

# 11

## Nuclear Sharing and NATO as a ‘Nuclear Alliance’

Alexander Mattelaer

The North Atlantic Treaty Organization’s (NATO’s) capstone document, its 2010 Strategic Concept, explicitly stated that ‘as long as nuclear weapons exist, NATO will remain a nuclear alliance’.<sup>1</sup> This wording put new emphasis on a reality that has been part of the alliance since its very foundation—namely, that the nuclear arsenal of the United States, later supplemented by those of the United Kingdom and France, constitutes the supreme guarantee of the security of the allies.<sup>2</sup> Yet the mere existence of these nuclear arsenals and extended deterrence commitments does not make NATO a nuclear alliance. Politically, NATO’s nuclear posture is shaped by the Nuclear Planning Group (NPG)—that is, it is developed in a multilateral process of consultation and coordination. Militarily, different allies participate to varying degrees in the nuclear deterrence enterprise. This ranges from providing support to nuclear operations to taking part in nuclear sharing by hosting US nuclear weapons and fielding dual-capable aircraft (DCA). While the

---

1 NATO, *Active Engagement, Modern Defence: Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization* (Lisbon: NATO Summit, 2010), [www.nato.int/cps/en/natohq/official\\_texts\\_68580.htm](http://www.nato.int/cps/en/natohq/official_texts_68580.htm).

2 For a critical discussion, see Kjølsv Egeland, ‘Spreading the Burden: How NATO Became a “Nuclear” Alliance’, *Diplomacy & Statecraft* 31(1), 2020, 143–67, [doi.org/10.1080/09592296.2020.1721086](https://doi.org/10.1080/09592296.2020.1721086).

nuclear debate in NATO features some longstanding dilemmas, the close involvement of allies makes the deterrence posture materially tangible and thus more credible.<sup>3</sup>

This chapter explores the interplay between nuclear-sharing arrangements and NATO's organisational identity as a nuclear alliance. It does so with the aim of reviewing the contemporary relevance of nuclear sharing and the dynamics of extended deterrence in the European and Indo-Pacific theatres. The argument proceeds in three parts. The first section focuses on the threefold logic that underlies NATO's nuclear-sharing arrangements. Why have allies come to consider nuclear sharing in the first place? A combination of concerns over nuclear proliferation, the political cohesion of the alliance and the military credibility of extended deterrence provides for a multifaceted response. Yet all three dimensions face considerable challenges today. The second section discusses the institutionalisation of nuclear policy in the NATO alliance. How do NATO nuclear policy and posture come into being? The role of the NPG, the function of DCA and bilateral security relations all account for part of the answer. The third section compares the extended deterrence dynamics at play in the European and Indo-Pacific theatres. While the institutional features of US extended deterrence commitments in both regions may vary, their political dynamic is similar. Ongoing nuclear modernisation efforts suggest that the challenge of managing deterrence in alliance relationships is an enduring one. The renewed emphasis on nuclear communication in NATO summit declarations indicates that political debates on the future of alliance relationships cannot help but confront deterrence and arms control questions head-on.

## The Threefold Logic of Nuclear Sharing— and its Challenges

NATO's nuclear deterrence relies in part on US nuclear weapons being forward deployed in Europe and on capabilities and infrastructure provided by allies. In particular, this concerns the fielding of DCA fleets in the air forces of Belgium, Germany, Italy and the Netherlands that are

---

3 Cf. Josef Joffe, 'NATO and the Dilemmas of a Nuclear Alliance', *Journal of International Affairs* 43(1), 1989, 29–45.

able to jointly deliver US nuclear weapons.<sup>4</sup> More than anything else, these nuclear-sharing arrangements constitute a symbol of the indivisible security of the alliance. Precisely because nuclear weapons are unique, the collective management thereof underscores the nuclear nature of the alliance. Before turning to the institutional specifics—allowing for comparison between different extended deterrence commitments—it is well warranted to recall the threefold logic that underlies the concept of nuclear sharing itself. First, nuclear sharing helps restrain proliferation pressures; second, nuclear sharing helps cement the political cohesion of the NATO alliance; third, nuclear sharing strengthens the military credibility of NATO's deterrence by providing a wider array of graduated force options. While all three dimensions face contemporary challenges, the overall logic remains compelling.

