



The Hague Centre
for Strategic Studies

Annual Report 2023

December 2023



HCSS Annual Report 2023

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December 2023

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2023: A Year of Power Politics

I proudly present you the HCSS Annual Report of 2023, a year in which the challenges piled up. One of the few bright spots were the climate agreements. Delegates from HCSS attended the [UN Water Conference](#) in New York, and were also present at the [COP28](#) climate conference in Dubai.

But otherwise, power politics dominated the international discourse. For now, Europe needs the United States to deal with the geopolitical turbulence. Our studies on [Transatlantic Relations](#) therefore remain extremely relevant, especially considering American political instability.

All this turbulence has major repercussions for domestic stability. That is why I ask you to pay special attention to our [Socio-Political Instability Survey](#). In this context, we are also proud to have been able to develop a [strategic monitor for the National Police](#) which, among other things, provides insight into the social stability of the Netherlands.

One of the ways to strengthen internal stability is economic development. We are therefore pleased to have contributed to working on a more integral national [maritime industrial policy](#). HCSS took the initiative to help governments and businesses carry out [geopolitical due diligence](#). This requires, among other things, insight into developments in the [Indo-Pacific](#), flow security and the implications of disruption of trade flows on our economic development.

HCSS also deepened its research into strategic technologies, the energy transition, and critical materials. The [Critical Raw Materials Dashboard](#) provides the basis for policy reporting on the steady supply of these materials. Given the major political challenges of the [energy transition](#), our contributions in this research domain are more relevant than ever.

The war in Ukraine has had a major impact on the work of HCSS. The basis of our knowledge about Russia is generated by a multi-year research program with the Georgia Institute of Technology, [RuBase](#), which has provided deep insights about Russia and how to respond to related threats. More generally, the application of advanced AI techniques has led to breakthroughs in our research.

The war gave rise to many studies that are important for the [future organization](#) and capabilities of the Dutch armed forces. [Hybrid threats](#) and the [future method of warfare](#) received special attention. Deterrence, both by means of nuclear weapons and by countering strong conventional defense, also received great attention.

Due to the war, HCSS has become more of a household name in the Netherlands than ever before, our experts by now an indispensable part of the Dutch and international media.

I thank everyone, from employees to clients, who made HCSS a success and sincerely hope that this success can be continued in 2024. We continue to work on our future by conducting objective, neutral, impartial, and fact-based research together with our partners, always keeping the general interest firmly in mind.



Rob de Wijk, Founder of HCSS

Introduction from our CEO

As we are approaching the year 2024, you might look back and assess our balancing act towards a multipolar order was stressful, precarious, and sometimes disruptive. You might believe that 2024 surely will be more stable, perhaps more relaxing, and predictable. I hate to bring you the bad news.

2024 appears likely to be another year of geopolitical and economic instability. It's unlikely we'll see a softening of US policy towards China and there is a high probability that in 2024 pivotal elections, not only in the U.S., but also in India, U.K., Russia, South Africa and Taiwan converge with the potential for conflicts and will add to the odds of the global economy diverging from its current path.

The geopolitical and geo-economic implications of the reshaping world economic framework are still to be determined but, we are already witnessing a reversal of global supply chains with an upward pressure on inflation as an outcome. The competition between unrestricted globalisation and national sovereignty will lead to insecurity and instability and will put pressure on the way we relate to each other, who we identify with and on our social contract.

Meanwhile most scientists and politicians are aware that there is only a theoretical chance of limiting global warming to 1.5 Celsius above preindustrial levels. The past nine years have been the warmest on record, with 2023 probably being the warmest. According to the World Meteorological Organization the global mean near-surface temperature (to October 2023) was around 1.40 degrees Celsius above the 1850-1900 average. More unprecedented extreme weather events are occurring as a result. We have seen a total area of 18.5 million hectares of forest lost due to wildfires in Canada and extreme rainfall in southeast Europe and parts of Africa. Meanwhile the three greenhouse gases will continue to increase bringing tipping points closer: currently at risk are the big ice sheets (Greenland, West Antarctic), the collapse of a major atmospheric current (North Atlantic), the thawing of permafrost and the death of coral reefs.

Still, some progress is being made. Paris resulted in more awareness and in a major increase in renewables. Carbon-dioxide emission trade is having a positive impact too. But far more measures are needed to improve grids, remove policies that are favourable for fossil fuels and to redesign energy markets. And these are relatively "easy" measures. How to invest in removing carbon-dioxide in the future or do we have to rely in the future on geoengineering interventions? Can this be done with the old economic rules still in place?

Meanwhile geoeconomic fragmentation will accelerate. Global companies are assumed political entities, they will have to take on responsibility while also securing energy supplies, restraining inflation, ensuring supply chain resilience, guaranteeing security, rebalancing the distribution of wealth, and achieving sustainability. It seems inevitable that (geo)politics and cultural values will lead to supply chains becoming more and more local and regional.

At the same time, we are approaching Christmas and the closing of the year. A time to get together with friends and family, sharing food and drinks, to celebrate past, present, and future. This Annual Report contains food for thought, as we focus on some of the highlights of 2023 and on future developments in the world. Through this we hope to look ahead to a brighter future beyond the gloom of the daily headlines.



At HCSS we do not pretend to know the future, to solve all highly complex problems with our analyses, or to instantaneously improve the relations between nations or mankind in an age of great-power competition, technological breakthroughs and climate change. But we expect that our fact-based analyses contribute to an increased understanding of the future path of the world and to provide ideas of how governments, businesses, and individuals, can help to make this world a better and safer place to live in.

The HCSS team wishes you a very merry Christmas and a happy New Year!

Paul Sinning, Executive Director



The Hague Centre
for Strategic Studies



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1. A Look at our Research Portfolio

As we look back upon last year, we take stock of our achievements and we formulate our plans for the next. Our research portfolio is in a very good state, I believe. In 2023, we once again expanded our thematic scope while at the same we deepened our focus. Our portfolio currently covers a wider spectrum of the challenges that our societies face in today's world, from great power politics and international security at the highest level down to the micro-fabrics of individual interactions that shape our everyday world from below. This annual report offers you a comprehensive overview of the many issues we work on everyday: geopolitics, defence policies, coercion, emerging technologies, economic statecraft, climate change, cyber governance, societal security and public order.



Our mission is to inform public discourse, public and private strategic decision making and contribute to international and national security in accordance with liberal democratic values. In carrying out this mission we aim to deliver research of the highest quality. Some would say that quality lies in the eye of the beholder.

