7,500,000 performance rights vested on 8 December 2018 and 7,500,000 will vest on 8 June 2019 subject to continued service being provided.

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21. CONTRIBUTED EQUITY (Continued)

(f) Options on issue

Unissued ordinary shares of the Company under option at 31 December 2018 are as follows:

Type	Expiry Date	Exercise Price (US\$)	Number of options
<i>Options issued as part consideration as part of the Acquisition</i>			
Unlisted ⁽¹⁾	10/09/2019	0.112	6,250,000
<i>Options issued to shareholders</i>			
Unlisted ⁽²⁾	31/05/2020	0.171	20,000,000
<i>Options issued as share-based payments</i>			
Unlisted – refer Note 24(c)	Various	Various	136,700,000
Total			162,950,000

The above options are exercisable at any time on or before the expiry date.

⁽¹⁾ 6,250,000 unlisted options exercisable at A\$0.157 cents per share before 10 September 2019 were issued to a BrainChip Inc. shareholder as part of the consideration for the Acquisition of BrainChip Holdings on 10 September 2015.

⁽²⁾ 20,000,000 options were issued as free attaching options to shares issued to sophisticated investors under a Placement on 5 June 2017.

22. RESERVES

	Foreign currency reserve	Share-based payment reserve	Other equity reserve	Total
	US\$	US\$	US\$	US\$
CONSOLIDATED				
At 1 January 2017	5,414	3,792,094	247,872	4,045,380
Share-based payments	-	6,941,360	-	6,941,360
Foreign translation of foreign operations	76,142	-	-	76,142
At 31 December 2017	81,556	10,733,454	247,872	11,062,882
At 1 January 2018	81,556	10,733,454	247,872	11,062,882
Share-based payments	-	5,730,073	-	5,730,073
Foreign translation of foreign operations	(1,030)	-	-	(1,030)
At 31 December 2018	80,526	16,463,527	247,872	16,791,925

Nature and purpose of reserves

Share-based payment reserve

The share-based payment reserve is used to record the value of share-based payments provided to Directors, employees and third parties as part of their remuneration.

Other equity reserve

This reserve arises from the issue of shares in BrainChip Holdings Ltd to extinguish the liability owing to convertible note holders in BrainChip Inc., on 10 September 2015.

Translation reserve

The translation reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations.

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23. ACCUMULATED LOSSES

	2018 US\$	2017 US\$
At 1 January	(46,567,313)	(32,791,785)
Re-measurement gains /(losses) on defined benefit plans	34,094	(1,515)
Net loss in current period attributable to members of the Company	(16,523,186)	(13,774,013)
At 31 December	<u>(63,056,405)</u>	<u>(46,567,313)</u>

24. SHARE-BASED PAYMENTS

	2018 US\$	2017 US\$
(a) Recognised share-based payment expenses		
Performance Rights issued to employees	1,438,285	559,516
Options issued to directors, employees and contractors	4,190,478	6,381,844
Restricted stock units issued to employees	101,310	-
Recognised in share-based payment reserve	<u>5,730,073</u>	<u>6,941,360</u>
Shares issued to director and consultants	1,575,729	-
Total share-based payment expense	<u>7,305,802</u>	<u>6,941,360</u>

The 2018 Long Term Incentive Plan (LTIP) was adopted by shareholders in May 2018. The Company has Performance Rights and Options that were issued under the plans current at the time of offer (Performance Rights Plan, Long Term Incentive Plan and Directors and Officers Option Plan) however all new equity awards post May 2018 have been issued under the 2018 LTIP.

2018 and 2015 Long Term Incentive Plan

The objective of the LTIP is to attract and retain key employees and consultants. It is considered that the LTIP, through the issue of equity instruments, will provide selected employees and consultants with opportunity to participate in the future growth of the Company. Equity instruments offered under the LTIP must be offered at no more than a nominal value and under terms to be determined by the Board from time to time. It is not the intention of the Company to apply for quotation of any of the equity instruments which are issued under the LTIP.

Performance Rights Plan

Awards under the PRP were previously made in order to retain key Directors, employees (including officers) and contractors and to provide selected participants with the opportunity to participate in the growth of the Company. Rights were granted under the PRP for no consideration. Each right, upon vesting, entitles the holder to one fully paid ordinary share in the capital of the Company if certain time and/or performance measures are met in the measurement period. The Rights issued to date that remain unvested are subject to a combination of conditions including time-based conditions which prescribe a period of time that the employee must stay employed by the Company prior to automatic vesting and specific operational based milestones.

The application of conditions on issue and vesting are at the absolute discretion of the Board with the terms of any grants to Directors approved by Shareholders. If at any time prior to the Vesting Date a participant ceases to be eligible through resignation or termination, the Rights automatically lapse and are forfeited, subject to the discretion of the Board.