When conceptualising the rationale for nuclear sharing, the historical link with non-proliferation comes first. After the UK had acquired nuclear weapons in 1952 and France had started its nuclear program, the sharing of nuclear weapons by the US was conceived as a way to limit the proliferation of additional nuclear arsenals. A key element of the 'nuclear stockpile' arrangement agreed in 1957, nuclear sharing sought to obviate the need for more European allies to provide for their own existential security independently. During several years of negotiations on procedural and technical details in the late 1950s and early 1960s, the deployment of US nuclear weapons in Europe and the close involvement of allied forces came into being.<sup>5</sup> NATO's nuclear-sharing arrangements were concluded before the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) came into effect, hence ensuring the conformity of the former with the obligations of the latter.<sup>6</sup> This entailed that NATO nuclear sharing was accepted under the NPT regime as long as the US maintained full peacetime custody of its forward-deployed nuclear weapons in Europe.

---

4 The status of Turkey in NATO's nuclear sharing is currently in doubt: while Turkey has long hosted US nuclear weapons on its territory, the participation of the Turkish Air Force in the nuclear strike mission has been discontinued. See, for example: Dustin Hinkley, 'US–Turkey Nuclear Energy Sharing', Turkish Heritage Organization, 2020, [www.turkheritage.org/Uploads/US---turkey--nuclear-energy-sharing.pdf](http://www.turkheritage.org/Uploads/US---turkey--nuclear-energy-sharing.pdf).

5 Marc Trachtenberg, *A Constructed Peace: The Making of the European Settlement 1945–1963* (Princeton: Princeton University Press, 1999).

6 William Alberque, *The NPT and the Origins of NATO's Nuclear Sharing Arrangements*, Proliferation Papers No. 57, 2017, [www.ifri.org/sites/default/files/atoms/files/alberque\\_npt\\_origins\\_nato\\_nuclear\\_2017.pdf](http://www.ifri.org/sites/default/files/atoms/files/alberque_npt_origins_nato_nuclear_2017.pdf).

While the recent Treaty on the Prohibition of Nuclear Weapons (TPNW) has put the spotlight on the lack of progress on nuclear disarmament efforts under the NPT regime, the fact that all NATO allies have abstained from the TPNW indicates their ongoing concern about their fundamental security needs.<sup>7</sup> In particular, the history of nuclear sharing raises a question about whether the abandonment of NATO's nuclear guarantee would further the cause of disarmament or have the opposite effect.

The second function of nuclear sharing—arguably the principal one today—is to cement the political cohesion of the alliance. After all, nuclear sharing ties different allies together in a way that is altogether unique, in the sense that it ensures that their security is indivisible. Both through political consultation process and the military readiness that the nuclear mission entails for the allies concerned, the nuclear-sharing arrangements make the deterrence posture of the alliance more legitimate and more robust than any conceivable alternative.

It is of course true that the political cohesion of the alliance has been put to the test in recent years by sharp transatlantic discussions on burden sharing and the lack of consultation among allies, especially in the eastern Mediterranean. This challenge has been clearly recognised and, to some extent, explicitly addressed by the NATO 2030 Reflection Group.<sup>8</sup> As far as the nuclear dimension of alliance cohesion is concerned, broad recognition thereof is increasing: both those allies who are already participating in nuclear sharing and those interested in becoming more closely involved are stating so on the record.<sup>9</sup>

The third and least understood function of nuclear sharing concerns its military-strategic utility. While critics often argue that such 'tactical' nuclear weapons delivered by fighter aircraft and gravity serve no military function—hence reducing these to their political symbolism—this claim is

7 'North Atlantic Council Statement as the Treaty on the Prohibition of Nuclear Weapons Enters into Force', NATO Press Release, 20 December 2020, [www.nato.int/cps/en/natohq/news\\_180087.htm](http://www.nato.int/cps/en/natohq/news_180087.htm).

