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Rethinking European Security

VIENNA WORKSHOP WORKING PAPER

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Introduction

'Realising a Sustainable Security Architecture in Europe' is a three-year project that is being funded by the generosity of Polden-Puckham Charitable Foundation. This undertaking is intended to help develop and advise on how to build a sustainable security architecture in Europe. This project brings together many representatives from Organisation for Security and Cooperation in Europe (OSCE) member states. During 2024 and 2025, five track 1.5 regional workshops will take place hosted across several European countries. The workshops will bring to the table government officials and experts from more than 30 European states for in-depth discussion and deliberations.

These discussions will be driven by a research-based working paper, produced by BASIC. It is intended that the workshop participants will explore the possibilities for the development of a New Model for Security in Europe that prioritises human security and environmental security with hard security concepts.

After deliberation of the participant recommendations throughout the workshops, an initial working report 'A New Model for Security in Europe' will be unveiled at the final conference in Vienna in 2025 where participants from both Track 1 and Track 2 levels from across the states can engage with a final discussion on the project, leading to the final report in full in the latter part of 2025.

Why we need a new European security architecture

Relations between states have become more complex and increasingly conflict-prone with the rise of multipolarity or multilateralism, and we are facing a crisis in the international rules-based order.¹ In Europe, Russia's continued war against Ukraine has uprooted decades of post-Cold War diplomacy aimed at creating a pan-European security architecture that allowed peaceful relations between allied and non-allied European states. The Russian aggression against Ukraine is the culmination of a slow erosion of post-Cold War diplomacy, and suggests that a new security architecture and new diplomacy is needed in Europe to return the continent to a state of stability. It is clear that in the short term, security in Europe must be organised in opposition to Russia; however, in the long-term, Europe's security architecture, while still requiring hard headed defence, must be rethought beyond traditional alliances and agendas and involve Russia as a European state.² This raises immediate questions around when and how the European states can engage to build a sustainable security architecture in Europe.

The need to rethink beyond traditional alliances and agendas stems from this breakdown of post-Cold War diplomacy as well as from new, or perhaps more precisely, newly realised security issues, such as energy security and climate change's impact on security, including human security, both of which have become increasingly important topics in international politics. When developing a security architecture in Europe encompassing new and old threats to peace and stability, we need to consider the complexity of security in Europe against the backdrop of the breakdown of the rules-based global order, rising nationalism in and outside of Europe, the failure of post-Cold War diplomacy, and climatic threats to security. This working paper seeks to better understand the complexity of security in Europe in this new era.

What is a security architecture?

The term 'security architecture', although often used, may have a different meaning to different actors be it governments or scholars. Some scholars argue that – in a European context – the European security architecture is a system created by the overlapping competencies of the main European institutions, or it is composed of 'interlocking institutions'; others have spent time digesting the different architectural debates in the post-Cold War era in Europe reflecting that the European security architecture evolves over time and space.³ Yet others are using the term without clarifying its meaning.⁴ As a suggestion and point of departure for the purpose of this working paper, we use the following:

'A security architecture is a system of norms, practices, relationships, alliances and institutions constructed or developed by nations to address, enhance or ensure international and/or regional security.'⁵ More specifically, when we talk about the purpose of a security architecture, these can be framed in material and social terms. The material purpose is often expressed in the ability to produce tangible outcomes, such as hard security, whereas in social terms, the purpose is about producing normative outcomes, such as policies or understandings of what the threats are.

In Europe, the architecture is the system made up of a range of components, such as alliances, multilateral organisations and institutions - such as the OSCE - a range of bilateral and multilateral relationships, formal and informal agreements, treaties and shared norms to ensure security. There are a vast number of components in this system that differ in geographical scope, level of formality stretching from formal to informal, level of commitment and purpose. At the same time new components continue to emerge in response to specific political goals or threats.⁶ For example, the European Political Community only recently came into being as a new organisation for cooperation between 'democratic' European nations to cooperate on, amongst other things, security. In addition, the Bucharest 9 came into being as a result of a perceived lack of adequate attention to the Eastern flank's defence needs following the Russian 2014 illegal annexation of

¹ Trine Flockhart and Elena A. Korosteleva, 'War in Ukraine: Putin and the Multi-Order World', *Contemporary Security Policy*, 24 June 2022, 1–16, <https://doi.org/10.1080/13523260.2022.2091591>.

