Half-Year Report of Audio Pixels Holdings Limited for the Half-Year Ended 30 June 2018

ACN 094 384 273

This Half-Year Report is provided to the Australian Stock Exchange (ASX) under ASX Listing Rule 4.2A.3.

Current Reporting Period:	Half-year ended 30 June 2018
Previous Corresponding Period:	Half-year ended 30 June 2017

Results for Announcement to the Market

Revenue and Net Profit/(Loss)

		Percentage Change %	Amount
Revenue from ordinary activities	down	15.3%	To $36,518
(Loss) from ordinary activities after tax attributable to members	down	N/A	To ($1,357,382)
Net (loss) attributable to members	down	N/A	To ($1,357,382)

Dividends (Distributions)

	Amount per security	Franked amount per security
Final dividend	Nil¢	Nil¢
Interim dividend	Nil¢	Nil¢
Record date for determining entitlements to the dividend:		
• final dividend		N/A
• interim dividend		N/A

Brief Explanation of Revenue, Net Profit/(Loss) and Dividends (Distributions)

Refer to Directors' Report.

Directors' Report

The directors of Audio Pixels Holdings Limited submit herewith the financial report for the half-year ended 30 June 2018. In order to comply with the provisions of the Corporations Act 2001, the directors report as follows:

The names of the directors of the company during or since the end of the half year are:

Mr Fred Bart (Chairman)
Mr Ian Dennis
Ms Cheryl Bart AO

PRINCIPAL ACTIVITIES

During the reporting period there were no significant changes in the nature of the Company's principal activities which were predominately focused on the refinement of the fabrication processes required to mass produce a commercial version of the Company's proven ground-breaking MEMS based digital loudspeaker.

Audio Pixels is a world leader in the digital transformation of sound reproduction; combining the emergence of a multibillion-dollar MEMS device industry together with the multibillion-dollar loudspeaker market that has over the course of a century become an indispensable fixture of daily life throughout a myriad of industries and applications.

REVIEW OF OPERATIONS

The Company's primary efforts remained focused on commercializing its ground-breaking MEMS based digital sound wave transducer platform into an industry compliant microchip that will propel audio loudspeakers, systems and ultrasonic sensors from its century old analog origins into the advanced digital era of today.

Achievements during the reporting period were technical in nature, focused on advancing the Company's proven prototype technologies into a mass-production product. The primary focus of the period has been an intensive effort involving the Company in close collaboration with its primary MEMS' vendor to overcome what is considered to be the final technical hurdle toward production of our MEMS based digital speaker.

As previously reported exhaustive testing and analysis conducted on wafers exposed a critical need to further optimize the performance and fabrication of the device's "dissipation layers".

Among the many attractive aspects of our speaker is its form factor. The emergence of electrostatic forces as the dominant actuation methods in micro and nano devices (MEMS and NEMS), make these value propositions possible, as electrostatics offers one of the highest energy densities available. The ability to use relatively standard micro fabrication technologies and reasonable integration methods to form a single-chip system enables the production of efficient, low-power, fast-response actuators. Consequently, electrostatics resides at the heart of the Company's MEMS speaker technologies.

The challenges we along with the rest of the MEMS industry face relates to electrostatic actuation. The interaction between the strong electrostatic fields and the various materials, forming our MEMS chip, is complex, non-linear and depends on numerous parameters. To achieve operational stability devices must suppress and control effects that are intrinsic to electrostatic fields; effects such as stiction, adhesion, material breakdown, electrical discharge and dielectric charging. Further complicating matters is that accurate modelling is extremely difficult if not impossible due to the very complex interaction between electrostatic fields and the imperfections intrinsic to any manufacturing process. Dielectric charging is consider by industry to be the key failure mechanism of electrostatically actuated MEMS devices, as the parasitic charges that get trapped inside the dielectric layers produce undesired effects such as voltage drifts, capacitance shifts and stiction of moving parts.

There are several proven methods to deal with the adverse effects of dielectric charging and other issues related to electrostatic actuation, however each solution must be uniquely designed, tailored and specifically fine-tuned to match the particular characteristics and attributes of the device. Such solutions are highly complex as at least to date, the industry lacks suitable physical models to accurately predict the charging characteristics of the device and its susceptibility to dielectric charging.

In our particular case, in order to produce the desired acoustic output, the number of pixels "actuating" at every clock must be precisely controlled. The dielectric charging is highly disruptive, as operation voltage drifts, capacitance shifts and stiction all throw off the precision control and timing required to produce the sound. As a result, the number of moving elements ("pixels") triggered at every clock varies from the nominal values as some triggered pixels remain stuck while others release and move instead of remaining immobile. This deficiency in the control of the pixels translates into audible noise and noticeably impacts acoustic performance.

In order to suppress such undesirable effects of electrostatic actuation, the Company developed a unique “charge dissipation mechanism” that was tested and utilized through all the earlier phases of development. As was previously reported testing revealed that our dissipation layers and / or its fabrication needed further optimization. A series of improvements to the dissipation layer were made and all early indications were that our requirements could be met.

The wafers delivered with the changes indeed exhibited a very significant improvement to the dielectric properties of the device. This enabled the Company to advance to acoustic testing of the devices and from there to implement the systems sound reproduction capabilities. While acoustic testing produced exciting results, the sound produced did not meet our qualitative expectations.