8 *NATO 2030: United for a New Era, Analysis and Recommendations of the Reflection Group Appointed by the NATO Secretary General*, November 2020, [www.nato.int/nato\\_static\\_fl2014/assets/pdf/2020/12/pdf/201201-Reflection-Group-Final-Report-Uni.pdf](http://www.nato.int/nato_static_fl2014/assets/pdf/2020/12/pdf/201201-Reflection-Group-Final-Report-Uni.pdf).

9 In Belgium, for instance, a parliamentary resolution to join the TPNW (doc 55K0372001) failed to gather a majority in a plenary vote. Meanwhile, allies like Poland and Estonia occasionally flag an interest in becoming more involved in the nuclear deterrence mission. See, for example: Jonatan Vseviõ, *Constructing Deterrence in the Baltic States* (Tallinn: International Centre for Defence and Security, 2021), [icds.ee/wp-content/uploads/2021/02/ICDS\\_Analysis\\_Constructing\\_Deterrence\\_in\\_the\\_Baltic\\_States\\_Jonatan\\_Vseviõ\\_February\\_2021-1.pdf](https://icds.ee/wp-content/uploads/2021/02/ICDS_Analysis_Constructing_Deterrence_in_the_Baltic_States_Jonatan_Vseviõ_February_2021-1.pdf).

incorrect.<sup>10</sup> Nuclear deterrence rests on a combination of communication, capability and resolve. Given that these sharing arrangements provide NATO with nuclear capability, they provide (and are intentionally used as) the prime vehicle for communicating deterrence messages on behalf of the alliance as a whole. The visibility of DCA that can jointly train, be deployed or recalled is not just a military vulnerability, but a strategic function that is hard to replicate with other delivery systems. The regime of annual Steadfast Noon exercises they engage in helps in turning this capability into a key instrument for deterrence signalling, especially in times of crisis.

In addition, limited nuclear response options have a specific function on the escalation ladder—namely, to deter a limited Russian strike against which strategic retaliation would be disproportionate.<sup>11</sup> Finally, but perhaps most fundamentally, nuclear sharing provides allies with a degree of nuclear expertise and capability, allowing them to transform into nuclear weapon states at the turning of a US key at a time of crisis.<sup>12</sup> While these arguments would have struck many observers as outlandish in the security environment of the 1990s and 2000s, the gradual erosion of the arms control architecture and the abandonment of the Intermediate-Range Nuclear Forces Treaty in particular have upended widespread assumptions about the fading relevance of nuclear deterrence in the European theatre.

## The Institutional Specifics of NATO as a Nuclear Alliance

Bearing in mind these varied arguments for nuclear sharing, it becomes possible to make sense of the way in which the NATO alliance articulates its nuclear deterrence policy. This concerns the role of the NPG, the different supporting capabilities provided by non-nuclear allies and the bilateral agreements that enable nuclear sharing to work on the basis of a dual-key arrangement. Individually, these institutional specifics highlight different

---

10 For a critical view, see Tom Sauer, 'US Tactical Nuclear Weapons: A European Perspective', *Bulletin of the Atomic Scientists* 66(5), 2010, 65–75, doi.org/10.1177/0096340210381338.

11 For discussion, see Hans Binnendijk and David Gompert, 'Decisive Response: A New Nuclear Strategy for NATO', *Survival* 61(5), 2019, 1–16, doi.org/10.1080/00396338.2019.1662119.

12 Cf. Barry Posen, 'In Reply: To Repeat, Europe Can Defend Itself', *Survival* 63(1), 2021, 41–49, doi.org/10.1080/00396338.2021.1881252.

dimensions of NATO's nuclear identity. Collectively, they underscore the fact that NATO is not just an alliance that includes nuclear weapon states but is indeed a nuclear alliance itself.