² Peter Jones, 'European Security Architecture: Against Russia, or With It?', *RUSI Commentary* (blog), 14 December 2022, <https://www.rusi.org/explore-our-research/publications/commentary/european-security-architecture-against-russia-or-it>.

³ Michael W. Mosser, 'Embracing "Embedded Security": The OSCE's Understated but Significant Role in the European Security Architecture', *European Security* 24, no. 4 (2 October 2015): 579–99, <https://doi.org/10.1080/09662839.2015.1054376>; Franz Kernic, *European Security in Transition*, ed. Gunther Hauser, 0 ed. (Routledge, 2016), <https://doi.org/10.4324/9781315581019>.

⁴ EEA: EU support to Ukraine and the security architecture in Europe, 2022. https://www.eeas.europa.eu/eeas/eu-support-ukraine-and-security-architecture-europe_en

⁵ Brendan Taylor and William T. Tow, 'What Is Asian Security Architecture?', *Review of International Studies* 36, no. 1 (2010): 95–116, <https://doi.org/10.1017/S0260210509990520>.

⁶ For an overview of how complex the European security architecture is, RUSI mapped the UK's defence and security relationships in Europe, see <https://rusi.org/explore-our-research/projects/european-security-transformation-programme/uk-defence-and-security-relationships-across-europe>

Crimea as a platform for dialogue and consultation between the members on NATO matters.⁷ A distinctive feature of the European security architecture is that the principles and rules of the UN Charter are reinforced throughout a number of core institutions and agreements founded since 1945, such as the Council of Europe 1949 and the 1990 Charter of Paris.⁸ In the post-Cold War period, Europe has seen Russia slowly rejecting the rules-based multilateral regional order in Europe, culminating in the full-scale invasion of Ukraine in 2022 in breach of international humanitarian law, principles, rules and regional norms.

What is Europe?

Having a regional security architecture, specifically a European security architecture, also raises the question of where and what Europe is - which is a highly debated issue. On the surface Europe is a geographical space - essentially a small appendage to Eurasia - yet Europe's geographical demarcation remains debated especially in the East. Europe, however, can also be an entity bound by political, cultural, economic ties or a sense of identity deeply rooted in the history of the region as a region separate from the surrounding regions.⁹

While there is a defined (yet contested) cartographic demarcation of Europe, it is clear that when we talk about security, geography doesn't capture all those states that are currently directly involved in the European security architecture, most notably the US. Looking back, it becomes evident that states have been involved in or detached from European security. For example, the US periodically stood outside European security in the 20th century only to become deeply embedded in 1949. Other states, most notably Russia and the US, have left certain parts of it in the post-Cold War era. At the same time, new states or states that reclaimed their statehood after the breakdown of the Soviet Union, joined the European security architecture; for example, Kazakhstan became a member of the OSCE in 1992.¹⁰ This in turn suggests that Europe, when we talk about European security, evolves in space over time.

In this regard, it is interesting to note that some scholars argue that instead of an imminent turn towards multipolarity in the international global order, which situates Russia in the multilateral European order, we may instead be facing the emergence of a multiorder.¹¹ In this multiorder, Russia may be the leader of the Eurasian order in which its security is based on military power, and, crucially, the security relationship between Europe and Russia becomes a matter between the two orders. In this sense, Russia is no longer a part of Europe, or the European security architecture.

What is climate change?

