Dr Nicola Leveringhaus, Lecturer, War Studies, School of Security Studies, King's College London – Written evidence (TRC0029)

Chinese-UK Engagement on Nuclear Weapons Issues

21 May 2021

Summary

Nuclear diplomacy is an area of proven engagement between the United Kingdom and China. Both are part of the P5 process since 2008/9, where the UK was influential in bringing China on board. There are other areas where the UK can engage with China, specifically a dialogue on working practices regarding the management of a sea-based nuclear deterrent; and joint activities concerning verification. Yet further cooperation may be hampered by strains in the broader bilateral relationship, including the civil nuclear sphere, where Chinese involvement in UK nuclear power projects is being viewed in an increasingly negative security light.

Background[1]

China likens itself to the UK in the nuclear context based on several shared characteristics, notably the similar size of its arsenal (both have less than 400 nuclear warheads) and a preference for minimal forms of deterrence. That said, China also makes clear certain nuclear related differences from the UK, namely that China is not part of an extended nuclear deterrent arrangement (the UK is a member of NATO) and that China maintains a de-alerted nuclear force based on a declared pledge since 1964 of No First Use (NFU), unlike the UK.

China, the UK and the P5 process

In the 2000s, the UK-China nuclear relationship has deepened, in large part because of UK efforts to engage the Chinese in bilateral dialogues (tracks 1-2) and the P5 process since 2008/9.
Since joining the P5 process, China has demonstrated genuine initiative, from compiling a Glossary of Key Nuclear Terms to re-starting the process following a two-year hiatus, by hosting a meeting in Beijing in 2019. At that meeting, member states reportedly started to discuss

[1] For more, see Nicola Leveringhaus, 'China, the United Kingdom and Global Nuclear Diplomacy', part of a collection of written evidence (NPT0032) from CSSS experts, submitted to the inquiry into The Nuclear Non-Proliferation Treaty and Nuclear Disarmament, U.K. House of Lords, Select Committee on International Relations, January 18, 2019. https://kclpure.kcl.ac.uk/portal/files/107222122/Evidence_submitted_to_Inquiry_on_Nuclear_Non_Proliferation_Treaty_and_Nuclear_Disarmament.pdf

nuclear doctrines, though it is unclear how these discussions have developed since then. China is now compiling a second edition of the glossary. While the first and second editions of represent an important diplomatic achievement, with benefits for mutual understanding and transparency among nuclear weapons states, deeper progress on disarmament has not yet emerged as part of the P5 process. Less positively, at times, participation in the P5 process has placed China at odds with its own diplomatic agenda. Specifically, China has been at pains to balance P5 unity with its own allegiances to Non-Nuclear Weapons States (NNWS)' concerns over the Treaty Prohibiting Nuclear Weapons (TPNW). China joined the P5 statement that rejected the TPNW, but its own past statements (via the Chinese Foreign Ministry) have been more sympathetic to the disarmament goals of the TPNW.

Since 2009, there seem to be two main grounds for cooperation within the P5 process between the UK and China:

(1) The UK has strengths in two nuclear areas of interest to China: firstly, maintaining a credible sea-based deterrent; and secondly, verification. Concerning the first, China has been making progress in developing, for the first time, a sea based nuclear deterrent and was likely interested in Britain's longer experience of maintaining SSBNs. As for the second area, the UK-Norway verification initiative was of interest to the Chinese, notably because this initiative did not involve the United States.

(2) Sustained UK efforts to project itself internationally as acting responsibly in the management and reduction of its nuclear arsenal complemented Chinese efforts in the 2000s to portray itself as restrained and responsible in the nuclear domain. This remains true in the Xi era, as China labels itself a responsible nuclear power in official documents and reports.

Moving forward, as the founder of the P5 Process, the UK could attempt to reinvigorate the process further, developing the discussion of nuclear strategies that started in 2019 to manage growing nuclear tensions within the group, particularly between China and the United States.

Building on shared interests and commonalities around verification and SSBNs

The UK has a strong record on **verification**. Given that China is outside the International Partnership for Nuclear Disarmament Verification (IPNDV), the UK could engage China in a separate verification process, perhaps linked to the UK-Norway initiative, with a view to understanding China's position on verification matters beyond its borders, specifically related to North Korea. China has displayed interest in verification yet seems to have limited experience of working on this issue in a multilateral

forum beyond the P5 process (at present China has been working on verification through the China Academy for Engineering and Physics). As American pressure on China to engage in arms control grows, involving China in discussions around verification will likely become more urgent at a technical level – so that China has a community of experts in this area - but also at a political level, in order to reassure China of the practical value of verification in the arms control process.

