

# ASX defence stocks guide: Here's everything you need to know

## Guides

14/09/20 | [Mike Cooper](#)

Defence spending for Australia — currently at 2 per cent of the economy, equivalent to \$42bn — is on the rise again, which may not be surprising given all the sabre-rattling that is going on.

Military spending is forecast to reach 3.5 per cent of GDP by the end of the decade, based on the Australian government's 2020 Defence Strategic Update, according to ANZ bank.

At this level, defence spending will be the highest since Australia's involvement in the Vietnam war in the late 1960s to early 1970s, a time of conscription for many young men.

"My view is spending on defence will probably increase rather than fall in the near term," Heath Andrews, senior equities analyst at corporate advisory firm PAC Partners, said.

"US-China relations seem to be deteriorating, and they're the two main players, so I think defence spending will ramp up, and Australia is obviously more leveraged to the US in that regard."

The nature of warfare is changing too. Direct confrontation has given way to cyberwarfare.

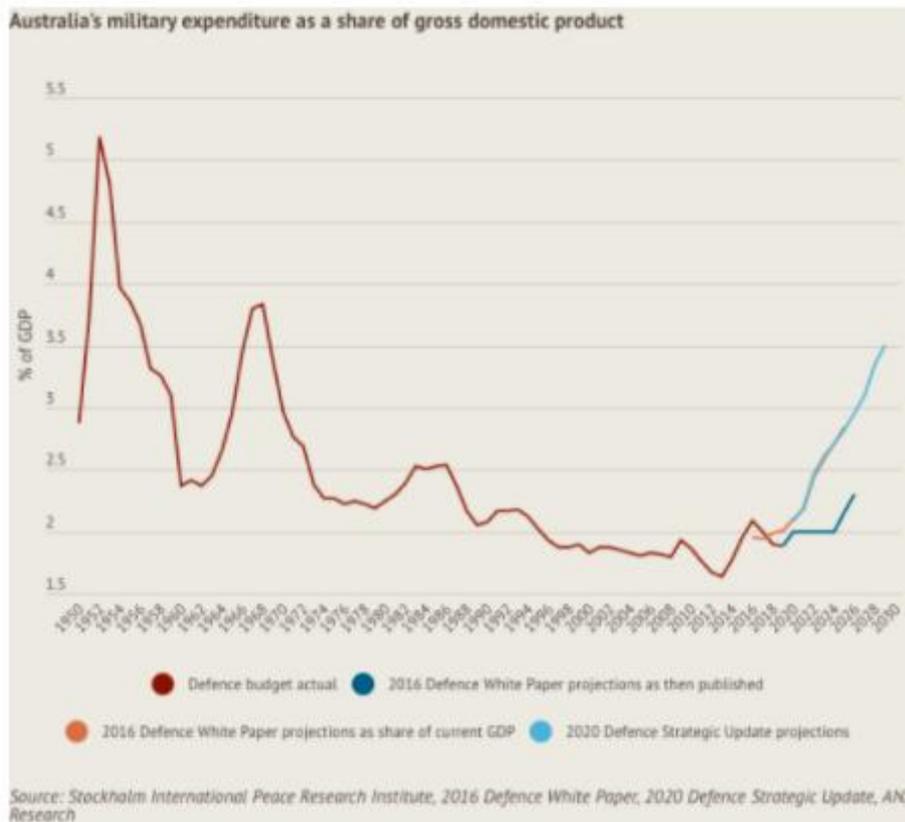
There are new theatres of war such as space. Meaning old strategies have to be rethought.

And there is new weaponry to combat. Hypersonic missiles are faster and more deadly.

Three new strategic objectives were unveiled in the 2020 Defence Strategic Update.

Firstly, to shape Australia's strategic environment. Secondly, to deter actions against Australia's interests. And thirdly, to respond with credible military force, when required.

## Australia's defence budget is at its highest since the Vietnam War



Australia's defence spending trends since 1950 and forecasts out to 2030: ANZ Bank

### Context of Australia's defence strategy

Australia is part of the tripartite ANZUS security pact, a mutual defence treaty between Australia, New Zealand and the United States, that came about in 1951 and is still in force.

The treaty forms the bedrock of Australia's strategic alliance with the US, although New Zealand and the US have downgraded some of their obligations under the treaty.

Australia is also part of the 'Five Eyes' intelligence sharing network under a joint treaty with Canada, New Zealand, the UK and US.

Australia has a number of challenges when it comes to home defence, including its long coastline, exposure to the Indian and Pacific Oceans, and location amid busy shipping lanes.

"Governments are ramping up spending — both as a means of stimulating their economies and also to address heightening geo-political tensions," Dronesield chief executive Oleg Vornik said.

“There’s a number of flash-points globally which are driving that, and we’re seeing that translate into strong customer interest in the counter-drone space as well.”

## Spending is an integral part of economic stimulus

The Australian government sees defence spending as key to helping the economy to recover from the COVID-19 crisis, as articulated by defence minister Linda Reynolds.

“The government’s focus on encouraging onshore suppliers is a form of industry assistance not available to many other sectors,” Reynolds said.