According to the UN 'climate change refers to long-term shifts in temperatures and weather patterns.'¹² These changes are driven by human activities, especially the burning of fossil fuels which increase greenhouse gases in the atmosphere and cause temperatures to rise abnormally. Experienced differently across the globe, climate change manifests itself in numerous ways, including in rising sea levels, extreme weather events such as wildfires and floods, forced displacement, and vector borne diseases. With the 2015 Paris Agreement, more than 190 states signed up to a global goal of limiting the

⁷ Thomasen, G. (2023). The Unsettled Alliance: Risk, Fear and Solidarity in NATO. *Journal of Autonomy and Security Studies*, 7(2). Retrieved from <https://jass.ax/index.php/jass/article/view/92>;

<https://commonslibrary.parliament.uk/what-is-the-european-political-community/>

⁸ Kjell Engelbrekt, 'The European Security Order', in *The Borders of the European Union in a Conflictual World: Interdisciplinary European Studies*, ed. Antonina Bakardjieva Engelbrekt et al. (Cham: Springer Nature Switzerland, 2024), 205–31, https://doi.org/10.1007/978-3-031-54200-8_9.

⁹ Maria Malskö, *The Politics of Becoming European: A Study of Polish and Baltic Post-Cold War Security Imaginaries*, The New International Relations (London ; New York: Routledge, 2010); R.B.J. Walker, 'Europe Is Not Where It Is Supposed to Be', in *International Relations Theory and the Politics of European Integration : Power, Security and Community*, Edited by Morten Kelstrup, and Michael Williams (Taylor & Francis Group, 2000); Larry Wolff, *Woodrow Wilson and the Reimagining of Eastern Europe* (Stanford, California: Stanford University Press, 2020), <https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=2297108&site=ehost-live>. Windley, Brian Frederick , Berentsen, William H. , East, W. Gordon and Poulsen, Thomas M.. "Europe". *Encyclopedia Britannica*, 7 Mar. 2024, <https://www.britannica.com/place/Europe>. Accessed 7 March 2024.

¹⁰ Geir Lundestad, *The United States and Western Europe since 1945: From 'Empire' by Invitation to Transatlantic Drift*, 1. publ. in paperback (Oxford: Oxford Univ. Press, 2005); Gry Thomasen, *Applying a Systematic Approach to NATO-Russia Risk Reduction: Perspectives from the North East Flank* (London, United Kingdom: BASIC, 2022).

¹¹ Trine Flockhart and Elena A. Korosteleva, 'War in Ukraine: Putin and the Multi-Order World', *Contemporary Security Policy*, 24 June 2022, 1–16, <https://doi.org/10.1080/13523260.2022.2091591>; Trine Flockhart, 'NATO in the Multi-Order World', *International Affairs* 100, no. 2 (4 March 2024): 471–89, <https://doi.org/10.1093/ia/iaae004>.

¹² UN: What Is Climate Change? <https://www.un.org/en/climatechange/what-is-climate-change>

temperature rise to 1.5°C by 2100. However, it is now widely believed that by 2030 the 1.5°C threshold will be surpassed.¹³ The Intergovernmental Panel on Climate Change (IPCC) - the UN body for assessing science related to climate change - estimates that global emissions will have to reach net zero by 2050 to limit the temperature rise to 1.5°C or reach net zero by 2070 to limit the rise to 2°C. Beyond 2°C there are tipping points in the Earth's system.¹⁴

Warming in Russia is higher than what is experienced on the global level. From 1976 to 2018, Russia experienced an average annual temperature increase of 0.47°C per decade, which was two and a half times higher than the average global temperature increase in the same period.¹⁵ These effects are most starkly seen in the Arctic, as the sea ice melts at rapid rates. The Arctic area of Siberia contains particularly high carbon deposits, and as its ice thaws, Arctic methane levels are expected to contribute to the rise in global carbon levels.¹⁶

Dealing with climate change, however, is a complex endeavour. On the one hand, climate change needs to be dealt with in the short-term to slow the rise of temperatures to reduce the risk of climate extremes and irreversible tipping points, and on the other, climate change must be dealt with through a long-term perspective to stabilise the climate.¹⁷ Whereas the rise in temperature is scientifically predictable, the many extreme weather events that have occurred over the years, such as wildfires and flooding, are far more difficult to predict. In addition, climate change becomes more unpredictable as societies may react differently to the effects of climate change.¹⁸ This makes climate change effects on our security somewhat difficult to control and certainly underscores the complexity of predicting the effects of climate change in both the short- and long-term.