At HCSS we have formulated a number of criteria that our research products and services should adhere to in order achieve that goal:

- **Clear Focus, Clear Argument and Clear Message**
 - Our products & services have a clear focus, express a clear argument, and contain a distinct message.
- **Well Articulated, Well Written, Well Structured**
 - Our arguments are well articulated and presented in an intelligent fashion. This means that the writing is flawless, the style is accessible, and the structure is coherent.
- **Evidence Based, Methodologically Sound**
 - Our products & services are based on empirical evidence; they are data- rather than opinion driven. We rely on sound methods to ensure that our results are reliable, valid, traceable, replicable, objective, and obtained in an ethical way.
- **Creative and Innovative**
 - Our products & services are creative and innovative. They don't repeat but challenge and complement conventional wisdom. They are thought-provoking and always offer something different, something new.
- **Policy Relevant and Actionable**
 - Our products & services are policy relevant and actionable, whether they are intended for public sector policy makers, NGO advocacy specialists, or private sector executives.

Achieving that quality – or should I say: these qualities – requires dedicated work and a relentless focus on continuous improvement by a diverse team of people coming from a variety of cultural, disciplinary and professional backgrounds. In our team we have, amongst others, philosophers, economists, political scientists and data scientists, mathematicians, economists, and polemologists.

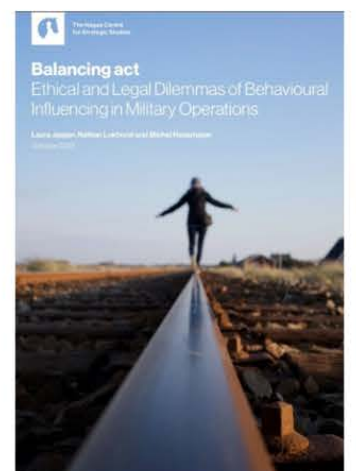
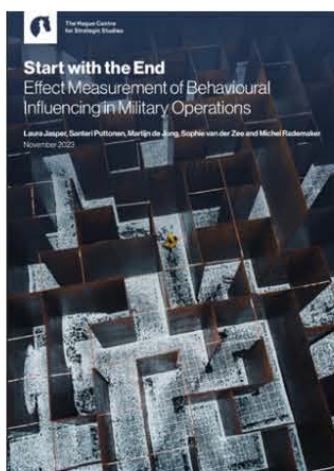
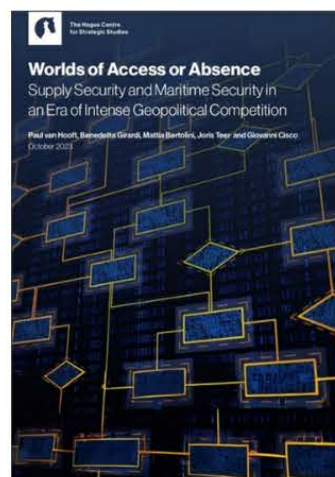
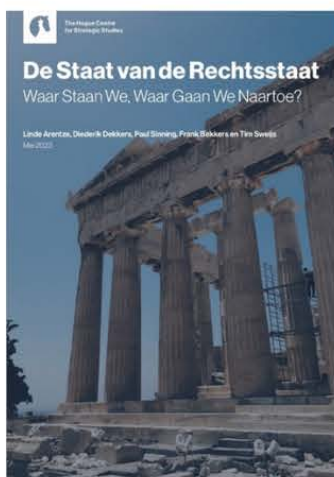
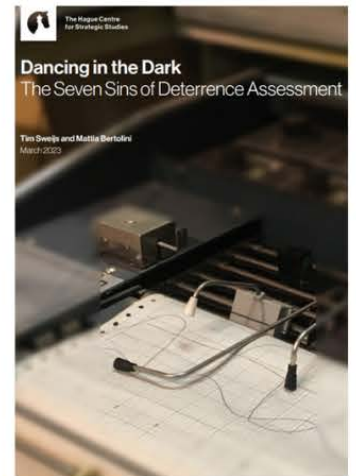
But it also necessitates constant experimentation and innovation, in order to test, mature, refine, and then deploy existing or novel analytical methods and techniques. I am proud to report that this year we added a range of analytical methods and techniques to our analyst toolbox. [And for the methodologically inclined amongst our readership: these include, but are certainly not limited to, unsupervised and supervised multilingual natural language processing techniques; structural and relational causal models for geographical and temporal data; optimization models for causal policy interventions; policymaker preferences elicitation protocols, amongst others, while we also tested how large language models can be deployed to support strategic analysis through taxonomy development].

We also struck up new - and strengthened existing collaborations with top notch institutions nationally and internationally, including, to name a few, the Leiden Institute for Advanced Computer Sciences (LIACS); the Center for International Strategy, Technology and Policy in the Sam Nunn School of International Affairs at the Georgia Institute for Technology and the Center for Strategic and International Studies (CSIS); The International Military Council on Climate and Security (IMCCS); the CyberPeace Institute in Switzerland; and Stellenbosch University in South Africa.

Last but not least: our team had an absolutely phenomenal output publishing in-depth research reports, shorter policy briefs, academic articles, book chapters, and books, as this annual report will attest to.

As we look forward, we expect another challenging year given the enormous geopolitical turbulence we do not expect to calm down anytime soon. We will be ready to offer more insight in the year to come.

Tim Sweijjs, Director of Research





2. Global Power Dynamics

Twenty-first century politics is moving fast. The international distribution of power has drastically shifted since the unipolar moment at the turn of the century. The Russian invasion of Ukraine highlights the return of brazen interstate war to current geopolitics. [Russia's return to the global stage](#) has renewed old alliances and ambitions in Europe, underlining the EU's desires to become a more geopolitical actor, but also the distance it still needs to travel.

However, while the news cycle in 2022 and 2023 was justly dominated by the war in Ukraine and Russian revanchism, the Indo-Pacific region continues to be the primary site of competition and contestation over the hegemonic order the United States established. [China](#) has emerged as a challenger to [both the US-led order and the US hegemony](#) that underwrites, across an array of military, diplomatic, economic, and legal dimensions. The access to high-end technologies with both commercial and military applications is in the foreground of that competition now, with the US seeking to limit China's access to specifically the semiconductors needed for artificial intelligence and miniaturization. European high-tech companies are caught in the middle.