A few months ago, the company decided to conduct far more comprehensive forensic analysis of electrostatic effects that are in play in our structure. The Company developed new measurement tools and techniques that enabled us to identify the various charging mechanisms in play in our devices. The data collected and analysed revealed that the dissipation layer was not reliably suppressing charges when stressed with the very demanding control and timing conditions involved in speech and music playback. The Company and the vendor, aided by a number of external experts ultimately determined that the properties of the core material of the dissipation layer were not adequately withstanding the particulars of entire fabrication process and as a result the wafers delivered lacked the stability and reliably required to achieve proper operation of the device.

The resulting recommendations were to a) continue to improve the core dielectric material of the dissipation layers, b) modify the fabrication process as to enable the use of alternative dielectric materials that have been proven to be less prone to charging and other adverse effects of electrostatic actuation and c) utilize two specific proprietary alternative methods to supress charges.

Before committing to a new process, the Company and vendor immediately launched a series of trials to validate the recommendations and performance of the new dielectric material, all of which showed extremely convincing results. On that basis the Company and vendor redesigned the fabrication process flow were needed and have already begun to produce a large number of wafers that implement the changes and recommendations. To the extent possible management and the vendor are convinced that the adjustments currently underway will resolve the final hurdle facing the company in producing and introducing our industry altering technology.

Beyond the MEMS activities described above, advancement continues all technical fronts. The Company has expanded its intellectual property portfolio to 115 granted patents, having five additional patents granted during the reporting period. The Company also continues to explore utilization of the product as an ultrasonic transducer as in case of the ongoing collaborative with Bar Ilan University for the non-invasive wearable devices for the visually impaired. In early September key members involved in this project will be visiting our facilities in Rehovot in order to test and evaluate the overall technology.

Management continues to remain intimately engaged with its future customers, routinely conducting confidential communications as to the progress, potential, applications and demand for its impending products.

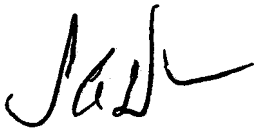
Further information concerning the operations and financial condition of the entity can be found in the financial report and in releases made to the Australian Stock Exchange (ASX) during the half year.

Auditor's independence declaration

The auditor's independence declaration is included on page 6 of the half-year financial report.

Signed in accordance with a resolution of the directors made pursuant to s.306(3) of the Corporations Act 2001.

On behalf of the Directors



I A Dennis
Director
Sydney, 30 August 2018

Deloitte.

Deloitte Touche Tohmatsu
ABN 74 490 121 060

Level 2
8 Brindabella Circuit
Brindabella Business Park ACT 2609
GPO Box 823
Canberra ACT 2601 Australia

DX 5661
Tel: +61 (0) 2 6263 7000
Fax: +61 (0) 2 6263 7001
www.deloitte.com.au

The Board of Directors
Audio Pixels Holdings Limited
Level 12
75 Elizabeth Street
Sydney NSW 2000

30 August 2018

Dear Board Members

Audio Pixels Holdings Limited

In accordance with section 307C of the Corporations Act 2001, I am pleased to provide the following declaration of independence to the directors of Audio Pixels Holdings Limited.

As lead audit partner for the review of the financial statements of Audio Pixels Holdings Limited for the half-year ended 30 June 2018, I declare that to the best of my knowledge and belief, there have been no contraventions of:

(i) the auditor independence requirements of the Corporations Act 2001 in relation to the review; and

(ii) any applicable code of professional conduct in relation to the review.

Yours sincerely

DELOITTE TOUCHE TOHMATSU

DELOITTE TOUCHE TOHMATSU

David Salmon

David Salmon
Partner
Chartered Accountants
Canberra, 30 August 2018

Deloitte.

Deloitte Touche Tohmatsu
ABN 74 490 121 060

Level 2
8 Brindabella Circuit
Brindabella Business Park ACT 2609
GPO Box 823
Canberra ACT 2601 Australia

DX 5661
Tel: +61 (0) 2 6263 7000
Fax: +61 (0) 2 6263 7001
www.deloitte.com.au

Independent Auditor's Review Report to the members of Audio Pixels Holdings Limited

We have reviewed the accompanying half-year financial report of Audio Pixels Holdings Limited, which comprises the condensed consolidated statement of financial position as at 30 June 2018, and the condensed consolidated statement of profit or loss and other comprehensive income, the condensed consolidated statement of cash flows and the condensed consolidated statement of changes in equity for the half-year ended on that date, notes comprising a summary of significant accounting policies and other explanatory information, and the directors' declaration of the consolidated entity comprising the company and the entities it controlled at the end of the half-year or from time to time during the half-year as set out on pages 9 to 27.

Directors' Responsibility for the Half-Year Financial Report

The directors of the company are responsible for the preparation of the half-year 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 half-year financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express a conclusion on the half-year financial report based on our review. We conducted our review in accordance with Auditing Standard on Review Engagements ASRE 2410 *Review of a Financial Report Performed by the Independent Auditor of the Entity*, in order to state whether, on the basis of the procedures described, we have become aware of any matter that makes us believe that the half-year financial report is not in accordance with the *Corporations Act 2001* including: giving a true and fair view of the consolidated entity's financial position as at 30 June 2018 and its performance for the half-year ended on that date; and complying with Accounting Standard AASB 134 *Interim Financial Reporting* and the *Corporations Regulations 2001*. As the auditor of Audio Pixels Holdings Limited, ASRE 2410 requires that we comply with the ethical requirements relevant to the audit of the annual financial report.

A review of a half-year financial report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Auditor's Independence Declaration

In conducting our review, we have complied with the independence requirements of the *Corporations Act 2001*. We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of Audio Pixels Holdings Limited would be in the same terms if given to the directors as at the time of this auditor's review report.