Climate risks

The climate – security nexus denotes the idea that there may be an interrelationship between climate change and conflict, and governments are increasingly representing climate change as simultaneously a systemic crisis - that is, a threat to national security, the environment and human security - and a threat multiplier, meaning that global warming multiplies existing threats to security. The causal link between global warming and geostrategic competition has, however, not been established yet.¹⁹

In terms of climate risks, however, there are at least three risks that are interrelated.

First, we talk about so-called 'transition risks' that may occur if states rapidly decarbonise. The petrostates are vulnerable to economic disruptions and a rapid decarbonisation may pose risks to these societies, political regimes and increase risks of conflict if there is no substantial planning to deal with a steep decline in revenue from hydrocarbon exports. For our purpose it is worth noting that Russia's economy is reliant on its hydrocarbons. Over the past decade, revenues from this industry have totalled between 30 and 50% of the total federal budget revenues, and the Russian oil and gas sector has contributed on average 20% of its GDP.²⁰

Second, the 'derailment problem' denotes that if we as societies are not dealing with climate change fast enough, it becomes more severe, which in turn may lead to short term disaster responses based on fossil fuel solutions to keep our societies

¹³ Damian Carrington and Damian Carrington Environment editor, 'World's Top Climate Scientists Expect Global Heating to Blast Past 1.5C Target', *The Guardian*, 8 May 2024, sec. Environment, <https://www.theguardian.com/environment/article/2024/may/08/world-scientists-climate-failure-survey-global-temperature>.

¹⁴ IPCC, 2023: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 35-115, doi: 10.59327/IPCC/AR6-9789291691647.

¹⁵ Alina Averchenkova, 'Great Power Ambitions and National Interest in Russia's Climate Change Policy', in *Great Powers, Climate Change, and Global Environmental Responsibilities*, ed. Robert Falkner and Barry Buzan (Oxford University Press, 2022), 0, <https://doi.org/10.1093/oso/9780198866022.003.0008>.

¹⁶ Chad Michael Briggs, 'Arctic Environmental Security and Abrupt Climate Change', in *Environmental and Human Security in the Arctic* (Routledge, 2013).

¹⁷ Durwood Zaelke, Romina Picolotti, & Gabrielle Dreyfus 2023; NIE Climate Change and National Security October 2021.

¹⁸ Durwood Zaelke, Romina Picolotti, & Gabrielle Dreyfus 2023; National Intelligence Estimate, Climate Change and International Responses Increasing Challenges to US National Security Through 2040. NIC-NIE-2021-10030-A. October 2021.

¹⁹ Katharine J. Mach et al., 'Climate as a Risk Factor for Armed Conflict', *Nature* 571, no. 7764 (1 July 2019): 193–97, <https://doi.org/10.1038/s41586-019-1300-6>; Joshua W. Busby, *States and Nature: The Effects of Climate Change on Security*, The Politics of Climate Change (Cambridge: Cambridge University Press, 2022), <https://doi.org/10.1017/9781108957922>.

²⁰ Vitaly Yermakov, 'Follow the Money: Understanding Russia's Oil and Gas Revenues' (Oxford: The Oxford Institute for Energy Studies, March 2024); Nivedita Kapoor, 'Russia and the Future of the Arctic', ORF Occasional Paper (Observer Research Foundation, October 2021).

going.²¹ In general terms, during conflict and periods of political instability climate regulations are often rolled back as well as the necessary international scientific cooperation on climate change suffers.²²

Third, geoengineering. Geoengineering is a 'large scale manipulation of a specific process central to controlling Earth's climate for the purpose of obtaining a specific benefit' and has become a threat to national security. In the US recent intelligence estimate, the Intelligence Community (IC) warns that: 'Large-scale geoengineering could be internationally disruptive because of its potential to substantially affect the Earth's biosphere, which would change global weather patterns and provide climate benefits to some regions at the expense of others.'²³

What is human security?

