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DroneShield Limited (DRO)

The Fruits of War

Recommendation
Buy (Initiation)
Price
\$0.165
Target (12 months)
\$0.24

GICS Sector
Capital Goods

Expected Return

Capital growth	46.0%
Dividend yield	0.0%
Total expected return	46.0%

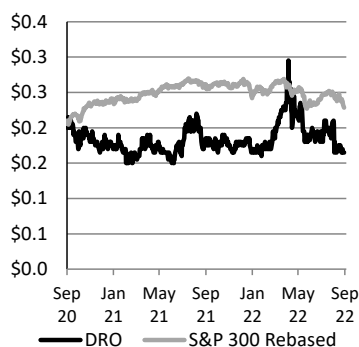
Company Data & Ratios

Enterprise value	\$65.5m
Market cap	\$71.4m
Issued capital	432.5m
Free float	~94.0%
Avg. daily val. (52wk)	\$213,781
12 month price range	\$0.16 - \$0.30

Price Performance

	(1m)	(3m)	(12m)
Price (A\$)	0.19	0.19	0.18
Absolute (%)	-10.81	-13.16	-5.71
Rel market (%)	-3.61	-12.36	5.61

Absolute Price



SOURCE: IRESS

Leading player in counter-drone

DroneShield Limited (DRO) is an Australian defence manufacturer specialising in counter-drone technology. DRO provides an end-to-end counter-drone solution that integrates proprietary artificial intelligence software with a suite of hardware products utilised to detect, identify and defeat aerial, ground and maritime threats. The company's products are largely in-house technology and include handheld, vehicular and fixed installations. DRO's customers primarily include military and intelligence, as well as law enforcement, critical infrastructure and commercial parties globally.

Opportunity for expansion into adjacent markets

DRO has developed advanced AI/ML capabilities in-house stemming from its experience in counter-drone and on-going R&D with the Australian DoD. The company now has the opportunity to expand outside its core business into the Electronic Warfare market, utilising its AI/ML technologies to detect and process complex signals on the electromagnetic spectrum. DRO's appointment to the *ISREW Panel* and its ongoing R&D contracts are a strong endorsement of its capabilities in this field and raise the prospect of future revenue streams outside its core competencies.

Investment View: Initiate with Buy, Price Target \$0.24

In our view, DRO is well placed to capitalise on favourable macroeconomic conditions accelerating structural growth in the market, with the strong sales pipeline (~\$100m CY22, ~\$250m CY23 onwards) identified by the company demonstrating long term demand. The conversion rates we apply to the sales pipeline are intentionally conservative, leaving potential upside risk to our revenue forecasts. Potential catalysts include validation of the sales pipeline through consistent contract wins and greater visibility over the pipeline through CY23 and beyond.

We initiate coverage of DRO with a BUY recommendation and a 12 month price target of \$0.24. The price target is a 50/50 blend of the DCF and relative valuation methods, resulting in a 46.0% premium to the current share price.

Earnings Forecast

Year End 31 Dec	CY21	CY22e	CY23e	CY24e
Revenue (\$m)	10.6	16.0	24.2	35.1
EBITDA (\$m)	-5.9	-5.1	-2.2	0.7
NPAT (underlying) (\$m)	-5.3	-3.8	0.3	2.6
NPAT (reported) (\$m)	-5.2	-3.8	0.3	2.6
EPS (cps)	-1.3	-0.9	0.1	0.6
EPS growth (%)	NM	NM	NM	743%
PE (x)	NM	NM	222.3	26.4
FCF Yield (%)	-10%	-5%	1%	3%
EV/EBITDA (x)	NM	NM	NM	93.3
Dividend (¢ps)	0.0	0.0	0.0	0.0
Yield (%)	0.0	0.0	0.0	0.0
Franking (%)	0.0	0.0	0.0	0.0
ROE(%)	-34%	-30%	2%	17%

SOURCE: BELL POTTER SECURITIES ESTIMATES

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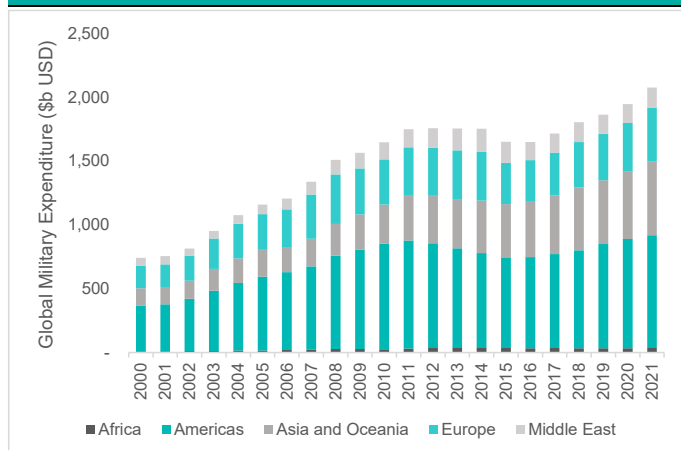
Investment Thesis

We initiate coverage on DroneShield Limited (DRO) with a Buy recommendation and a price target of \$0.24 per share. Our favourable investment thesis is driven by the following factors:

- **Structural growth:** International data illustrates a significant increase in defence budgets globally with aggregate military expenditure exceeding \$2 trillion USD for the first time in 2021. This thematic is likely to continue with the Russian invasion of Ukraine and escalating tensions surrounding Taiwan. Asymmetric warfare, including drones and counter-drone defence, is one of the fastest growing subsets within this growing military market - the core competency of DRO. Thus, the company is well positioned to capitalise on this trend, which is likely to be a central market narrative over the next decade.
- **Fiscal support:** In 2018, the Australian government announced its intention to prioritise the domestic defence industry, including \$270 billion AUD of funding for sovereign capability investment over the next decade. This policy will see further emphasis on the production and manufacturing of strategically important defence projects in Australia using domestic companies. DRO operates in fields identified as sovereign priorities, thus the company will benefit from increased government support and investment.
- **Comprehensive product offering:** DRO is able to differentiate itself from other participants in the market through its ability to provide an end-to-end counter-drone solution, including handheld, vehicular and fixed installations. The company's products are largely in-house technology with a range of detection and/or defeat capabilities, complemented by various proprietary software platforms.
- **Opportunity for growth in adjacent markets:** Electronic Warfare has the potential to be an extremely lucrative opportunity for DRO to expand outside its core business. The company was recently appointed to the ISREW panel in addition to the two R&D contracts previously awarded to the company from the AUS Department of Defence (DoD), including an ongoing \$3.8 million AUD contract in EW. DRO's appointment to the ISREW and its ongoing contracts are a strong endorsement of its capabilities in this field and provides significant scope for further collaboration with the DoD.
- **Solid revenue momentum:** DRO has demonstrated strong earnings momentum in recent periods, with CY21 revenue (\$10.6m) growing at a 3-year CAGR of ~107% and increasing +89% YoY. This is forecast to continue with a particularly strong 2H22 providing momentum into CY23.
- **SaaS model to drive margin expansion:** DRO offers its software platforms (RFAI, DroneOptID and DroneSentry-C2) to complement its hardware products via a SaaS based subscription model entered into at the time of purchase. DRO's gross margins have significant upside as SaaS increases as a proportion of the revenue mix, with the company predicting SaaS revenue to account for the majority of its earnings in the long term.
- **Strong sales pipeline:** The Company has outlined sales opportunities of \$100 million for the remainder of CY22 and a further \$250 million for CY23 and beyond. These sales opportunities are likely to include further sales to Ukraine via military aid contracts from European countries, sales to US government agencies and additional sales to the Australian Government. Whilst it is not expected the company would convert all sales opportunities into revenue, this highlights the extensive future revenue opportunities for the company.

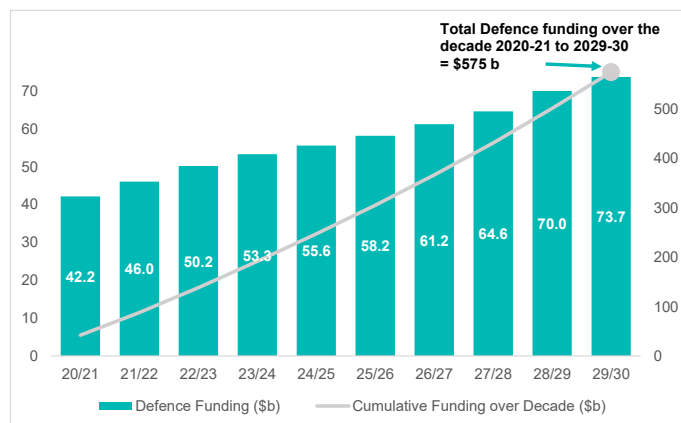
Investment Thesis- Key Charts

Figure 1 – Global military expenditure (\$b USD) 2000-2021



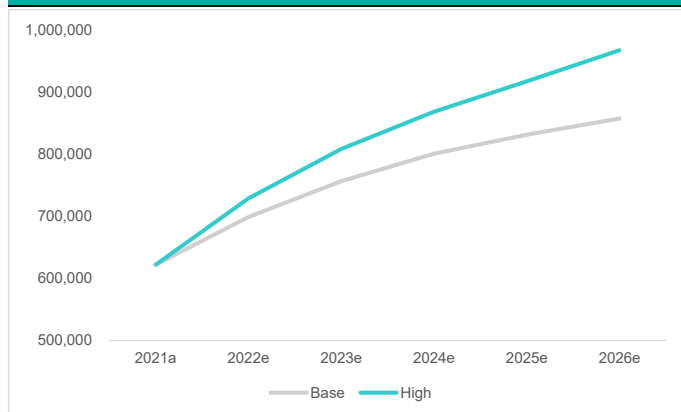
SOURCE: STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