Conclusion

Based on our review, which is not an audit, we have not become aware of any matter that makes us believe that the half-year financial report of Audio Pixels Holdings Limited is not in accordance with the *Corporations Act 2001*, including:

(a) giving a true and fair view of the consolidated entity's financial position as at 30 June 2018 and of its performance for the half-year ended on that date; and

(b) complying with Accounting Standard AASB 134 *Interim Financial Reporting* and the *Corporations Regulations 2001*.

Material Uncertainty Related to Going Concern

We draw attention to Note 1 in the financial report, which indicates that the consolidated entity incurred a net loss during the half-year of $1,357,382 (2017: $4,285,046). Net cash used in operating activities was $2,048,307 (2017: $1,411,192). As at 30 June 2018, the consolidated entity had net current liabilities of $5,848,083 (31 December 2017: $3,256,772). These conditions, along with other matters as set forth in Note 1, indicate the existence of a material uncertainty that may cast doubt about the consolidated entity's ability to continue as a going concern. Our conclusion is not modified in respect of this matter.

DELOITTE TOUCHE TOHMATSU

DELOITTE TOUCHE TOHMATSU

David Salmon

David Salmon
Partner
Chartered Accountants
Canberra, 30 August 2018

Directors' Declaration

The directors declare that:

a) in the directors' opinion, 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

b) in the directors' opinion, the attached financial statements and notes thereto are in accordance with the Corporations Act 2001, including compliance with accounting standards and giving a true and fair view of the financial position as at 30 June 2018 and the performance for the half year ended on that date of the consolidated entity.

Signed in accordance with a resolution of the directors made pursuant to s.303(5) of the Corporations Act 2001.

On behalf of the Directors

I A Dennis
Director
Sydney, 30 August 2018

Condensed Consolidated Statement of Profit or Loss and Other Comprehensive Income for the half-year ended 30 June 2018

	Note	Consolidated Half-year ended 30 June 2018 $	Consolidated Half-year ended 30 June 2017 $
Revenue	2(a)	36,518	43,123
Administrative expenses		(502,590)	(505,231)
Amortisation		(39,124)	(39,976)
Depreciation		(36,665)	(37,939)
Directors' benefits		(74,460)	(74,460)
Exchange gains/(losses)		1,334,642	(1,427,004)
Fair value movement on derivative liability		-	(601,796)
Interest expense		(838,036)	(285,978)
Marketing expenses		(3,983)	(4,738)
Research and development		(1,233,684)	(1,351,047)
(Loss) before income tax expense	2	(1,357,382)	(4,285,046)
Income tax expense		-	-
(Loss) for the period	3	(1,357,382)	(4,285,046)
Other Comprehensive Income			
Items that may be reclassified subsequently to profit and loss			
Exchange differences arising on translation of foreign operations		(1,205,012)	1,324,072
Income tax relating to components of other comprehensive income		-	-
Other comprehensive (loss)/ income for the period (net of tax)		(1,205,012)	1,324,072
Total Comprehensive (loss) for the period		(2,562,394)	(2,960,974)
(Loss) attributable to:			
Owners of the company		(1,357,382)	(4,285,046)
		(1,357,382)	(4,285,046)
Total comprehensive (loss) attributable to:			
Owners of the company		(2,562,394)	(2,960,974)
		(2,562,394)	(2,960,974)
(Loss) per share:			
Basic (cents per share)	4	(5.05 cents)	(15.93 cents)
Diluted (cents per share)	4	(5.05 cents)	(15.93 cents)

Notes to the financial statements are included on pages 14 to 27.

Condensed Consolidated Statement of Financial Position as at 30 June 2018

	Note	Consolidated 30 June 2018 $	Consolidated 31 Dec 2017 $
Current Assets			
Cash and cash equivalents		4,092,786	2,700,577
Trade and other receivables		43,481	3,046,113
Total Current Assets		4,136,267	5,746,690
Non-Current Assets			
Goodwill	10	2,262,998	2,189,025
Intangible	11	501,486	513,773
Property, plant and equipment		341,983	324,610
Trade and other receivables		14,170	16,108
Total Non-Current Assets		3,120,637	3,043,516
Total Assets		7,256,904	8,790,206
Current Liabilities			
Trade and other payables		967,113	887,770
Borrowings	12	7,378,376	6,388,489
Derivative liability	12	1,473,341	1,486,884
Provisions		165,520	240,319
Total Current Liabilities		9,984,350	9,003,462
Total Liabilities		9,984,350	9,003,462
Net (Liabilities)		(2,727,446)	(213,256)
Equity			
Issued capital	7	45,228,931	45,228,931
Reserves	8	(23,091,585)	(21,934,777)
Accumulated losses	3	(24,864,792)	(23,507,410)
Total Equity		(2,727,446)	(213,256)

Notes to the financial statements are included on pages 14 to 27.