In the UN's seminal Human Development Report (1994), human security was introduced as a new frontier in world politics, underscoring that the end of the Cold War allowed states to step back from doctrines of mutually assured destruction and arms racing. Unlike the traditional concept of security that placed the protection of the state - its territorial integrity and sovereignty - from external threats at the centre, human security places the human at the centre and gives the individual security agency. This broadens the scope of security to encompass economic security, food security, health security, environmental security, personal security, community security, and political security, to name but a few. Human security has a positive and negative dimension, meaning it is not only about absence of threats, but also about the presence of opportunity to live a full life.²⁴

Human security as a concept has, however, been criticised for being too vague or rather too encompassing in the sense that everything can become a matter of human security, leaving states and international organisations with a concept that is difficult to operationalise into policies.²⁵

Whose security is at stake?

The state

A traditional concept of security was originally conceived to evolve around protecting the state's integrity and survival from foreign aggression. A state's national security has since come to involve the state's extended resource base, military infrastructure and civilian diaspora. These threats to the state's security continue to exist, and for the purpose of this working paper, we consider attacks by state and non-state actors on a state's territorial integrity or their existential interests beyond the state territory, a matter of national security.

When we turn to climate change and the referent object of security is the state, the effects of climate change have already entered the state's policies and strategies. As mentioned above, states increasingly tend to see the effects of climate change as threat multipliers and systemic crises simultaneously. In the Euro-Atlantic area this has translated into policies to adapt to climate change effects on national security, and is conceptualised as a matter of protecting a state's ability to defend itself

²¹ Laurie Laybourn, Joseph Evans, and James Dyke, 'Derailment Risk: A Systems Analysis That Identifies Risks Which Could Derail the Sustainability Transition', *Earth System Dynamics* 14, no. 6 (14 November 2023): 1171–82, <https://doi.org/10.5194/esd-14-1171-2023>.

²² Angelina Davydova, 'At COP27, Russia Acted as Though It Had Not Invaded Ukraine', openDemocracy, accessed 21 May 2024, <https://www.opendemocracy.net/en/odr/cop27-russia-war-ukraine-climate-crisis/>; Gry Thomassen, 'Managing Resources And Sea Routes In The Arctic - BASIC' (London, United Kingdom: BASIC, 7 November 2022), <https://basicint.org/report-managing-resources-and-sea-routes-in-the-arctic/>.

²³ NIC-NIE-2021-10030-A. October 2021)

²⁴ Gunhild Hoogensen Gjørsv et al., 'Human Security in the Arctic: The IPY GAPS Project', in *Implications and Consequences of Anthropogenic Pollution in Polar Environments*, ed. Roland Kallenborn, From Pole to Pole (Berlin, Heidelberg: Springer Berlin Heidelberg, 2016), 181–201, https://doi.org/10.1007/978-3-642-12315-3_10; Ygnacio "Nash" Flores, 'Human Security', in *Handbook of Security Science*, ed. Anthony J. Masys (Cham: Springer International Publishing, 2022), 341–59, https://doi.org/10.1007/978-3-319-91875-4_45; United Nations Development Programme, *Human Development Report 1994*, Human Development Report (UN, 1994), <https://doi.org/10.18356/87e94501-en>.

²⁵ The UN established The United Nations Trust Fund for Human Security highlighting the important role that the international community has to ensure individual's security, UNGA Res 33/290.

from the enemy amid a changing climate. This has led to national defences adapting in all operating domains, including protecting and adapting its war fighting abilities, deterrence and defence postures.²⁶

Although militaries have a clear mandate to approach the climate - security nexus by responding primarily through adaptation to secure military effectiveness,²⁷ states also attempt through mitigation to reduce greenhouse gas emissions whilst at the same time reducing reliance on fossil fuels in both operations and facilities. This is important as the 'carbon boot print' of defence - the total emissions of carbon dioxide from armed forces and the related industries - accounts for as much as up to 5% of the total global carbon dioxide emissions, which makes defence the largest single institutional emitter of carbon dioxide.²⁸ Meeting the obligations under the Paris Agreement, or simply to avoid a significant rise in temperature, states have therefore increasingly come to see that reducing the emissions from their armed forces and related industries is important to mitigate the effects of climate change. In this context states have embarked upon 'greening' defence to reduce their environmental impact; however, while 'greening' defence appears to be self-evident, some states have questioned the wisdom of 'greening', believing that these efforts can compromise national security.²⁹

