



## Titomic Commences Phase II Defence Program with TAUV

- Phase II Feasibility Program signed and commenced following TAUV's confirmation of 5 products
- 5 Defence products are within Soldier Systems and Soldier Sensors category
- Phase II will deliver Feasibility Report and prototypes of the 5 products manufactured using the Titomic Kinetic Fusion™ ("TKF") process.
- Successful completion of Phase II will commence Phase III for up to \$1.5M for production trials of the 5 products.
- Successful completion of Phase III will lead to the sale of TKF automated production line systems to product each product using the TKF patented process.

**Melbourne, Australia 7<sup>th</sup> December, 2018:** Australian metal additive manufacturing (3D printing) Company Titomic Limited (ASX: TTT) ("Titomic" or "Company") is pleased to announce the \$1.8 million exclusive defence program with TAUV Proprietary Limited ("TAUV") has commenced following execution of the Phase II Agreement.

Under the Phase II Agreement, Titomic will deliver a Feasibility Report with prototypes of each product to TAUV outlining the various performance parameters, mechanical properties and product cost advantages of using the TKF process to produce the 5 specific defence products selected by TAUV for a total cost of \$300,000 payable in accordance with completion milestones. TAUV will receive a product exclusivity period of 12 months from the date of agreement with Titomic whilst the development is completed, following which TAUV can pay a license fee to maintain exclusivity.

Soldier Systems and Soldier Sensors are classified as being any equipment which is intended to be personally carried, worn or deployed, used by military or civil security personnel and enhance the individual and unit collective safety, lethality, mobility and connectivity.

The Soldier Systems market alone is projected to grow from USD\$9.78 billion in 2018 to USD\$14 billion by 2023, at a CAGR of 7.65% from 2018 to 2023 <sup>1</sup>.

Market demand for military products has significantly expanded across the areas including:

- Unmanned Aerial Vehicle (UAV) market was estimated to be valued at US\$545 million in 2018 <sup>2</sup>;
- Combat helmets market is estimated to grow to USD\$3 billion by 2024 <sup>3</sup>;
- Body armour market is estimated to be valued at USD\$4 billion by 2024 <sup>4</sup>.

The Phase III, which is set to follow, will see Titomic design and engineer automated TKF manufacturing production lines for up to five (5) different TAUV's Soldier System products at a cost of \$300,000 per product for total revenue of up to \$1.5 million.

On successful completion of production and evaluation trials (Phase III), TAUV will purchase customised TKF automated production line systems to manufacture the products under individual exclusive product licenses for each product from which Titomic will receive ongoing royalty revenues.

The TKF process provides innovative capabilities for aerospace and defence organisations to produce next-generation, lightweight, high-performance military products using advanced 3D additive manufacturing techniques which achieve improved performance characteristics.

Titomic is the global leader in fully-automated digital metal manufacturing systems that compete directly with traditional manufacturing methods at comparable or reduced cost with enhanced performance properties.

**Sources:**

- 1 Soldier systems market by end user (military, homeland security), type (personal protection, communication, power and transmission, surveillance and target acquisition, navigation and health monitoring, vision), region - global forecast to 2023 (Research and Markets [https://www.researchandmarkets.com/research/fvpwkl/14\\_billion?w=5](https://www.researchandmarkets.com/research/fvpwkl/14_billion?w=5) ).
- 2 Teal Group. (n.d.). Estimated worldwide production value for unmanned aerial vehicles (military drones) from 2013 to 2022 (in million U.S. dollars). In Statista - The Statistics Portal.
- 3 Variant Market Research. Advanced Combat Helmet Market Overview <https://www.variantmarketresearch.com/report-categories/defense-aerospace/advanced-combat-helmet-market>
- 4 Global body armour market size \$4 billion USD in 2016 <https://www.grandviewresearch.com/industry-analysis/body-armor-market>

**About TAUV Proprietary Ltd (TAUV)**

TAUV is an Australian company specialising in the integration of electronical technologies into personnel soldier protection to develop intelligent platforms for advanced soldier systems to improve soldier safety and performance whilst enabling advanced tactical systems to ensure optimal operational advantage.

This UVAs and soldier system capabilities can also be applied to develop super lightweight protection and airborne assets for defence, law enforcement and civil industry. Force Ordnance purchased a 50% stake in TAUV during 2018.

For more information on TAUV, visit <https://tauv.systems>

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**About Titomic:**

Titomic (ASX:TTT) is headquartered in Melbourne, Australia. The company overcomes limitations of additive manufacturing (3D printing) for metals to manufacture complex parts without shape or size constraints. Titomic Kinetic Fusion offers manufacturing which enables speed-to-market, superior products with lower production inputs and using fewer resources for a more sustainable future.

Titomic systems can be customised to client requirements offering additive manufacturing advantages at industrial scale. Multiple robots can be utilised to scale up in both speed and size to compete with traditional subtractive manufacturing for industries such as aerospace, defence, resources (oil & gas, mining, industrial equipment), marine, construction, automotive and consumer & sporting goods.

Other benefits of the Titomic Kinetic Fusion technology include:

- Joining dissimilar metals and composites for engineered properties in a structure
- No heat-related oxidation or distortion issues when it comes to manufacturing large parts
- Reduced time to market with industry-leading deposition speeds

Titomic's business model involves providing clients with feasibility tests and manufacture of prototypes to work out the manufacturing costs of the product. Clients will be offered a licence to manufacture via Titomic Kinetic Fusion or choose to commission their own Titomic system. After the system sales, Titomic continues to support clients with powder and consumables supply, system upgrades, service and maintenance. For more information visit: [www.titomic.com](http://www.titomic.com)

**Forward-looking statements:**

Certain statements made in this release are forward-looking statements and are based on Titomic's current expectations, estimates and projections. Words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates," "guidance" and similar expressions are intended to identify forward-looking statements. Although Titomic believes the forward-looking statements are based on reasonable assumptions, they are subject to certain risks and uncertainties, some of which are beyond Titomic's control, including those risks or uncertainties inherent in the process of both developing and commercialising technology. As a result, actual results could materially differ from those expressed or forecasted in the forward-looking statements. The forward-looking statements made in this release relate only to events as of the date on which the statements are made. Titomic will not undertake any obligation to release publicly any revisions or updates to these forward-looking statements to reflect events, circumstances or unanticipated events occurring after the date of this release except as required by law or by any appropriate regulatory authority