

[nature](#) > [news](#) > article

NEWS | 15 January 2025

Will Europe ramp up defence research? War prompts major rethink

Nations consider increasing universities' involvement in military research.

By [Elizabeth Gibney](#)



The German military received an extra €100 billion of investment after Russia invaded Ukraine in 2022. Credit: Axel Heimken/AFP via Getty

A drive to increase university participation in military research is gaining pace across Europe – and meeting resistance.

The European Commission is proposing ways to boost dual-use research – that with both civilian and military uses – including by bringing such studies into its [flagship multibillion-euro research programme](#), from which they have historically been excluded. In Germany, the government is encouraging institutions to overturn decades-old policies that restrict research to peaceful purposes.

“There is a lot of pressure at the moment on research institutions and universities to change their long tradition in peaceful and civilian research, towards a more politically oriented policy,” says Hannes Jung, a particle physicist at the German Electron Synchrotron (DESY) in Hamburg and member of the Science4Peace Forum, which campaigns to use science to promote peace. “I find that extremely worrying.”

RELATED



[The UK's \\$1-billion bet to create technologies that change the world](#)

The push comes amid increasing militarization of European research, which began after [Russia's incursions in Ukraine in 2014](#) and ramped up following the [full-scale invasion in 2022](#). Boosting dual-use research is part of the European Union's response to a “more threatening geopolitical context”, commission president Ursula von der Leyen has said.

Unlike after the Second World War, when government-backed military laboratories

were major research hubs that often spun-out civilian applications, today the military must “spin in” innovation from universities and industry, says James Black, who studies defence policy at RAND Europe, a research consultancy in Cambridge, UK.

Defence spending

The EU is in a different situation from the United States and China, which spend vastly more on military research and where academia and defence typically have closer ties. In China, researchers are often incentivized to engage with the military, says Fiona Quimbre, a senior analyst at RAND. Chinese military and academic centres are often located together, and many of their leaders have spent time working in both domains, she says. “The networks they’ve created are something that takes years to gain,” she says.

Meanwhile, Japan – which since the Second World War has been a pacifist nation – has over the past decade begun [investing in research with possible military applications](#).



How involved European universities are in defence varies. Some institutions in western Europe have long-standing defence ties, but connections are more common in nations with a history of being invaded, for example in eastern Europe, as well as Nordic nations. Other nations have avoided such work.

What Japan's election means for controversial defence research

The push to increase military research comes amid rising defence spending by EU countries. Investment grew by 10% from 2022 to 2023, to €279 billion (US\$287 billion,) according to the European Defence Agency. Spending on research by the European Defence Fund

(EDF), the EU's main funder of military research and development, will rise [to €2.7 billion for the 2021–27 period](#).

But the EDF has struggled with academic engagement. The bulk of its funding awards go to semi-governmental research, technology organizations, large defence industries and smaller companies.

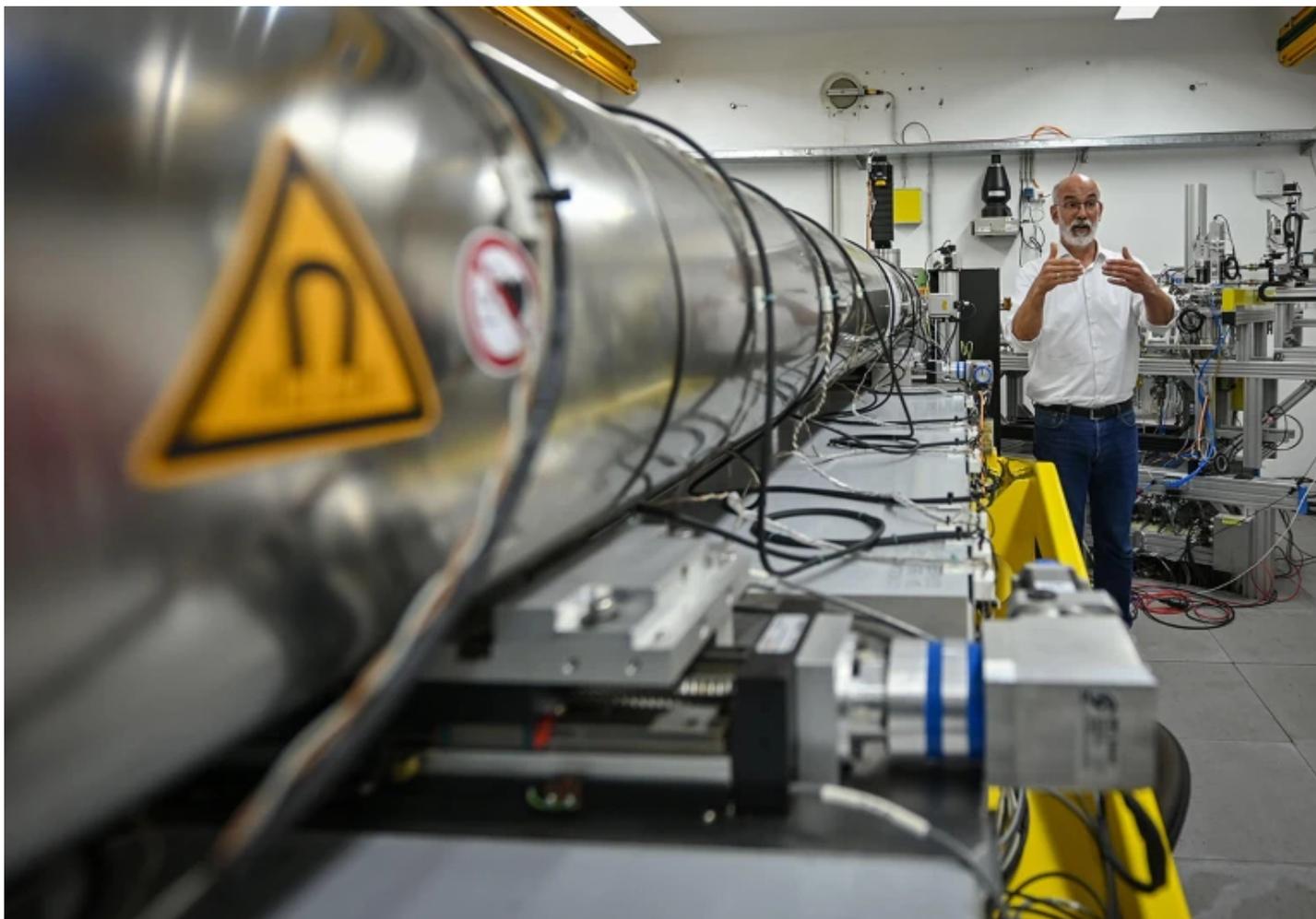
Some researchers might ethically object to doing military research, but many don't engage because of a lack of access or incentive, says Black. Military research can restrict collaboration and prevent publication, and there might be only a small market for products.