Figure 2 - Total AUS Defence Budget 2020-21 to 2029-30



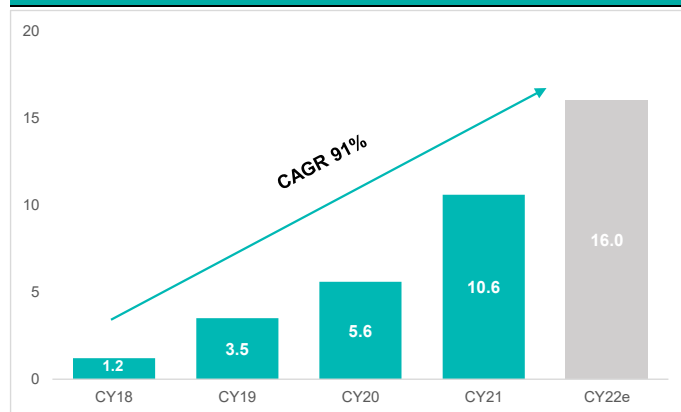
SOURCE: AUSTRALIAN GOV, DEPARTMENT OF DEFENCE, 2020 DEFENCE STRATEGIC UPDATE

Figure 3 – USA Registered Commercial drones - FAA forecasts



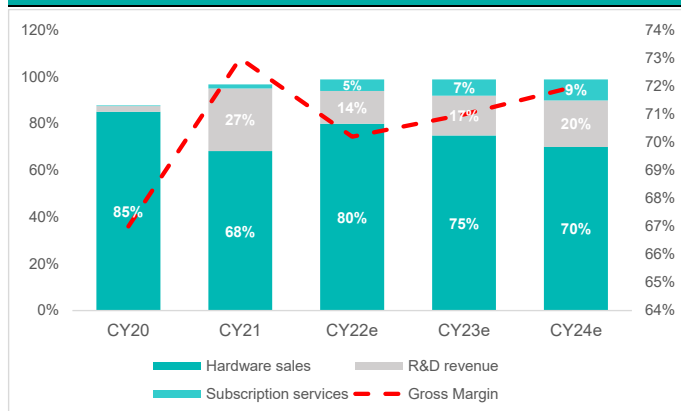
SOURCE: FAA AEROSPACE FORECAST FISCAL YEARS 2022-2042

Figure 4 – DRO Revenue growth CY18-CY22e



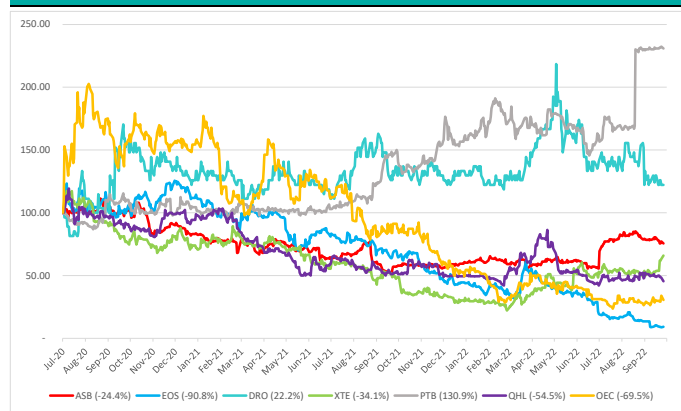
SOURCE: COMPANY DATA AND BELL POTTER SECURITIES ESTIMATES

Figure 5 – DRO Revenue breakdown & effect on gross margin



SOURCE: COMPANY DATA AND BELL POTTER SECURITIES ESTIMATES

Figure 6 – DRO & domestic peers relative price performance



SOURCE: BLOOMBERG

Key Risks

Key downside risks to our estimates and valuation include (but are not limited to):

- **Failure to retain existing clients or attract new customers:** The majority of DRO sales are currently attributed to existing customers. Failure to retain existing customers or attract new customers will severely impact revenue growth and the overall financial performance of the company.
- **Research & Development Risk:** DRO operates in fields requiring extensive R&D to produce advanced technologies and maintain market leadership. If the company lags the rest of the market in its product development it may have an adverse effect on the company's future operations.
- **Competition Risk:** The market in which DRO participates is competitive with a wide range of participants including large multi-national defence contractors who have extensive resources and scale.
- **Legislative Risk:** Further restriction and regulation of the operation and use of drones may result in a reduction of drone activity and a subsequent decline in demand for counter-drone solutions.
- **Sales strategy:** The company has detailed a significant sales pipeline and failure to convert sales opportunities into sales will have an adverse effect on the company's performance and investor opinion.
- **Government policy:** Changes in Government policy, particularly the Defence Industrial Capability Plan, or general reductions in defence spending could have a material adverse effect on DRO.
- **Key personnel risk:** The loss of key management personnel, delays in their replacement, and/or failure to attract new talent, may adversely affect DRO's operations and future performance.
- **Exchange rate risk:** DRO receives a proportion of revenues in USD, and to a lesser extent GBP. Any adverse movement in exchange rates could negatively impact the company's financial performance.

Company Overview

Description

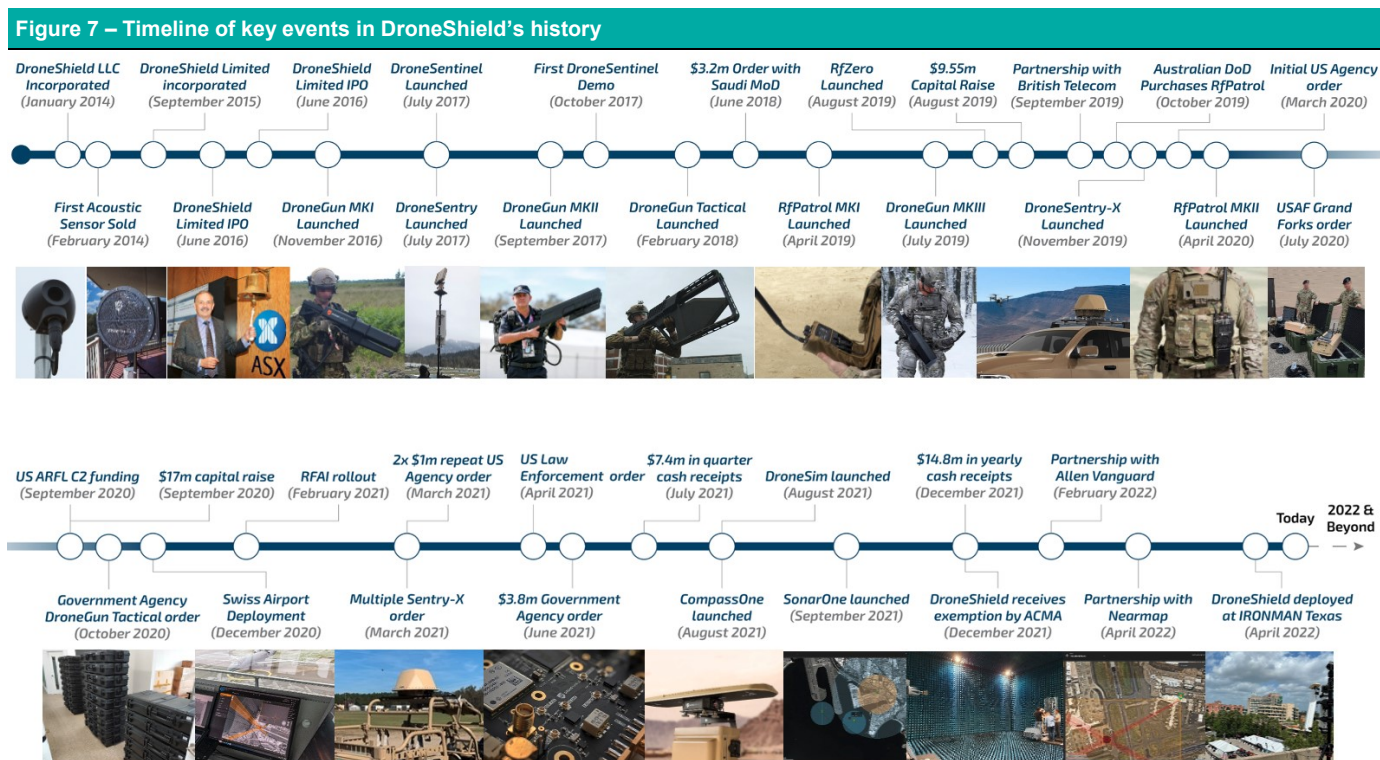
DroneShield Limited (DRO) is an Australian defence manufacturer that provides a variety of hardware and software solutions for protection against advanced threats such as drones and autonomous systems. DRO's offering integrates a proprietary Artificial Intelligence platform with a suite of hardware products utilised to detect, identify and defeat aerial, ground and maritime threats. The company possess an in-house R&D and engineering team of over 40 full-time engineers in Australia, allowing DRO to participate in a range of R&D partnerships with various parties including the Australian Department of Defence, primarily focusing on Electronic Warfare. The company's customers include military, intelligence community, Government, law enforcement, critical infrastructure and commercial parties globally.

History

DroneShield was founded in the U.S on the 10th January 2014. The company quickly shifted its operations to Australia with the goal of listing on the ASX, which occurred on the 4th November 2015. Early on, the company's primary product was acoustic sensors, which could detect a drone presence through their acoustic signatures. Hereafter, DRO expanded their development into a variety of different technologies to possess a comprehensive range of hardware and software products. Currently, the company's base of operations is in Australia with an established presence in the US.

Timeline

The key events in the history of DRO are detailed in **Figure 7** below



SOURCE: COMPANY DATA

Products and Services

DRO offers counter-UAS (Unmanned Aerial Systems) or counter-drone products and technology to combat drone threats. Whilst Counter-UAS refers specifically to Aerial systems, DRO technology is designed to combat all ground, surface and underwater drones. Counter-UAS responses can typically be broken down into 4 steps; Detect, Identify, Track and Defeat.

1. **Detect-** The first and most significant step in the Counter-UAS response is to detect the threat. This is a quite complex process due to the number of foreign objects or technologies that can emit a similar signal to a drone.
2. **Identify-** Next, the responder needs to identify what threat the UAS may pose based on whether it's carrying an additional payload, camera, weaponry, etc. This can also be referred to as classification of the UAS.
3. **Track-** The ability to track the UAS in real time allows the responder to employ an appropriate response.
4. **Defeat-** Neutralise the threat through either a soft or hard kill. A soft kill refers to a response that does not physically damage the drone but uses frequency jamming or UAS "hacking" to neutralise the drone. A hard kill involves physically damaging the drone through use of some form of projectile (ammunition, missile, etc.), laser or UAS seeking UAS.

DRO possesses an end-to-end counter-drone solution, including both hardware and software solutions. The company's products range from single purpose detect or defeat devices, to multi-sensor systems with both detect and defeat capabilities, available as handheld, vehicular or fixed installation devices.

The range is largely in-house proprietary technology, with exceptions being camera, radar and acoustic hardware deployed in the DroneSentry systems. DRO utilises third party products in this instance as this is 'mature' hardware, which is to say there is no value-add for the company to manufacture this technology in-house because it is so well developed.

See **Figure 8** below for a breakdown of the different technologies employed in each product.

