

January 29, 2021

# **ACTIVITIES REPORT – DECEMBER QUARTER 2020**

#### **HIGHLIGHTS:**

- Successful trial of Unmanned Aerial Vehicle (UAV) high-voltage power line survey for utilising Infinity RemTeq<sup>™</sup> and Nodestream technology.
- 8-Channel Remote Inspection System (RIS) Encoder developed for Fugro Australia Marine Pty Ltd (Fugro).
- Group entered into an initial agreement with Iristick N.V. (Iristick) to commence proof of concept trials for integration of Infinity Nodestream and Wearwolf™ technology into Iristick's industrial smart glasses.
- Infinity AVR2 successfully completed compliance and safety testing.
- End of quarter cash balances of \$6.745M.

**January 29, 2021:** Harvest Technology Group Limited (ASX:HTG) (Group) reports closing cash balances for the quarter of \$6.745M inclusive of a record spend within the quarter on Research and Development and the payment of \$750,000 being the second cash tranche due on the initial acquisition of Harvest Infinity Pty Ltd (formerly Advanced Offshore Streaming Pty Ltd).

# INFINITY PRODUCT SUITE INCLUDING WEARWOLF™

The COVID-19 global pandemic continues to have a positive effect for the Infinity suite of products as the need for remote communication increases, and the concept of 'working-from-home' normalises due to border closures and travel restrictions.

#### REMOTE COMMUNICATION PLATFORM

The Infinity suite of products makes up the Remote Communication Platform which forms an IoT (internet of things) ecosystem of connected devices for the transmission of high quality encrypted secure video and audio communications, along with synchronised data, at ultra-low bandwidth, point-to-point, from anywhere in the world.

#### NODESTREAM DOWNLOADABLE DECODER APPLICATION

Focus remains on the development of the Infinity Nodestream Downloadable Decoder Application (Application) has been released. The Infinity Nodestream Downloadable Decoder Application (Application) is a software application that uses embedded software to offer existing and new clients the opportunity to decode and deliver high-quality, secure encrypted video and audio over ultra-low bandwidth satellite point-to-point communications from anywhere in the world directly to a user's desktop or laptop computer, without the need for any additional decoder hardware..



The Application is ideally suited to work seamlessly with the Nodestream system or Wearwolf™ on wearables and mobile devices. Wearwolf™ is a software application version of the Nodestream encoding platform and enables live secure point-to-point video and communications at ultra-low bandwidths, and over poor quality or congested networks. Like all Remote Communication Platform devices, the Application utilises the next generation encryption Gimli block cypher with a 384-bit permutation - achieving unmatched levels of high

The release is the first step towards a SaaS model for future delivery and expansion of the Remote Communication Platform.

#### PRODUCT COMPLIANCE

security and high performance.

The Infinity AVR2, which is designed to deliver real-time live content over low-quality satellite networks point-to-cloud, has completed compliance and safety testing and regulatory applications have been submitted. Compliance acceptance testing has been undertaken to meet the Regulatory Compliance Mark (RCM) standard in Australia, CE Marking for Europe (CE), and the Federal Communications Commission (FCC) ruling in the US.

Nodestream Mini devices are ready for Engineering Verification Test (EVT) trials and during January 2021 are being shipped globally for operational testing and infrastructure integration.

# **INTEGRATED SYSTEMS**

# **REMOTE INSPECTION SYSTEM**

Locally, Fugro Australia Marine Pty Ltd (Fugro) have ordered a new 8-Channel Remote Inspection System (RIS) Encoder. Another world first for the Infinity suite, having eight SD or IP cameras encoded simultaneously in a single system and transmitted together at ultra-low bandwidth along with synchronised data.

The 8-Channel RIS Encoder has been designed specifically for integrating into an Unmanned Surface Vessel (USV) which Fugro will take delivery of in early 2021, and forms the backbone of the USV video communication system. The system interfaces directly into the existing Infinity technology stack at the Remote Operations Centre located at the Telstra International Telecommunications Centre in Gnangara, Perth, Western Australia.

# **INDUSTRIAL SMART GLASSES**

The Group has developed and demonstrated the proof of concept for the integration of the Nodestream and Wearwolf™ technology into Iristick's industrial smart glasses.

