Shareholder Update

SYDNEY, NSW and COLUMBIA, MD USA – Department 13 International Limited (ASX:D13) provides the following update to shareholders in addition to the financial accounts for the six-months ended 31 December 2018.

Progress

During 1H'19 the Company made progress across a number of fronts:

- Showcased MESMER™'s ability to integrate with globally recognized military vehicle, the 'Thales Bushmaster' at Land Forces;
- Entered into an MOU with Thales Australia and EPE to deliver a fully integrated and commercialized version of MESMER™ within the Bushmaster vehicle;
- Extended its distribution network into Africa with South African aerospace company Skydrone;
- Undertook multiple demonstrations in the Middle East, Latin America, Asia-Pacific, South Korea and the United States;
- Secured an exclusive partnership with Counter-UAS Intellectual Property specialist XiDrone, providing the US and European patents for integrated multi-sensor, counter drone technology;
- Executed sales of MESMER™ units to both its South Korean and Latin American distribution partners; and
- Closed Tranche 2 of its $12m convertible note, delivering a further $5m in funding.
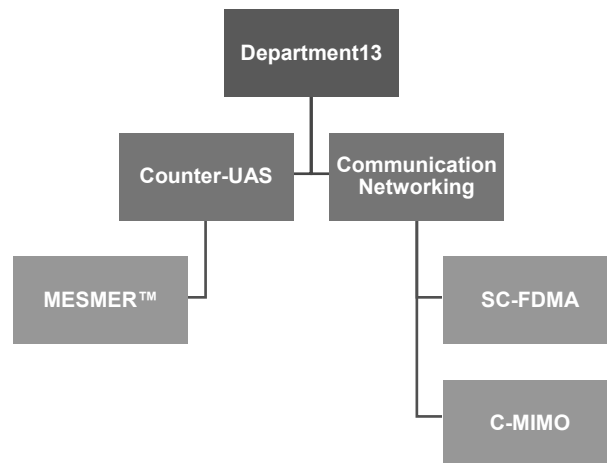
Since 31 December 2018 D13 has:

- Secured a credit facility totaling $10m, enabling the Company to fund its ongoing operations for the foreseeable future;
- Continued to engage with other C-UAS providers to license certain patents and technologies within the D13 patent portfolio;
- Developed a new business segment, Single Carrier – Frequency Division Multiple Access ("**SC-FDMA**"), centered around battery optimization for wireless communication and devices. This will result in a prototype for demonstration in 2H'19.
- Advanced the strategy for additional licensing opportunities for the Company's broader IP portfolio;
- Expanded the MESMER™ sales pipeline, with opportunities spanning airport operators, border security, mobile VIP protection, critical infrastructure and public venue safety; and
- Strengthened the Board of Directors with the appointment of two new non-executive directors.

Strategy Update

D13 is a Transformative Communications and Networking Company. At the core of D13's IP strategy is the patent portfolio that it owns and has exclusively licensed from GenghisComm and XiDrone Systems.

Since listing in 2016 the Company has grown its patent portfolio from 10 issued and 9 pending patents to 67 issued US and international patents, with a further 32 pending. Many of these patents are essential to providing a competitive advantage to current and future D13 products but additionally are applicable to competitors and broader industry partners products, and as a result provide revenue opportunities.

D13's strategy is to generate revenue from its patent portfolio by both product commercialisation and licensing. The current strategy encompasses 3 core products across the Counter-Unmanned Aerial Systems ("**C-UAS**") and Communication Networking sectors.

C-UAS: MESMER™

D13's first commercialised product is MESMER™, utilising protocol manipulation to detect, identify and take control of the vast majority of commercially available drones. Patent-protected, this software and hardware solution is non-jamming, non-kinetic and the first of its kind.

The recent shutdown of Gatwick Airport was a major catalyst for the C-UAS industry and the Company has been inundated with inbound inquiries. **News** reports in global media referencing MESMER™'s detection capabilities in conjunction with positive operating data from multiple other operational units continues to drive confidence in our products capabilities and a significant sales pipeline.