Condensed Consolidated Statement of Changes in Equity for the half-year ended 30 June 2018

Consolidated	Issued Capital $	Equity Settled Share Option Reserve $	Foreign Currency Translation Reserve $	Accumulated Losses $	Convertible Note Equity Reserve $	Minority Acquisition Reserve $	Total $
Balance at 1 January 2018	45,228,931	4,512,898	(1,575,876)	(23,507,410)	666,893	(25,538,692)	(213,256)
Other comprehensive (loss) for the period	-	-	(1,205,012)	-	-	-	(1,205,012)
(Loss) for the period	-	-	-	(1,357,382)	-	-	(1,357,382)
Total comprehensive (loss) income for the period	-	-	(1,205,012)	(1,357,382)	-	-	(2,562,394))
Equity reserve on issue of convertible notes	-	-	-	-	48,204	-	48,204
Balance at 30 June 2018	45,228,931	4,512,898	(2,780,888)	(24,864,792)	715,097	(25,538,692)	(2,727,446)

Consolidated	Issued Capital $	Equity Settled Share Option Reserve $	Foreign Currency Translation Reserve $	Accumulated Losses $	Convertible Note Equity Reserve $	Minority Acquisition Reserve $	Total $
Balance at 1 January 2017	45,228,931	4,512,898	(3,251,993)	(17,592,453)	-	(25,538,692)	3,358,691
Other comprehensive Income for the period	-	-	1,324,072	-	-	-	1,324,072
(Loss) for the period	-	-	-	(4,285,046)	-	-	(4,285,046)
Total comprehensive (loss) for the period	-	-	1,324,072	(4,285,046)	-	-	(2,960,974)
Balance at 30 June 2017	45,228,931	4,512,898	(1,972,921)	(21,877,499)	-	(25,538,692)	397,717

Notes to the financial statements are included on pages 14 to 27.

Condensed Consolidated Cash flow statement for the half-year ended 30 June 2018

	Consolidated Half-year ended 30 June 2018 $	Consolidated Half-year ended 30 June 2017 $
Cash Flows From Operating Activities		
Payments to suppliers and employees	(2,084,825)	(1,454,315)
Interest and bill discounts received	36,518	43,123
Net cash (used in) operating activities	(2,048,307)	(1,411,192)
Cash Flows From Investing Activities		
Payment for property, plant and equipment	(37,406)	(241,025)
Net cash (used in) investing activities	(37,406)	(241,025)
Cash Flows From Financing Activities		
Proceeds from convertible note	3,500,000	-
Net cash provided by financing activities	3,500,000	-
Net (Decrease)/ Increase In Cash Held	1,414,287	(1,652,217)
Cash and cash equivalents at the beginning of the half-year	2,700,577	5,083,948
Effects of exchange fluctuations on the balances of cash held in foreign currencies	(22,078)	(47,437)
Cash and cash equivalents at the end of the half-year	4,092,786	3,384,294

Notes to the financial statements are included on pages 14 to 27.

1. Significant accounting policies

1 (a) Statement of compliance

The half-year financial report is a general purpose financial report prepared in accordance with the Corporations Act 2001 and AASB 134 Interim Financial Reporting. Compliance with AASB 134 ensures compliance with International Financial Reporting Standard IAS34 "Interim Financial Reporting". The half-year financial report does not include notes of the type normally included in an annual financial report and shall be read in conjunction with the most recent annual financial report and any public announcements made by the company during the interim reporting period in accordance with continuous disclosure requirements under the Corporations Act 2001.

1 (b) Basis of preparation

The condensed consolidated financial statements have been prepared on the basis of historical cost, except for the revaluation of certain non-current assets. Cost is based on the fair values of the consideration given in exchange for assets. All amounts are expressed in Australian dollars, unless otherwise stated.

The accounting policies and methods of computation adopted in the preparation of the half-year financial report are consistent with those adopted and disclosed in the company's 2017 annual financial report for the financial period ended 31 December 2017 except for the impact of the Standards and Interpretations described below. These accounting policies are consistent with Australian Accounting Standards and International Reporting Standards.

1 (c) New Accounting Standards

The Group has adopted all of the new and revised Standards and Interpretations issued by the Australian Accounting Standards Board (the AASB) that are relevant to its operations and effective for an accounting period that begins on or after 1 January 2018.

New and revised Standards and amendments thereof and Interpretations effective for the current financial year, and which have been applied in the preparation of this half-year report, that are relevant to the Group include:

- AASB 9 *Financial Instruments* and related amending Standards
- AASB 15 *Revenue from Contracts with Customers* and related amending Standards
- Interpretation 22 *Foreign Currency Transactions and Advance Consideration*

AASB 9 *Financial Instruments* and related amending Standards

In the current year, the Group has applied AASB 9 *Financial Instruments* (as revised) and the related consequential amendments to other Accounting Standards for the first time. AASB 9 introduces new requirements for 1) the classification and measurement of financial assets and financial liabilities, 2) impairment for financial assets and 3) general hedge accounting. Details of these new requirements as well as their impact on the Group's consolidated financial statements are described below.

The Group has applied AASB 9 in accordance with the transition provisions set out in AASB 9.

1. Significant accounting policies (cont)

Classification and measurement of financial assets

The date of initial application (i.e. the date on which the Group has assessed its existing financial assets and financial liabilities in terms of the requirements of AASB 9) is 1 January 2018. Accordingly, the Group has applied the requirements of AASB 9 to instruments that have not been derecognised as at 1 January 2018 and has not applied the requirements to instruments that have already been derecognised as at 1 January 2018.

Subsequent to initial recognition, all recognised financial assets that are within the scope of AASB 9 are required to be measured at amortised cost or fair value on the basis of the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets. Specifically:

- Debt investments that are held within a business model whose objective is to collect the contractual cash flows, and that have contractual cash flows that are solely payments of principal and interest on the principal amount outstanding, are subsequently measured at amortised cost,
- Debt investments that are held within a business model whose objective is both to collect the contractual cash flows and to sell the debt instruments, and that have contractual cash flows that are solely payments of principal and interest on the principal amount outstanding, are subsequently measured at fair value through other comprehensive income (FVTOCI),
- All other debt investments and equity investments are subsequently measured at fair value through profit or loss (FVTPL).