Geopolitical competition and economic access meet elsewhere as well. The access to the global maritime commons, with [the transport routes that connect European economies to those in Asia is more and more insecure](#) and therefore a key economic concern of Europe. The missile attacks by the Houthis on trade vessels passing through the Red Sea underlines the fragility of these routes. The increased militarization of the Indo-Pacific, specifically in East Asia, further endangers that access and undermines the multilateral order upon which small and middle powers in Europe and Asia depend. Europeans therefore need to look for engagement with small and middle powers in the Indo-Pacific, to strengthen the existing maritime order and dampen the risks of escalation between the US and China. Sino-European relations, unlike European-Russian relations, have not yet led to open confrontation, but are similarly characterised by a downward trajectory over the course of the past decade; a combination of firmness and engagement is need, while this in turn requires greater European capability to assess, decide, and act.

Global supply chains running through the Indo-Pacific [can be weaponized due to rising tensions between industrialized blocs](#), similar to how Russia has weaponized its supply of natural gas to Europe. Our research shows that the semiconductor and CRM ecosystem is a fragile balance: whereas the semiconductor value chain is dominated by technologically advanced democracies allied to the US, supply chains of CRM currently used for the production of semiconductors are dominated by rival states, namely China and Russia, and non-rival states, such as the DRC.

All in all, as the speed of developments and their interactions increases, the world needs to prepare for long-term structural changes in the distribution of power in the international system and deep uncertainty in the domestic politics on both sides of the Atlantic. Europe and the Netherlands must be more proactive and take on greater responsibility, given the close connectedness between the Atlantic and the Indo-Pacific theatres. With our research programmes [Europe in the Indo-Pacific](#) and the [Future of Transatlantic Relations](#), HCSS examines the return of great power competition.

Paul van Hooft, Senior Strategic Analyst

Europe in the Indo-Pacific

The Indo-Pacific region has become the focal point of geopolitical competition, driven by the economic growth of Asian nations, particularly the People's Republic of China. Recognising this shift, Europeans are increasingly redirecting their focus towards the Indo-Pacific. Despite this, the specific role that Europeans should assume in the region remains uncertain. The HCSS "[Europe in the Indo-Pacific Hub \(EIPH\)](#)" serves as a catalyst for fostering exchanges and discussions on this evolving landscape. The hub actively engages with a diverse array of clients and partners worldwide, collaborating with scholars and experts beyond Europe. By establishing an international knowledge network, the EIPH brings together a range of stakeholders, including practitioners, business representatives, journalists, and scholars from Europe, South, East, and Southeast Asia, as well as East Africa, the Middle East, and the United States. This collective effort aims to explore and shape the future of the maritime commons in the Indo-Pacific, reflecting the dynamic nature of this strategic region.



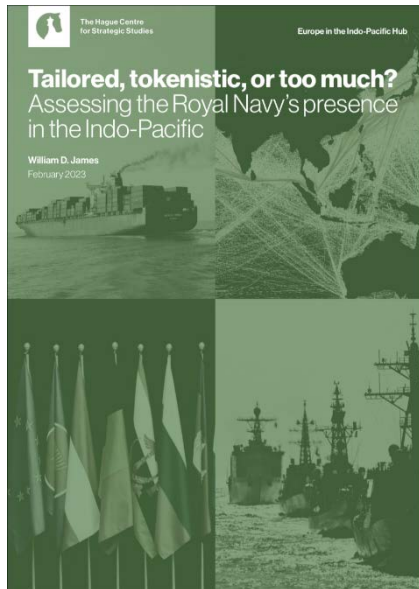
Paper | Why should Europe guard the Indo-Pacific Maritime Commons: Order, Access, or US hegemony?

Author: Paul van Hooft, Tim Sweijts. Contributions: Laura Elisa Niemann.

Europe face difficult choices in the Indo-Pacific, as the Sino-American competition intensifies and the multilateral order that protects the freedom of the seas comes increasingly under threat. This paper argues that Europeans need to more clearly formulate their objectives and develop policies based on a realistic view of their capabilities before embarking on a long-term commitment in the Indo-Pacific. [This paper examines](#) 3 distinctive objectives: (1) upholding the maritime order, (2) ensure that Europe maintains access to key Asian economies, and (3) support for U.S. hegemony. The authors offer a number of solutions with which Europeans can compensate for their lack of naval capabilities and consider serious maritime engagement in the Indo-Pacific. For example, European states, like the UK and France, should more effectively share and pool infrastructure in the region and rotate their forces in and out.

Guest Paper Series: Assessing Europe's Naval Presence

With China playing a more dominant role in the Indo-Pacific region, American supremacy has declined, posing a new challenge to European countries whose economic future and geopolitical relevance are linked to developments in the Indo-Pacific. However, it remains unclear what role Europeans should play in the Indo-Pacific given the modest size of the European navies compared to the US or China. In [this paper series edited by senior strategic analyst Paul van Hooft](#), six authors from across Europe, the US and Asia addressed the prospects and strategy of a European naval presence in the Indo-Pacific. The scholars explore the scope and focus of the European (EU) naval presence in the region and its effect, with a specific focus on the defence component of the Indo-Pacific tilt. Scholars also give their thoughts on the latest French, Dutch, German and British strategies for the Indo-Pacific and the meaning of future naval deployments in the region.



Guest Paper | Tailored, tokenistic, or too much? Assessing the Royal Navy's presence in the Indo-Pacific

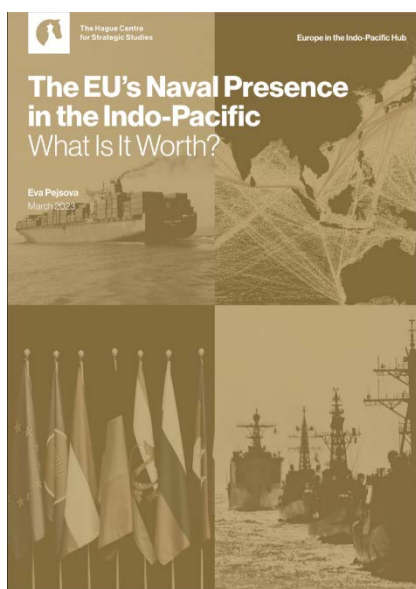
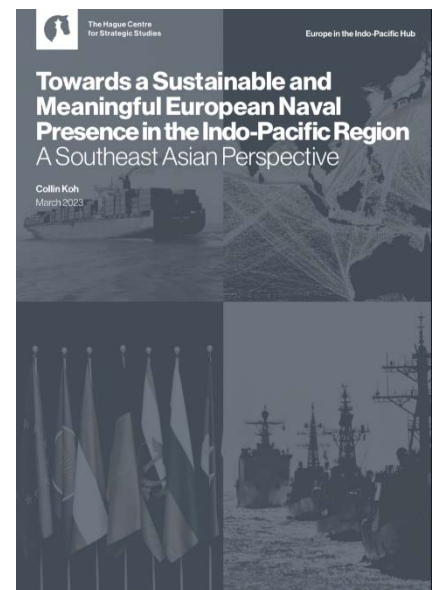
Author: William D. James (King's College London)