Figure 8 - Product Comparison

Product	Detection Method				Defeat Method		In- House Technology
	Radio Frequency	Radar	Sonar	Optics	RF Jamming	GNSS Jamming	
<i>RfPatrol</i>	✓	x	x	x	x	x	✓
<i>RfOne MKII</i>	✓	x	x	x	x	x	✓
<i>DroneOpt</i>	x	x	x	✓	x	x	x
<i>RadarZero</i>	x	✓	x	✓	x	x	x
<i>DroneGun Tactical</i>	x	x	x	x	✓	✓	✓
<i>DroneGun MKIII</i>	x	x	x	x	✓	✓	✓
<i>DroneCannon MKII</i>	✓	x	x	x	✓	✓	✓
<i>DroneSentry-X</i>	✓	x	x	x	✓	✓	✓
<i>DroneSentry</i>	✓	✓	✓	✓	✓	✓	✓
<i>DroneSentry-C2</i>	<i>*DroneSentry-C2 is a Command and Control platform compatible with various Dronesield and third party products</i>						✓

****RfOne, DroneOpt, RadarZero, DroneCannon MKII are all integrated into DroneSentry**

Detect
Defeat
Detect & Defeat






SOURCE: COMPANY DATA AND BELL POTTER SECURITIES ESTIMATES

Hardware

The products detailed in **Figure 9** are the standard range available to customers however DRO is able to customise the assembly of the DroneSentry systems according to client requirements.

DRO currently has the capacity to manufacture smaller batches of its hardware in-house at its Sydney headquarters. The company also has external defence manufacturers who are engaged for larger production runs, including a fully Australian owned defence manufacturer in Adelaide.

Figure 9 - DroneShield Product Range (Hardware)

<p>DroneGun Tactical</p> 	<p>Portable rifle shape drone disruptor</p> <ul style="list-style-type: none"> • Causes the drone to safely land, or fly back to the starting point (potentially identifying the pilot) • 7kg weight, no backpack • Best-in-breed effective range • Released in early 2018 • Sold across Middle East, Australia, South East Asia, South America, and Europe
<p>DroneGun MKIII</p> 	<p>Pistol shaped compact drone disruptor</p> <ul style="list-style-type: none"> • Best-in-breed effective range • Released in mid-2019 • Only 2kg weight including battery • Unique patented design • Suitable for mobile deployments, patrols, law enforcement and special forces • Sales include US Government agencies and DoD and Europe
<p>RFPatrol MKII</p> 	<p>Body-worn drone detection device</p> <ul style="list-style-type: none"> • Best-in-breed detection range • Can be used with a directional accessory (DAUTM) to determine direction of the threat as well as vehicle kit • Completely passive (no RF emissions) • MKII version launched in mid-2020 • Deployments include Australian and US military and intelligence customers
<p>DroneSentry</p> 	<p>Integrated detect-and-defeat system</p> <ul style="list-style-type: none"> • Best-in-breed detection and defeat range • Radiofrequency direction finders, radars and cameras with a DroneCannon drone disruptor • Utilises proprietary DroneSentry-C2 counterdrone software command-and-control engine • The camera includes DroneOptIDTM, DroneShield proprietary AI computer vision software to detect and track drone targets
<p>DroneSentry-X</p> 	<p>Integrated detect-and-defeat counterdrone solution</p> <ul style="list-style-type: none"> • Best-in-breed detection and defeat range • Deployable on a vehicle, ship or fixed site platforms • Customer trials commenced in late 2020, followed by initial sales through 2021 including US and South-East Asia

SOURCE: COMPANY DATA

Software

The role of DRO’s software engines are to filter and process the complex data received by various sensor hardware in order to produce the detect and track functionality in its products. DRO has identified its proprietary artificial intelligence and machine learning (AI/ML) technology as the foundation of this software and the key element that differentiates the company from other participants in the market. AI/ML has the ability to learn and develop as it digests more data, increasing the performance of the engine and reducing the number of false positives when detecting threats.

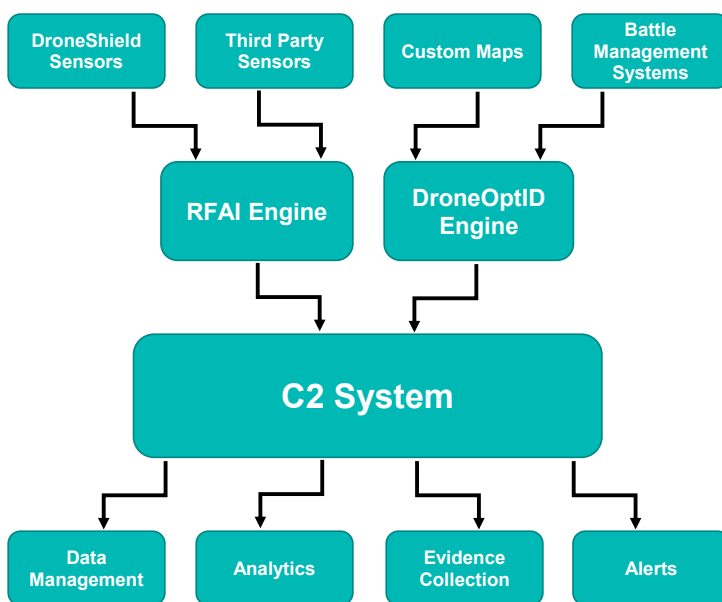
The **RFAI** engine is a proprietary software utilising the company’s AI/ML techniques to specifically process data received from RF sensors. The purpose of the software is to filter through the immaterial “noise” emitted on the radio frequency spectrum from unrelated technologies such as Bluetooth, Wi-Fi, etc. and identify signals from a valid drone threat. The RFAI engine integrates with any DRO product that uses the company’s RF sensor hardware including the RFPatrol and the RF sensors incorporated into DroneSentry.

The **DroneOptID** engine was created with a similar goal as the RFAI however this platform was specifically built for the functionality of optical and thermal cameras used in counter-drone technology. The software processes raw data from the cameras and other sensors in order to filter the irrelevant information and authenticate a drone threat. When the target has been validated and located by the camera, the engine employs motion tracking and machine learning technologies to track the threat.

DroneSentry-C2 differs from the other software products in that it is a command and control platform. Its purpose is to provide an interface for the user to receive and view data from the various sensors, utilising the company’s software engines, and control the product. The interface provides a platform for analytics, data management and a range of other administrative tasks.

The DRO software products were intentionally designed to be hardware agnostic, meaning they can integrate with third party sensors as well as the DRO product range. The software is also compatible with a range of third party systems customers may utilise including mapping programs and battle management systems.

Figure 10 - Software Architecture



SOURCE: COMPANY DATA AND BELL POTTER SECURITIES

Business Model

DroneShield has three streams of revenue consisting of Hardware sales, SaaS and R&D contracts.

Hardware

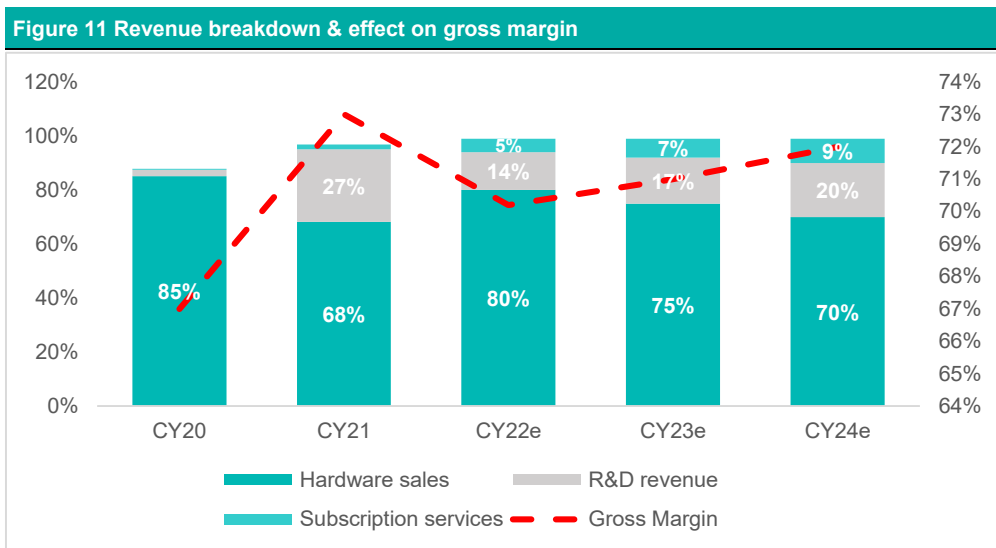
The main source of revenue for the company is sales of its hardware products. This includes all detection, defeat and detection + defeat technologies that were discussed earlier in the report. DRO has sales teams located in both Australia and the US, who deal directly with customers and third party distributors. Additionally, DRO offers the option to lease their products on weekly, monthly and multi-year basis. This allows the company to appeal to broader segments of the market, such as event-based requests, and expands deployment opportunities. Military and Defence contracts are commonly of a recurring nature, with repeat contracts following successful deployments. Hardware margins are commonly around 50% and accounted for ~70% of revenue in 2021.

SaaS

The entire DRO product range is supported by the company’s proprietary software engines RFAI and DroneOptID, as well as the command-and-control software DroneSentry-C2. Regular software updates increase the performance of these products by improving the system architecture and increasing the number of detectable threats through expansion of the signal libraries. Access to the regular software updates is offered on a subscription basis by enrolling in a SaaS model at the time of purchase. SaaS is of a recurring nature so is expected to increase as a proportion of the DRO revenue mix as more products requiring software updates are sold.

R&D Contracts

R&D contracts are an additional stream of revenue however they also provide an opportunity for the company to develop advanced capability in-house, potentially exposing the company to new streams of revenue. DRO’s recent \$3.8 million AUD contract with the AUS Department of Defence and appointment to the ISREW panel is a strong endorsement of their AI/ML capabilities and a likely pathway towards further government contracts in the Electronic Warfare space and any adjacent markets.

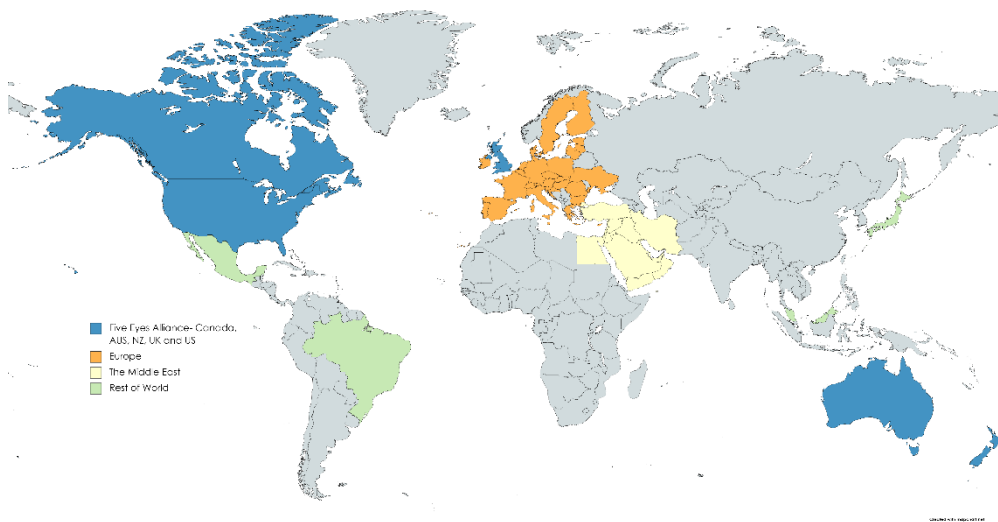


Customers

DRO currently derives over 75% of its revenue from Defence, ~15% from the intelligence community and the balance in civilian deployments. Military and intelligence are the most lucrative customers for the company and this will be its primary focus moving forward. However, there is future scope to grow its commercial and civilian deployments, which includes airports, prisons, stadiums and other critical infrastructure.