Despite the aforegoing, the Group may make the following irrevocable election/designation at initial recognition of a financial asset:

- The Group may irrevocably elect to present subsequent changes in fair value of an equity investment that is neither held for trading nor contingent consideration recognised by an acquirer in a business combination to which AASB 3 *Business Combinations* applies in other comprehensive income,
- The Group may irrevocably designate a debt investment that meets the amortised cost or FVTOCI criteria as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

In the current year, the Group has not taken any of the elections above.

When a debt investment measured at FVTOCI is derecognised, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss as a reclassification adjustment. In contrast, for an equity investment designated as measured at FVTOCI, the cumulative gain or loss previously recognised in other comprehensive income is not subsequently reclassified to profit or loss.

Debt instruments that are subsequently measured at amortised cost or at FVTOCI are subject to impairment.

1. Significant accounting policies (cont)

The directors of the Company reviewed and assessed the Group's existing financial assets as at 1 January 2018 based on the facts and circumstances that existed at that date and concluded that the initial application of AASB 9 has had the following impact on the Group's financial assets as regards their classification and measurement:

- Financial assets classified as held-to-maturity and loans and receivables under AASB 139 that were measured at amortised cost continue to be measured at amortised cost under AASB 9 as they are held within a business model to collect contractual cash flows and these cash flows consist solely of payments of principal and interest on the principal amount outstanding;

As a result of the above, there was no impact on the Group's financial position, profit or loss, other comprehensive income or total comprehensive income for the period.

Impairment of financial assets

In relation to the impairment of financial assets, AASB 9 requires an expected credit loss model as opposed to an incurred credit loss model under AASB 139. The expected credit loss model requires the Group to account for expected credit losses and changes in those expected credit losses at each reporting date to reflect changes in credit risk since initial recognition of the financial assets. In other words, it is no longer necessary for a credit event to have occurred before credit losses are recognised.

Specifically, AASB 9 requires the Group to recognise a loss allowance for expected credit losses ('ECL') on i) trade receivables, ii) debt investments subsequently measured at amortised cost or at FVTOCI, iii) lease receivables, iv) contract assets and v) loan commitments and financial guarantee contracts to which the impairment requirements of AASB 9 apply.

In particular, AASB 9 requires the Group to measure the loss allowance for a financial instrument at an amount equal to the lifetime ECL if the credit risk on that financial instrument has increased significantly since initial recognition, or if the financial instrument is a purchased or originated credit-impaired financial asset. On the other hand, if the credit risk on a financial instrument has not increased significantly since initial recognition (except for a purchased or originated credit-impaired financial asset), the Group is required to measure the loss allowance for that financial instrument at an amount equal to 12m ECL. AASB 9 also provides a simplified approach for measuring the loss allowance at an amount equal to lifetime ECL for trade receivables, contract assets and lease receivables in certain circumstances.

As at 1 January 2018, the directors of the Company reviewed and assessed the Group's existing financial assets, amounts due from customers and financial guarantee contracts for impairment using reasonable and supportable information that is available without undue cost or effort in accordance with the requirements of AASB 9 to determine the credit risk of the respective items at the date they were initially recognised, and compared that to the credit risk as at 1 January 2018. No further cumulative additional loss allowance was recognised as a result of the this assessment.

Classification and measurement of financial liabilities

One major change introduced by AASB 9 in the classification and measurement of financial liabilities relates to the accounting for changes in the fair value of a financial liability designated as at FVTPL attributable to changes in the credit risk of the issuer.

1. Significant accounting policies (cont)

Specifically, AASB 9 requires that the changes in the fair value of the financial liability that is attributable to changes in the credit risk of that liability be presented in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss. Changes in fair value attributable to a financial liability's credit risk are not subsequently reclassified to profit or loss, but are instead transferred to retained earnings when the financial liability is derecognised. Previously, under AASB 139, the entire amount of the change in the fair value of the financial liability designated as at FVTPL was presented in profit or loss.

This change in accounting policy has not affected the Group's accounting in relation to the convertible notes as fair values ascribed to these instruments already reflect the Group's own credit risk.

Apart from the above, the application of AASB 9 has had no impact on the classification and measurement of the Group's financial liabilities.

General hedge accounting

The Group does not undertake hedging activities and hence is not impacted by the changes in relation to hedging.

Disclosures in relation to the initial application of AASB 9

The table below illustrates the classification and measurement of financial assets and financial liabilities under AASB 9 and AASB 139 at the date of initial application, 1 January 2018.

Category	**Original measurement category under AASB 139**	**New measurement category under AASB 9**	**Original carrying amount under AASB 139**	**Additional loss allowance**	**New carrying amount under AASB 9**
Trade and other receivables	Loans and receivables	Financial assets at amortised cost	3,046,113	-	3,046,113
Cash and bank balances	Loans and receivables	Financial assets at amortised cost	2,700,577	-	2,700,577
Trade and other payables	Financial liabilities at amortised cost	Financial liabilities at amortised cost	(887,770)	-	(887,770)
Borrowings	Financial liabilities at amortised cost	Financial liabilities at amortised cost	(6,388,489)	-	(6,388,489)
Derivative liabilities	Financial liabilities at FVTPL	Financial liabilities at FVTPL	(1,486,884)		(1,486,884)

The application of AASB 9 has had no impact on the financial statements, including the consolidated cash flows of the Group or its earnings per share.