In the United Kingdom, there is a lively debate over the utility of its 'tilt' to the Indo-Pacific region. [This paper explores](#) the rationale and efficacy of small or token defence deployments – with a specific focus on the defence component of the Indo-Pacific tilt. Its arguments challenge the assumption that tokenistic deployments are always a strategically unsound idea. This paper argues that the naval effort in the Indo-Pacific – as currently constituted – will not cause undue strain on the UK's broader defence efforts in the Euro-Atlantic. Furthermore, and contrary to conventional wisdom, it argues that tokenistic naval deployments can be worthwhile – so long as the objectives are clear, expectations are managed, and they are integrated with allied and partner navies.

Guest Paper | Towards a Sustainable and Meaningful European Naval Presence in the Indo-Pacific Region: A Southeast Asian Perspective

Author: Collin Koh (S. Rajaratnam School of International Studies).

[This paper examines](#), from a Southeast Asian perspective, prospects and challenges facing the viability of future European naval presence in the Indo-Pacific. It argues that notwithstanding varying perceptions within Southeast Asia, the region remains generally receptive of European naval presence. Given the extant uncertainties surrounding the war in Ukraine that could cast doubts in the Indo-Pacific about the durability of this presence, this paper proposes maintaining the status quo of European powers flying their national flags while representing a general form of European naval presence in the Indo-Pacific at least for the time being.



Guest Paper | The EU's Naval Presence in the Indo-Pacific: What Is It Worth?

Author: Eva Pejsova (The Brussels School of Governance).

Recent years have seen an unprecedented concentration of European interest – and warships – in the Indo-Pacific. [This paper asks](#) what has been the scope and focus of the European naval presence in the Indo-Pacific and what has been its effect? The paper looks at the rationales and specificities of the naval deployments of France, Germany and the Netherlands in the Indo-Pacific in the context of Brussels' recent official tilt towards the region in 2021. It analyzes the responses of partners, including China and the US, before assessing their overall contribution to the regional strategic dynamic.

Guest Paper | The French Strategy for the Indo-Pacific and the issue of European cooperation

Author: Nicolas Mazzucchi (French Navy Centre for Strategic Studies (CESM)).

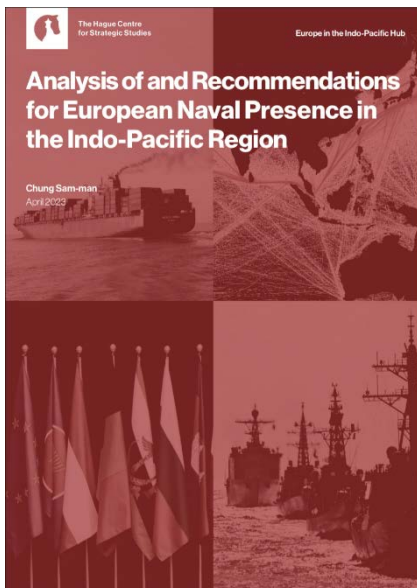
French presidential speeches in the Indo-Pacific from 2018 to 2021, structured a vision of France's role in the region, as both a local actor – with territories in both the Indian Ocean and the Pacific Ocean – and a global power able to propose diplomatic, economic and military cooperation for the Indo-Pacific countries. [This paper highlights](#) how France's orientation in the Indo-Pacific region is consistent with its global strategy: to act as a balancing power able to promote stability and peace in the context of growing tensions and global re-armament.



Guest Paper | Analysis of and Recommendations for European Naval Presence in the Indo-Pacific Region

Author: Chung Sam-man (KIMS).

As a way of walking a fine line in the Indo-Pacific region France published Indo-Pacific strategy paper in 2018, Germany and the Netherlands followed in September and November 2020 respectively. [This paper reasons](#) that in order to effectively target maritime challenges in the Indo-Pacific, including traditional security threats and newer challenges like climate change, a coalition of the willing that includes European navies and the navies of reliable and voluntary countries in the region needs to be forged. This paper highlights how minilateral frameworks and cooperation rather than competition is recommended for the EU's approach to the Indo-Pacific region.



Guest Paper | A Man-of-War is the Best Ambassador: European Naval Deployments as Costly and Useful Diplomatic Signals

Author: Jonathan D. Caverley (United States Naval War College).

European states appear willing to expend scarce resources on “presence” missions. The EU strategy calls for increased regional presence, but given the modest resources, every deployment must count. [This paper argues](#) that even modest navies—almost uniquely among foreign policy tools— can effectively perform diplomacy when used thoughtfully and judiciously by civilian political leaders. It explores how to analyse the diplomatic benefits of a naval vessel, and concludes by recommending that, as the world enters a more competitive, even mercantile era, Europe should focus its diplomacy via gunboats to deterring the potential for gunboat diplomacy.



Report | What the Indo-Pacific means to Europe: Trade Value, Chokepoints, and Security Risks

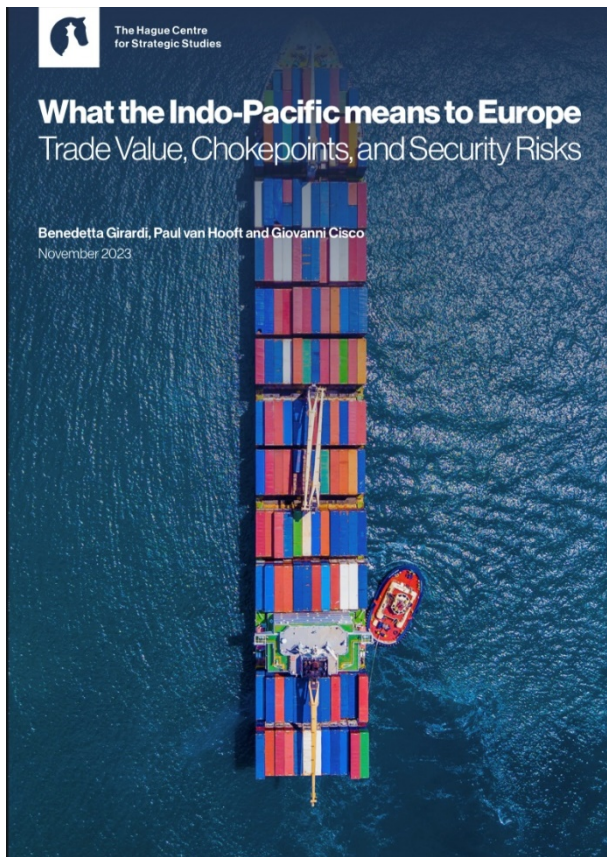
Authors: Benedetta Girardi, Paul van Hooft, Giovanni Cisco. With contributions by Alisa Hoenig.