Directors and Officers Option Plan

The DOOP was established to enable eligible Directors and officers (including executive and non-executive directors) of the Company or its subsidiaries to receive options to acquire shares in the Company. 11,000,000 options issued under the DOOP in December 2015 lapsed during 2018.

Notes to the Consolidated Financial Statements

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24. SHARE-BASED PAYMENTS (Continued)

(b) Performance Rights issued to employees

The following table summarises the movement in Performance Rights issued to employees:

	Opening balance 1 January 2018	Issued during the year ⁽¹⁾	Converted during the year	Closing balance 31 December 2018
Class B Performance Rights	1,000,000	1,000,000	(1,000,000)	1,000,000
Class D Performance Rights	3,000,000	-	(3,000,000)	-
Class E Performance Rights	-	15,000,000	(7,500,000)	7,500,000
	4,000,000	16,000,000	(11,500,000)	8,500,000

⁽¹⁾ Refer Note 21(e)

(c) Summary of options granted under the Long Term Incentive Plan and Directors & Officers Option Plan

Unissued ordinary shares of the Company under option at 31 December 2018 are as follows:

Type	Grant Date	Expiry Date	Exercise Price (US\$)	Number of options	Vested at year end
Unlisted ⁽¹⁾	4/12/2015	21/12/2020	0.172	5,300,000	3,975,000
Unlisted ⁽¹⁾	22/01/2016	01/02/2021	0.165	1,500,000	750,000
Unlisted ⁽²⁾	28/09/2016	30/09/2021	0.172	50,000,000	16,750,000
Unlisted ⁽¹⁾	8/07/2016	10/10/2021	0.113	4,000,000	2,000,000
Unlisted ⁽¹⁾	7/10/2016	10/10/2021	0.205	2,000,000	1,000,000
Unlisted ⁽³⁾	01/11/2016	01/11/2019	0.137	7,000,000	7,000,000
Unlisted ⁽¹⁾	27/01/2017	16/02/2022	0.242	100,000	25,000
Unlisted ⁽⁴⁾	30/01/2017	16/02/2022	0.185	3,000,000	3,000,000
Unlisted ⁽⁴⁾	30/01/2017	31/12/2022	0.185	3,000,000	3,000,000
Unlisted ⁽⁵⁾	05/03/2017	31/03/2022	0.209	8,000,000	2,000,000
Unlisted ⁽⁵⁾	05/03/2017	31/03/2022	0.209	6,000,000	1,500,000
Unlisted ⁽⁵⁾	05/03/2017	31/03/2022	0.209	6,000,000	1,500,000
Unlisted ⁽⁶⁾	31/05/2017	31/01/2023	0.138	2,000,000	2,000,000
Unlisted ⁽⁶⁾	31/05/2017	31/01/2024	0.138	2,000,000	-
Unlisted ⁽⁶⁾	31/05/2017	31/01/2025	0.138	2,000,000	-
Unlisted ⁽⁶⁾	31/05/2017	31/01/2026	0.138	2,000,000	-
Unlisted ⁽⁷⁾	31/05/2017	01/02/2023	0.182	1,750,000	1,750,000
Unlisted ⁽⁷⁾	31/05/2017	01/02/2024	0.182	1,750,000	-
Unlisted ⁽⁷⁾	31/05/2017	01/02/2025	0.182	1,750,000	-
Unlisted ⁽⁷⁾	31/05/2017	01/02/2026	0.182	1,750,000	-
Unlisted ⁽⁸⁾	7/07/2017	7/07/2023	0.125	2,000,000	2,000,000
Unlisted ⁽⁸⁾	7/07/2017	7/07/2024	0.125	2,000,000	-
Unlisted ⁽⁸⁾	7/07/2017	7/07/2025	0.125	2,000,000	-
Unlisted ⁽⁸⁾	7/07/2017	7/07/2026	0.125	2,000,000	-
Unlisted ⁽¹⁾	28/11/2017	14/12/2022	0.136	500,000	125,000
Unlisted ⁽¹⁾	28/11/2017	14/12/2022	0.141	5,300,000	1,325,000
Unlisted ⁽¹⁾	28/11/2017	14/12/2022	0.148	400,000	100,000
Unlisted ⁽¹⁾	1/12/2017	14/12/2022	0.140	200,000	50,000
Unlisted ⁽⁹⁾	5/03/2018	13/03/2028	0.147	5,100,000	-
Unlisted ⁽¹⁰⁾	5/03/2018	13/03/2028	0.147	2,000,000	1,000,000
Unlisted ⁽¹⁾	5/03/2018	13/03/2028	0.171	1,300,000	-
Unlisted ⁽¹⁾	30/04/2018	08/06/2028	0.136	500,000	-
Unlisted ⁽¹⁾	30/04/2018	08/06/2028	0.117	1,000,000	-
Unlisted ⁽¹⁾	16/06/2018	16/06/2028	0.105	600,000	-
Unlisted ⁽¹⁾	12/07/2018	17/07/2028	0.107	500,000	-
Unlisted ⁽¹⁾	19/11/2018	5/10/2028	0.103	400,000	-
Total				136,700,000	50,850,000