D13 believes MESMER™ is clearly positioned as the most viable solution available that has the capability of addressing commercial drone threats where stringent regulation requires C-UAS technology to be non-jamming, non-kinetic and transparent to the overall RF communication spectrum. This is evidenced by:

1) The sale of over 10 units since launching MESMER™ since August 2018
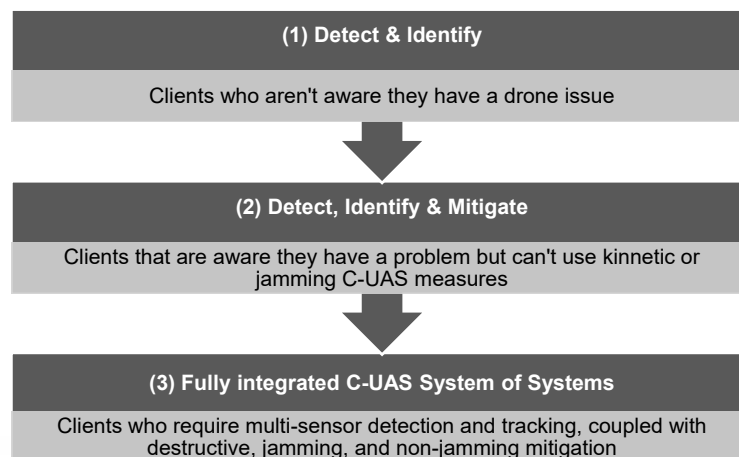2) Its EAR 99 classification by the Department of Commerce

department 13

D13 continues to develop and enhance its software with the latest MESMER™ v1.8 software update released yesterday, which included:

- **Detect Only Mode** – Detect Only Mode utilizes the full capability of MESMER™'s detection software, allowing for crucial situational awareness. Detect Only Mode is upgradable to mitigation capable software.

- **Viewer User Role** – Admin users are now able to create user roles with a view-only capability, restricting the user's ability to activate any mitigations or settings changes. Viewer User Role enables the user to change their own language without changing the default option for personalized accessibility.

- **UAS Support Library Updates** – Additional drone support has been added to the MESMER™ library for detections, identifications and mitigations.

- **Korean Language Support** – Users now have access to the Korean language mode on MESMER™'s user interface.

- **Enhanced History Screen** – Users now have access to preselected or custom timeframes to generate drone detection reports.

- **Optimized Code** – Code has enhanced signal processing and optimized data gathering which increases the rate and accuracy of detecting and identifying drones.

- **System Health Panel** – The new System Health Panel tracks the hardware and software components of MESMER™ and shows the user critical information regarding the operational status of the system. This information can be used for swift troubleshooting to ensure the continuous operation of the MESMER™ system.

D13 continues to invest in MESMER™ and the development roadmap over the balance of the year includes:

- Continuous expansion of its drone library to support new and emerging threats;
- Multi-sensor integrations within other Electronic Warfare Platforms;
- Incorporation of Machine Learning (ML) techniques, allowing the technology to identify and protect against unknown drone protocols infield; and
- New and improved form factors.

The C-UAS Market is best defined as:

(1) Detect & Identify

Clients who aren't aware they have a drone issue

(2) Detect, Identify & Mitigate

Clients that are aware they have a problem but can't use kinnetic or jamming C-UAS measures

(3) Fully integrated C-UAS System of Systems

Clients who require multi-sensor detection and tracking, coupled with destructive, jamming, and non-jamming mitigation

Through FY'18 D13 targeted the Detect, Identify and Mitigate Market (2). Over the past 6-months, D13 has broadened its offering to service all 3 market segments. D13 is now working to capture a full spectrum of opportunities, from small-scale detection and identification only customers, to large-scale integrated electronic warfare platforms for government and military clients (3).

Having already built and proven the software that detects, identifies and mitigates drones, D13 has released detection and identification software to address market (1). Development efforts supporting smaller and lower cost form factors for detection, including running MESMER™ on portable computers are in progress and will result in expanded product configurations during the balance of 2019.

Multiple aerospace and defence companies have begun aggressively marketing such multi-sensor platforms i.e. integration of numerous C-UAS technologies including protocol manipulation (D13), laser, radar and jamming. For instance, Raytheon recently released its **Windshear Product**. MESMER™ forms a key component of Windshear and represents one of the Company's multiple initiatives within the Defence and Aerospace industry. D13's exclusive rights to XiDrone's multi-sensor patents not only protects D13's integrations but also creates a potential revenue stream from any sale of multi-sensor systems within the C-UAS industry.

D13 continues to work with Thales Australia to fast-track the development of a mobile MESMER™ system, for integration into the Thales Bushmaster and is in discussions with multiple other major defence contractors to drive the uptake of MESMER™ at the larger end (3) of the market.