How secure is European maritime trade with the Indo-Pacific? Sea lines of communication between the two regions pass through several chokepoints. Disruptions in trade, most likely along these key chokepoints, would have dire consequences. Currently, it is not clear how Europe can best protect its economic interests in the region. [This HCSS report traces](#) their role in global supply chains, identifies hot spots and weak points where Europeans should concentrate their maritime security efforts on a national, unilateral, minilateral or EU level, and offers practical recommendations to enhance maritime security.

Snapshot | Capability and Ambition Mismatch in the Indo-Pacific: A Middle Power Strategy for the EU

Authors and Contributors: Stella Kim, Paul van Hooft and Alessandra Barrow

How can a middle power strategy in the Indo-Pacific enable the EU to pursue greater strategic autonomy? [This snapshot argues](#) that by analysing the strategies of prevailing middle powers in the region, the EU can improve its own approach in the Indo-Pacific and settle on one better suited for its capabilities. A middle power strategy for the EU matches the EU's experience, behaviour and capabilities. European middle powers lack a robust military presence in the region and are less willing to commit more military might, as Russia is regarded more of a threat than China to European interests.



Event | How can Europe contribute to Maritime Security in the Indo-Pacific?

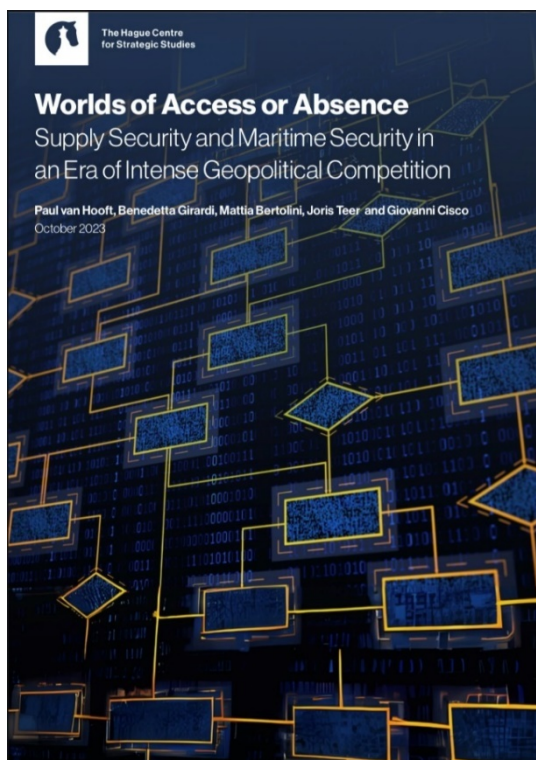
On April 6th, [held a in-person Europe in the Indo-Pacific Hub](#) event titled *How can Europe contribute to maritime security in the Indo-Pacific? Dutch-French dialogues on the Indo-Pacific* organised together with the Embassy of France in The Hague. The event was opened by Amb. Marc Abensour (French Ambassador for the Indo-Pacific) who provided remarks on maritime security in the Indo-Pacific. Following Amb. Marc Abensour's intervention, two panel discussions will took place with Adm. Jean-Mathieu Rey (Head of Navy foreign relations ALRI), Juliette Eijkelkamp (Adviseur Militaire Samenwerking Regio Azië at the Dutch Ministry of Defence), Frédéric Grare (Senior Policy Fellow at ECFR) and Paul van Hooft (Senior Strategic Analyst at HCSS and Chair of HCSS Europe in the Indo-Pacific hub).

Access or Absence in an Era of Geopolitical Competition: Insights on Critical Resources, Global Value Chains, and Maritime Security.

The [HCSS "Europe in the Indo-Pacific Hub \(EIPH\)"](#) serves as a catalyst for fostering exchanges and discussions on the specific role that Europeans should assume in the Indo-Pacific region. The hub actively engages with a diverse array of clients and partners worldwide. This guest paper series, edited by senior strategic analyst Paul van Hooft, strategic analyst Benedetta Girardi and assistant analyst Alisa Hoenig, features contributions from scholars and experts beyond Europe. The research for and production of this paper series was made possible by a financial contribution from the Taipei Representative Office in the Netherlands to the Hague Centre for Strategic Studies.

Keystone Report | Worlds of Access or Absence: Supply Security and Maritime Security in an Era of Intense Geopolitical Competition

Authors: Paul van Hooft, Benedetta Girardi, Mattia Bertolini, Joris Teer and Giovanni Cisco, with contributions by Alisa Hoenig and Tom Draaijer.*



Hyperglobalization and reduced trade barriers have increased supply chain interconnectedness, with maritime transport crucial for global value chains, especially through chokepoints from the Western Pacific to the Suez Canal. These narrow waterways are vital for transporting essential resources, yet susceptible to disruptions like blockades, wars, and natural disasters. Policymakers and business leaders should address potential disruptions to key economic inputs via supply control or threats to maritime transport.

[This report focuses](#) on the supply of essential resources, including oil, natural gas, cobalt, silicon, and semiconductors, and suggests diversification of supply and cooperation in maritime security for European and Asian powers.

*(*Mattia Bertolini worked as a research fellow at HCSS until the end of April 2023).*

Guest Paper | Indo-Pacific Security in 2030-35: Links in the Chain

Author: Dr. Jagannath Panda.

In a world subject to increasing geopolitical competition, global value chains have become significantly vulnerable. Geopolitical threats related to great power competition, political rivalry, and maritime disputes pose serious risks to supply chains worldwide. [This paper argues that](#) to avoid disastrous consequences for global trade and supply chains, it is vital that like-minded partners in the Indo-Pacific and beyond work together to anticipate risk, minimise exposure, and help each other resist and adapt to sudden shocks brought along by geopolitical threats. For both industry leaders and governmental bodies, the key challenge lies in utilising predictive models and analytics to grasp potential risks and mitigate vulnerabilities. This effort should not be isolated but rather adopt a holistic approach, encompassing suppliers, processes, and markets..