Notes to the Consolidated Financial Statements

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24. SHARE-BASED PAYMENTS (Continued)

(c) Summary of options granted under the Long Term Incentive Plan and Directors & Officers Option Plan (continued)

- (1) Options issued to employees and consultants which vest equally over a 4-year period on each anniversary of the grant date.
- (2) 50,000,000 unlisted options were issued to the CEO, Lou DiNardo, on 30 September 2016 with an expiry date of 30 September 2021. 23,000,000 options vest equally over a 4-year period. 27,000,000 options vest equally over a 4-year period after attainment of specific performance criteria.
- (3) 7,000,000 unlisted options were issued on 1 November 2016 to Foster Stockbroking Pty Ltd as consideration for acting as Sole & Exclusive Lead Manager to the Placement announced on ASX on 26 October 2016. These options will vest when the share price is trading at 150% of the exercise price i.e. \$0.27 (based on 30 day VWAP) for 30 consecutive trading days, are exercisable before 1 November 2019.
- (4) 6,000,000 unlisted options issued to consultants on 16 February 2017. 50% of these options vested immediately and expire on 16 February 2022. 50% vested on 31 December 2017 as long as continuous service is provided and expire 31 December 2022.
- (5) 20,000,000 unlisted options were issued to employees on 31 March 2017. 8,000,000 of these options vest equally over a 4-year period as long as continuous service is provided. 12,000,000 of these options vest equally over a 4-year period subject to the employee achieving various operational KPIs as determined by the Board, and continuous services. After vesting, all options expire 31 March 2022.
- (6) 8,000,000 unlisted options were issued to Directors of which 25% of the options vest on each anniversary date of the offer date (31 January 2017) so long as continuous service is provided and expire five years from each vesting date.
- (7) 7,000,000 unlisted options were issued to Directors of which 25% of the options vest on each anniversary date of the offer date (1 February 2017) so long as continuous service is provided and expire five years from each vesting date.
- (8) 8,000,000 unlisted options were issued to Directors of which 25% of the options vest on each anniversary date of the offer date (7 July 2017) so long as continuous service is provided and expire five years from each vesting date.
- (9) 5,100,000 unlisted options issued to employees on 13 March 2018 and expiring on 13 March 2028 with the following vesting terms:
 - 1,200,000 vest 5 July 2021;
 - 800,000 vest 7 October 2021;
 - 650,000 vest 15 January 2020;
 - 1,500,000 vest 9 December 2019;
 - 800,000 vest 15 January 2021;
 - 150,000 vesting equally over a 4-year period from 5 March 2018.
- (10) 2,000,000 unlisted options issued to consultants on 13 March 2018, expiring on 13 March 2028, with the following vesting terms: 25% on 30 April 2018, 25% on 30 September 2018 and 50% on 13 February 2019.

The above options are exercisable after vesting and at any time on or before the expiry date.

(d) Options forfeited, lapsed and cancelled

The following options were forfeited during the year due to cessation of employment:

- 20,750,000 unlisted options granted to an employee on 10 August 2017;
- 500,000 unlisted options granted to an employee on 28 November 2017.

The following options lapsed during the year during the year:

- 6,250,000 unlisted options granted to an employee on 10 August 2017;
- 11,000,000 unlisted options issued to directors on 4 December 2015.

The following options expired during the year during the year:

- 500,000 unlisted options granted to a consultant on 21 December 2015.

Notes to the Consolidated Financial Statements

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24. SHARE-BASED PAYMENTS (Continued)

(e) Movements during the year

The following table illustrates the number and weighted average exercise prices (WAEP) of, and movements in, share options during the year:

	2018 Number	2018 WAEP (US\$)	2017 Number	2017 WAEP (US\$)
Outstanding at 1 January	164,300,000	0.161	85,300,000	0.160
Granted during the year	11,400,000	0.142	84,000,000	0.163
Forfeited during the year	(21,250,000)	(0.128)	(5,000,000)	(0.194)
Cancelled during the year	(500,000)	(0.215)	-	-
Lapsed during the year	(17,250,000)	(0.150)	-	-
Outstanding at 31 December	136,700,000	0.165	164,300,000	0.161
Exercisable (vested and unrestricted) at 31 December	50,850,000		34,650,000	

The weighted average remaining contractual life for the share options outstanding at 31 December 2018 is 3.83 years (2017: 4.40 years).