Military and defence contracts are commonly structured to be recurring in nature, thus the contract is only renewed if the deployment was successful. Positively, the majority of DRO sales are received from repeat customers, with ~74% of sales in FY21 attributed to repeat customers.

Figure 12 – Geographical representation of Customers



SOURCE: BELL POTTER SECURITIES

DRO is certified under the 'Defence Industry Security Program (DISP)' and a member of the 'Intelligence, Surveillance, Reconnaissance and Electronic Warfare (ISREW) Panel' allowing the company to work on sensitive projects with the Australian Defence Force and Australian intelligence & law enforcement agencies.

The Five Eyes Alliance, AUKUS and other strategic partnerships are extremely beneficial to the company as they have accelerated its ability to expand its customer base globally. The basis of such alliances is to encourage shared military capabilities and technology in the name of international security, allowing companies like DRO to establish commercial relationships with these countries.

The US government is the largest counter-drone customer in the market and is also the largest contributor to DRO sales. The company has successfully executed contracts with numerous Federal, State and Military agencies such as US State Department, Department of Defense, US Air Force and various law enforcement agencies.

In the UK, the company has established a partnership with BT (formerly *British Telecom*) to expand opportunities in this market. DRO recently achieved UK MOD SAPIENT compliance, which enables compatibility of DRO systems with UK military standards. This is a significant milestone as the primary focus of this partnership is the Ministry of Defence though there is strong demand from law enforcement and major airports.

Further, the company has several customers throughout Europe, both military and commercial, including various major airports. DRO has supplied RF defeat and DroneGun's to Ukraine indirectly via a European country's military aid program.

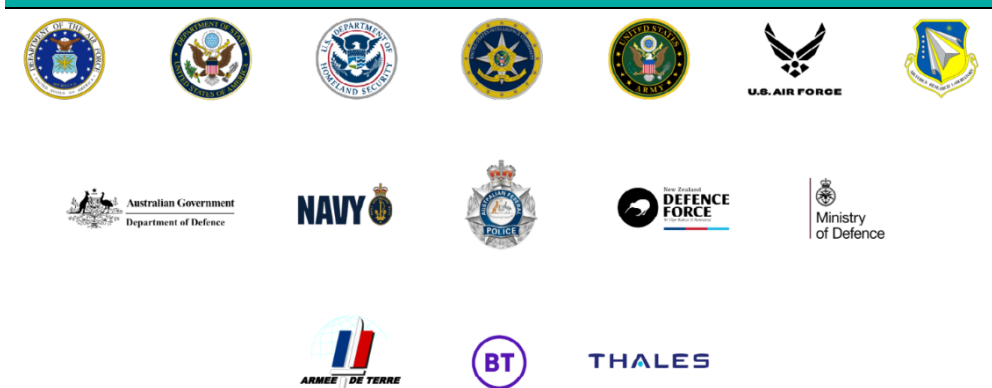
There is also significant demand for further business throughout the Middle East and the rest of the world.

Competitive Strengths

The key competitive strengths of DroneShield are:

- **Comprehensive Product range:** DRO differentiates itself from the rest of the market by offering an end-to-end counter-drone solution with largely in-house technology. The company's offering includes handheld, vehicular and fixed installations with both detect and defeat capabilities, as well as accompanying software platforms.
- **Sovereign Capability Business:** The Australian government's renewed emphasis on sovereign capabilities is advantageous for DRO as it removes certain levels of competition in the industry. The company is well positioned to capitalise on the opportunities presented to Australian companies in the domestic defence industry.
- **Strong client relationships:** DRO has established an extremely strong customer base with a range of long term partnerships. As discussed previously, -74% of sales in FY21 can be attributed to repeat customers, which demonstrates the sustained demand from the company's existing base. **Figure 13** provides an overview of the company's long term partnerships.

Figure 13 - DroneShield Partnerships



SOURCE: COMPANY DATA

Growth Strategy

The three key areas of DroneShield's growth strategy are:

- **Secure market position in the counter-drone sector:** The counter-drone market is experiencing significant tailwinds and is forecast to continue its rapid growth over the next decade. DRO is a leading participant in this market with an extensive in-house product range and thus is well-positioned to capitalise on future opportunities presented in its core market.
- **Expand capabilities into adjacent markets:** DRO has demonstrated it is capable of expanding outside of its core business into adjacent growth markets. The company will focus on further development in the Electronic Warfare markets through continued R&D with the Australian Department of Defence.
- **Drive margin expansion:** The Company will be able to drive margin expansion as SaaS increases as a proportion of the revenue mix, which will occur as more products requiring subsequent software updates are sold.

Industry Overview

Market Definition

Counter-drone

DroneShield primarily operates in the counter-drone market. This market encompasses all technology with the primary purpose of detecting, identifying, tracking and defeating drones. This market can be classified by both type and application

- **Type:** Detection or Detection + Defeat
- **Application:** Military & Defence, Commercial and Internal Security

DRO manufactures both hardware and software solutions for the counter-drone market. The hardware products are typically comprised of detect and/or defeat capabilities whilst the company's software programs utilise artificial intelligence to identify and track threats. The company's products have a wide variety of applications across military & defence, commercial and internal security.

Electronic Warfare

An emerging market opportunity for DRO is in the field of Electronic Warfare. The US Department of Defense defines Electronic Warfare (EW) as military activities with the intent to manipulate the electromagnetic spectrum in aid of an attack on the enemy. In this instance, the electromagnetic spectrum refers to a range of signals and frequencies such as radio, radar or infrared¹.

Research & development in EW is largely focused on the application of AI/ML to detect and process complex signals on the electromagnetic spectrum. This provides DRO the opportunity to apply its experience with AI/ML in the counter-drone market to a rapidly growing field outside of its core business.

Market Size

Counter-drone

The counter-drone market is forecast to grow from approximately \$1.99 billion USD in 2021 to \$7.62 billion USD over the next decade².

When assessing the 2021 market by type, detection was the dominant market segment with 60% market share and revenue of \$1.19 billion USD³. This is not surprising as defeat capabilities are restricted to military and federal government agencies in most jurisdictions globally.

Analysing the market from a different perspective, military and defence applications accounted for 67% of the market with \$1.33 billion USD in revenue⁴. This is in-line with general market trends considering military and defence applications are on a much larger scale than commercial and internal security deployments, thus providing greater revenue opportunities.

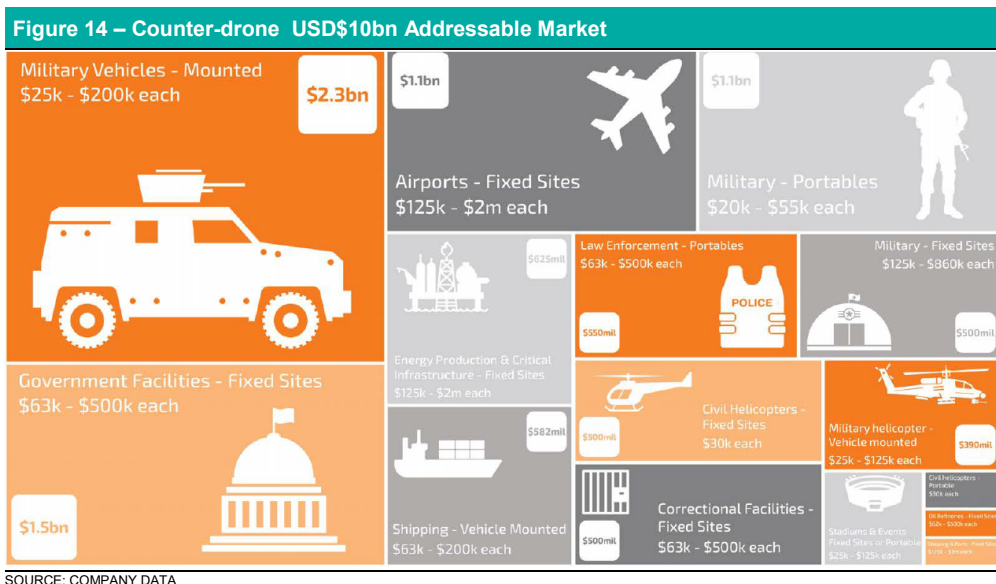
Internally, DRO assess their potential market opportunity to be up to \$10 billion USD over the next decade as detailed below in **Figure 14**.

¹ (US Department of Defense, 2020)

² (Marketquest.biz, 2021)

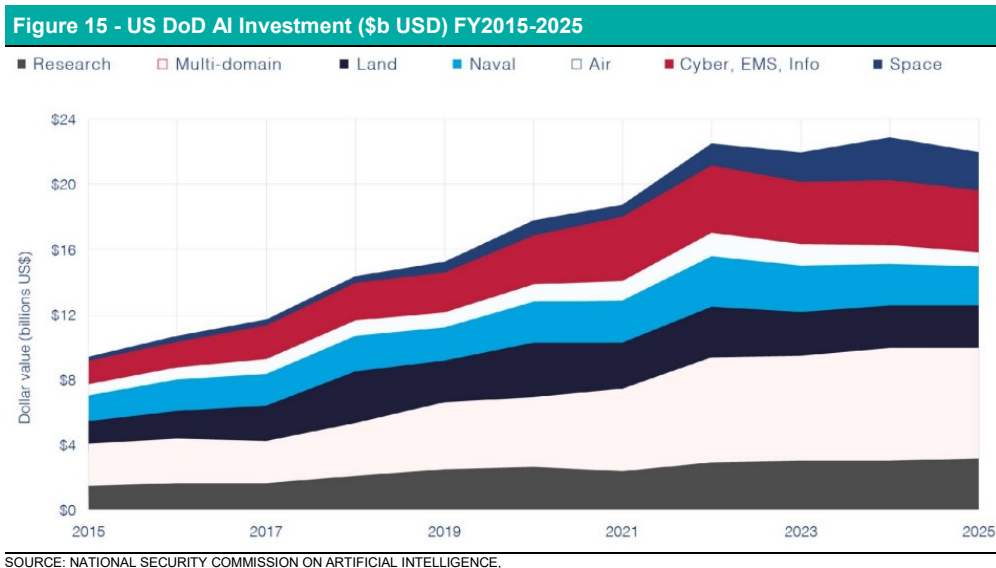
³ (Marketquest.biz, 2021)

⁴ (Marketquest.biz, 2021)



Electronic Warfare

EW is an emerging market and therefore its size is quite difficult to quantify at this early stage, thus we will utilise US investment in to AI/ML capabilities for military application as a as a point of reference. As detailed in **Figure 15**, the DoD is forecast to increase investment in AI/ML capabilities to ~\$22b USD in 2026, and this may increase further if recommendations made to congress by the **National Security Commission on Artificial Intelligence** are accepted. Whilst this is not a precise representation of the size of the EW market, it does emphasise the potential market opportunity for DRO.

