

EU Non-Proliferation and Disarmament Consortium

Promoting the European network of independent non-proliferation and disarmament think tanks

E-newsletter of the European Network of Independent Non-Proliferation and Disarmament Think Tanks

CAN A UK EXTENDED NUCLEAR DETERRENT WORK FOR EUROPE?: AN INTERVIEW WITH ANDREW J. FUTTER – UNIVERSITY OF LEICESTER

Andrew Futter is Professor of International Politics at the University of Leicester UK, where he specialises in contemporary nuclear weapons and security issues. He is currently leading the European Research Council-funded “Third Nuclear Age” project and is the author of numerous books and articles, including most recently “The Politics of Nuclear Weapons” (2021), and “The Global Third Nuclear Age” (2025). He has held visiting positions at a number of leading institutions, including the James Martin Center for Nonproliferation Studies in Monterey and the Nobel Peace Institute in Oslo, and regularly provides expert testimony and advice to governments and NGOs.

What is the current state of debate in the UK regarding the future of Europe’s deterrence?

Thinking in the UK about a changed deterrence context can probably be traced back to the 2014 Russian annexation of Crimea, but the full Russian invasion of Ukraine in 2022, subsequent nuclear threats made against the UK on Russia media, and more recent concerns about the US commitment to European security, have magnified this. The UK – like many other European nations – is reassessing the ways, ends and means of deterrence for a context that seems markedly different to the “second nuclear age” and “war on terror” framings that followed the Cold War. Along with the US, and unlike France, UK nuclear weapons “are assigned to the defence of NATO”. The UK sees itself playing a key role in European deterrence and working with European allies, but this is clouded slightly by the decision to leave the European Union in 2016.

The British nuclear deterrent extensively relies on US technology and assistance. How would the US-UK nuclear sharing work in the context of a potential UK role in European nuclear security?

Only the UK Prime Minister can authorise the use of UK nuclear weapons – there is no US veto or “off-switch” – they are operationally independent. The UK does utilise technological cooperation with the United States for its nuclear warheads, but these are designed, built and maintained by – and in – the UK. These warheads are deployed on Trident D5 submarine-launched ballistic missiles that are leased from a common pool, built and maintained in the US. The UK builds and maintains its own fleet of four nuclear-powered, nuclear-armed submarines. This is very different to the NATO “nuclear sharing” agreement that sees around 100 US nuclear weapons deployed at several European airbases and that might be used by Belgian, Dutch, German or Italian air forces in a time of war. It is difficult to see how “nuclear sharing” with European allies would work in the UK context. Unlike France or the US, the UK does not have an air-based nuclear delivery system that could be deployed to the territory of allies.

Since the UK retired its free-fall nuclear bombs in the 1990s, its nuclear deterrence commitment to NATO relies on one submarine being hidden somewhere in the North Atlantic ready to retaliate. This is known as continuous-at-sea-deterrence.

Given the aging Vanguard-class submarines and the increasingly complex and challenging anti-submarine threat environment, how credible could the UK’s current nuclear posture be in the near to mid-term?

This is difficult to judge. The challenge of finding a very quiet submarine in a very large ocean remains very difficult (even for the United States – by far the most capable actor in this domain). But anti-submarine warfare technologies are improving, and the current fleet of UK nuclear submarines are getting older and require increasing amounts of time for repair and overhaul. Under previous plans the UK would be replacing these submarines now, but the deployment of the new “Dreadnought-class” has been delayed until the mid-2030s. A concurrent concern, and one cited by a former UK Secretary of Defence, is the ability to penetrate an adversary’s ballistic missile defences. While the UK no longer publicises the number of missiles and warheads on each submarine when it is on patrol, significant increases in capability of systems designed to shoot down warheads would potentially cause a problem for a “minimum deterrent” force such as that operated by the UK. By building a new fleet of submarines and a new warhead (known as “Astraea”), the UK is putting in place a nuclear deterrent framework for well into the second half of this century. It is at least conceivable that the UK government may decide that credible nuclear deterrence involves augmentation of this force structure. One possibility is building an additional submarine, another is applying to join the NATO nuclear sharing arrangement by buying F35a aircraft and playing host to US nuclear bombs. Perhaps least likely is that the UK may decide to reconstitute a sovereign air-delivered nuclear platform (either indigenously or perhaps with France).