This may explain why NATO makes an effort to repeatedly clarify that 'military effectiveness in carrying out NATO's core tasks remains the number one priority, even if this objective may sometimes clash with mitigation goals'.³⁰ At the same time it is important to realise that decarbonising defence is not necessarily about mitigating climate change, but also a means to increase operational ability.³¹ Regardless, NATO pledges to reduce its CO2 emissions by 50% by 2050.³²

This in turn raises questions about what low-carbon warfare will mean for future NATO operations, including against adversaries that continue operating with fossil fuels as operational energy.³³

Climate change impact on security does not feature prominently in Russian defence strategies. Although, climate change is often mentioned in connection with energy and economic security. This in turn raises questions about Russia's lack of interest in addressing climate change in relation to the largest institutional GHG emitter.³⁴

²⁶ Jamie Kwong, *How Climate Change Challenges the U.S. Nuclear Deterrent* (Carnegie: 2023); NATO Secretary General, *The Secretary General's Report NATO Climate Change and Security Impact Assessment*. (Second edition, 2023); Susan D'Agostino 2021; Gry Thomasen, Chiara Cervasio & Mhairi McClafferty, *Arctic Diplomacy at a Crossroads. Addressing and Assessing Future Geopolitical and Strategic Risk*, (London: BASIC 2023).

²⁷ NATO Secretary General, *The Secretary General's Report NATO Climate Change and Security Impact Assessment*. (Second edition, 2023).

²⁸ Duncan Depledge, 'Low-Carbon Warfare: Climate Change, Net Zero and Military Operations', *International Affairs* 99, no. 2 (6 March 2023): 667–85, <https://doi.org/10.1093/ia/iiaad001>; Mohammad Ali Rajaeifar et al., 'Decarbonize the Military – Mandate Emissions Reporting', *Nature* 611, no. 7934 (3 November 2022): 29–32, <https://doi.org/10.1038/d41586-022-03444-7>. In this context it is important to realise that war time emissions are one thing, but the upkeep of defences in peacetime is probably more costly from a carbon footprint perspective than war.

²⁹ John Conger, 'False Choices and Climate Security', *The Hill*, 16 May 2023, sec. Opinion - Energy and Environment, <https://thehill.com/opinion/energy-environment/4006384-false-choices-and-climate-security/>.

³⁰ NATO, 'The Secretary General's Report NATO Climate Change and Security Impact Assessment. Second Edition, 2023' (NATO, 2023); NATO, 'Remarks by NATO Secretary General Jens Stoltenberg at the High-Level Roundtable "Climate, Peace and Stability: Weathering Risk Through COP and Beyond" in Glasgow, UK', NATO, accessed 4 May 2024, https://www.nato.int/cps/en/natohq/opinions_188262.htm; Michael Rühle, 'Scoping NATO's Environmental Security Agenda', NDC Policy Brief (NATO, March 2020), <https://www.ndc.nato.int/news/news.php?icode=1426#>.

³¹ Depledge, 'Low-Carbon Warfare: Climate Change, Net Zero and Military Operations'.

³² Jamie Kwong, *How Climate Change Challenges the U.S. Nuclear Deterrent* (Carnegie: 2023); NATO Strategic Concept 2023. Although we do not know with certainty, the estimated global military footprint is around 5.5%. However, during war the number will be higher as the operational energy usage increases and in the age of global warming, the increase will be even more as a result of cooling requirements of systems, material and soldiers, see Stuart Parkinson, 'How big are global military carbon emissions?' *Responsible Science* 5, May 2023; NATO Secretary General, *The Secretary General's Report NATO Climate Change and Security Impact Assessment*. (Second edition, 2023)

³³ Duncan Depledge, 'Low-carbon warfare: climate change, net zero and military operations', *International Affairs*, Volume 99, Issue 2, March 2023, Pages 667–685, <https://doi-org.proxy1-bib.sdu.dk/10.1093/ia/iiaad001>

³⁴ Jakub Maciej Godzimirski, 'Energy, Climate Change and Security: The Russian Strategic Conundrum', *Journal of Eurasian Studies* 13, no. 1 (1 January 2022): 16–31, <https://doi.org/10.1177/18793665211054518>.