Civil versus military

Now, the European Commission's [new commissioners](#), who began their terms in December, will explore how the bloc might better harness the potential of dual-use research, says a commission spokesperson.

A white paper published last year proposed introducing dual-use research into the EU's main civilian-research programme¹, potentially in the next 'framework programme' known as FP10, which begins in 2028. Universities largely rejected this idea during consultation. Instead, academic groups preferred one of the commission's alternative suggestions, to improve existing separate civilian- and military-funding schemes.

Merging the streams in the framework programme risks increasing bureaucracy and reducing international cooperation and resources for civilian research, says Walter Rosenthal, president of the Bonn-based German Rectors' Conference, an association of 269 universities.



DESY, Germany's largest particle-physics lab, is consulting staff on whether dual-use research can be conducted at the facilities. Credit: Patrick Pleul/dpa via Alamy

Germany pivots

The question of whether and how to grow university involvement in defence is particularly thorny in Germany, where more than 70 institutions include a voluntary “civil clause” in their mission statements or constitutions prohibiting military research.

For decades, Germany has adopted pacifist policies owing to its role in the Second World War. The government overhauled that stance in 2022, after Russia's invasion, allocating €100 billion to upgrade the country's armed forces.

The effects are now filtering through to science. Germany's federal research

ministry last year called for researchers to “reassess” strict separations between civil and military research, and pledged to examine ways to incentivize collaboration between those areas.

RELATED



A science mega-programme is taking shape in the EU: what it means for researchers

Managers at DESY, the country’s largest particle-physics lab, are consulting staff on to the extent to which work with “high dual-use potential” can take place at the facilities, which are also used by external researchers. DESY leadership expects to reach a conclusion by mid-2025, says Thomas Zoufal, a lab spokesperson. The organization’s own research programme and strategy for the coming years will remain unchanged, he adds.

Regional laws

Shifts are also happening regionally. In the state of Hesse, the government’s coalition agreement for 2024–29 includes a commitment to support universities in reviewing civil clauses.

In North Rhine-Westphalia, a law drafted in September clarifies that a commitment to a “peaceful” society is not in conflict with military research. And in July, Bavaria passed a law pre-emptively prohibiting civil clauses and instructing universities to cooperate with the army when ordered by the Ministry of Science.

Many academics are unhappy with the law, says Martina Borgendale, chair of the Bavaria branch of the German Education Union. At a recent rally, some university staff told the union they were afraid of speaking out “because they fear consequences” for their career, she says.

Jonathan Beullens, a peace campaigner and biophysics student at the University of Frankfurt, worries about attempts to redefine ‘peace’ to include ‘peace through security or war’. Another concern is that growing research spending by the Federal Ministry of Defence could create a “financial back door” that shifts the goals of science, he says.

doi: <https://doi.org/10.1038/d41586-025-00117-z>

References

1. European Commission. Report No. COM(2024) 27 final (European Commission, 2024).
-

[Reprints and permissions](#)

Latest on:

[Funding](#) Government Policy

Philanthropic foundations must step in to shield science from Trump's cuts

CORRESPONDENCE |

14 JAN 25



Give 'science for peace' a chance

EDITORIAL | 18 DEC 24



How Elon Musk's partnership with Trump could shape science in the US – and beyond

NEWS | 13 DEC 24

Nature (*Nature*) | ISSN 1476-4687 (online) | ISSN 0028-0836 (print)