1. Significant accounting policies (cont)

AASB 15 *Revenue from Contracts with Customers* and related amending Standards

The Group has applied AASB 15 *Revenue from Contracts with Customers* (as amended) for the first time in the current period. AASB 15 introduces a 5-step approach to revenue recognition. Far more prescriptive guidance has been added in AASB 15 to deal with specific scenarios. Details of these new requirements as well as their impact on the Group's consolidated financial statements are described below.
AASB 15 uses the terms 'contract asset' and 'contract liability' to describe what might more commonly be known as 'accrued revenue' and 'deferred revenue', however the Standard does not prohibit an entity from using alternative descriptions in the statement of financial position. The Group has adopted the terminology used in AASB 15 to describe such balances.

Apart from providing more extensive disclosures on the Group's revenue transactions, the application of AASB 15 has not had any impact on the financial position and/or financial performance of the Group. This is because the Group's revenue is primarily interest received which is outside the scope of AASB 15.

1 (d) Accounting policies applied from 1 January 2018

The accounting policies and methods of computation applied by the Group in this consolidated interim financial report are the same as those applied by the Group in the financial report for the year ended 31 December 2017, except for the following amended policies for the new accounting standards effective 1 January 2018 outlined in Note 1(c). The Group has elected not to restate comparative information and as a result, the comparative information provided continues to be accounted for in accordance with the Group's previous accounting policies outlined in the Group's 2017 Annual Report.

Revenue Recognition
Interest revenue is recognised on an accrual basis.

Financial assets
Classification
From 1 January 2018, the Group classifies its financial assets in the following measurement categories:

- Those to be measured subsequently at fair value (either through other comprehensive income, or through profit or loss), and
- Those to be measured at amortised cost.

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

Measurement
At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss. Measurement of cash and cash equivalents and trade and other receivables remains at amortised cost consistent with the comparative period.

1. Significant accounting policies (cont)

Debt instruments
Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the Group classifies its debt instruments:

- Amortised cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. A gain or loss on a debt investment that is subsequently measured at amortised cost and is not part of a hedging relationship is recognised in profit or loss when the asset is derecognised or impaired. Interest income from these financial assets is included in finance income using the effective interest rate method.
- Fair value through other comprehensive income (FVOCI): Assets that are held for collecting contractual cash flows and through sale on specified dates. A gain or loss on a debt investment that is subsequently measured at FVOCI is recognised in other comprehensive income. No such assets are currently held by the Group.
- Fair value through profit or loss (FVPL): Assets that do not meet the criteria for amortised cost or FVOCI are measured at fair value through profit or loss. A gain or loss on a debt investment that is subsequently measured at fair value through profit or loss and is not part of a hedging relationship is recognised in profit or loss and presented net in the statement of profit or loss within other gains/(losses) in the period in which it arises. No such assets are currently held by the Group.

Equity instruments
The Group subsequently measures all equity investments at fair value. Where the Group's management has elected to present fair value gains and losses on equity investments in other comprehensive income, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in profit or loss as other income when the Group's right to receive payments is established. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value. Changes in the fair value of financial assets at fair value through profit or loss are recognised in other expenses in the statement of profit or loss as applicable.

Impairment
The Group assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortised cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables, and lease receivables, the Group applies the simplified approach permitted by AASB 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables.

Financial Liabilities
Interest bearing liabilities
All loans and borrowings are initially recognised at fair value, being the amount received less attributable transaction costs. After initial recognition, interest bearing liabilities are stated at amortised cost with any difference between cost and redemption value being recognised in the statement of profit or loss over the period of the borrowings on an effective interest basis.

Trade and other payables
Liabilities are recognised for amounts to be paid for goods or services received. Trade payables are settled on terms aligned with the normal commercial terms in the Group's countries of operation.

Derivative liabilities
Derivative liabilities are initially recognised at fair value on issue. After initial recognition, they are subsequently measured at fair value through profit or loss.

1. Significant accounting policies (cont)

1 (e) Going Concern

The financial report has been prepared on the going concern basis which assumes continuity of normal business activities and the realisation of assets and the settlement of liabilities in the ordinary course of business.
The consolidated entity incurred a net loss during the half-year of $1,357,382 (2017: $4,285,046) and as at 30 June 2018, the consolidated entity had net current liabilities of $5,848,083 (31 December 2017: $3,256,772). Net cash used in operating activities was $2,048,307 (2017: $1,411,192).). As at 30 June 2018 the consolidated entity had cash of $4,092,786 (31 December 2017: $2,700,577) of which $53,646 (2017: $53,092) is restricted as it secures future lease payments. The cash will become unrestricted once the contracts are concluded or renegotiated. Further, in the event that they are not converted to ordinary shares or the maturity date extended, the consolidated entity has $8,000,000 of convertible notes due on 31 December 2018.

In the opinion of the directors, the ability of the consolidated entity to continue as a going concern and pay its debts as and when they become due and payable is dependent upon:

- the ability of the company to secure additional financing from new or existing investors to fund continued development and enable the repayment of convertible notes to the extent that they are not converted to ordinary shares or the maturity date extended. The directors consider that the company has a number of financing options available to it at this stage of the commercialization of its key product;
- the successful completion of the development stage of the technology; and
- the future trading prospects of the consolidated entity including obtaining commercial contracts.