The NPG constitutes NATO's senior body on nuclear matters. With the exception of France, which prides itself on its fully autonomous (national) deterrent capabilities, all NATO allies participate in the consultative process on the nuclear arrangements of the alliance. Established at the end of 1966, and in sync with the drafting of the Harmel Report balancing deterrence and dialogue, the NPG provides a forum for consensual decision-making relating to deterrence communication, nuclear planning and force posture, consultation about nuclear use, nuclear weapons safety and arms control issues. While generally meeting at the level of defence ministers, the activities of the NPG are supported by the (ambassador-level) NPG Staff Group and the High-Level Group involving national policymakers (at policy director level). As such, all allies but France acquire a diplomatic voice in a multilateral consultation process. Individual capitals can choose to amplify their own voice by means of nuclear burden and risk-sharing: by assuming ownership over part of the deterrence posture, they acquire more control over the nuclear policy of the alliance. As decisions are taken by consensus, the NPG articulates the common positions of the alliance members and thus embodies alliance solidarity and commitment to indivisible security and burden sharing.<sup>13</sup>

The strategic nuclear forces of the US, the UK and France constitute the backbone of NATO's nuclear capabilities. This particularly concerns the continuous at-sea deterrents that all three allies maintain—hence ensuring second-strike capability tied to three separate centres of decision—and the unique 'missile sink' function of the US arsenal of intercontinental ballistic missiles. The latter makes it virtually impossible for any adversary to overwhelm the alliance in a surprise attack. Yet the supporting capabilities and infrastructure provided by non-nuclear allies do help to strengthen NATO's posture. This goes beyond simply supporting nuclear operations with conventional air tactics (e.g. by escorting bombers with fighters), which is a mission in which many allies participate. It can also involve the hosting of US weapons that are forward deployed and making personnel and infrastructure available for NATO

---

13 Cf. Rose Gottemoeller, 'NATO Nuclear Policy in a Post-INF World', Speech by NATO Deputy Secretary at the University of Oslo, 9 September 2019, [www.nato.int/cps/en/natohq/opinions\\_168602.htm](http://www.nato.int/cps/en/natohq/opinions_168602.htm).

nuclear deterrence, and can include fielding DCA. For the latter, US weapons are married to a delivery system that is owned and operated by individual allies, turning it into a multinational extension of the nuclear posture of the US and latent nuclear powers. While the US maintains full custody over the weapons, the DCA allies obtain some degree of control over their hypothetical use. In effect, this shared capability can only be employed with the consent of both the US and the ally concerned—the so-called dual key.

Political control over NATO is exercised via the NPG and command authority is exercised from the top political level to military commanders. Nuclear decision authority rests ultimately with the political leadership of the nuclear powers (i.e. without delegation to commanders in the field).<sup>14</sup> However, the technical operationalisation of nuclear sharing builds on NATO's military command structure, led by the supreme allied commander Europe, as well as a broad array of bilateral agreements with individual allies involved in the nuclear mission. This system of bilateral consultations within an alliance framework facilitates the technical and legal support that are required for the mission. It also allows for minor technical variation across different allies and avoids the scenario in which the technical implementation of the alliance's posture is complicated by the unanimity requirement governing the political work of the NPG. While NATO functions as an integrated, multilateral alliance, its structure also builds on strong bilateral ties with individual allies.<sup>15</sup>

## Interplay between Extended Deterrence in Europe and the Indo-Pacific

By keeping the nuclear-sharing model in mind, the differences and similarities between extended deterrence in the European and Indo-Pacific theatres are accentuated. Ultimately, the US nuclear arsenal provides the fundamental security guarantee for allies as diverse as Japan, the Republic of Korea, Australia and the different NATO countries. For this reason, the fate of extended deterrence in both theatres is deeply intertwined:

<sup>14</sup> Simon Lunn, 'NATO Nuclear Sharing', in *Building a Safe, Secure, and Credible NATO Nuclear Posture*, 2018, [www.jstor.org/stable/pdf/resrep17630.12.pdf](http://www.jstor.org/stable/pdf/resrep17630.12.pdf).

<sup>15</sup> Jeffrey A. Larsen, 'NATO Nuclear Adaptation since 2014: The Return of Deterrence and Renewed Alliance Discomfort', *Journal of Transatlantic Studies* 17, 2019, 180, [doi.org/10.1057/s42738-019-00016-y](https://doi.org/10.1057/s42738-019-00016-y).

the communication and credibility of the US strategic deterrent in one theatre cannot help but affect the other. Yet these security guarantees are operationalised in different ways—politically and militarily. Understanding NATO's identity as a nuclear alliance thus also benefits from such a comparative approach.

