



1: FSP internal conference 2023

The Defence Science and Technology Laboratory (Dstl) is hosting its first Future Sensing and Position, Navigation and Timing (PNT) symposium on 20th and 21st November 2023. This event will provide insights into Generation-After-Next (GAN) technical defence challenges for sensing and PNT and promote discussion of future technologies and concepts.

In our rapidly changing world, sensor technologies increasingly underpin operations across military and civilian sectors, from autonomous mobility, to modern just-in-time logistics and industry 4.0 manufacturing. We continue to experience dramatic changes in terms of improving technological capability, proliferation of networked sensors and artificial intelligence enabled analytics.

In military capability and security operations, sensors are essential to provide data to help build a picture of the operational environment. They are used everywhere from space to underwater, supporting intelligence, surveillance and reconnaissance, to enhancing platform survivability and targeting within advanced weapon systems. However, as capability grows so does the challenge of ensuring the UK has an information advantage over adversaries. Future GAN environments are likely to present severe challenges to sensing as increased clutter creates congestion for sensors, targets become smaller and more mobile, and countermeasures become ever more complex and sophisticated.

The FSP symposium will welcome academics, industry partners including small and medium-sized enterprises and non-traditional defence suppliers, as well as colleagues from MOD and across government departments. The event provides space to network and discuss collaboration opportunities to work alongside Dstl scientists to shape future thinking on how to address these challenges.



2: Future Sensing and PNT programme

Event Details

The Future Sensing and PNT programme vision centres on creating revolutionary sensing concepts and novel underpinning technologies to deliver pervasive, resilient situational awareness and targeting. Realisation of these elements is essential to enable operational advantage and freedom of action against complex and diverse threats in challenging future congested and contested environments.

The event will cover:

- shared challenges for emerging sensing and PNT technologies in future operating environments, both inside and outside of defence
- how research and development investment can be harnessed in future approaches

The FSP 2023 event will feature a range of keynote speakers, technical presentations and interactive workshops, along with poster and networking sessions to encourage collaboration across the defence Enterprise. The event will be held as an in-person event and will take place in Nottingham at the East Midlands Conference Centre; however Dstl will also facilitate virtual attendance by live-streaming the main talks for those who are unable to physically be there.

At this year's event, presentations will consider advances and implications in topics including:

- The Future Operating Environment
- Distributed sensing and time transfer
- UK Quantum programme & quantum sensing
- Defence and civilian sensing technology: synergistic development

The FSP symposium will also include sessions for technical posters and Dstl-led workshops to consider and discuss challenges in areas such as:

- Radar systems
- Electro-optic systems
- Sensor fusion & management techniques
- Quantum sensing & timing technologies
- Alternative PNT technologies
- The future of sensing

To enable suppliers to work with MOD on Defence Sensing & PNT topics, the event will also include representatives from the key commercial frameworks (e.g. Serapis) and the Defence and Security Accelerator (DASA).

Posters are invited aligned with the themes of the conference and can be submitted using the FSPsymposium@dstl.gov.uk

Posters to be presented across the two conference days (20th & 21st November). Poster submission details will be provided following your pre-registration (see below). The poster submission deadline is 23rd August 2023.

Any information that is to be presented by any party at this symposium and further that is detailed within this event will be deemed to be in the public domain and therefore will not require further approval for its use by the receiving parties notwithstanding any rights of ownership of information set in law.

How to Register

This event requires pre-registration, please forward details to FSPsymposium@dstl.gov.uk by 6th October to indicate your interest in attending FSP 2023. Once your form has been accepted you will receive a link to the event registration portal.

FSP 2023 will be co-located with the Operating in the Future Electromagnetic Environment (OFEME) symposium 2023. Delegates registering for FSP 2023 can participate in sessions from both events.

More Information

Please contact FSPsymposium@dstl.gov.uk for any further information.