The UK could encourage, if it is not doing so already, a dialogue, at various levels with the Chinese to explore issues of strategy, safety, and command and control in relation to a **sea-based nuclear deterrent**. In terms of safety, worryingly, there are no agreements like the 1971 Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War or the 1971 Prevention of Incidents on and over the High Seas to regulate nuclear behaviour at sea today. The legal instruments that exist, such as the Codes for Unplanned Encounters at Sea, have not yet been expanded to include mention of ballistic missile submarines (SSBNs). The risk is real as collisions between SSBNs are not impossible. For example, in 1984, a Soviet submarine became entangled in the nets of a Norwegian fishing trawler. Much later, in 2009, two SSBNs, the British HMS Vanguard and French Triomphant, collided in the Atlantic Ocean. More recently, in 2019, it was reported that a Chinese SSBN had to surface in the South China Sea, near to a Vietnamese fishing boat, just off the Paracel Islands.

In terms of strategy, there is no shared view among nuclear navies as to what types of conventional attacks, if any, would illicit a nuclear response. Nor are there shared views on how deterrent patrols should be conducted and communicated, and ways to reduce escalatory signalling during military exercises (especially joint exercises) among nuclear and conventional navies of the Indo-Pacific (a geographical area highlighted in the 2021 UK Integrated Review). [2] As nuclear weapons states with sea-based deterrents, the UK and China could engage in a discussion of maritime nuclear strategy, including debating whether all nuclear navies really need Continuous at Sea Deterrence (CASD) to bolster deterrence. While the UK has long maintained CASD, it is not yet clear whether China seeks this capability. Indeed, it also remains unclear how many SSBNs China intends to build, but most external estimates go no higher than ten SSBNs.

The danger of conflation: civil-military nuclear cooperation

Cooperation between the UK and China in the management of nuclear weapons should be protected from other areas under strain in the

[2] UK Integrated Review, 16 March 2021, https://www.gov.uk/government/publications/global-britain-in-a-competitive-age-the-integrated-review-of-security-defence-development-and-foreign-policy/global-britain-in-a-competitive-age-the-integrated-review-of-security-defence-development-and-foreign-policy

bilateral relationship such as UK-China nuclear energy cooperation. In the last decade, Chinese investment in civil nuclear projects in the UK through the General Nuclear Power Corporation (CGN) have come under increasing domestic scrutiny, raising security concerns not dissimilar to those voiced regarding Huawei in 2020. Three nuclear projects are of note here: the **Hinkley Point C Station** in Somerset, the **Bradwell B** in Essex and the **Sizewell C** in Suffolk. The first project is already underway and financed with a 33.5% stake by CGN. EDF Energy, a French company, is tasked with the construction of this plant. The second and third projects are less certain and would involve more than Chinese financial investment (66.5% and 26% stakes by CGN respectively). Bradwell B could potentially involve construction of a Chinese reactor, the Hualong One. Sizewell C could include Chinese nuclear technology and operation of the plant. Within the UK, most security concerns seem to revolve around speculation that China's access to national critical infrastructure could afford it the ability to disrupt every-day life, and thereby hold the UK to ransom were relations to sour considerably. Concerns also centre around the Chinese company involved, CGN, which was indicted by the United States in 2016 for allegedly approaching and enlisting US based nuclear experts to assist in developing and producing special nuclear material in China.[3] Whatever the political environment between the UK and China, conflation between domestic concerns in the civil domain should not undermine efforts to engage the Chinese on nuclear weapons matters.

To conclude, beyond strengthening the P5 process, UK-China nuclear cooperation could develop in two other areas: **verification**, and management of a **sea-based nuclear deterrent**. If the UK seeks to continue to engage China on nuclear weapons matters, it will be important to keep wider concerns in the civil nuclear sector as separate as politically possible.

Received 21 May 2021

[3]U.S. Nuclear Engineer, China General Nuclear Power Company and Energy Technology International Indicted in Nuclear Power Conspiracy against the United States, 14 April 2016 https://www.justice.gov/opa/pr/us-nuclear-engineer-china-general-nuclear-power-company-and-energy-technology-international