



Nordic Photonics Forum:

Photonics and Electronics 4 Defence

Workshop: 10:00-16:00, 21 October, 2025, Day 1 of OPS-2025 at Electrum in Kista, Stockholm, Sweden

Photonics & Electronics 4 Defence

Stockholm | 21 October 2025

Workshop and Exhibition

- » Talks by Photonics Experts and End-users
- » Networking & Matchmaking
- » Exhibition



Registration: *Photonics and Electronics 4 Defence*

Workshop participants *free of charge*: <http://dinkurs.se/NFPOPS2025Workshop>

Web: <https://photonicsweden.org/event/workshop-on-photonics-electronics-4-defence-21-october-2025/>

Save the date! Workshop on Photonics & Electronics 4 Defence, 21 October 2025

In today's rapidly evolving landscape, companies face complex decisions around technology selection and strategic investments. This event offers networking opportunities, showcasing innovative solutions, engaging with end-users, and exploring collaborations and funding prospects. The workshop on Photonics & Electronic 4 Defence offers a unique platform to:

- Gain insights into the latest R&D trends
- Connect with academic and industrial leaders
- Explore solutions to cross-sector challenges
- Discover the future of photonics in defence, manufacturing, and quality assurance

Swedish photonics companies can prepare for the EU defense industry by focusing on key areas like:

- night vision and imaging,
- secure communication systems,
- and laser technology.

They should also prioritize:

- supply chain security,
- dual-use technology development,
- and active participation in EU research and funding initiatives.

Background:

(Stockholm, 28 April 2025) World military expenditure reached \$2718 billion in 2024, an increase of 9.4 per cent in real terms from 2023 and the steepest year-on-year rise since at least the end of the cold war. Military spending increased in all world regions, with particularly rapid growth in both Europe and the Middle East. The top five military spenders—the United States, China, Russia, Germany and India—accounted for 60 per cent of the global total, with combined spending of \$1635 billion, according to new data published today by the Stockholm International Peace Research Institute (SIPRI), available at www.sipri.org.

The European Union needs to strengthen the European Defence Technological and Industrial Base (EDTIB) and achieve defense industrial readiness.

https://defence-industry-space.ec.europa.eu/eu-defence-industry/edis-our-common-defence-industrial-strategy_en

First ever defense industrial strategy and a new defense industry programme to enhance Europe's readiness and security

https://defence-industry-space.ec.europa.eu/document/download/333faee1-a851-44a6-965b-713247515d39_en?filename=DEFIS_EDIS_factsheet.pdf

As a first immediate and central means to deliver the Strategy, the European Commission today tables a legislative proposal for a European Defence Industry Programme (EDIP) and a framework of measures to ensure the timely availability and supply of defence products.

The European Defence Industrial Strategy (EDIS) is a document released on 5 March 2024 by the von Der Leyen Commission, which suggested to switch to "war economy mode" due to the 2022 Russian invasion of Ukraine and fears over Donald Trump's rumoured withdrawal from NATO.

- The EU's Defence Industrial Strategy, unveiled in March 2024, aims to bolster the European defence industry and enhance the EU's overall defence readiness by 2035.
- A core aim is to increase collaboration among EU member states in the procurement of defence equipment, aiming for at least 40% of defense acquisitions to be done jointly by 2030, according to the European Parliament
[https://www.europarl.europa.eu/RegData/etudes/BRIE/2024/762402/EPRS_BRI\(2024\)762402_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2024/762402/EPRS_BRI(2024)762402_EN.pdf) .
- The strategy encourages greater trade of defence goods within the EU, targeting 35% of the EU defence market value by 2030, according to the EEAS
https://ec.europa.eu/commission/presscorner/detail/en/ip_24_1321 .
- A key target is to ensure that at least 50% of the EU's defense procurement budget is allocated to products manufactured in Europe, according to a YouTube video <https://www.youtube.com/watch?v=o3WlW-5RwOk> .
- In 2024, EU countries collectively spent an estimated €326 billion on defense, which is approximately 1.9% of their combined GDP. This represents a significant increase from €240 billion in 2022, with a projected further increase of at least €100 billion by 2027.
- Overall, the EU's Defence Industrial Strategy represents a significant step towards a more integrated and capable European defence industry, aiming to enhance the EU's security and strategic autonomy.

