

Funding boost for protection systems for the British Army

Press release

The Defence Science and Technology Laboratory (Dstl) confirms new investment that will increase scalable protection options for the UK's armoured land vehicles



New investment will exploit and build on the MIPS standard to demonstrate a modular, flexible Active Protection System

Funded by the British Army, the investment of £15 million over three years will enable Dstl to deliver the follow-on phase of the successful Icarus Technology Demonstrator Programme ([TDP](#)). The Icarus TDP, through Chief Scientific Advisor (CSA) funding, developed and demonstrated the Modular Integrated Protection System (MIPS) Open Architecture Standard (the MIPS standard) to Technology Readiness Level 5 (TRL 5).

This new investment will exploit and build on the MIPS standard to demonstrate a modular, flexible Active Protection System (APS) at high maturity (TRL 7).

The next stage of MIPS will enable the UK to continue to develop future capabilities, with advances through to 2040 to include:

- Improved sensors – multi-spectral devices are combined with increasingly sophisticated fast signal processing
- Improved information processing – including data fusion and artificial intelligence (AI)
- Improved effectors – current counter-munition and directed energy technology projects deliver precise effects to defeat a wider range of threats
- Improved high-speed directors – compact and affordable energy storage and motor drive technologies
- Improvements in electronic infrastructure component technologies –

exploiting safety and security features being developed elsewhere for industrial robotic and autonomous systems

Minister for Defence Procurement, Alec Shelbrooke said:

“Our Armed Forces keep us safe around the clock and it’s incumbent upon us to do all we can to protect them and adapt to future threats.

“The war in Ukraine has highlighted the importance of well protected armoured vehicles. We are supporting the Army to modernise and remain at the forefront of cutting-edge capabilities.

“This is an important step forward in researching the latest technology to improve protection for armoured vehicles, helping them prevent and repel attacks from the ground and air.”

Advanced APS is a critical enabler to achieving operational advantage and is a key function to enable survivability of the Army’s fleet of vehicles. MIPS provides a modular framework to exploit high maturity APS components and/or systems into a sovereign-designed solution that can be procured at pace, be supported through life, and be effectively integrated into mission systems.

The new activity will:

- Exploit previous CSA investment of £10 million into MIPS development
- Be an essential step towards developing an enduring approach for vehicle protection Research and Development (R&D)
- Boost UK industry by securing UK industrial capability in APS. It promotes Land APS activity with Industry as part of the Land Industrial Strategy
- Seek to build a UK industrial partnership in MIPS that increases exploitation opportunities and enables Army to benefit from the delivered capability options
- Work with a range of industry partners, including the UKACIA group (the UK APS Community of Interest and Action).

Dstl’s Active Protection expert Tom Newbery said:

“This is such an exciting opportunity for Dstl and Industry to work together to deliver a step change in vehicle survivability by taking MIPS to the next level of maturity. MIPS has the potential to open up a range of capability options for Army, improving vehicle survivability against the most challenging threats now and in the future.”

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