The weighted average fair value of options granted during the year was US\$0.108 (2017: US\$0.11)

The range of exercise prices for options outstanding at the end of the year was US\$0.105 to US\$0.258 (2017: US\$0.108 to US\$0.258)

(f) Options pricing model

The fair value of the equity-settled share options granted under the LTIP and DOOP is estimated as at the date of grant using a Black Scholes Option Pricing model. The following table lists the inputs to the models used for the valuation of options during the year ended 31 December 2018:

	Number of options	Fair value at measurement date \$US	Share price at Grant Date US\$	Exercise price US\$	Expected volatility (%)	Risk-free interest rate (%)	Expected life of options in years
Employee	5,100,000	0.124	0.140	0.147	97.3	2.75	10.0
	1,300,000	0.123	0.140	0.171	97.3	2.75	10.0
	500,000	0.097	0.110	0.136	97.3	2.77	10.1
	600,000	0.094	0.105	0.105	97.3	2.67	10.0
	500,000	0.089	0.089	0.107	97.3	2.64	10.0
	400,000	0.074	0.074	0.103	97.3	2.64	10.0
Consultants	2,000,000	0.124	0.140	0.147	97.3	2.75	10.0
	1,000,000	0.098	0.110	0.117	97.3	2.77	10.1

Notes to the Consolidated Financial Statements

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24. SHARE-BASED PAYMENTS (Continued)

Options pricing model (continued)

The following table lists the inputs to the models used for the valuation of options during the year ended 31 December 2017:

	Number of options	Fair value at measurement date \$US	Share price at Grant Date US\$	Exercise price US\$	Expected volatility (%)	Risk-free interest rate (%)	Expected life of options in years
Employee	100,000	0.193	0.242	0.242	110	2.28	5.1
	1,000,000	0.198	0.249	0.249	110	2.32	5.1
	20,000,000	0.166	0.209	0.209	110	2.32	5.1
	27,000,000	0.131	0.127	0.127	110	2.23	5.1
	500,000	0.100	0.136	0.136	92.4	2.26	5.4
	5,300,000	0.101	0.141	0.141	92.4	2.26	5.1
Consultants	3,000,000	0.192	0.241	0.241	110	2.24	5.1
	3,000,000	0.201	0.241	0.241	110	2.35	5.9
	500,000	0.097	0.141	0.171	92.4	2.26	5.1
	400,000	0.100	0.141	0.148	92.4	2.26	5.1
	200,000	0.101	0.140	0.140	92.4	2.26	5.1
Director	2,000,000	0.116	0.142	0.138	110	2.06	5.7
	2,000,000	0.121	0.142	0.138	110	2.16	6.7
	2,000,000	0.125	0.142	0.138	110	2.26	7.7
	2,000,000	0.128	0.142	0.138	110	2.35	8.7
Director	1,750,000	0.112	0.142	0.182	110	2.06	5.7
	1,750,000	0.118	0.142	0.182	110	2.16	6.7
	1,750,000	0.123	0.142	0.182	110	2.26	7.7
	1,750,000	0.127	0.142	0.182	110	2.35	8.7
Director	2,000,000	0.101	0.121	0.125	110	2.33	6.0
	2,000,000	0.106	0.121	0.125	110	2.41	7.0
	2,000,000	0.109	0.121	0.125	110	2.49	8.0
	2,000,000	0.111	0.121	0.125	110	2.57	9.0

The expected dividend yield for all options granted during the period was nil. The expected life of the share options is based on historical data and is not necessarily indicative of exercise patterns that may occur. The expected volatility reflects the assumption that the historical volatility over a period similar to the life of the options is indicative of future trends, which may not necessarily be the actual outcome.

(g) Performance rights pricing model - 2018

The fair value of the performance rights granted under the LTIP is estimated as at the date of grant using the share price at the date of grant. The following table lists the inputs to the models used for the valuation of performance rights during the year ended 31 December 2018:

	Number of performance rights	Grant date	Fair value at grant date \$US
Employee	1,000,000	8/06/2018	0.110
	15,000,000	10/05/2018	0.104
	<u>16,000,000</u>		

The following table lists the inputs to the models used for the valuation of performance rights during the year ended 31 December 2017:

	Number of performance rights	Grant date	Fair value at grant date \$US
Employee	500,000	9/08/2017	0.131
	1,000,000	5/03/2017	0.209
	500,000	5/03/2017	0.209

Notes to the Consolidated Financial Statements

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24. SHARE-BASED PAYMENTS (Continued)

(h) Restricted Stock Units issued during the year as share-based payments

The Company granted the following Restricted Stock Units to employees during 2018 (2017: Nil). The fair value of the Restricted Stock Unit granted is estimated using the share price on the date of the grant.