Based in Belgium, Iristick is a technology company creating industrial smart safety glasses to support the digital transformation of enterprises. Iristick wearables are ruggedized certified safety glasses with dual cameras, zoom lens, barcode scanner, voice commands, unrestricted field of view, and boasting 'full-shift' battery capacity. Iristick enables "hands-free" remote assistance, work instruction guidance and pick-by-vision for frontline and field workers. Unlike competitors, Iristick enterprise wearables leverage the processing power of a smartphone, avoiding risk of radiation to the wearer and significantly reducing the cost of deployment.



Iristick smart glasses enable remote assistance to support deskless workers with real-time feedback and information from a distant expert. Remote assistance is the most dominant use case in various industries; doctors have glasses on during surgical procedures, service teams are equipped with Iristick glasses during maintenance interventions, and Quality Assurance personnel utilise glasses to perform remote Factory Acceptance Tests.

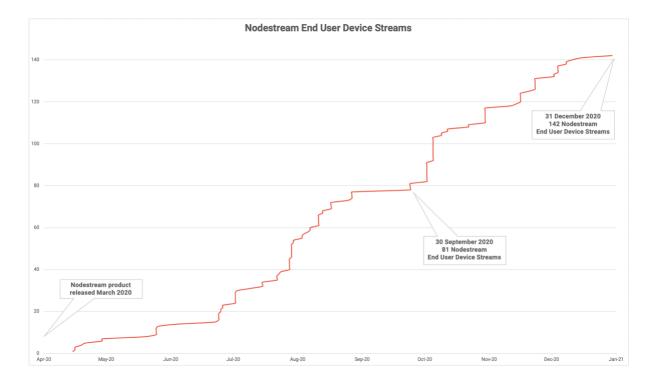
Prototype testing was completed during December 2020 where the Wearwolf<sup>™</sup> application was successfully combined with the Iristick software development kit (SDK) on a smartphone and proved to work with the cameras, microphone and screen on the Iristick smart glasses. Trial communications were successfully made and maintained between Perth, Australia and Brussels, Belgium at 128kbps.

Planned to launch during the first quarter of 2021, the final commercial product will communicate point-to-point with Nodestream mini decoding devices and the soon-to-be released Nodestream Downloadable Decoder Application, which will run on laptops and desktop computers.

# **INFINITY SUITE STATS**

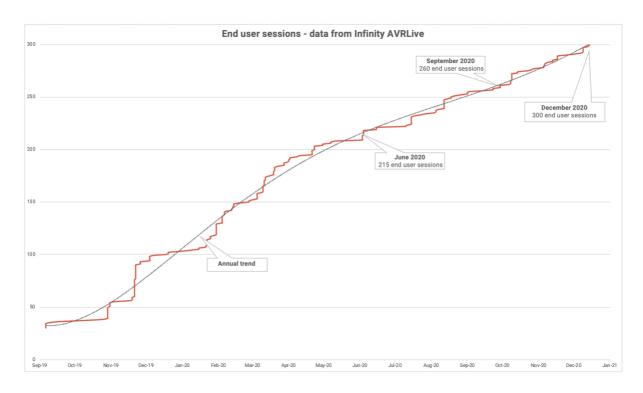
Twenty-one (21) further trials of the Nodestream, Wearwolf<sup>™</sup> and AVR2 product devices were undertaken between October and December. Trials continue to be focused on Operators within the energy and resources sectors and Tier 1 contractors in Australia, as well as in the US by subsidiary Harvest Technology Group, Inc.

The Nodestream and Wearwolf™ products have had a growth rate of 75% across the quarter with sixty-one (61) new end user device connections taking the total number of End User Device Streams to 142 connections since the product was launched in March 2020.





In conjunction online End User sessions have increased 188% since the beginning of 2020.



#### REMTEQ™ REMOTE CONTROL PLATFORM & UNMANNED AERIAL VEHICLE INTEGRATION

The Infinity RemTeq<sup>™</sup> (RemTeq<sup>™</sup>) remote control system is a remote-control platform enabling the physical separation of control systems from machines or robots and allowing them to be controlled from anywhere in the world. This system is designed to be industry agnostic for interface control of remote robotic systems.