If the consolidated entity is unable to achieve successful outcomes in relation to the above matters, significant uncertainty would exist as to the ability of the consolidated entity to continue as a going concerns and therefore, it may be required to realise its assets and extinguish its liabilities other than in the normal course of business and at amounts different from those stated in the financial report.

No adjustments have been made to the financial report relating to the recoverability and classification of recorded asset amounts or to the amounts and classification of liabilities that might be necessary should the consolidated entity not continue as a going concern.

	Consolidated Half-year to 30 June 2018 $	Consolidated Half-year to 30 June 2017 $

2. (Loss) for the period

(Loss) from ordinary activities before income tax includes the following items of revenue and expense:

(a) Revenue

Interest received	36,518	43,123
Total revenue	36,518	43,123

(b) Expenses

Amortisation	39,124	39,976
Interest expense	838,036	285,978
Depreciation of property, plant and equipment	36,665	37,939

3. (Accumulated losses)

Balance at beginning of financial period	(23,507,410)	(17,592,453)
Net (loss) for the period	(1,357,382)	(4,285,046)
Balance at end of financial period	(24,864,792)	(21,877,499)

4. (Loss) Per Share

	2018 ¢ per share	2017 ¢ per share
Basic EPS	(5.05 cents)	(15.93 cents)
Diluted EPS	(5.05 cents)	(15.93 cents)

Basic (Loss) per Share

The earnings and weighted average number of ordinary shares used in the calculation of basic earnings per share are as follows:

	Half-year to 30 June 2018 $	Half-year to 30 June 2017 $
(Loss) (a)	(1,357,382)	(4,285,046)

	2018 No	2017 No.
Weighted average number of ordinary shares used in the calculation of basic earnings per share	26,893,409	26,893,409

(a) Earnings used in the calculation of basic earnings per share is the same as net (loss) in the Statement of Profit and Loss and Other Comprehensive Income.

Diluted (Loss) per Share

There were no options outstanding as at 30 June 2018. Accordingly as the consolidated entity made a loss in the period, as required by AASB 133 the basic loss per share is the same as diluted (loss) per share.

5. Net tangible assets per security

	30 June 2018 ¢ per share	30 June 2017 ¢ per share
Net tangible assets /(liabilities) per security	(0.20 cents)	(0.09 cents)

6. Segment information

The Company acted as the parent company for its subsidiaries in the half year period ended 30 June 2018. The company owns a 100% equity interest in Audio Pixels Technologies Pty Limited of Australia and Audio Pixels Limited of Israel. These subsidiaries are involved in the development of digital speakers. Accordingly the directors are of the opinion that the consolidated entity operates in one segment.

7. Share capital

	30 June 2018 $	31 December 2017 $
Issued and paid up capital		
Fully paid Ordinary Shares		
Balance at the beginning of the financial period	45,228,931	45,228,931
Balance at the end of the financial period	45,228,931	45,228,931
Fully paid Ordinary Shares	**Number**	**Number**
Balance at the beginning of the financial period	26,893,409	26,893,409
Balance at the end of the financial period	26,893,409	26,893,409

8. Reserves

Minority acquisition reserve	(25,538,692)	(25,538,692)
Equity settled share option reserve	4,512,898	4,512,898
Convertible note equity reserve	715,097	666,893
Foreign currency translation reserve	(2,780,888)	(1,575,876)
	(23,091,585)	(21,934,777)

9. Related party transactions

During the period, the Company paid a total of $53,929 (six month period ended 30 June 2017 - $53,929) to 4F Investments Pty Limited, a company associated with Mr Fred Bart in respect of directors' fees and superannuation for Mr Fred Bart and Mrs Cheryl Bart.

During the period, the Company paid a total of $20,531 (six month period ended 30 June 2017 - $20,531) to Dennis Corporate Services Pty Limited, a company associated with Mr Ian Dennis in respect of directors' fees and superannuation for Mr Ian Dennis.

During the period, the Company paid a total of $15,000 (six month period ended 30 June 2017 - $15,000) to Dennis Corporate Services Pty Limited, a company associated with Mr Ian Dennis in respect of consulting fees for secretarial and accounting services.

As disclosed in note 12, during the period the company had on issue two convertible notes to 4F Investments Pty Limited, a company associated with Mr Fred Bart amounting to a total of $2,000,000. During the period, the Company paid a total of $64,548 (six month period ended 30 June 2017 – $59,605) to 4F Investments Pty Limited, in respect of interest on the convertible notes of $1,500,000 and $500,000 at 8%.

The convertible note of $1,500,000 was issued on 26 June 2015 following shareholder approval at an Extraordinary General Meeting. The convertible note was extended twice during the year ended 31 December 2016 and once during the year ended 31 December 2017, the most recent of which being on 29 December 2017, which was approved by shareholders at the Annual General Meeting held on 7 May 2018. The convertible note expires on 31 December 2018.

On 7 May 2018, shareholders approved the issue of a $500,000 convertible note to 4F Investments Pty Limited. This convertible note also expires on 31 December 2018, has a coupon rate of 8%, is unsecured, not listed and convertible into ordinary shares at $16.71.

On 8 May 2014, the company entered into a lease in respect of office premises at Level 12, 75 Elizabeth Street Sydney for a period of forty eight months to 30 March 2018. Since the end of the financial period, the lease has been extended for a further 4 years. During the half-year period ended 30 June 2018, the company recharged $13,129 (six month period ended 30 June 2017 - $11,658) of the rent and other tenancy charges to Electro Optic Systems Holdings Limited, a company of which Fred Bart and Ian Dennis are directors, $13,129 (six month period ended 30 June 2017 - $11,319) to 4F Investments Pty Limited, a company controlled by Fred Bart and $26,257 (six month period ended 30 June 2017 - $22,637) to another tenant who is a shareholder in the company.