THE NARROW PATH TO A US-IRAN NUCLEAR DEAL

On April 12, U.S. and Iranian officials held their first round of indirect nuclear talks in Muscat, Oman—the most substantive engagement since Washington’s withdrawal from the Joint Comprehensive Plan of Action (JCPOA) in 2018, which was designed to ensure that Iran’s nuclear program remains exclusively peaceful. Several rounds of indirect talks between Iranian Foreign Minister Abbas Araghchi and U.S. envoy Steve Witkoff have followed, suggesting a mutual interest in reviving diplomacy. Yet, the negotiations remain shrouded in deep uncertainty. While the Trump administration maintains its goal of preventing Iran from acquiring nuclear weapons, its messaging has been disconcertingly inconsistent. In the span of just three weeks, senior officials have taken a bewildering array of positions—ranging from “zero enrichment” and “dismantlement by force” to “limited enrichment” and even a revival of the JCPOA’s original 3.67% cap. This raises a fundamental question: does the Trump administration have a coherent Iran policy? Beyond broad statements about preventing a nuclear-armed Iran, it remains unclear whether Washington has defined a package of concrete demands and credible offers. This lack of clarity not only weakens Washington’s negotiating posture but also casts serious doubts on the credibility and durability of any prospective deal. For Tehran, the stakes are clear: avoid a military confrontation and obtain a badly needed economic relief through the lifting of international sanctions. Yet, preserving the right to enrich uranium remains non-negotiable. Moreover, the state of Iran’s nuclear program is today much more advanced than in 2015, when the JCPOA was signed. The country holds over 7,000 kg of enriched uranium, including 275 kg enriched up to 60%—a level close to weapons-grade—and operates advanced centrifuges such as the IR-4 and IR-6, which significantly shortens the breakout timeline. These developments, coupled with ongoing gaps in international monitoring, mean that any credible agreement should go beyond freezing Iran’s program; it should roll it back decisively. Technically, this would require Iran’s stockpile of 60% enriched uranium—which has no plausible peaceful application—to be down-blended or exported under international oversight. Enrichment would need to be capped at around the thresholds set by the JCPOA, with intrusive verification mechanisms fully reinstated. Since February 2021, Iran has restricted IAEA access to critical facilities, creating serious monitoring gaps. Any sustainable agreement should therefore re-establish comprehensive, full-spectrum monitoring across the entire fuel cycle—including research and development sites and locations with potential military dimensions. Crucially, Iran should also reimplement the IAEA Additional Protocol to ensure timely and unrestricted inspections and greater transparency. The ongoing US-Iran talks have created a narrow window of opportunity. Still, the absence of a coherent and stable US stance risks weakening the diplomatic momentum before it has a chance to consolidate. In parallel, the recent Houthi missile strike on Israel’s Ben Gurion airport has underscored the volatile security environment and raised renewed fears of broader escalation. Time is not on diplomacy’s side. Without immediate and verifiable limits on enrichment, and a rapid restoration of IAEA access, Iran risks entrenching a threshold nuclear status while talks drag on. Both Tehran and Washington have strategic incentives to avoid war, but converting that shared interest into concrete, enforceable commitments will require more than tactical flexibility—it will require political coherence and a shared understanding of what a viable deal entails.

Ludovica Castelli, Project Manager, Nonproliferation and Disarmament Programme, IAI

Latest Publications

Non-Proliferation, Nuclear Technology and Peaceful Uses: Examining the Role and Impact of Export Controls. Giovanna Maletta, Mark Bromley and Kolja Brockmann. EU Non-Proliferation and Disarmament Papers No.95. April 2025.

Clearing the Path for Nuclear Disarmament: Confidence-building in the Korean Peninsula. Tytti Erästö. SIPRI. April 2025.

Nuclear Facilities as Targets of Military Attack. Darya Dolzikova. RUSI. April 2025.

Panorama Nuclear Global. Manuel Herrera. IEEE. April 2025.

Understanding the Principle of Irreversibility: A Primer for Future Negotiations. Noah Mayhew and Nikolai Sokov. Vienna Center for Disarmament and Non-Proliferation. April 2025.

Network Calls

SIPRI's Armament and Disarmament Cluster is hiring a Researcher, with specific focus on biological weapons or biological and chemical weapons, to join the Weapons of Mass Destruction (WMD) Programme. The deadline to apply is 16 May 2025.

More info: [here](#).

The Vienna Center for Disarmament and Non-Proliferation (VCDNP) is recruiting an intern for fall 2025, under the Japan Chair for a World without Nuclear Weapons programme. The deadline to apply is 18 May 2025.

More info: [here](#).

ELN is looking for a Policy and Impact Director. The deadline to apply is 9 May 2025.

More info: [here](#).

Call for Papers - Ettore Greco and Chiara Cervasio are chairing a panel at SISP 2025 "Nuclear Politics in an Era of Multipolar Strategic Competition". Submit an abstract to ccervasio@basicint.org and e.greco@iai.it by 16 May 2025.

More info: [here](#).

EU NEWS

EU STATEMENT - UNITED NATIONS DISARMAMENT COMMISSION GENERAL DEBATE, 7 APRIL 2025.

More Info: [here](#).

EU STATEMENT - THIRD PREPARATORY COMMITTEE FOR THE 11TH REVIEW CONFERENCE OF THE PARTIES TO THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS (NPT): CLUSTER I, 1 MAY 2025.

More Info: [here](#).

NETWORK NEWS

CONVENTIONAL WEAPONS DIVERSION AND YOUNG WOMEN AND NEXT GENERATION INITIATIVE (YWNGI) MENTORSHIP ALUMNI REGIONAL MEETING IN BRUSSELS

The Vienna Center for Disarmament and Non-Proliferation (VCDNP) and the International Affairs Institute (IAI), within the framework of the Young Women and Next Generation Initiative (YWNGI), organised the first Mentorship Alumni Regional Meeting for participants of the YWNGI Mentorship Programme. The event was held on 15 April 2025 at the Flemish Parliament in Brussels, in collaboration with the Flemish Peace Institute.

More info: [here](#).

BASIC AND RECNA AT NAGASAKI UNIVERSITY ARE LAUNCHING A NEW COLLABORATION: "ASSEMBLING PEACE THROUGH DIALOGUE"

This project is generously supported by the PCU Nagasaki Council for Nuclear Weapons Abolition (PCU-NC) — a consortium of Nagasaki Prefecture, Nagasaki City, and Nagasaki University — and seeks to reimagine how we pass on memory and responsibility across generations. By forming a study group made up of young researchers and students from Japan and around the world, we will explore the question: What responsibility must each generation bear to protect humanity and the planet from existential risks, including those posed by nuclear weapons? As the number of hibakusha diminishes each year, and global attention to nuclear issues fades, this project offers a timely and much-needed opportunity to foster empathy, deepen imagination, and support new generations of peacebuilders — grounded in dialogue and memory.



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