More defence spending is a golden opportunity for Australian companies that are in the business of providing defence equipment and services to the federal armed forces.

One dozen ASX companies have links to the Australian defence sector, ranging from satellite data and drone systems companies to military equipment suppliers and shipbuilders.

**Here is a list of ASX defence stocks:**

Code	Name	Sub-sector
AJX	ALEXIUM INTERNATIONAL GROUP	MILITARY EQUIPMENT
ASB	AUSTRAL	SHIPBUILDING
BCT	BLUECHIP LTD	MILITARY EQUIPMENT
BIS	BISALLOY STEEL GROUP LTD	MILITARY EQUIPMENT
BRN	BRAINCHIP HOLDINGS LTD	MILITARY EQUIPMENT
CDA	CODAN LTD	MILITARY EQUIPMENT
DRO	DRONESHIELD LTD	DRONES
ELS	ELSIGHT LTD	DRONES
EOS	ELECTRO OPTIC SYSTEMS	SATELLITES/SPACE
KSS	KLEOS SPACE	SATELLITES/SPACE
MOB	MOBILICOM LTD/AUSTRALIA	MILITARY EQUIPMENT
OEC	ORBITAL CORP LTD	DRONES
QHL	QUICKSTEP HOLDINGS LTD	MILITARY EQUIPMENT
TTT	TITOMIC LTD	MILITARY EQUIPMENT
UUV	UUV AQUABOTIX LTD	MILITARY EQUIPMENT
XTE	XTEK LTD	DRONES/MILITARY EQUIPMENT

## Satellites in the data intelligence space race

Space is the new frontier in defence, and there is demand for space systems to detect, track and catalogue objects in space that may present a threat to ground-based and aerial assets.

Australian intelligence data company **Kleos Space (ASX:KSS)** will utilise SpaceX's Falcon 9 rocket to carry several of its satellites into earth orbit, starting in mid-2021.

Under the company's Polar Vigilance Mission, four Kleos satellites will launch into a 500km sun synchronous orbit and travel over the Arctic Ocean and Antarctic continent.

The Australian company is a subsidiary of Luxembourg-based parent Kleos Space which it says collects reconnaissance data to disrupt illegal activity, protect borders and save lives.

Kleos Space is expanding its space-based earth coverage that uses radio frequency reconnaissance data, and its goal is to operate 20 satellite clusters to create a constellation for monitoring global events and key locations of interest.

"The launch of the Polar Vigilance Mission means we take another step on that journey, collecting more data, over new areas opening additional markets while also providing a higher value product for our existing customer base," chief executive Andy Bowyer said.

Aerospace company **Electro Optic Systems (ASX:EOS)** is also involved in space defence.

Its defence systems include laser physics, advanced optics, precision control systems, space domain sensors and communications technologies, and remote operated combat vehicles.

**The company is well positioned to benefit from Australian increases in defence spending of \$70bn to \$270bn over the next 10 years, announced in the 2020 Defence Strategic update.**

"Geopolitical tensions, asymmetric threats, defence spending and manufacturing stimuli in key EOS areas are increasing," a company presentation said.

"Global demands for advanced technology, real value-for-money, increased automation and responsive delivery all favour EOS."

The company thoughtfully outlined the new technological threats faced by 21st century society in its Battlefield of the Future pictogram.

### Defence forces face new technological warfare threats

#### Battlefield of the Future



Battlefield of the future: EOS presentation

## Robotics and drone technology

Drone technology was specifically mentioned in the Defence Strategic Update as one of a number of new military threats due to their low cost and difficulty to defend against.

Several Australian ASX companies operate in the unmanned aircraft or drones' space.

**Droneshield (ASX:DRO)** said the market for its counter-drone technology was expanding rapidly and expected to be worth \$US4.5bn (\$6.2bn) by 2026, driven by rising international tensions.

**The company has a number of contracts with police and military customers in Australia and** New Zealand, the European Union, and US and with civilian and airport agencies.

**Elsight (ASX:ELS)** has developed communication technology for real-time data, video and audio transmission over cellular networks and sees significant opportunities around drones.

Halo is the company's drone communication technology that allows unmanned aircraft to fly beyond the visual line of sight and is undergoing testing in California.

**Aerospace company Orbital (ASX:OEC)** is a world leader in the manufacture of integrated engine systems for **tactical unmanned aerial vehicles or UAVs**, such as its ScanEagle 3 model.

The company also manufactures aeroengines for Boeing from its Perth-based and US facilities and is developing a hybrid propulsion system for a vertical take-off and landing UAV with defence technology company Northrop Grumman.

**Aquabotix (ASX:UUV)** is a company in the defence space that provides underwater robotics products with machine-learning capability.

The company specialises in the design, development and commercialisation of micro-sized, autonomous products for defence applications.

SwarmDiver is a modular, flexible autonomous system for near shore or shallow water use that can be used for a number of military purposes.

**Xtek (ASX:XTE)** managing director Philippe Odouard said he had noticed a sharp change in how the Australian military had adopted the use of drone technology.

The company signed its first **sales contact with the Australian Defence Force** around three years ago, and since then has sold around 65 drone systems.