The Strategy sets indicators, aimed at measuring Member States' progress towards industrial readiness. Member States are invited to:

- Procure at least 40% of defence equipment in a collaborative manner by 2030;
- Ensure that, by 2030, the value of intra-EU defence trade represents at least 35% of the value of the EU defence market;
- Make steady progress towards procuring at least 50% of their defence procurement budget within the EU by 2030 and 60% by 2035.
- EDIP includes both financial and regulatory aspects. EDIP will mobilise **€1.5 billion of the EU budget over the period 2025-2027**, to continue enhancing the competitiveness of the EDTIB.

Photonics – an essential technology for defence

Photonics21 – European Technology Platform



https://www.photonics21.org/download/ppp-services/photonics-downloads/Photonics_for_Defence_FINAL_C3.pdf

Most modern warfare aspects involve at least one photonics device or piece of equipment. The table below provides an overview of the applications of photonics technologies.

Warfare domain	Intelligence, Surveillance, and Reconnaissance (ISR)	Survivability & lethality	Mobility	Connectivity
Photonics functions	Observation & surveillance	Fire control & protection	Vision Enhancement	Communication
Cameras & sensors	Night sights IR cameras on various platforms	Weapon sights Missile warning systems	Helmet sights Driver vision enhancement	N/A
Lasers	Laser Rangefinders and Lidars in turrets and pods	Pods for target designation	Lidars for enhanced vision	Free Space Optics communication
Fibers	Fiber sensors and monitoring systems	Fiber sensors for protection	Fibers for avionics systems	Secure communication for operations

Table 2: Overview of the applications of photonics technologies for defence Source: TEMATYS/Photonics21, 2023.

Military expenditures The figure below presents the military expenditures for a selection of countries.

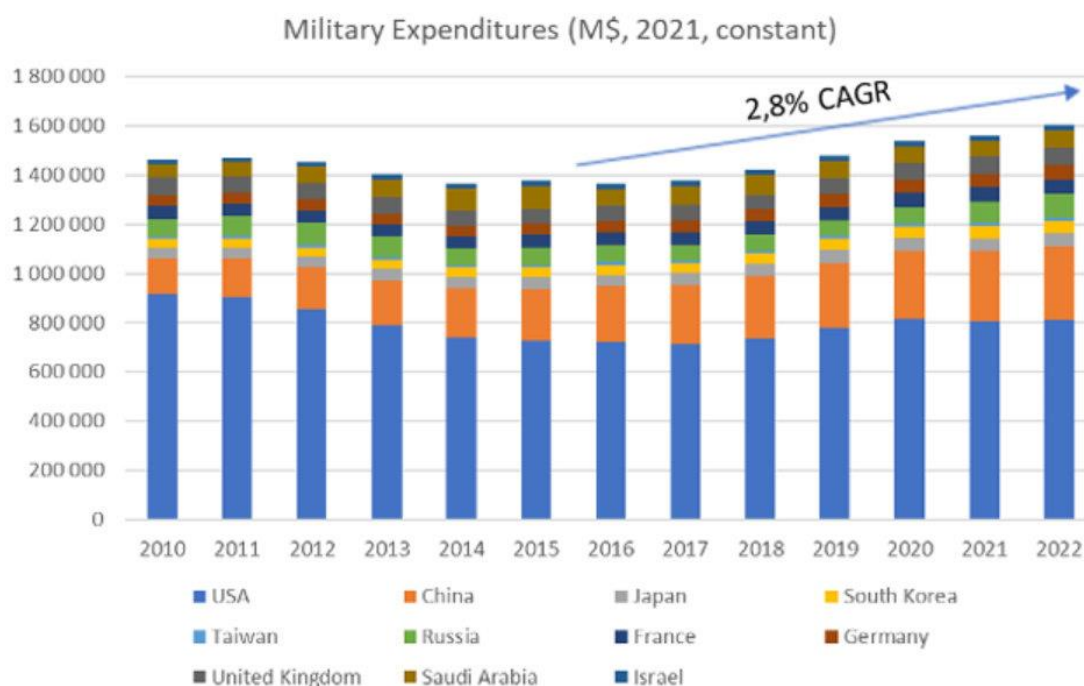


Figure 1: Military expenditures from 2021 to 2022 for a selection of countries (\$ million) Source of data: SIPRI Military Expenditure Database 2023, <https://www.sipri.org/databases/milex>