The institutionalisation of nuclear sharing in NATO engages allies in a multilateral process that binds their security more closely together. This in turn makes the promise of extended deterrence materially tangible. After all, the armed forces of different allies take part in nuclear exercises and deterrence messaging. Taken together, this makes NATO's nuclear deterrence posture more credible and more reliable precisely because it involves different actors and therefore greater redundancy. Being implicated in the formulation and signalling of nuclear deterrence also implies embracing responsibility and helping to share the burden of risk. Such nuclear co-ownership comes at a cost: it requires political capital in justifying deterrence. Yet the level of public support for deterrence is often underestimated. Worries about accidental nuclear use tend to be more prevalent than principled opposition to nuclear deterrence, thereby putting a premium on institutional excellence in terms of security protocols. Finally, while it is generally accepted that the credibility of NATO's deterrence posture influences elite perceptions among US allies in Asia, this relationship also works in the other direction. Especially as US–China competition is downgrading Europe to being a secondary theatre, NATO's role in setting the gold standard of extended deterrence would benefit from taking this Indo-Pacific dimension on board.<sup>16</sup>

For US allies such as South Korea, Japan and Australia, the prospect of taking part in a similar endeavour of nuclear sharing in the Indo-Pacific would arguably mitigate the fear of abandonment. It would also involve them more closely in the formulation of nuclear strategy and posture discussions. This would substantially expand the model of extended deterrence dialogues that have featured in the framework of the Japan–US alliance since 2010, for instance. It would also entail accepting the mutual interdependence that such multilateralisation would entail. In order to be credible, this would require their political leadership to contemplate, however remotely, the possibility of nuclear use. Quite apart from financial

---

16 Luis Simon, Linde Desmaele and Jordan Becker, 'Europe as a Secondary Theater? Competition with China and the Future of America's European Strategy', *Strategic Studies Quarterly*, Spring 2021, 90–115.

or budgetary discussions, the fundamental willingness to engage in nuclear deterrence is perhaps the hardest question of all. Yet without such political willingness on the part of US allies, it is equally fair to ask whether the US extended deterrence commitment can be fully relied upon. Simply put, can one ask one's ally to do what one is not, as a matter of principle, willing to do for oneself? In turn, the multifaceted and technologically advanced nature of the China challenge with which South Korea, Japan and Australia are most familiar are reshaping the character of deterrence in ways that impact the discussion of NATO's future security as well. The attention paid to emerging and disruptive technologies in the report by the NATO 2030 Reflection Group constitutes clear evidence of this.<sup>17</sup>

\* \* \*

Deteriorating trends in the security environments of both Europe and the Indo-Pacific have put renewed emphasis on the importance of extended deterrence relationships and the nuclear guarantee underpinning these. The evolution of the nuclear language contained in NATO summit declarations from 2014 onwards constitutes a clear indication of this. This implies that the nuclear identity of the NATO alliance is far from mere symbolism. Instead, ongoing political debate on the future of the alliance suggests that questions pertaining to deterrence commitments, burden sharing and arms control need to be addressed, taking the changed security environment and the evolving military balance into account. As the military balance in the Indo-Pacific and the European theatres cannot avoid impacting on one another, a detailed comparison between the two regions offers an enhanced understanding of the extended deterrence provided by the US in both theatres. The latter is, of course, not new. Just as the Korean War was instrumental in endowing NATO with a standing command structure, the origins and contemporary relevance of NATO's nuclear-sharing arrangements may offer inspiration to defence planners in the Indo-Pacific as well.

---

<sup>17</sup> 'North Atlantic Council Statement as the Treaty on the Prohibition of Nuclear Weapons Enters into Force'.

This text is taken from *Alliances, Nuclear Weapons and Escalation: Managing Deterrence in the 21st Century*, edited by Stephan Frühling and Andrew O'Neil, published 2021 by ANU Press, The Australian National University, Canberra, Australia.

[doi.org/10.22459/ANWE.2021.11](https://doi.org/10.22459/ANWE.2021.11)