10. Goodwill

	30 June 2018 $	31 December 2017 $
Goodwill paid on the acquisition of subsidiary company, Audio Pixels Limited of Israel		
Balance at the beginning of the period	2,189,025	2,300,905
Add Exchange differences on translation	73,973	(111,880)
	2,262,998	2,189,025

11. Intangible asset

	30 June 2018 $	31 December 2017 $
Based on independent valuation performed by Ernst & Young, Israel as at the acquisition date, 24 September 2010		
Intangible	868,000	868,000
Add Exchange differences on translation	178,824	151,987
Less amortisation	(545,338)	(506,214)
	501,486	513,773

12. Borrowings

On 4 May 2015, the Company announced its intention to issue two convertible notes of $1,500,000 each at a coupon rate of 8% per annum, raising $3,000,000.

One convertible note was issued to an unrelated party on 28 May 2015 and one convertible note was issued to 4F Investments Pty Limited, a company associated with Mr Fred Bart. The convertible note to 4F Investments Pty Limited received shareholder approval at an Extraordinary General Meeting held on 22 June 2015 and was issued on 26 June 2015.

The unrelated party holding one convertible note of $1,500,000 agreed to extend their convertible note to 31 December 2016 on 22 March 2016. On 31 May 2016 shareholders approved the extension of the convertible note to 4F Investments Pty Limited to 31 December 2016. On 28 December 2016, the company reached agreement with both holders of the convertible notes to extend the expiry date by 12 months to 31 December 2017. On 31 May 2017 shareholders approved the extension of the convertible note to 4F Investments Pty Limited to 31 December 2017. On 29 December 2017 the company reached agreement with both holders of the convertible notes to extend the expiry date by 12 months to 31 December 2018. On 7 May 2018 shareholders approved the extension of the convertible note to 4F Investments Pty Limited to 31 December 2018. For accounting purposes these extensions have been treated as the derecognition of the original convertible notes and the recognition of two new convertible note instruments.

The two convertible notes initially issued on 28 May 2015 and 26 June 2015 on issue at 30 June 2018 have a term to 31 December 2018, are unsecured, not listed and are convertible to ordinary shares based on the lower of the five day volume weighted average share price of Audio Pixels Holdings Limited on the date of the original agreement ($9.68) or the five day volume weighted average share price of Audio Pixels Holdings Limited immediately prior to conversion.

12. Borrowings (cont)

On 5 January 2018, The Company announced it had raised $4,500,000 from a new convertible note issue to sophisticated unrelated investors pursuant to agreements dated 29 December 2017. In addition, 4F Investments Pty Limited, a company associated with Mr Fred Bart also agreed to take up a further $500,000 of convertible notes on the same terms and conditions subject to shareholder approval at the next Annual General Meeting of the Company. This shareholder approval was granted at the Annual General Meeting held on 7 May 2018 and the note was issued on 15 May 2018.

These new convertible notes issued on 29 December 2017 and 15 May 2018 have a term of 12 months to 31 December 2018, are unsecured, not listed and convertible into ordinary shares based on the five day volume weighted average share price of Audio Pixels Holdings Limited on the date of the agreement ($16.71).

	30 June 2018 $	31 December 2017 $
Borrowings – Convertible note		
Carrying amount at start of period	6,388,489	2,648,387
Face value of notes issued	500,000	4,500,000
Gain on derecognition of convertible notes	-	(444,618)
Convertible note equity reserve – fair value recognised	(48,204)	(666,893)
	6,840,285	6,036,876
Add – accrued interest expense	538,091	351,613
Current Liability at end of period	7,378,376	6,388,489
Derivative liability		
Carrying value at start of the period	1,486,884	1,169,870
Loss on derecognition of convertible notes	-	159,018
Fair value movement to the end of the reporting period	(13,543)	157,996
Derivative liability	1,473,341	1,486,884
Total borrowings	8,851,717	7,875,373
Face value of convertible notes	8,000,000	7,500,000

13. Subsequent events

The Directors are not aware of any significant subsequent events since the end of the financial period and up to the date of this report.

14. Commitments

At 30 June 2018 the Consolidated entity has entered into agreements with strategic suppliers for delivery of certain components which on delivery of components meeting the required specifications of the Consolidated entity will result in final payments being due of $1,083,561 (31 December 2017 - $451,745).

15. Contingent liability

The parent company has been advised of a potential derivative action in Israel by an individual shareholder of BE4 Limited (a company with no financial interest in Audio Pixels Holdings Limited), an Israeli company in bankruptcy proceedings. The Central District Court of Israel dismissed the motion to file a derivative action against Audio Pixels Limited and impose costs and expenses on the petitioner. At the date of this report the period in which to appeal the decision his still open. The Directors do not believe the Company has a case to answer, and is prepared to vigorously defend any action if commenced.

Information on Audit or Review

This half yearly report is based on accounts to which one of the following applies.

- ☐ The accounts have been audited.
- ☒ The accounts have been subject to review.
- ☐ The accounts are in the process of being audited or subject to review.
- ☐ The accounts have not yet been audited or reviewed.

Description of likely dispute or qualification if the accounts have not yet been audited or subject to review or are in the process of being audited or subjected to review.

Not applicable

Description of dispute or qualification if the accounts have been audited or subjected to review.

Not applicable