	Number of RSUs granted	Grant date	Fair value at grant date \$US
	2,950,000	8/06/2018	0.103
	50,000	17/7/2018	0.107
Employee	300,000	6/8/2018	0.089
	200,000	3/9/2018	0.089
	150,000	8/10/2018	0.089
	200,000	19/11/2018	0.088
	<u>3,850,000</u>		

25. COMMITMENTS

Operating lease commitments - Company as lessee

	2018 US\$	2017 US\$
Office lease		
Up to one year	177,388	261,827
Two to five years	-	144,001
More than five years	-	-
	<u>177,388</u>	<u>405,828</u>

26. CONTINGENT ASSETS AND LIABILITIES

The Group had no contingent assets or liabilities at 31 December 2018 (31 December 2017: \$Nil).

27. EVENTS AFTER THE BALANCE SHEET DATE

In January 2019, the Company partnered with SoftCryptum to deliver BrainChip Studio's AI-powered video analytics to government agencies in European countries.

On 11 February 2019, Mr Stephe Wilks was appointed as Non-Executive Director and Chair of the Board of Directors.

In February 2019, the Company expanded the distribution network of BrainChip Studio in Europe with the engagement of Novo Technologies in Greece and Cypress.

In March 2019, the Company appointed Roger Levinson as Chief Operating Officer. Mr Levinson will be responsible for all aspects of operations including ASIC manufacturing which includes wafer fabrication, product engineering, assembly and test operations, and customer service.

In March 2019, the Company appointed Ken Scarince as Vice President of Finance, Controller. Mr Scarince will be responsible for all aspects of finance, including general accounting, tax, audit, treasury, compliance and financial planning. Mr Scarince replaces the Company's former CFO who left in August 2018.

In March 2019, the Company accepted the resignation of Julie H. Stein as Non-executive director. The resignation is effective 1 April 2019. Ms Stein served on the board since November 2016.

In March 2019, the Company executed a Memorandum of Understanding with Socionext Americas to develop and manufacture the Akida Neuromorphic System-on-Chip (NSoC). The companies will negotiate a definitive agreement to deliver a physical Akida device. The agreement is expected to be finalised within the coming months while the parties begin preliminary work.

No other matters or circumstances have arisen since the end of the financial year which significantly affected or may significantly affect the operations of the Group, the results of those operations, or the state of affairs of the Group in subsequent financial years.

Notes to the Consolidated Financial Statements

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28. AUDITOR'S REMUNERATION

	2018 US\$	2017 US\$
<i>Amounts received or due to be receivable by Ernst & Young (Australia) for:</i>		
An audit or review of the financial reports of the entity	87,370	102,560
	<u>87,370</u>	<u>102,560</u>
<i>Amounts received or due and receivable by non-Ernst & Young audit firms for:</i>		
An audit or review of the financial report of the entity	10,255	17,455
	<u>10,255</u>	<u>17,455</u>

29. OPERATING SEGMENTS

For management purposes, the Group is organised into one operating segment, being the technological development of designs that can be licensed to OEM (Original Equipment Manufacturer) Customers, End Users and System Integrators based on Artificial Neural Networks.

All the activities of the Group are interrelated, and each activity is dependent on the others. Accordingly, all significant operating disclosures are based upon analysis of the Group as one segment. The financial results from this segment are equivalent to the financial statements of the Group as a whole.

The Group currently derives revenue from BrainChip Inc., located in the USA, and BrainChip SAS, its France based subsidiary.

Geographically, the Group has the following revenue information based on the location of its customers and non-current assets from where its investing activities are managed.

	2018 US\$	2017 US\$
Revenue from external customers		
North America	722,586	24,565
Europe, Middle East & Asia (EMEA)	225,403	244,931
Revenue from continuing operations	<u>947,989</u>	<u>269,496</u>

Customers representing more than 10% of revenues in the current year amounted to \$712,500 from a North American customer comprising license revenue of \$200,000 and development service revenue of \$512,500. Development service revenue includes (i) further development of existing licensed technology and/or (ii) engineering services for existing licensed technology.

In the prior year, customers representing more than 10% of revenues totaled \$194,728 of development service revenue from European customers, comprising Customer A: \$89,807; Customer B \$76,529 and Customer C \$28,392.

	2018 US\$	2017 US\$
Non-current assets		
North America	1,018,340	1,117,018
EMEA	982,188	1,930,828
	<u>2,000,528</u>	<u>3,047,846</u>

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

30. DISCONTINUED OPERATION

	2018 US\$	2017 US\$
Sale of ORRI and dissolution of subsidiaries 2017 (a)	-	28,372
Net gain/(loss) from discontinued operations after tax	-	28,372

(a) Sale of ORRI and dissolution of subsidiaries 2017:

During 2017, BrainChip dissolved three wholly owned subsidiaries and sold an interest in an overriding royalty interest agreement ("ORRI") to a third party.