# **UNMANNED AERIAL VEHICLE INTEGRATION TRIAL**

After further development of the RemTeq™ system, a successful trial was carried out during December 2020 for the control of an Unmanned Aerial Vehicle (UAV) conducting an overhead power line inspection in Western Australia. The trial proved that a high-voltage power line survey could be carried out with video being transmitted at ultra-low bandwidth directly from the UAV control via a portable satellite terminal. This represents the first step towards embedding the RemTeq™ technology directly into a UAV for full control. UAVs are becoming widely adopted by energy and utility companies for conducting aerial-based asset management in preference to human access and helicopter surveys, and until now live viewing with command instructions has not been possible.

The trial enabled the live high-voltage power lines survey video to be transmitted at 128kbps directly from the UAV control via an Explorer 6075 LX portable satellite terminal on the Group alliance partner Inmarsat Global Limited (Inmarsat) satellite network in conjunction with Applied Satellite Technology Group (AST), a global leader in satellite and radio communication systems.



Inmarsat's Land Xpress (LX) system operates over their Global Xpress (GX) Broadband Global Area Network (BGAN) Ka-band satellite network and is the world's first and only globally available mobile broadband service from a single operator.

#### **COMPACT SATELLITE TERMINAL**

The future development path will involve the development of a compact satellite terminal directly incorporating RemTeq™ and Nodestream technology. The compact satellite terminal will be small enough to be installed directly onto lightweight UAVs, enabling high-quality video and control of the UAV from anywhere in the world using bandwidths under 200kbps on a satellite network. Designed to be installed at manufacture or retrofitted onto existing UAVs, the satellite terminal will incorporate the Nodestream video encryption and streaming protocols along with the RemTeq™ remote control technology, offering a world-first compact ultra-low bandwidth remote control system.

# **COMMERCIAL UAV MARKET**

The increased global demand for connectivity has given the satellite industry new purpose with emerging technology and innovations fuelling a move towards mass-market applications. With the IoT powering the data driven Fourth Industrial Revolution<sup>1</sup>, satellite connectivity is critical to realising its full potential. The market requires innovation throughout the satellite ecosystem to enable affordable, ubiquitous connectivity ensuring existing infrastructure remains relevant.

Lightweight UAVs guided by remote control, more commonly known as 'drones', have widespread military and commercial application and the miniaturisation of applicable technologies means the possibility of cheaper, more capable systems is now available to industry. UAVs have transformed various commercial industries with the ability to now fly beyond visual line of sight (BVLOS) under radio control, maximising production and reducing operating costs whilst still maintaining regulatory compliance. Unlike radio control, a compact satellite terminal directly mounted to a UAV will enable the remote control of the system from anywhere in the world over a satellite network and will take concept of BVLOS to a whole new level.

The global commercial UAV market size was valued at US\$5.80 billion, with an estimated 274,600 commercial UAVs sold during  $2018^3$  and there are estimated to be more than 30,000 military UAVs in service world-wide.<sup>2</sup> The commercial UAV market is anticipated to register a CAGR (compound annual growth rate) of 56.5% between  $2019 - 2025^3$ . Commercial UAVs are finding increasing application across the entertainment, agriculture and energy sectors, which is ultimately expected to have a positive impact on market growth.

UAVs have the ability to perform hazardous tasks with higher precision and cost-effectiveness as compared to conventional methods. The drive towards the IoT has demonstrated the utilisation of UAVs in delivering goods from the warehouse to the customer, opening up new market opportunities. Commercial UAV delivery services are expected to foster various innovative forms of cargo transportation capabilities which until now have not been possible.

<sup>2</sup> The Wall Street Journal - Warren P. Strobel - September 2019

<sup>&</sup>lt;sup>1</sup> Forbes - Nima Negahban - Kinetica - May 2019

<sup>&</sup>lt;sup>3</sup> Commercial Drone Market Size, Share & Trends Analysis Report - Grand View Research, Inc. - June 2019



The introduction of new Federal Aviation Administration (FAA) guidelines, Part 107 FAA 'Rules For Small Unmanned Aircraft Systems', has opened up various opportunities in the US for energy and resources companies to utilise UAVs for daily operations, and the rising adoption by utility companies is expected to change the way these companies conduct maintenance and inspection operations.

#### LAUNCH OF NODESTREAM DOWNLOADABLE DECODER SOFTWARE

The launch of the prototype satellite terminal is planned for late Q1 CY2021, and will be supported by the Nodestream Application which can be downloaded to assist with video transmission and remote control anywhere in the world.