The people

When looking at human security - that is, when the referent object of security is people - we find different threats, different security agents, and different response strategies to ensure people's survival, livelihood and dignity.³⁵ As McDonald has uncovered, when it comes to climate change and its implications for human security, states and international organisations such as the UN attempt mitigation strategies as well as adaptation strategies to combat the effects.³⁶

However, the fact that human security is about - according to the UN - the 'cross-cutting challenges to the survival, livelihood and dignity of their people', the concept of human security can be difficult to integrate into a security framework. Yet, the MODs and militaries have begun to consider human security as well. In NATO's 2022 Strategic concept, for example, it says that 'human security, including the protection of civilians and civilian harm mitigation, is central to our approach to crisis prevention and management' and NATO will to that end reinforce their coordination and cooperation with international and regional actors such as the EU and OSCE.³⁷ Reaching a common and joint understanding of human security is crucial for states and international organisations to be able to operationalise human security into policy.

The ecological system

While it is clear that the effects of climate change on security, human security and traditional security have been negotiated at the international and regional levels for decades and centuries, a new concept of security has emerged within the most recent years, namely ecological security. Ecological security - specifically in the context of climate change - denotes that all life is best protected by sustaining and maintaining the functionality of ecosystems.³⁸ When the referent object of security is the ecological system, the ecological system refers to all life including both the living and non-living, such as water. It also refers to stretches in time to underscore that the safety of future generations relies on the present actions to ensure that ecological systems are not damaged and thus all life endangered.

In a recent study about the conflict potential of fish and warming waters, Ocean Futures detailed that between the end of the Second World War and the end of the Cold War, a quarter of the militarised disputes between democratic states were about fishery, and over the past 40 years conflict over fishery has increased 20-fold. At the same time, Ocean Future foresees that the warming of the seas causes fish migration which may intensify competition and thus increase the potential of conflict.³⁹ The conflict potential of fish is well known among certain states; for example, in the Arctic the International Agreement to Prevent Unregulated Fishing in the High Seas of the Central Arctic Ocean was concluded in anticipation of fish migration, and therefore large scale commercial fishing, as a result of warming seas.⁴⁰

Energy security

Concerns about energy security have in a European context accelerated since the first instances of Russian disruption of gas supplies in the 2000s. Energy security, however, is a complex issue. In general terms, energy is 'secure when a country has energy reserve, balanced supply and demand, and balanced energy trade' and, importantly, policies aimed at securing energy are dependent on the state's assessment of the geopolitical situation, its economic resources and the status of environmental issues.⁴¹ Policies for securing energy, however, are exactly that, policies based on political assessments and priorities. In Europe and the US, energy security is deeply entangled in geopolitical concerns around energy supplies for

³⁵ UNGA Res 33/290

<https://undocs.org/Home/Mobile?FinalSymbol=A%2FRES%2F66%2F290&Language=E&DeviceType=Desktop&LangRequested=False>

³⁶ Matt McDonald, "Discourses of climate security", *Political Geography*, Volume 33, 2013, Pages 42-51, ISSN 0962-6298, <https://doi.org/10.1016/j.polgeo.2013.01.002>; Matt McDonald, *Ecological Security: Climate Change and the Construction of Security*. (Cambridge: 2021).

³⁷ NATO: Strategic Concept 2022.

³⁸ Matt McDonald, *Ecological Security: Climate Change and the Construction of Security*. (Cambridge University Press: 2021).

³⁹ Oceans Futures: <https://oceansfutures.org/>

⁴⁰ Arctic Council: An introduction to The International Agreement to Prevent Unregulated Fishing in the High Seas of the Central Arctic Ocean. <https://arctic-council.org/news/introduction-to-international-agreement-to-prevent-unregulated-fishing-in-the-high-seas-of-the-central-arctic-ocean/>

⁴¹ Tri Ratna Bajracharya, Shree Raj Shakya, Anzoo Sharma, Chapter 2 - Dynamics of energy security and its implications, Editor(s): Muhammad Asif, *Handbook of Energy and Environmental Security*, Academic Press, 2022, Pages 13-25, ISBN 9780128240847, <https://doi.org/10.1016/B978-0-12-824084-7.00019-9>

critical infrastructure, including defence, and peoples, as well as transition towards green(er) energy. In a European context there appears to be a careful weighing up of the different securities, making energy security to do with national security, human security, and - via the transition towards green(er) energy - also ecological security.