	2018 US\$	2017 US\$
(i) Financial performance		
Other revenues – oil & gas royalties	-	5,220
Other revenues – sale of interest in overriding royalty interest	-	32,289
General & administrative expenses	-	(9,137)
Operating gain from discontinued operations	-	28,372
Income tax expense	-	-
Operating gain attributable to discontinued operations after tax	-	28,372
Gain on dissolution of subsidiaries	-	-
Income tax expense	-	-
Gain on dissolution of subsidiaries after tax	-	28,372
Net gain attributable to discontinued operations	-	28,372

(ii) Cash flow information.

Net cash outflow from operating activities	-	(3,917)
Net cash inflow from investing activities	-	32,289
Net increase in cash generated by the disposal	-	28,372

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

31. RELATED PARTY DISCLOSURES

(a) Ultimate parent

The ultimate legal Australian parent entity and the ultimate legal parent entity of the Group is BrainChip Holdings Ltd.

(b) Subsidiaries

The consolidated financial statements include the financial statements of BrainChip Holdings and the subsidiaries listed in the following table:

Name	Country of incorporation	Beneficial interest	
		2018	2017
Subsidiary companies of BrainChip Holdings Ltd			
BrainChip Inc. ⁽¹⁾	USA	100%	100%
Subsidiary companies of BrainChip Inc.			
BrainChip SAS (formerly Spikenet Technology SAS) ⁽²⁾	France	100%	100%

⁽¹⁾ BrainChip Holdings Ltd holds 100% of the shares of BrainChip Inc. effective from 10 September 2015.

⁽²⁾ BrainChip SAS was acquired by BrainChip Holdings Ltd on 1 September 2016. Effective 29 December 2017, the Group was re-organised such that BrainChip SAS became a wholly-owned subsidiary of BrainChip Inc.

(c) Other entities

The consolidated financial statements include the following entities controlled by BrainChip Holdings Ltd:

Name	Country of registration	Beneficial interest	
		2018	2017
BrainChip Long Term Incentive Plan Trust ⁽¹⁾	Australia	-	-

⁽¹⁾ BrainChip Holdings Ltd executed the BrainChip Long Term Incentive Plan Trust on 2 August 2018 and appointed Solium Nominees (Australia) Pty Ltd as the Plan Trustee.

(d) Key Management Personnel compensation

Total remuneration paid to KMP of the Group during the year are as follows:

	2018	2017
	US\$	US\$
Short-term employee benefits ⁽¹⁾	1,986,750	1,936,098
Short-term employee benefits capitalised to Intangible assets	-	162,573
Termination benefit ⁽²⁾	-	180,895
Share-based payment	5,917,796	5,059,626
	<u>7,904,546</u>	<u>7,339,192</u>

⁽¹⁾ In the prior year, Mr. Bolto and Ms. Stein each had a consulting agreement with the Company for ad hoc services as requested by the CEO from time to time effective from 1 December 2016 to 31 August 2017 at a rate of A\$10,000 per month during active assignments. These consulting services are outside the scope of what is expected of Mr. Bolto and Ms. Stein in their roles as non-executive directors of the Company. The agreements were terminated effective from 31 August 2017. Fees paid during the prior year to Mr. Bolto totalled \$38,462 and to Ms. Stein totalled \$61,540.

⁽²⁾ In the prior year, accrued termination salary payable as at 31 December 2017 to Mr DoDuy, a KMP at the time of his resignation, totalled \$51,800.

Related party transactions with KMPs of the Group are as follows:

There were no related party transactions with KMPs of the Group.

(e) Transactions with other related parties

There were no transactions with other related parties.

(f) Loans to/from related parties

There were no outstanding loans arising to or from related parties (31 December 2017: \$Nil).

Notes to the Consolidated Financial Statements

For the year ended 31 December 2018

32. PARENT ENTITY INFORMATION

	2018 US\$	2017 US\$
Information relating to BrainChip Holdings Ltd		
Current assets	318,207	859,502
Non-current assets	8,879,309	17,350,532
Total assets	9,197,516	18,210,034
Current liabilities	(87,099)	(143,564)
Non-current liabilities	-	-
Total liabilities	(87,099)	(143,564)
Net assets	9,110,417	18,066,470
Issued capital	80,383,215	78,810,327
Other contributed equity	2,025,617	2,025,617
Accumulated losses	(109,836,277)	(94,596,627)
Share-based payment reserve	36,308,159	30,578,086
Option premium reserve	480,731	480,731
Foreign currency translation reserve	-	1,019,364
Other reserves	(251,028)	(251,028)
Total shareholders' equity	9,110,417	18,066,470
Net loss of the parent entity ⁽¹⁾	15,239,650	14,102,256
Total comprehensive loss of the parent entity	15,239,650	14,102,256

⁽¹⁾ At the reporting date investments and loans receivable from controlled entities net of provision for impairment totalled \$8,879,309 (2017: 17,350,532). Impairment expense of \$7,742,170 (2017: \$6,411,651) was recognised for the year ended 31 December 2018.