Guest Paper | Semiconductors in Key European and Indo-Pacific Economies: Geopolitical Risk in the Supply Chains into 2030 and Beyond

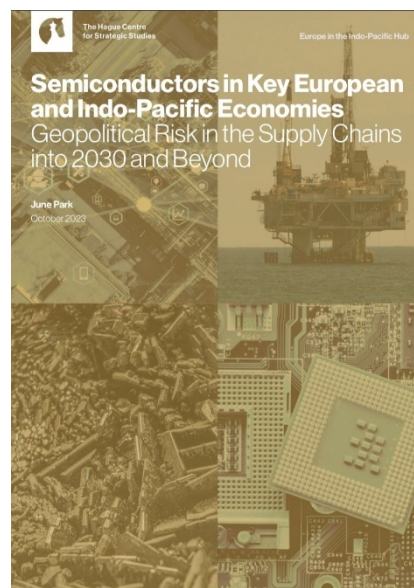
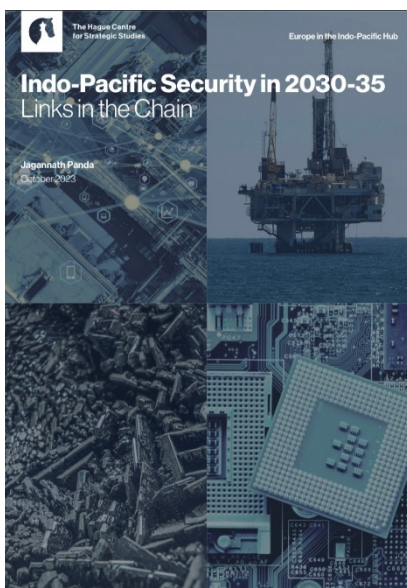
Author: June Park.

What are the core factors that drive semiconductor supply chains amid the current geopolitical climate post-pandemic, and into the near future by 2030? Will there be a secure supply and if so, why or why not? In a [new HCSS guest paper](#), June Park, PhD, analyses the chip supply chain in the context of multiple geopolitical risks, reflecting the industry and government perspectives of countries involved in the supply chain.

Guest Paper | Gas Supply Security in Europe and Asia Beyond 2030

Author: Philip Geurts.

Gas supply security stands at the forefront of global energy concerns, particularly for Europe and Asia. In [his guest paper](#), author Philip Geurts highlights the challenges posed by the inflexibility of gas supplies due to long lead times for production projects, exacerbated by the limited versatility of gas exports, whether in the form of liquefied natural gas (LNG) or through pipelines.



Guest Paper | The U.S.-China Technology War and Taiwan's Semiconductor Role in Geopolitics

Author: Jiann-Chyuan Wang.

In the dynamic landscape of global geopolitics, Taiwan has emerged as a pivotal player in the U.S.-China technology war, particularly in the realm of semiconductor production. With a remarkable contribution of over 60% of advanced chips, Taiwan has positioned itself as a critical hub for technologies driving artificial intelligence, 5G, and advanced military weaponry. [This paper by Jiann-Chyuan Wang](#), delves into the intricate interplay between the U.S.-China trade and technology war, the Chips & Science Act, and Taiwan's semiconductor industry.

Guest Paper | Oil Supply Security of Asia and Europe Beyond 2030

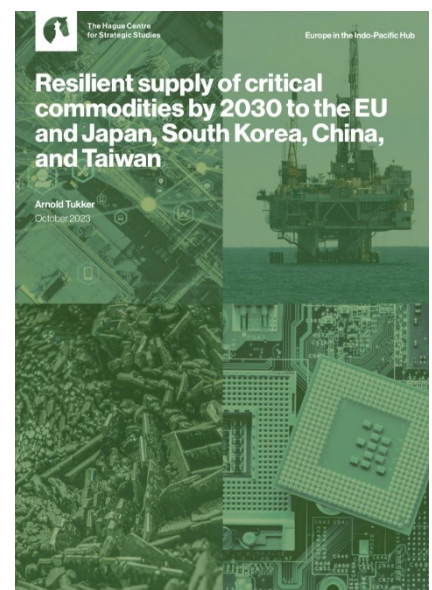
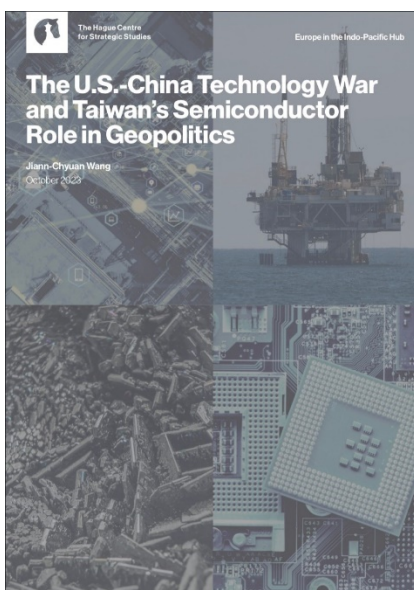
Author: Philip Geurts.

In [this paper](#), guest author [Philip Geurts](#) explores the ever-growing global demand for oil and the challenges it poses for policymakers in Asia and Europe. Despite the ongoing discourse on transitioning away from fossil fuels, the relentless demographic growth in developing nations and industrial development continue to propel oil demand upwards, projected to hover around 100 million barrels per day into the 2030s.

Guest Paper | Resilient supply of critical commodities by 2030 to the EU and Japan, South Korea, China, and Taiwan

Author: Arnold Tukker.

In a rapidly evolving global landscape, securing a resilient supply chain for critical commodities is a paramount concern for the European Union (EU) and major Asian economies, including Japan, South Korea, China, and Taiwan. In [this paper](#), [Arnold Tukker](#) sheds light on this critical issue in his paper, drawing insights from a workshop organized by HCSS in The Hague on the 7th of March 2023.



Initiative on the Future of Transatlantic Relations

Transatlantic Dialogues

Transatlantic Dialogue series, organised together with the Embassy of the United States in the Netherlands, that looks at how the relationship between Europe and the United States can be adapted to the geopolitical realities on the 21st century.

James Goldgeier | The United States, NATO, and Russia: Why did things go wrong, and where do we go from here?

Three decades ago, the United States and its European allies had high hopes for a new relationship with a Russia that seemed on the path toward democracy. Today, the West faces an authoritarian Russia that has committed genocide in Ukraine and is bent on undermining Western democracies. Could things have been different, as many have argued, had the United States and its European allies followed a different approach to Russia and to NATO enlargement in the 1990s and 2000s? How will the United States and its NATO allies deter and defend against the threat Russia poses – and an ever-closer Sino-Russian relations – going forward? On February 7th 2023, [James Goldgeier](#) visited HCSS as part of the Transatlantic Dialogues event series. [In this interview](#) HCSS senior strategic analyst Paul van Hooft raises these and other questions with James Goldgeier.