As the largest regional actor, the EU has, for example, coordinated and imposed investments across the member states in energy infrastructure and solidarity mechanisms to ensure there is no or little disruption in energy supplies across the Union.⁴² Similarly, both NATO and the EU seek to avoid creating new energy dependencies, in particular with China on strategic minerals, that are important for and critical to the continued supply of material for states' defence and the transition towards climate friendly technology.⁴³ Russia, as well, recognised in its 2020 Energy Strategy until 2035 that the energy sector is important to Russia's socio-economic development, therefore calling for adaptation to climate change and the implementation of measures to reduce the environmental footprint of the energy sector.⁴⁴

A new model for security in Europe

Developing a new security model in Europe that captures old and new threats, traditional and new understandings of security is complex. How do we contemplate a model that captures fish migration, war and energy security? There are several fundamental questions that need to be addressed to develop a sustainable security architecture, including what is Europe? And what is a security architecture? Which in turns reflects upon Russia and Russia's future position in Europe and the European security order. At the same time, new threats to security, most notably the effects of climate change, must be enrolled in the new architecture.

Joshua Busby has developed a concept of security that can assist European states in developing policies, rules, norms and practises in the future security architecture that captures the threats to security from climate change. He introduces the concept of 'security threats' that denotes that climatic events can have the same severity or importance to national security as an external armed attack on the sovereign state.⁴⁵ Security threats, however, 'maximally, ..., includes risks to the survival of the country, but also more limited dangers, such as the vulnerability of the seat of government, the survival of the regime, threats to critical infrastructure, and large scale loss of life'. The point is that for the security threats in this model to be considered security threats, they have to risk 'large scale damage' and 'unacceptable losses'.⁴⁶

'Large scale damage' and 'unacceptable losses' is ambiguous terminology used to capture the vast regional differences of what constitutes a security threat. A drought in northern Europe is not necessarily a security threat commensurate with an armed attack, but it can be considered such elsewhere. Implementing the idea of security threats thus allows for a negotiated political decision on when, for example, a climatic event, a natural disaster or a pandemic becomes a security threat commensurate to the threat posed by a traditional armed attack.⁴⁷

A first step towards creating a sustainable security architecture in Europe can therefore be the development of a common European understanding of what and how different threats or challenges become security threats in a European context.

⁴² Communication from the Commission to the European Parliament and the Council, *European Energy Security Strategy* /* COM/2014/0330 final */. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52014DC0330>; Since the Russian war against Ukraine, the European Union members have become increasingly preoccupied with securing a steady flow of energy to the Union and has similarly upscaled its cooperation with potential new members, such as Georgia, including on energy infrastructure and connectivity, see The European Union and Georgia. The European Union and Georgia enjoy a very close and positive relationship. September 2023. https://www.eeas.europa.eu/georgia/european-union-and-georgia_en?s=221#2795

⁴³ National Intelligence Estimate, Climate Change and International Responses Increasing Challenges to US National Security Through 2040. NIC-NIE-2021-10030-A. October 2021; The Secretary General's Report NATO Climate Change and Security Impact Assessment. Second edition, 2023; EU acts to secure access to critical raw materials, The Economist Intelligence, April 2023. <https://www.eiu.com/n/eu-acts-to-secure-access-to-critical-raw-materials/> Also Strategic Compass.

⁴⁴ Godzimirski, 'Energy, Climate Change and Security'.

⁴⁵ Busby, *States and Nature: The Effects of Climate Change on Security*.

⁴⁶ Joshua W. Busby, *States and Nature: The Effects of Climate Change on Security*, (Cambridge University Press: 2022), p 22-23.

⁴⁷ Busby further hypothesises that the likelihood of a climatic event will have a negative security outcome increases when states have limited capacity.