Data. Anywhere.™

#### **APPENDIX 4C**

Please refer to the attached Appendix 4C Filing for further details on the results for the quarter.

#### **ITEM 6.1**

The following table provides a breakdown of the amount disclosed in Item 6.1 of the Appendix 4C for the December 2020 quarter.

Category	Amount AUD
Directors fees	\$54,084
Managing Director – salary and other benefits	\$82,125

This announcement was authorised for release by Paul Guilfoyle, Managing Director.

# For further information please contact:

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#### **About Harvest Technology Group**

Harvest Technology Group Limited (ASX:HTG) is an Australian operated group of companies whose portfolio includes Harvest Technology Pty Ltd and Harvest Infinity Pty Ltd. Harvest Technology is a bespoke subsea technology solutions provider for the energy, resources, and renewables sectors. Harvest Infinity is an innovation company developing remote control, communication, automation and monitoring solutions.

To learn more please visit: www.harvest.technology

# **Appendix 4C**

# Quarterly cash flow report for entities subject to Listing Rule 4.7B

# Name of entity

Harvest Technology Group Limited

# ABN

# Quarter ended ("current quarter")

77 149 970 445

31 December 2020

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000	
1.	Cash flows from operating activities			
1.1	Receipts from customers	1,864	2,632	
1.2	Payments for			
	(a) research and development	(477)	(697)	
	(b) product manufacturing and operating costs	(1,486)	(2,236)	
	(c) advertising and marketing	(26)	(94)	
	(d) leased assets	(29)	(52)	
	(e) staff costs	(636)	(1,164)	
	(f) administration and corporate costs	(438)	(1,264)	
1.3	Dividends received (see note 3)	-	-	
1.4	Interest received	5	13	
1.5	Interest and other costs of finance paid	(124)	(257)	
1.6	Income taxes paid	(33)	(36)	
1.7	Government grants and tax incentives	53	184	
1.8	Other (provide details if material)	-	-	
1.9	Net cash from / (used in) operating activities	(1,327)	(2,971)	

2.	Ca	sh flows from investing activities		
2.1	Payments to acquire or for:			
	(a)	entities	-	-
	(b)	businesses	(750)	(750)
	(c)	property, plant and equipment	(87)	(132)
	(d)	investments	-	-
	(e)	intellectual property	-	-
	(f)	other non-current assets	-	-

ASX Listing Rules Appendix 4C (17/07/20)

Page 1

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	-	15
	(d) investments	-	23
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(837)	(844)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	233	1,338
3.4	Transaction costs related to issues of equity securities or convertible debt securities	28	(574)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	(846)	(1,511)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	(585)	(747)

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	9,494	11,307
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,327)	(2,971)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(837)	(844)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(585)	(747)
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	6,745	6,745

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	6,745	9,494
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	6,745	9,494

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	134
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
	if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must includation for, such payments.	de a description of, and an

7.	Financing facilities  Note: the term "facility' includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at qu	arter end	-
7.6	Include in the box below a description of each	n facility above, including	the lender, interest

7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

7.3 – Convertible note funds received in November 2019 as approved by shareholders at the AGM. Interest accrues at 9% p.a. and is paid quarterly.

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(1,327)
8.2	Cash and cash equivalents at quarter end (item 4.6)	6,745
8.3	Unused finance facilities available at quarter end (item 7.5)	-
8.4	Total available funding (item 8.2 + item 8.3)	5,418
8.5	Estimated quarters of funding available (item 8.4 divided by item 8.1)	4.08
	Note: if the entity has reported positive net operating cash flows in item 1.9, answer item figure for the estimated guarters of funding available must be included in item 8.5.	8.5 as "N/A". Otherwise, a

8.6 If item 8.5 is less than 2 quarters, please provide answers to the following questions:

8.6.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

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Answer:			
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8.6.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer:			

8.6.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer:
Note: where item 9.5 is less than 2 quarters all of questions 9.6.1.9.6.2 and 9.6.2 above must be appropriate

# **Compliance statement**

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: January 29, 2021

Authorised by: The Board

(Name of body or officer authorising release – see note 4)

#### **Notes**

- This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.