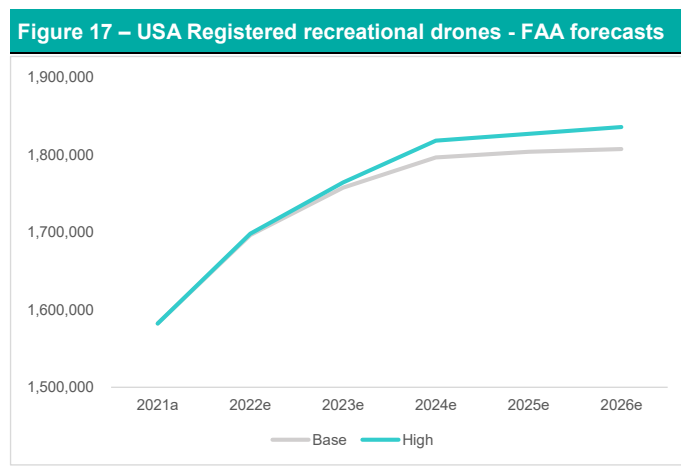
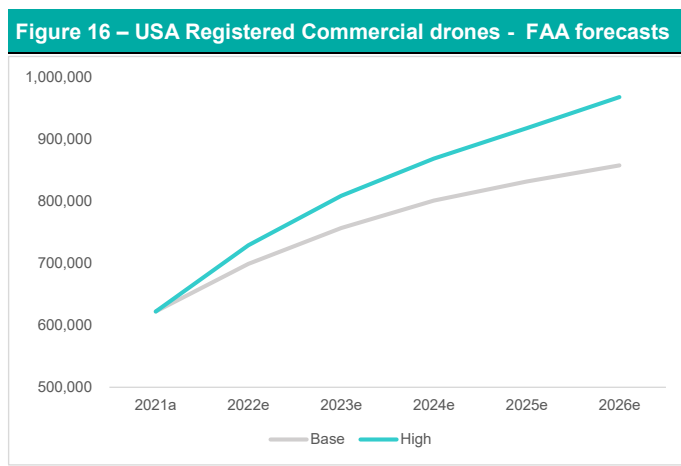


Market Trends and Drivers

The key trends and drivers in the counter-drone and Electronic warfare markets are detailed below.

Increased adoption of UAV's globally

The rapid progress experienced in the drone market in recent times has led to increasingly advanced technology available at modest cost to users. The removal of the cost barrier has made drones more readily available for recreational and commercial purposes rather than strictly the tools of military and law enforcement. The relative ease that drones can be repurposed for nefarious purposes indicates the increasing demand for drones requires a corresponding increase in demand for counter-drone technology. Illegal deployments of drones and the risk they pose to public safety necessitates counter-drone solutions be employed in protection of private and public interests such as critical infrastructure, airports, prisons, public events and various others.



SOURCE: FAA AEROSPACE FORECAST FISCAL YEARS 2022–2042

SOURCE: FAA AEROSPACE FORECAST FISCAL YEARS 2022–2042

Geopolitical tensions fuelling increased military spending

Recent global events have transformed the geopolitical landscape and seen relations between sovereign nations deteriorate rapidly. This theme was accelerated by the Russian invasion of Ukraine and China’s increasingly aggressive posturing towards Taiwan. This global tension has led many nations, such as Germany, Japan and Australia, to reassess their own military capabilities and resolve to commit greater long term funding to their defence budgets⁵. For example, whilst announcing significant increases to the Defence budget in 2022⁶, the ruling Liberal Democratic party in Japan has suggested (without committing) increasing their defence spending to 2% of GDP over the next 5 years, in line with NATO. This is an extremely significant change of policy from its post-war pacifism where it has long adhered to an ‘informal’ cap on defence spending of ~1% of GDP.

Further, the Australian Government has announced another “Defence Strategic Review” amid fears current expenditure is not adequate to combat the growing strategic threats in the region, despite having conducted a similar review only 2 years ago (2020 *Defence Strategic Update*) that committed to an increased defence budget of \$575.0b over the next decade⁷. This updated review is due to be submitted in March 2023 and will likely see Australian defence spending exceed 2% of GDP, possibly reaching 2.5% in the next decade.

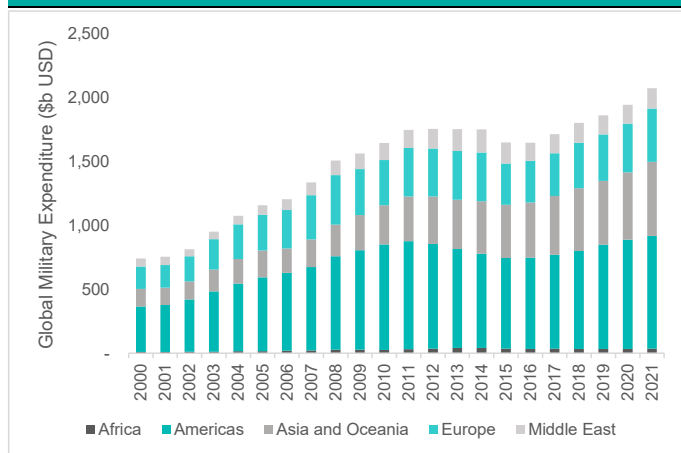
⁵ (Stockholm International Peace Research Institute , 2022)

⁶ (Japanese Government, Ministry of Defense, 2022)

⁷ (Australian Government, Department of Defence, 2020)

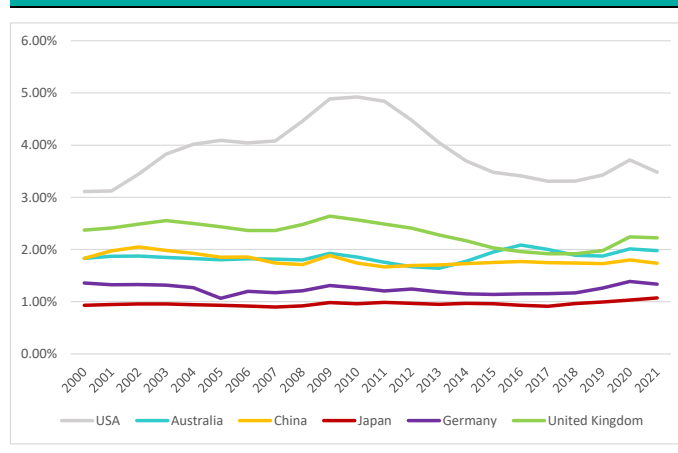
The significant commitment to greater defence expenditure, both globally and within Australia, demonstrates structural growth in the market and long-term demand for DRO products and services.

Figure 18 - Global military expenditure (\$b USD) 2000-2021



SOURCE: STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

Figure 19 Military expenditure as % of GDP, 2000-2021

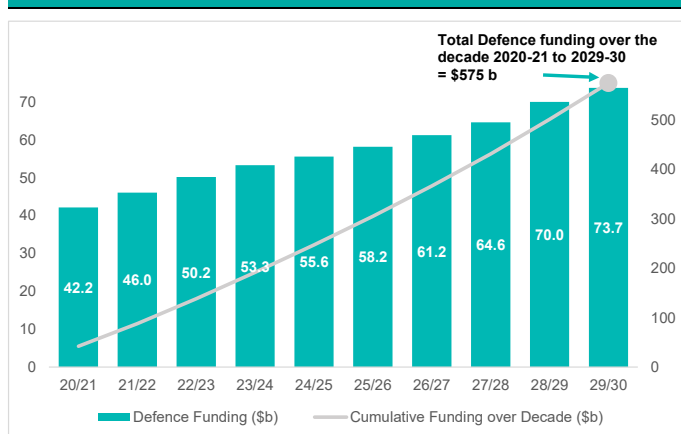


SOURCE: AUSTRALIAN GOVERNMENT, DEPARTMENT OF DEFENCE, 2020 DEFENCE STRATEGIC UPDATE

Sovereign capabilities investment

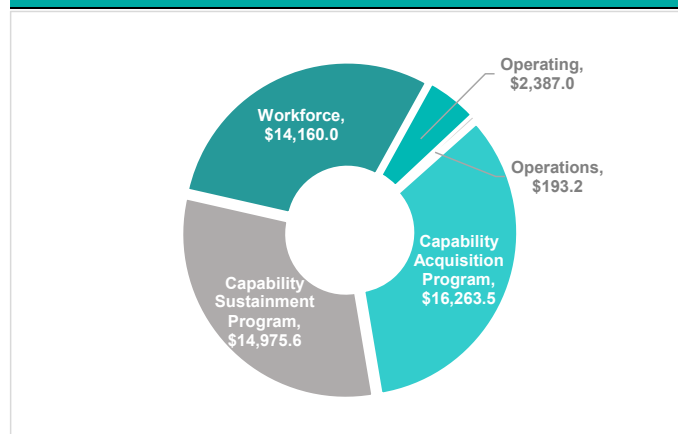
In 2018, the Australian Government announced the *Defence Industrial Capability Plan*. This outlined the government’s long term vision to establish a secure and sustainable defence industry to encourage critical projects to be designed and manufactured domestically. The report committed \$270 billion AUD of funding for capability investment over the next decade and detailed ten initial ‘Sovereign Industrial Capability Priorities’ that would be the main focus of Government support and investment. One of the priorities explicitly mentioned was “*Advanced signal processing capability in electronic warfare, cyber and information security, and signature management technologies and operations.*”⁸ The government’s ambition to develop a sovereign defence industry is a key tailwind for DRO as it removes international competition in a growing market where the company has already demonstrated significant capabilities.

Figure 20 Total AUS Defence Budget 2020-21 to 2029-30



SOURCE: AUSTRALIAN GOV, DEPARTMENT OF DEFENCE, 2020 DEFENCE STRATEGIC UPDATE

Figure 21 – AUS Capability Investment, Defence Budget 2022-23



SOURCE: AUSTRALIAN GOVERNMENT, PORTFOLIO BUDGET STATEMENTS 2022-23

⁸ (Australian Government, Department of Defence, 2018)

Competitive Landscape

The competitive landscape in counter-drone and EW range from large prime defence contractors (primes) to smaller firms who specialise in specific areas of the market.

