

NATO DIGITAL ANNUAL DISCIPLINE CONFERENCE 2025

20–23 May 2025 | NCI Academy, Oeiras, Portugal

Driving NATO's Digital Advantage Through Innovation

A high-level platform to shape the Alliance's digital future through transformative education, emerging disruptive technologies and operational integration.

FEATURED STRATEGIC PRESENTATIONS

Towards Point Zero

Setting the
Course for
NATO's
Digital
Discipline



Prof. Sam Medhat
Institute of Innovation and Knowledge Exchange CEO

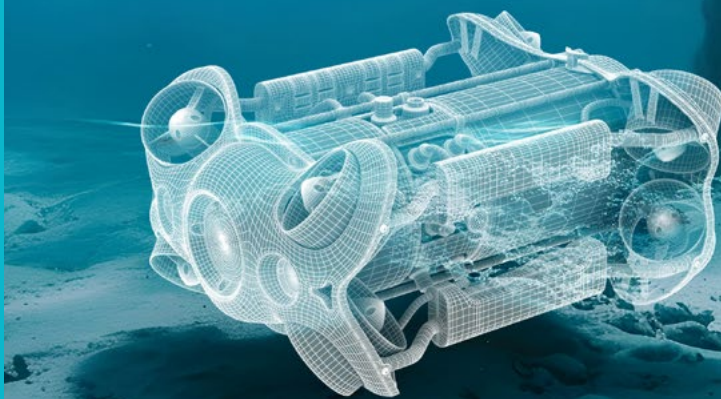


and **Senior Mentor** – NATO Allied Command
Transformation

This opening keynote by Prof. Sam Medhat marks a pivotal shift from legacy C3 structures to a new, data-centric, AI-enabled Digital Discipline. It lays out a forward-looking strategy for empowering force readiness, synchronising operations, and reinforcing decision dominance across the Alliance.

**This is where NATO begins its digital convergence—
towards Point Zero, where data, decisions, and domain
coordination unite.**

Using **Digital Twins** as a Best Composite Picture of Our Oceans



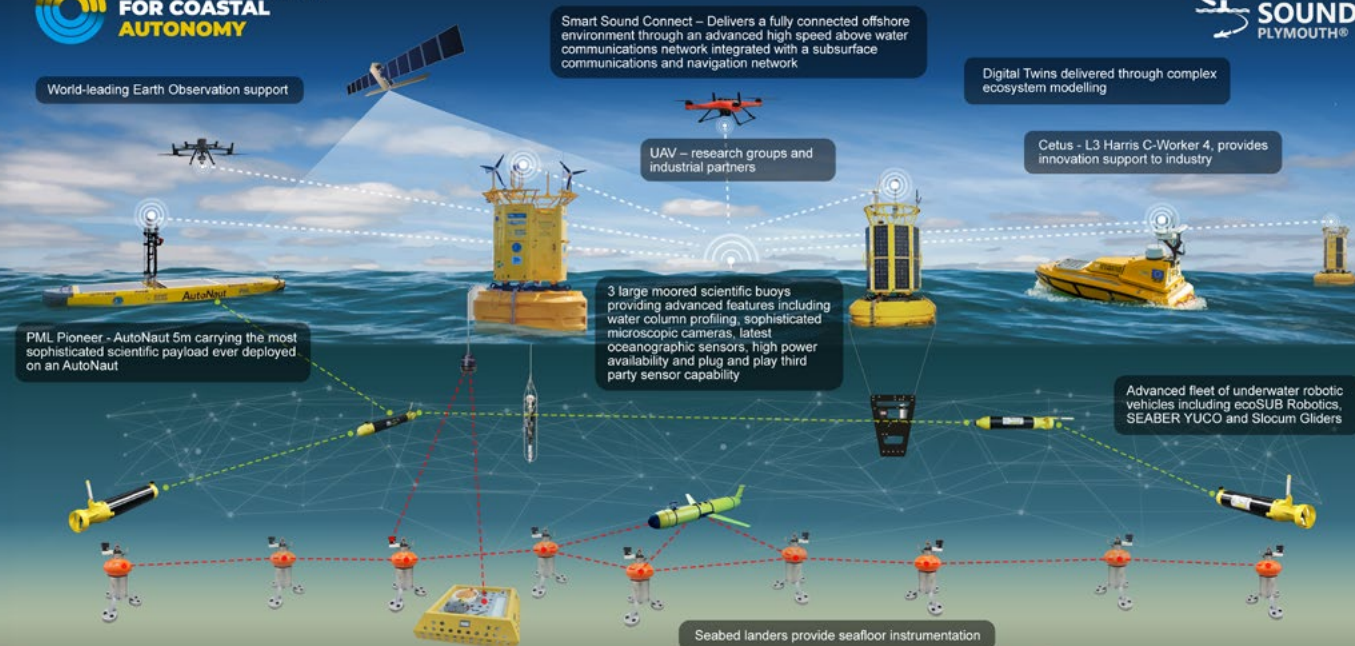
By combining
data and
simulation,
we unlock
predictive clarity
in a constantly
shifting maritime
domain.

PML | Plymouth Marine
Laboratory

Prof. James Prof James Fishwick,
Prof. Matthew Palmer & Dr. Tom Mansfield
Plymouth Marine Laboratories

Explore how **digital twin technologies** are revolutionising maritime situational awareness. This session highlights how dynamic, data-fed models of the ocean environment can enhance operational planning, undersea awareness, and environmental security—crucial for NATO's evolving maritime doctrine.

Advanced Maritime Above & Below Water Communications Systems



Prof. Alex Nimmo-Smith
University of Plymouth



Dr. Darryl Newborough
Sonardyne



Seb Leaver
Steatite

The future of joint maritime operations depends on seamless connectivity — from seabed to surface and beyond.

As NATO operations become increasingly joint and multi-domain, resilient communication systems are vital. This session showcases cutting-edge surface–subsurface communication technologies, including Smart Sound Connect, and their potential to transform above/below water interoperability in contested environments.



IKEinstitute.org