“What’s happening in defence at present time is they’re multiplying the types of drones they’re buying, with different requirements whether you’re in the navy or army,” he said.

“So there’s real tenders going out covering all sizes you can dream of — from an 18-gram device you can carry to what they call the Triton, which has a wingspan of a 757.”

There are now several levels of drones with different types of capabilities, he said.

“And each of them has different capabilities — some are more helicopter-like and able to land in narrow areas, others are winged aircraft built for longer endurance.”

## **Military equipment suppliers positioning for demand growth**

**Alexium International (ASX:AJX)** is a bedding supplier that has developed flame retardant nylon and cotton fabrics for military applications including its Alexiflam brand.

The company is supplying these products to the US military for testing and evaluation and expects to achieve its first commercial sales in 2022.

**Bisalloy Steel Group (ASX:BIS)** produces different types of steel including armour plate for Australia's ballistics, defence, naval, vehicles market and for **overseas customers**.

The company has increased its market share in the Australian steel products market and has a quarterly production target for armoured plate of 10,000 tonnes.

**Brainchip Holdings (ASX:BRN)** is a smart sensor analytics company whose products cover several markets, including video analytics, speech and speaker recognition.

The company says its technology can also be applied to autonomous vehicles and **unmanned aerial** surveillance drones.

**Bluchiip (ASX: BCT)** provides sample tracking technology for use in harsh environments and extreme temperatures.

The company's initial target market was in healthcare for secure tracking and tracing of biosamples, but it also has applications in security and defence and aerospace/aviation.

**Codan (ASX:CDA)** produces landmine detectors for defence and security force customers around the world and it has seen strong growth in this area.

The company also sells tactical communications equipment and has delivered Land Mobile Radio systems to customers.

The company's growth strategy is to expand into the \$10.5bn military market for tactical communications and to become a full systems provider for customers.

**Mobilicom (ASX:MOB)** a developer of 4G and 5G mobile technology which has some defence applications and it is also involved in drone and robotics research projects.

**Quickstep (ASX:QHL)** produces carbon fibre products for the aerospace industry including for the F-35 jet fighter program and wing flaps for the C-130 Hercules aircraft.

More than 90 per cent of the company's product is for export markets, and Quickstep aims to expand beyond its core defence market into commercial aerospace sectors.

Digital manufacturing company **Titomic (ASX:TTT)** is involved in **3-D printing** to create large scale industrial parts and produces anti-corrosion and ballistic protection equipment for defence from the light metal titanium.

The company is aiming for several defence industry sectors including, the \$50bn special coatings market, and \$30bn titanium boat hulls sector.

For the \$450m titanium rifle barrel market, the company said its system is 50 per cent cheaper and is 69 per cent lighter, and has a production time of only 4 minutes per barrel.

## **Focus on soldier survivability**

**XTEK (ASX:XTE)** is developing a range of defence-related products for its customers.

They include, tactical and protective equipment, explosive ordnance disposal robots and X-ray equipment, forensics, logistics, and advanced carbon fibre composites and spacecraft satellite and launcher systems.

“As global defence spending continues to grow and governments increase their focus on soldier survivability, Xtek remains well placed to capitalise on these market trends,” it said.

In 2020, the company achieved a number of key milestones, including acquiring US ballistics armour manufacturer HighCom Armor Solutions, and achieved first domestic and international orders for its XTclave plates.

The company has a long-term support and maintenance contract with the Australian Defence Force, provides products to government and law

and order agencies in Australasia, and secured a grant for space applications from the Australian Space Agency.

## **More ship orders for Austral from Australia**

Australia has a long coastline to defend and its navy has to patrol three large oceans.

Among the most established ASX companies operating in the defence sector is shipbuilding company **Austral (ASX:ASB)**. ASB operates ship yards in five countries – Australia, China, Philippines, the United States and Vietnam – and had \$2bn of revenue in FY2020.

Austral's order book pipeline is worth \$4.3bn and it has 45 ships under construction or scheduled to be built in its yards, and the company delivered 9 ships in the 2020 FY.

The shipbuilder is a part of a \$US1bn contract for unmanned vessel systems in the US, and its centre in Singapore is currently supports two ships in the region and is growing.

In Australia, Austral is building several commercial ferries, and 2 Cape class patrol boats for Trinidad and Tobago's coast guard, as well as supporting 2 Royal Australian Navy ships.

In May 2020, Austral was awarded its largest ever Australian vessel contract for six Cape-class patrol boats worth \$324m for delivery to the Royal Australian Navy.

“With 10 Capes currently in operation with the Australian Border Force and Royal Australian Navy, it is a smart, logical step to build upon existing fleet with additional vessels that will enhance the nation's ability to protect and secure our maritime borders,” chief executive David Singleton said.

Austral is also delivering 21 Guardian-class patrol boats for 12 Pacific Island nations and East Timor under the Pacific Patrol Boat Replacement project, and six boats have been delivered since 2018.

A growing fleet of Austral-built ships are entering service. In 2024 numbers are set to reach 32 ships built in its US shipyard, and 31 Australia-built ships, said a company presentation.

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