Chris Miller | Technological Crossroads: Transatlantic Relations and the European Semiconductor Industry in a Era of Sino-American Rivalry

Today, military, economic, and geopolitical power are built on a foundation of computer chips. Virtually everything—from missiles to microwaves, smartphones to the stock market—runs on chips. Until recently, the West designed and built the most advanced chips and used control over computing power to maintain its military edge. On June 23rd, [Chris Miller](#) addressed these key questions: How has China's investment in chip-building initiatives impacted its military capabilities and its relationship with Taiwan? How has the technological competition between China and the United States in semiconductors affected Europe? What choices does Europe face regarding technology imports and exports from China? Chris Miller is author of *Chip War: The Fight for the World's Most Critical Technology*, a geopolitical history of the computer chip.

Aaron L. Friedberg | A New World of Blocs: The Future of US-Europe Relations in an Age of Competition with China

The division between the West with the United States, Europe, Japan, and others on one hand, and China, Russia and other autocratizing states, on the other, has been underway for some time. However, the Russian invasion of Ukraine has served as a harbinger and catalyst for this process. With particular emphasis on China, renowned Professor of Politics and International Affairs [Aaron L. Friedberg](#) spoke to HCSS on June 28th and addressed the following questions: Why did the strategy of engagement fail? What is the shape of the “new world order” that is now emerging? And what are the implications of these ongoing developments for the strategies of the major Western powers, and for the future of trans-Atlantic relations? HCSS Strategic Analyst [Paul van Hooft](#) interviews Princeton Professor of Politics and International Affairs Aaron L. Friedberg the shape of the “new world order” that is now emerging.

Prof. F. Gregory Gause III | The Israel-Hamas Conflict and the Crisis of the Greater Middle East

On Thursday December 7, [Professor F. Gregory Gause III from Texas A&M University](#) visited HCSS for a new Transatlantic Dialogue on the Israel-Hamas Conflict and the Crisis of the Greater Middle East: Impact on US foreign policy and transatlantic relations. While the Israel-Hamas conflict, like all conflicts, has its own unique history and immediate causes, it is also representative of a broader crisis that has characterized the Middle East for the past two decades. That crisis has its roots in the weakening and, in some cases, the collapse of state authority in the Arab world. This series of reinforcing crises has given rise to a consistent theme for the transatlantic partners, both within NATO and more broadly: should we stay or should we go? Or, perhaps more for Washington, how should we balance our efforts between the Middle East, Europe, and East Asia? The long-term solution to the crisis of the greater Middle East is the reconstitution of central authority within the borders of these weakened states. However, the path to the restoration of state authority, if it happens at all, will be long, difficult and frequently violent. How the EU and the US can encourage that historical process while addressing other challenges and remaining politically cohesive remains an open question.



The Socio-Political Instability Survey

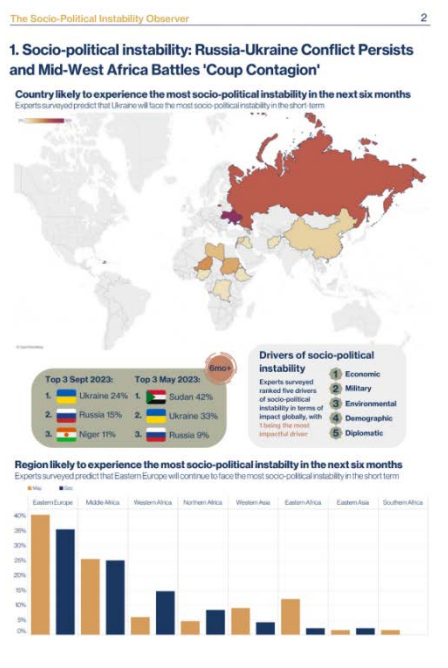
The world is in flux, global players are shifting the balance of power, and instability is on the rise. But, what's next? How will the socio-political situation develop? How will environmental and economic factors affect socio-political instability? Which regions will be affected most? This year HCSS launched [The Socio-Political Instability Survey](#), inviting think tankers from around the world to give their views on the short-term likelihood and location of volatility and conflict globally using multiple-choice questions. The survey also delves into three 'hot-topics' using open-ended questions formulated by our Strategic Analysts. Each survey produces an 'Observer' paper which outlines the results of the first Socio-Political Instability Survey and provides analysis. In this survey, socio-political instability encompasses various drivers of volatility, such as economic, diplomatic, environmental, and demographic factors. In extreme socio-political instability, this includes the probability of conflict fatalities, specifically, the incidence of armed conflict that results in fatalities. The survey will accompany the HCSS Socio-Political Instability Monitor which assesses conflict probabilities for the upcoming month, six months, and twelve months. In 2023, the Socio-Political Instability Survey was led by Alessandra Barrow and Linde Arentze.

Observers

The Socio-Political Instability Observer: May 2023

Authors and contributors: Alessandra Barrow, Linde Arentze, Diederik Dekkers and Henrik Kathmann

The [first edition of the Observer](#) highlights Russia's invasion of Ukraine as a significant factor in shaping expert perceptions of global socio-political instability in the short term. Russia is a major source of instability, both internally and through military and political involvement in various locations. The instability in Sudan underscores the potential for volatile situations, whether due to environmental or armed conflicts, to escalate and spread across fragile neighbouring states in Middle and Eastern Africa, making them potential sources of future socio-political instability. While China is a dominant global player, experts downplay its disruptive power in the short term compared to Russia. Many experts emphasise China's inter-dependencies with the west and uncertainties surrounding its next moves regarding Taiwan and Ukraine.



The Socio-Political Instability Observer: September 2023

Authors: Alessandra Barrow, Anna Sophie den Ouden and Tom Connolly

The [second edition of the Observer](#) highlights the continued importance of Russia's invasion of Ukraine as a significant factor in shaping expert perceptions of global socio-political instability in the short term. Russia and Ukraine are seen as major sources of instability, through the worsening of the war in Ukraine and the conflict's role as a catalyst for geopolitical bloc forming. However, experts do not perceive that the war in Ukraine is likely to escalate into a wider Russia-NATO confrontation any time soon. Africa, particularly Middle Africa, continues to be seen as a major source of future socio-political instability, with a number of coups in September highlighting how volatile situations can escalate and inspire other armed events. This potential for volatility around the world is heightened by perceptions of a retreat from multilateralism and a lack of 'international community', also highlighted in the previous May Observer.