Guarantees entered into by the parent entity in relation to the debts of its subsidiaries

Nil

Contingent liabilities of the parent entity

Nil

Contractual commitments by the parent entity for the acquisition of property, plant or equipment

Nil

Directors' Declaration

In accordance with a resolution of the Directors of BrainChip Holdings Ltd, I state that:

In the opinion of the Directors:

- (a) the financial statements and notes of the Company and of the Group are in accordance with the *Corporations Act 2001*, including:
 - (i) giving a true and fair view of the Company's and the Group's financial position as at 31 December 2018 and of their performance for the year ended on that date; and
 - (ii) complying with the Australian Accounting Standards (including the Australian Accounting Interpretations) and Corporations Regulations 2001; and
- (b) the financial statements and notes also comply with International Financial Reporting Standards as disclosed in note 2(b) and;
- (c) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable; and
- (d) this declaration has been made after receiving the declarations required to be made to the Directors in accordance with section 295A of the *Corporations Act 2001* for the financial year ended 31 December 2018.

On behalf of the Board.



Stephen Wilks
Chair
Sydney, Australia, 27 March 2019

Independent auditor's report to the members of BrainChip Holdings Ltd

Report on the audit of the financial report

Opinion

We have audited the financial report of BrainChip Holdings Ltd (the Company) and its subsidiaries (collectively the Group), which comprises the consolidated statement of financial position as at 31 December 2018, the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

In our opinion, the accompanying financial report of the Group is in accordance with the *Corporations Act 2001*, including:

- a) giving a true and fair view of the consolidated financial position of the Group as at 31 December 2018 and of its consolidated financial performance for the year ended on that date; and
- b) complying with Australian Accounting Standards and the *Corporations Regulations 2001*.

Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report. We are independent of the Group in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's *APES 110 Code of Ethics for Professional Accountants* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

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

Material uncertainty related to going concern

We draw attention to Note 2(a) Going Concern in the financial report which describes the principal conditions that raise doubt about the consolidated entity's ability to continue as a going concern. These events or conditions indicate a material uncertainty exists that may cast significant doubt on the Group's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial report of the current year. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, but we do not provide a separate opinion on these matters. In addition to the matter described in the *Material Uncertainty Related to Going Concern* section, we have determined the matter described below to be the key audit matter to be communicated in our report. For the matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report, including in relation to this matter. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial report. The results of our audit procedures, including the procedures performed to address the matter below, provide the basis for our audit opinion on the accompanying financial report.

Share-based payment

Why significant

As disclosed in Note 24 to the financial statements, the Group has awarded significant share-based payment to employees, directors and consultants during the year, contributing to a total share-based payment expense of approximately US\$7.3 million.

The valuation of share-based payment is complex and involves the use of subjective assumptions that have a material effect on the financial statements. As such this matter was determined to be a key audit matter.

How our audit addressed the key audit matter

As part of our audit procedures, we assessed the Group's share based payment expense calculations to determine whether the balances were calculated in accordance with Australian Accounting Standards. We involved our valuation specialists to assess the Group's calculation of the fair value of share-based payment issued during the year, including the key assumptions used.

We also assessed the adequacy of the presentation and disclosures included in Note 24 to the financial statements.

Information other than the financial report and auditor's report thereon

The directors are responsible for the other information. The other information comprises the information included in the Company's 2018 Annual Report, but does not include the financial report and our auditor's report thereon.

Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon, with the exception of the Remuneration Report and our related assurance opinion.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, 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.

Responsibilities of the directors for the financial report

The directors of the Company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the Corporations Act 2001 and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters relating 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 report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is 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 the Australian Auditing Standards 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 this financial report.

As part of an audit in accordance with the Australian Auditing Standards, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- ▶ Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- ▶ Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- ▶ Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- ▶ Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- ▶ Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.
- ▶ Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the financial report. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated to the directors, we determine those matters that were of most significance in the audit of the financial report of the current year and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on the audit of the Remuneration Report

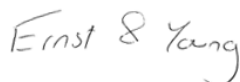
Opinion on the Remuneration Report

We have audited the Remuneration Report included in the directors' report for the year ended 31 December 2018.

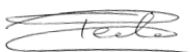
In our opinion, the Remuneration Report of BrainChip Holdings Ltd for the year ended 31 December 2018, complies with section 300A of the *Corporations Act 2001*.

Responsibilities

The directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the *Corporations Act 2001*. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with Australian Auditing Standards.