Counter-drone

In counter-drone specifically, competitors can be classified into three groups; 'Garage' businesses, mid-sized firms and primes

- The term 'Garage' businesses refers to companies still in the embryonic stage of business development with a limited product range and lack of commercialisation capabilities. In their current state these companies are not viewed as a competitive threat due to their immaturity and lack of product offering.
- Mid-sized firms are the closest peer to DRO and represent the greatest competitive threat to the company. Mid-sized firms are likely to possess more than a single commercial product, proprietary technology and operate globally.
- Primes are a competitive threat due to economies of scale however these companies typically choose to partner with the mid-sized firms who specialise in this technology and are able to provide an in-house product range. Primes are known as integrators, which is the practice of integrating third-party technology into their own multi-product solutions, rather than developing proprietary technologies. Primes are also known to acquire smaller business to bring advanced capabilities in-house.

DRO is able to compete with the other mid-sized firms on product because it possesses an end-to-end counter-drone solution, developed with largely proprietary technologies. Few participants in market are able to provide this level and range of product, with many competitors possessing a far more limited product range.



















Primes are potential partners for DRO due to its specialised product knowledge and the Australian Industrial Capability (AIC) requirements for primes to sub-contract Australian companies when working on Australian DoD jobs. The company has existing partnerships with several primes such as Thales, Bosch and BT. However, primes do still pose a competitive threat due to their sheer size and scale, as well as the risk they opt to partner with other mid-sized firms rather than DRO.

Electronic Warfare

The competitive landscape in EW is unique in that this is a field that has been identified by the Australian government as a priority sovereign capability, therefore removing foreign competition from the tender process.

DRO has already successfully navigated a competitive bidding process with the Australian DoD against other Australian companies who have demonstrated capabilities in EW. Consequently, DRO is currently working through its second EW contract (\$3.8 million AUD) with the Australian DoD, which along with its appointment to the ISREW panel, is a strong endorsement of the company's AI/ML capabilities and further renewal of this contract is a likely sign that DRO is the DoD's preferred company in this space.

Figure 22 - Competitor Analysis

									
Type		Prime	Prime	Mid-size	Mid-size	Mid-size	Garage	Prime	-
Country of origin									
Integrator	✓	✓	✓	✓	✓	—	—	—	✓
In-House Detect									
Dismounted	✓	—	✓	—	—	✓	—	—	—
Vehicle Mounted	✓	—	✓	—	—	—	—	✓	✓
Fixed Site	✓	✓	✓	—	✓	✓	—	✓	✓
In-House Defeat									
Dismounted	✓	✓	—	✓	✓	✓	✓	—	—
Vehicle Mounted	✓	—	✓	—	—	—	—	✓	—
Fixed Site	✓	—	✓	✓	—	✓	—	✓	✓
Commentary									
Platform information	<ul style="list-style-type: none"> ✓ Most extensive product range in the market ✓ Large in-house portfolio ✓ Market leading performance 	<ul style="list-style-type: none"> ✓ Integrator-only via its Lattice platform ✓ Acquired copius imaging sensing technology 	<ul style="list-style-type: none"> • Substantially an integrator • Acquired AVT, a smaller integrator 	<ul style="list-style-type: none"> • Substantially an integrator 	<ul style="list-style-type: none"> • Lower-performance technology • Focus on prison and police 	<ul style="list-style-type: none"> • Handheld DroneKiller jammer gun • Lacks a full product suite 	<ul style="list-style-type: none"> • Handheld DroneBuster jammer gun • Lacks a full product suite 	<ul style="list-style-type: none"> • Titan detect-and-defeat a halfway solution between a portable and vehicle product • LOCUST laser defeat 	<ul style="list-style-type: none"> • Offer an expensive, competing product to DroneSentry • Lacks a full product suite
Detection	RF, EO / IR, Radar	RF, EO / IR, Radar	RF, EO / IR, Radar	RF, EO / IR, Radar	RF, EO / IR, Radar	—	—	RF	EO / IR, Radar, RF
Defeat	RF smart jamming	Drone on drone - Anvil product	EW Jammer	Catching net, RF jamming	RF jamming	RF jamming	RF jamming	RF jamming, Laser	RF jamming
Geography focus	Global	USA, UK, AUS	USA	USA	Global	USA	Global	USA	USA
In-House technology portfolio	RF, EW, waveforms, AI, sensorfusion, computervision	Sensor integration	EO / IR sensors, gimbals, RF	Sensor integration	RF	Waveforms	RF jamming	RF, Laser	RF, EW, radar

SOURCE: COMPANY DATA AND BELL POTTER SECURITIES ESTIMATES

Financials

Forecast Revenue

The basis of our revenue forecasts for DRO is the company's reported sales pipeline, which we then apply a conversion rate (probability of successfully converting the sales opportunity into revenue) to in order to calculate revenue. The company has outlined a \$350 million sales pipeline, including \$100m for the remainder of CY22 and a further \$250 million of opportunities in CY23 and CY24.

Our revenue forecasts for the next 3 years (CY22-CY24) are shown below. Our conversion rates are intentionally conservative, leaving upside risk to our forecasts. This conservative approach leaves scope for upgrades to our numbers, the catalyst for which will be de-risking of the company's pipeline through 1) consistent conversion of sales opportunities into revenue and 2) greater visibility over the sales pipeline.

Figure 23 - Forecast Revenue

	CY21	CY22e	CY23e	CY24e
Reported Sales Pipeline (\$m)	100.0	100.0	115.0	135.0
Conversion rate	11%	16%	21%	26%
Revenue (\$m)	10.6	16.0	24.2	35.1

SOURCE: COMPANY DATA AND BELL POTTER SECURITIES ESTIMATES

Our segment revenue is forecast by calculating the top line revenue as seen above and then determining the revenue breakdown based on historical averages and company projections.

Figure 24 - Forecast segment revenue

	CY21	CY22e	CY23e	CY24e
Revenue Breakdown				
Hardware sales	68%	80%	75%	70%
R&D revenue	27%	14%	17%	20%
Subscription services	2%	5%	7%	9%
Other Revenue	3%	1%	1%	1%
Segment Revenue				
Hardware sales	7.2	12.8	18.1	24.6
R&D revenue	2.8	2.2	4.1	7.0
Subscription services	0.2	0.8	1.7	3.2
Other Revenue	0.3	0.2	0.2	0.4

SOURCE: COMPANY DATA AND BELL POTTER SECURITIES ESTIMATES

The key take-outs are:

- We forecast a significantly stronger second half for DRO in CY22, which we believe will act as an inflection point for the company with strong earnings momentum carrying forward into CY23 and beyond.
- We forecast Subscription services (SaaS) revenue to increase as a proportion of the revenue mix going forward. Increasing revenue from subscription services will place upwards pressure on gross profit margins through CY24.

Forecast Profit & Loss

Our forecast Profit & Loss for the next 3 years (CY22-CY24) is shown below.

Figure 25 - Forecast Profit & Loss

Income Statement Year end 31 Dec	Dec-19 CY19a	Dec-20 CY20a	Dec-21 CY21a	Jun-22 1H22a	Dec-22 2H22e	Dec-22 CY22e	Dec-23 CY23e	Dec-24 CY24e
Total Revenue	3.5	5.5	10.6	3.7	12.3	16.0	24.2	35.1
growth %		59%	91%			51%	51%	45%
COGS	-1.61	-1.83	-2.85	-1.07	-3.70	-4.77	-7.00	-9.83
Gross Profit	1.9	3.7	7.7	2.6	8.6	11.2	17.1	25.3
Gross margin %	54%	67%	73%			70%	71%	72%
Total expenses	-10.2	-10.8	-14.5	-7.8	-9.2	-17.0	-19.3	-24.6
Other income/(loss)	0.1	0.3	0.3	0.2	0.0	0.2	0.0	0.0
EBITDA	-7.6	-6.1	-5.9	-4.4	-0.6	-5.1	-2.2	0.7
Total D&A	-0.7	-0.6	-0.5	-0.5	-0.2	-0.7	-0.5	-0.6
EBIT	-8.2	-6.8	-6.4	-4.9	-0.8	-5.8	-2.7	0.1
Interest Expense	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Profit Before Tax	-8.2	-6.8	-6.4	-4.9	-0.8	-5.8	-2.7	0.1
Income Tax Expense	0.5	0.9	1.1	0.0	2.0	2.0	3.0	2.5
Underlying NPAT	-7.7	-5.9	-5.3	-4.9	1.2	-3.8	0.3	2.6
abs. & extras (post-tax)	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	0.0
Reported NPAT	-7.7	-5.9	-5.2	-5.0	1.2	-3.8	0.3	2.6

SOURCE: COMPANY DATA AND BELL POTTER SECURITIES ESTIMATES

The key take-outs are:

- **Forecast EBITDA loss:** We forecast DRO to report a loss at the EBITDA line in CY22 & CY23 before experiencing positive EBITDA in CY24 and beyond as earnings momentum continues and the transforming sales mix places upwards pressure on gross profit margins. Note, there is a somewhat small difference between the forecast EBITDA and Profit Before Tax due to the relatively immaterial level of D&A and interest expenses.
- **Income Tax Expense:** Due to significant investment in R&D, DRO is a beneficiary of the governments R&D tax incentive grant. In line with ongoing and planned R&D, we expect the company to continue to receive tax rebates moving forward, which we offset against the company's income tax expense as the company moves to profitability and incurred losses are depleted.
- **NPAT:** We forecast DRO to realise profitability in CY23, which is reliant on the company executing its sales pipeline, modest increases in gross profit margins and further receipt of the R&D tax incentive grant.
- **No forecast other income:** We do no forecast any other income in future periods as historically this has been mostly forex gains or losses and thus is near impossible to forecast.

Balance Sheet

The key figures and ratios from the forecast Balance Sheet of DRO over the next three years are shown below.

Figure 26 - Key figures and ratios from forecast Balance Sheet

Balance Sheet	Dec-19	Dec-20	Dec-21	Jun-22	Dec-22	Dec-22	Dec-23	Dec-24
Year end 31 Dec	CY19a	CY20a	CY21a	1H22a	2H22e	CY22e	CY23e	CY24e
Cash	5.5	7.9	9.4	6.6	6.0	6.0	7.1	9.3
Total Debt	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.1
Net debt/(cash)	-5.5	-7.7	-9.3	-6.4	-5.9	-5.9	-6.9	-9.2
PPE	1.1	0.8	1.0	0.8	0.8	0.8	0.9	1.0
Intangibles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NTA per share	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Net Assets	6.7	19.6	15.6	11.5	12.7	12.7	13.0	15.6
Inventories	0.7	2.0	6.9	7.4	6.2	6.2	4.8	5.3

SOURCE: COMPANY DATA AND BELL POTTER SECURITIES ESTIMATES

The key take-outs are:

- **Solid net cash:** We forecast net cash to decline this period before increasing in-line with stronger revenues in future periods. The company has a solid cash balance with no core bank debt (insurance premium financing < \$150K) so we do not foresee the need for a capital raise at this time.
- **PPE and Intangibles:** PPE is relatively immaterial for DRO however we do forecast it to moderately increase over future periods. We expect intangibles to remain negligible.
- **Working Capital:** We forecast inventories to reduce moderately over future periods as the large inventory investment made in the past 18 months, for faster delivery to customers, is sold through. We expect the inventory balance to normalise post CY24 and rise in line with increased revenue forecasts.