MESMER™'s addressable market is spread across several individual industries and D13's software driven approach allows it to quickly meet the needs of these customers:

Public Sector:
- Border Control
- Prisons
- Government Facilities
- Military Installations
- Airports, Customs and Ports
- Mobile VIP protection

Private Sector:
- Stadiums & Event-Spaces
- Utilities
- Critical Infrastructure
- Private Residences of Celebrity & High-Net Worth Individuals
- Theme Parks & Entertainment Venues

The Company has active sales engagements across these segments for procurement of MESMER™ units, at varying stages of maturity. Due to the typically longer sales cycles in a nascent market comprised of large corporations and Governments, the timing of orders is not predictable. The Company remains highly confident in translating its sales pipeline into purchase orders over the balance of this year.

Communication Networking: Single Carrier- Frequency-Division Multiple Access (SC-FDMA)

- D13's most recent business segment is a signal coding technology that greatly increases battery efficiency in wireless devices.
- The initial analysis around the fully patented technology is demonstrating improved power efficiency and a prototype of the technology is nearing the final stages of completion.
- There are many markets for SC-FDMA, including drone communications, WiFi, Internet of Things ("**IoT**") devices, 5G user equipment and cell towers.
- D13 is now looking at ways to commercialize the technology, which includes licensing SC-FDMA to various product manufacturers across multiple industries.

Communications Networking: 5G & Cooperative-Multiple-Output-Multiple-Input ("C-MIMO")

- The global rollout of 5G networks and their impending impact on the communications systems worldwide has led to substantial media attention.
- A key component of this technology is enabling devices to act co-operatively to share mobile signals, rather than compete for signals as is the case for the current 4G standard. This technology is broadly known as "C-MIMO".
- D13 believes that it owns the patents that underpin C-MIMO and intends on leveraging this IP as the technology's utilization grows through 5G.
- The Company is currently investigating ways in which to best commercialise these patents.

The Company is active across the above 3 potential business segments. To this end the Company has:

- Procured sufficient funding to build out its go-to-market strategies; and
- The Board has been reconstituted with key parties that can assist in these strategies being executed and will be strengthened further over coming months, which the Company will update the market on as it progresses.

Board & EGM

D13 will continue to work on reconstituting the Board following the recent appointment of Jim O'Neil and Ryan Whitelegg with relevant experience.

The Company will be holding an EGM shortly to seek approval for the issuance of Tranche 2 of the Company's convertible notes and the reduction of the conversion price of the existing Notes. The Company will then be in a position to begin working towards a re-listing process, subject to ASX approval.

Department 13 CEO, Jonathan Hunter, commented: *"We are now at a crucial stage in our Company's development. The C-UAS market is maturing rapidly, our pipeline is larger than ever, with demand for solutions to drone incursions becoming a necessity and not an optional precaution.*

Timing on sales is still ambiguous but we remain very confident than ever that we have the best product globally, protected by the most extensive IP portfolio and are working with the best and largest defense organizations to deliver this product.

We have strategies in place for the development and commercialisation of new products and the monetization of our tactically built IP portfolio. These will take time to develop but have the potential to contribute considerable value to the business over the long-term.

We have now executed a substantial change in the Company's Board and we are confident that we will continue to attract high quality individuals who understand the potential of our products and strategy, penetrating two of the highest growth sectors globally.

We have worked through a testing period for the business and are now well positioned to build D13 into a world leading Communications and Networking Company.

I would like to thank all stakeholders for their patience and ongoing support and I look forward to advising the market on our progress as we continue to drive our business forward through the balance of FY'19."

- ENDS -

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About Department 13

Based in Maryland, Department 13 (D13) was founded in 2010 by a team of former military operators, scientists and engineers who apply proprietary innovative advanced technology to emerging requirements. D13 is developing cutting-edge software and communication systems that have the potential to transform the networking and communication fields as well as current applications in drone defense, mobile phone IT security and secure enhanced Android phone systems. D13 is engaged with multiple counter UAS projects to provide strategic solutions for civil, military and commercial security requirements. D13 has a substantial intellectual property portfolio covering wireless protocol manipulation and communication networking software with applications in drone defense, local area and wide area cellular communications and networking, enhanced data bandwidth for all digital communications, cyber security for mobile devices and sophisticated RF technology applications (radiometrics). For more information about D13, please visit www.department13.com or follow us on Twitter (@D13ASX), LinkedIn and YouTube.