Ernst & Young



Philip Teale
Partner
Perth
27 March 2019

Additional Shareholder Information as at 28 February 2019

(a) Top 20 Quoted Shareholders	%	Number of shares
MR PETER AJ VAN DER MADE	16.79	176,305,508
MR ROBERT F MITRO <ROBERT F MITRO LIVING A/C>	11.45	120,202,500
MERRILL LYNCH (AUSTRALIA) NOMINEES PTY LIMITED ⁽¹⁾	9.48	99,567,164
METALS X LIMITED	5.79	60,747,531
NERONA PTE LTD	2.36	24,759,500
MR ANIL SHAMRAO MANKAR & MRS MEENA ANIL MANKAR <MANKAR FAMILY A/C> ⁽¹⁾	2.17	22,750,000
CITICORP NOMINEES PTY LIMITED	1.65	17,330,225
HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	1.42	14,904,478
MR PAUL GLENDON HUNTER	0.95	10,000,000
MS CRISTINA M MITRO	0.95	10,000,000
MS VELIA MITRO	0.95	10,000,000
CROSSFIELD INTECH NOMINEES PTY LTD <LIEBESKIND FAMILY S/FUND A/C>	0.89	9,338,500
MR ADAM OSSEIRAN + MRS REBECCA OSSEIRAN-MOISSON <OSSEIRAN FAMILY A/C>	0.89	9,338,500
J P MORGAN NOMINEES AUSTRALIA LIMITED	0.73	7,686,188
MR LOUIS DINARDO	0.71	7,500,000
AJAVA HOLDINGS PTY LTD	0.56	5,860,281
ZERO NOMINEES PTY LTD	0.52	5,477,265
SOLIUM NOMINEES (AUSTRALIA) PTY LTD <VSA A/C>	0.50	5,253,290
BNP PARIBAS NOMINEES PTY LTD <IB AU NOMS RETAILCLIENT DRP>	0.43	4,520,837
MR JEFFREY BRIAN WALTON	0.39	4,100,000
Total	59.58%	625,641,767

(1) 99,135,000 fully paid ordinary shares are held by Merrill Lynch (Australia) Nominees Pty Limited on behalf of Mr Mankar. Total holding by Mr Mankar is 121,885,000 fully paid ordinary shares.

(b) (i) Distribution of quoted fully paid ordinary shares

Size of parcel	Number of share holders	Number of shares
1 to 1,000	148	34,338
1,001 to 5,000	2,752	9,543,695
5,001 to 10,000	1,803	14,661,046
10,001 to 100,000	3,822	136,677,778
100,001 and over	762	888,966,662
Total	9,287	1,049,883,519

There are 3,652 holders with less than a marketable parcel of ordinary shares based on the Company's closing market price of \$0.064 on 28 February 2018.

Additional Shareholder Information as at 28 February 2019

(ii) Distribution of unquoted securities

Size of parcel	Number of Option holders	Number of options	Number of performance rights holders	Number of performance rights	Number of restricted stock unit holders	Number of restricted stock units
1 to 1,000	1	3,333	-	-	-	-
1,001 to 5,000	-	-	-	-	-	-
5,001 to 10,000	-	-	-	-	-	-
10,001 to 100,000	25	1,068,665	-	-	4	275,000
100,001 and over	70	161,578,002	5	8,500,000	11	3,575,000
Total	96	162,950,000	5	8,500,000	15	3,850,000

(c) Substantial Shareholders	%	Number of shares
MR PETER AJ VAN DER MADE	16.79	176,305,508
MR ROBERT F MITRO <ROBERT F MITRO LIVING A/C>	11.45	120,202,500
MERRILL LYNCH (AUSTRALIA) NOMINEES PTY LIMITED ⁽¹⁾	9.48	99,567,164
METALS X LIMITED	5.79	60,747,531
ANIL SHAMRAO MANKAR AND MEENA ANIL MANKAR AS TRUSTEE OF THE MANKAR FAMILY TRUST ⁽¹⁾	2.17	22,750,000

(1) 99,135,000 fully paid ordinary shares are held by Merrill Lynch (Australia) Nominees Pty Limited on behalf of Mr Mankar. Total holding by Mr Mankar is 121,885,000 fully paid ordinary shares.

(d) Voting Rights

The voting rights for each class of security on issue are:

Ordinary fully paid shares

Each ordinary shareholder is entitled to one vote for each share held.

Options

The holders of options have no voting rights. Upon exercise of the option, the holders will be holders of fully paid ordinary shares and therefore will have voting rights as afforded to shareholders of these securities.

Performance Rights

The holders of performance rights have no voting rights. Upon vesting of the performance rights, the holders will be holders of fully paid ordinary shares and therefore will have voting rights as afforded to shareholders of these securities.

Restricted Stock Units

The holders of restricted stock units have no voting rights. Upon vesting of the restricted stock units, the holders will be holders of fully paid ordinary shares and therefore will have voting rights as afforded to shareholders of these securities.