Cash Flow

They key figures and ratios from the forecast Cash Flow Statement of DRO over the next 3 years are shown below.

Figure 27 - Key figures and ratios from forecast Cash Flow Statement

Cash Flow Statement	Dec-19	Dec-20	Dec-21	Jun-22	Dec-22	Dec-22	Dec-23	Dec-24
Year end 31 Dec	CY19a	CY20a	CY21a	1H22a	2H22e	CY22e	CY23e	CY24e
Gross Cash Flow	-5.0	-4.7	-6.3	-2.5	-2.3	-4.8	-1.4	0.4
Operating Cash Flow	-5.0	-4.7	-6.3	-2.5	-0.3	-2.8	1.6	2.9
Capex	-1.0	-0.8	-0.5	-0.2	-0.2	-0.4	-0.6	-0.6
Free Cash Flow	-6.0	-5.4	-6.8	-2.7	-0.5	-3.2	1.0	2.2
Net Change in Cash	4.3	10.9	-6.9	-2.9	-0.5	-3.5	1.0	2.2
<i>FCF per share (cps)</i>	-2.4	-1.4	-1.6	-0.6	-0.1	0.2	0.5	1.3

SOURCE: BELL POTTER SECURITIES ESTIMATES

Note:

- **Free Cash Flow:** We forecast DRO to be free cash flow positive in CY23e.
- DRO historically included the R&D tax incentive in gross cash flows, we have included this as the Income tax benefit/ (expense), or operating cash flows, in our forecasts.

Valuation

Our price target of \$0.24 is calculated using a 50/50 blend of two valuation methodologies, relative valuation and DCF. The 12 month price target is at a 46.0% premium to the current share price so we initiate with a BUY recommendation.

Relative Valuation

A relative valuation approach requires a group of listed comparable companies to provide reference for the appropriate multiple to value the company. We have elected to use the EV/Revenue multiple due to many of the comparable companies not yet making a profit at the EBITDA line and our forecasts having DRO experience negative EBITDA in CY22.

We have a constructed a peer group of Aerospace & Defence companies listed both domestically and internationally to provide the basis of this valuation. The criteria for inclusion in this comps group was listed Aerospace & Defence companies with a market cap < \$500m, however an exception was made to include Austal (ASB.ASX) due to the limited number of Aerospace and Defence comps listed domestically.

Figure 28 - DRO peer analysis

Company name	Last	Currency	Market Cap (\$m)	Enterprise Value (\$m)	Revenues		EV/Revenue FY23e
					FY22	FY23e	
Domestic Peers- Aerospace & Defence							
Austal Ltd	\$ 2.57	AUD	928.17	922.17	1414.57	1483.29	0.62
Electro Optic Systems Holdings Ltd	\$ 0.50	AUD	80.97	95.57	216.00	299.50	0.32
PTB Group Ltd	\$ 1.57	AUD	199.71	210.82	118.00	133.00	1.59
Quickstep Holdings Ltd	\$ 0.44	AUD	31.56	56.56	95.90	105.00	0.54
Average			310.10	321.28	461.12	505.20	0.77
International Peers- Aerospace & Defence							
RADA Electronic Industries Ltd	\$ 10.03	USD	498.67	457.40	120.75	160.00	2.86
AEye Inc	\$ 1.54	USD	245.32	139.18	3.56	26.03	5.35
Astronics Corp	\$ 9.21	USD	351.40	494.62	543.50	619.50	0.80
Astra Space Inc	\$ 0.85	USD	226.39	34.21	12.40	52.90	0.65
Avon Protection PLC	£ 8.06	GBP	243.73	365.55	269.20	300.40	1.22
Redwire Corp	\$ 2.76	USD	174.58	262.51	167.00	277.00	0.95
Byrna Technologies Inc	\$ 8.93	USD	198.57	174.31	54.83	76.07	2.29
Momentum Inc	\$ 1.77	USD	147.40	64.85	3.91	9.35	6.94
Coda Octopus Group Inc	\$ 4.97	USD	53.97	33.31	22.70	30.60	1.09
VirTra Inc	\$ 5.32	USD	57.87	51.93	29.03	31.47	1.65
Air Industries Group	\$ 0.70	USD	22.55	49.89	58.00	65.00	0.77
Average			201.86	193.43	116.81	149.85	2.23
EV/Revenue Multiple							1.50

SOURCE: BLOOMBERG AND BELL POTTER SECURITIES ESTIMATES

Based on this analysis, we believe it is reasonable to take the average EV/Revenue multiple of all international and domestic peers. We do not consider it necessary to apply a premium or discount to this multiple due to our use of a DCF valuation in conjunction with this relative valuation.

Figure 29 - Relative Valuation

Relative Valuation (EV/Revenue)	
CY23e Revenue	24.2
EV/Revenue Target Multiple	1.5x
Implied Enterprise Value	36
Net Debt (CY23e)	-6.9
Implied Equity Value	43
Diluted shares on issue	432.5
Valuation per Share	\$ 0.10

SOURCE: BELL POTTER SECURITIES ESTIMATES

Discount Cash flow

DCF is an absolute valuation approach and so is appropriate to consider in conjunction with a relative valuation. Our DCF valuation is shown below along with the calculation of the WACC we have used. This valuation is a year from now to be consistent with a 12 month price target.

Figure 30 - DCF Valuation DRO

DCF methodology	CY23e	CY24e	CY25e	CY26e	CY27e	CY28e
Operating Cash Flow	1.6	2.9	6.4	8.9	17.5	
Capex	-	0.6	0.6	0.8	0.8	0.9
Free Cash Flow	1.0	2.2	5.7	8.1	16.7	22.0
Discount Rate	0.3	1.3	2.3	3.3	4.3	5.3
PV of cash flows	1.0	2.0	4.5	5.8	10.9	133.8
Sum of present values	158.0					
Market value of investments	0.0					
Net debt/(cash)	-6.9					
Equity value	164.9					
Equity Value per share (\$)	\$	0.38				

Key DCF Inputs		Sensitivity Analysis for DCF						
		Terminal Growth Rate						
		2.0%	2.5%	3.0%	3.5%	4.0%		
Cost of debt	3.5%							
Market risk premium	6.0%							
Beta	1.30	9.5%	\$0.40	\$0.42	\$0.45	\$0.49	\$0.52	
Cost of equity	11.8%	10.0%	\$0.37	\$0.39	\$0.42	\$0.44	\$0.48	
WACC	10.6%	WACC	10.6%	\$0.34	\$0.36	\$0.38	\$0.40	\$0.43
Terminal growth Rate	3.0%	11.0%	\$0.32	\$0.34	\$0.36	\$0.38	\$0.40	
		11.5%	\$0.30	\$0.32	\$0.33	\$0.35	\$0.37	

SOURCE: BELL POTTER SECURITIES ESTIMATES

The sensitivity analysis in **Figure 30** outlines the effect of changes in the WACC and/or terminal growth rate on the DCF valuation.

Key assumptions used in our DCF Valuation:

- **Post-tax WACC of 10.6%:** Our WACC is derived from a risk free rate of 4%, a market risk premium of 6% and unlevered asset beta of 1.30.
- **Terminal growth rate of 3%**

We highlight possible upside to our valuation via the following:

- DRO is able to convert sales opportunities into revenue at a greater rate than anticipated
- SaaS revenue increases as a proportion of revenue faster than predicted, thus increasing gross margins earlier than forecast

Price Target

We use a 50/50 blend of the DCF and relative valuation methods to determine a 12 month price target of \$0.24. Our valuation process is detailed below in **Figure 31**.

Figure 31 - Valuation calculation DRO

Methodology	Weighting	Value
DCF Valuation	50%	\$ 0.38
Relative Valuation	50%	\$ 0.10
Blended Valuation		\$ 0.24

SOURCE: BELL POTTER SECURITIES ESTIMATES

Board of Directors & Key Management

Board of Directors

The DroneShield Board of Directors are detailed below:

Peter James - Independent Non-Executive Chairman

Peter has over 30 years' experience in the Technology, Telecommunications and Media Industries, and has extensive experience as Chair, Non-Executive Director and Chief Executive Officer across a range of publicly listed and private companies. He is currently Chair of ASX-listed companies Macquarie Telecom and Nearmap.

Peter is an experienced business leader with significant strategic and operational expertise. He is a Fellow of the Australian Institute of Company Directors, a Fellow of the Australian Computer Society and holds a BA Degree with Majors in Computer Science and Business.

Oleg Vornik - CEO & Managing Director

Oleg is an experienced senior executive with successful track record of rapid business scale up, including IPO and subsequent growth of the DroneShield teams in Australia, US and UK, and presence in over 100 countries. Through that time, he fostered organic deep technology development, through to mass deployment of the solutions around the world in the homeland security, intelligence community and military segments.

Prior to DroneShield, Oleg's career spanned across Deutsche Bank, Royal Bank of Canada, Brookfield and ABN AMRO.

Oleg has a Bachelor of Science (Mathematics) from Canterbury University and completed a Columbia University business program.

Jethro Marks – Independent Non-Executive Director

Jethro is a Sydney-based CEO and co-founder of the Mercury Retail Group, an eCommerce retail, services, logistics and outsourcing business.

Over 17 years Jethro has led, and continuously grown, the business at the forefront of digital commerce, marketing and international logistics, while competing with the largest retailers globally. Jethro brings to the Board extensive commercial experience in successfully scaling a multinational business.

Jethro graduated from the University of Auckland, with a Bachelor of Commerce (Honours).

Key Management

The key management of DroneShield are listed below:

Figure 32 - Key Management

Oleg Vornik - CEO & Managing Director	Matt McCrann - CEO, DroneShield (USA)
Angus Bean - Chief Technology Officer	Lyle Halliday - Chief Operating Officer
Carla Balanco - CFO & Company Secretary	Tom Branstetter - Director of Business Development (USA)
Hedley Boyd-Moss - Vice President, Engineering	Lawrence Marychurch - Vice President, Design
Carl Norman - Vice President, Embedded Systems	

SOURCE: COMPANY DATA

Shareholder Register

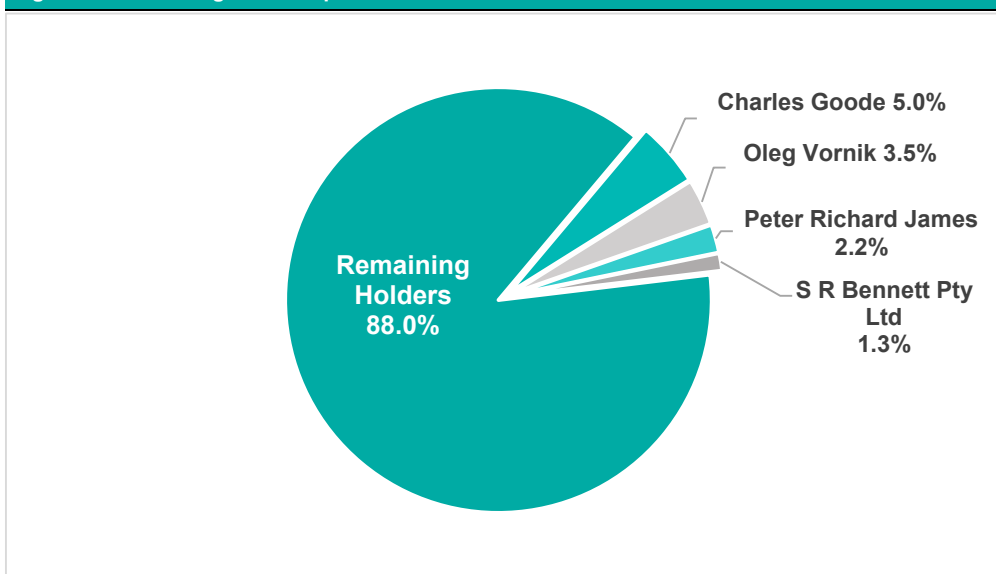
The DroneShield Top Shareholders are detailed below

Figure 33 – Top shareholders		
Charles Goode	21,500,000	5.0%
Oleg Vornik	15,310,356	3.5%
Peter Richard James	9,301,688	2.2%
S R Bennett Pty Ltd	5,717,538	1.3%
Carla Balanco	3,200,000	0.7%
Richard Darling	3,194,729	0.7%
Blackwood Consulting Pty Ltd	2,348,240	0.5%
Azoth LLC	2,250,000	0.5%
Angus Bean	2,135,621	0.5%
Mark Jones	1,800,000	0.4%
Hein Victor Graafhuis	1,700,000	0.4%
Volodymyr Yatsyna	1,501,000	0.3%
Richard Joffe	1,438,157	0.3%
Soirhu Pty Ltd	1,282,362	0.3%
Jethro Marks	666,666	0.2%

SOURCE: IRESS

- **Charles Goode** is the former chairman of ANZ Bank (1995-2010) and a former director of various public companies. Charles is not involved with the DRO board and is strictly a shareholder of the company.
- Employees are strongly incentivised, with Oleg Vornik, Peter Richard James, Carla Balanco, Angus Bean and Jethro Marks all appearing as top shareholders. This aligns the interests of shareholders and management.
- The company has over 8,000 shareholders, with only 4 shareholders owning > 1%, reflecting a diverse registry of retail holders and a large free float.

Figure 34 – DRO Register Composition



SOURCE: IRESS

Table 1 - Financial summary

Profit & Loss (A\$m)						Dronesield Limited						
	CY20	CY21	CY22e	CY23e	CY24e						Year End 31 Dec	
Year Ending 30 June						Share Price: \$0.165						Target Price: \$0.24
Revenue	5.5	10.6	16.0	24.2	35.1	No. of issued shares (m):	432.5	Market cap:			\$71.4m	
<i>Change</i>	59%	91%	51%	51%	45%							
Cost of sales	- 1.8	- 2.8	- 4.8	- 7.0	- 9.8							
Gross profit	3.7	7.7	11.2	17.1	25.3							
<i>Gross margin</i>	67%	73%	70%	71%	72%							
Other income/(expense)	0.3	0.3	0.2	-	-							
Expenses (excl. D&A, int.)	- 10.8	- 14.5	- 17.0	- 19.3	- 24.6							
EBITDA	- 6.1	- 5.9	- 5.1	- 2.2	0.7							
Depreciation and amortisation	- 0.6	- 0.5	- 0.7	- 0.5	- 0.6							
EBIT	- 6.8	- 6.4	- 5.8	- 2.7	0.1							
Net interest (expense)/revenue	0.0	0.0	0.0	-	-							
Pre-tax profit	- 6.8	- 6.4	- 5.8	- 2.7	0.1							
Income tax benefit/(expense)	0.9	1.1	2.0	3.0	2.5							
Underlying NPAT	- 5.9	- 5.3	- 3.8	0.3	2.6							
Abs & extras.	0.0	0.1	-	-	-							
Reported NPAT	- 5.9	- 5.2	- 3.8	0.3	2.6							
Cashflow (A\$m)						Valuation Ratios						
EBITDA	-6.1	-5.9	-5.1	-2.2	0.7		CY20	CY21	CY22e	CY23e	CY24e	
Change in working capital	1.5	-0.4	0.3	0.8	-0.3	Basic EPS (cps)	-2.0	-1.3	-0.9	0.1	0.6	
Gross cash flow	-4.7	-6.3	-4.8	-1.4	0.4	Diluted EPS (cps)	-2.0	-1.3	-0.9	0.1	0.6	
Income tax refunded/(paid)	0.0	0.0	2.0	3.0	2.5	<i>EPS growth (%)</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	<i>NM</i>	743%	
Operating cash flow	-4.7	-6.3	-2.8	1.6	2.9	FE(x)	NM	NM	NM	222.3	26.4	
Payments for PPE	-0.8	-0.5	-0.4	-0.6	-0.6	EV/Sales (x)	11.8	6.2	4.1	2.7	1.9	
Payments for Intangibles	0.0	0.0	0.0	0.0	0.0	EV/EBITDA (x)	NM	NM	NM	NM	93.3	
Investing cash flow	-0.8	-0.5	-0.4	-0.6	-0.6	EV/EBIT (x)	NM	NM	NM	NM	461.8	
Net Proceeds from issue of shares	16.1	0.0	0.0	0.0	0.0	FCF per share	-1.4	-1.6	-0.8	0.2	0.5	
Net proceeds of borrowings	0.7	0.0	0.0	0.0	0.0	FCF yield %	-8.4%	-9.8%	-4.7%	1.4%	3.1%	
Repayment of borrowings	-0.6	0.0	0.0	0.0	0.0	NTA per share (\$ps)	0.05	0.04	0.03	0.03	0.04	
Payment of lease liabilities	-0.1	-0.1	-0.3	0.0	0.0	P/NTA (x)	3.3	4.4	5.7	5.5	4.6	
Other	0.2	0.0	0.0	0.0	0.0	Book value (\$ps)	0.05	0.04	0.03	0.03	0.04	
Financing cash flow	16.3	-0.1	-0.3	0.0	0.0	Price/Book (x)	3.3	4.4	5.6	5.5	4.6	
Net change in cash	10.9	-6.9	-3.5	1.0	2.2	DPS (cps)	0.0	0.0	0.0	0.0	0.0	
Cash at start of period	5.5	16.3	9.5	6.2	7.2	Payout ratio %	0.0%	0.0%	0.0%	0.0%	0.0%	
Exchange rate impact	-0.1	0.1	0.1	0.0	0.0	Dividend Yield %	0.0%	0.0%	0.0%	0.0%	0.0%	
Cash at end of period	16.3	9.5	6.2	7.2	9.4							
Balance Sheet (A\$m)						Performance Ratios						
Cash and cash equivalents	16.3	9.5	6.2	7.2	9.4		CY20	CY21	CY22e	CY23e	CY24e	
Trade and other receivables	3.7	0.9	4.3	4.8	5.3	EBITDA Margin (%)	-111.0%	-56.1%	-31.6%	-9.0%	2.0%	
Inventories	2.0	6.9	6.2	4.8	5.3	EBIT Margin (%)	-122.4%	-60.9%	-36.0%	-11.1%	0.4%	
PPE	0.8	1.0	0.8	0.9	1.0	NPAT Margin (%)	-106.0%	-50.3%	-23.6%	1.3%	7.5%	
Intangibles	0.0	0.0	0.0	0.0	0.0	Net debt/(cash)	- 7.7	- 9.3	- 5.9	- 6.9	- 9.2	
Right-of-use assets	0.2	-	0.7	0.7	0.7	ROE (%)	-29.9%	-34.1%	-29.8%	2.4%	16.9%	
Total assets	23.1	18.3	18.2	18.5	21.7							
Trade and other payables	0.9	0.5	1.2	1.2	1.8	Segmentals (A\$m)						
Lease Liabilities	0.3	1.6	0.9	0.9	0.9	Revenue						
Provisions	0.2	0.5	0.5	0.5	0.5	Hardware sales	4.7	7.2	12.8	18.1	24.6	
Borrowings	0.1	0.2	0.1	0.1	0.1	R&D Revenue	0.1	2.8	2.2	4.1	7.0	
Other	2.0	0.1	2.9	2.9	2.9	Subscription services	0.0	0.2	0.8	1.7	3.2	
Total liabilities	3.5	2.8	5.6	5.6	6.1	Other Revenue	0.7	0.3	0.2	0.2	0.4	
Net Assets	19.6	15.6	12.7	13.0	15.6	Total Revenue	5.5	10.6	16.0	24.2	35.1	
Share capital	37.3	37.0	37.0	37.0	37.0	<i>Revenue Breakdown</i>						
Other reserves	7.8	5.3	5.2	5.2	5.2	Hardware sales	85%	68%	80%	75%	70%	
Accumulated losses	(25.5)	(26.7)	(29.5)	(29.2)	(26.5)	R&D Revenue	2%	27%	14%	17%	20%	
Total shareholders' equity	19.6	15.6	12.7	13.0	15.6	Subscription services	0%	2%	5%	7%	9%	
						Other Revenue	12%	3%	1%	1%	1%	
						Interim Results						
							1H21	2H21	1H22	2H22e		
						Revenues	6.7	3.9	3.7	12.3		
						EBITDA	-0.2	-5.7	-4.4	-0.6		
						EBIT	-0.5	-5.9	-4.9	-0.8		
						NPAT	-0.5	-4.9	-4.9	1.2		

SOURCE: BELL POTTER SECURITIES ESTIMATES

Recommendation structure

Buy: Expect >15% total return on a 12 month view. For stocks regarded as 'Speculative' a return of >30% is expected.

Hold: Expect total return between -5% and 15% on a 12 month view

Sell: Expect <-5% total return on a 12 month view

Speculative Investments are either start-up enterprises with nil or only prospective operations or recently commenced operations with only forecast cash flows, or companies that have commenced operations or have been in operation for some time but have only forecast cash flows and/or a stressed balance sheet.

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