Other Publications

Report | The Strategic Interests of the Dutch Maritime Manufacturing Industry

Author: Frank Bekkers. With contributions by Tara de Klerk, Rob de Wijk, Michel Rademaker and Paul Sinning.

What is the economic significance of [the Dutch maritime manufacturing industry](#)? What are the strengths, weaknesses, opportunities and threats of and for the maritime sector? At the request of the Ministry of Economic Affairs and Climate, HCSS has conducted research into the strategic interests of the maritime manufacturing industry (MMI), in the context of the desire of various House of Representatives motions to achieve a more integral national maritime industrial policy, including naval construction.

From a number of strategic perspectives, this report elaborates which knowledge areas and which industrial capacities should be invested nationally as much as possible in order to safeguard the vital interests of national security in the Netherlands. Finally, in an international comparison, the report provides insight into how a number of other European countries – France, Germany, Italy, Spain, UK, Norway and Sweden – have designed their industrial policy around the maritime sector, as a possible mirror for the Dutch policy to be developed.

For our podcast produced together with BNR Nieuwsradio, [Special envoy Marja van Bijsterveldt](#) talked in depth about the status of the Dutch maritime industry.



Presentations, Visits and Events

Expert Session at HCSS with Professor Stephan Frühling on Alliance Dynamics and Integrated Deterrence in the Indo-Pacific:

On Wednesday, March 29, The Hague Centre for Strategic Studies (HCSS) together with the War Studies Research Centre (WSRC) hosted a closed [expert meeting with Professor Stephan Frühling](#) and a group of high-level policymakers and experts on the evolution of alliance dynamics in the Indo-Pacific and the role of integrated deterrence therein: how is it changing and what are the implications for the future stability of the region. Professor Stephan Frühling researches and teaches at the Strategic and Defence Studies Centre at the Australian National University, and has widely published on Australian defence policy, defence planning and strategy, nuclear weapons and NATO.

Webinar: Evolving Frontiers in Maritime Governance

On the [4th of September 2023](#), FACTS Asia, Friedrich-Ebert-Stiftung (FES) Philippines, and Foundation for the National Interest (FNI) present the second instalment in the European Foreign and Security Policy in the Indo-Pacific Webinar series titled “Evolving Frontiers in Maritime Governance”. As one of the speakers, HCSS strategic analyst Benedetta Girardi highlighted the importance of inclusivity in building cooperation and partnership with Indo-Pacific states in the recent Webinar on Evolving Frontiers in Maritime Governance. Ms. Girardi discussed Europe’s role in guarding the Maritime Commons and how this will involve a partnership between the EU and the Indo-Pacific states. She notes that despite the distance of Europe to the region, the EU is first and foremost interested in protecting its economic interest.

Michel Rademaker meets with President Tsai at the 2023 Ketagalan Forum

On August 9, President Tsai Ing-wen [met with HCSS deputy director Michel Rademaker](#) and other international participants from the Ketagalan Forum – 2023 Indo-Pacific Security Dialogue. In her speech, President Tsai said that, standing on the frontline of the defence of democracy, Taiwan has continued to strengthen cooperation with other democracies – including the United States, Japan, the European Union, Australia, and Canada – to exchange experiences on combating disinformation and protect the freedom of speech. The president said she looks forward to more interactions and cooperation to safeguard our values of freedom and democracy.

HCSS Visit to Taiwan with Han ten Broeke and Joris Teer

In late June and early July, HCSS Director of Political Affairs Han ten Broeke and Strategic Analyst Joris Teer completed a study trip to Taiwan. They spoke with scholars, thinktank experts, policymakers and industry representatives from Taiwan, South Korea, Europe and the United States about maintaining peace and stability in the Taiwan Strait, in the face of the rapid modernization of China’s People’s Liberation Army, intensifying US-China competition and the war in Ukraine among other topics. The [Netherlands Office Taipei \(NLOT\)](#) hosted a seminar, as well as a salon dinner at the Residence of Representative Guido Tielman, during which Ten Broeke and Teer gave insightful presentations on the topic of economic security and geopolitical due diligence. Together with European representatives and business leaders in Taipei, they engaged in an informative and constructive discussion based on findings from various HCSS research reports.



His Excellency Dr Zambry Abd Kadir, the Minister of Foreign Affairs of Malaysia, visits HCSS

On June 20th 2023, HCSS was honoured to welcome His Excellency Dr Zambry Abd Kadir, [the Minister of Foreign Affairs of Malaysia](#), for a working visit this week, together with a delegation including H.E. Nadzirah Osman, the Ambassador of Malaysia to the Netherlands and Permanent Representative of Malaysia to the OPCW. The visit was part of efforts to enhance the bilateral relations between Malaysia and the Netherlands. The delegation was then given a briefing by Senior Strategic Analyst Laura Birkman, Head of the [HCSS Climate and Security Programme](#), on a range of research and activities, including ongoing work for the Water, Peace and Security partnership, its data-driven research to model climate and conflict pathways and design optimal intervention options. Strategic Analyst Joris Teer discussed the [HCSS Europe in the Indo-Pacific](#) Hub highlighting Malaysia's geographical centrality in global maritime supply chains. He outlined the risks for the world economy, if trade in critical economic inputs like critical raw materials, semiconductors and oil is disrupted, as a result of a geopolitical crisis between great powers.

Economic and Maritime Security in the Indo-Pacific: Connection between Europe and East Asia

On the [27th of January](#) HCSS brought together experts from Japan, the US, and Europe to discuss economic and maritime security in the Indo-Pacific. Two panels of experts talked about the potential for cooperation between Europe and Japan on supply chains of access to critical raw materials for the energy transition as well as the maintaining of open sea lines of communication in the Indo-Pacific. You can re-watch the [critical raw material supply chain](#) and the role of the [maritime routes connecting Europe and East Asia](#) on the HCSS YouTube.

3. The Climate Security Nexus

The effects of climate change became more prevalent in 2023. It was a record-breaking year for extreme weather events with devastating impacts in all regions of the world. According to NASA, this summer was the Earth's warmest on record. Compared to the 1850-1900 baseline, temperatures rose by approximately 1.4 degrees in 2023. In Southeast Asia, high humidity conditions in Thailand, Laos and Vietnam were coupled with temperature highs between 41 and 44 degrees, while the inland province of Xin Yang in China and California's Death Valley had to contend with 52.2 and 56.7 degrees, respectively. Also in Europe, summer temperatures hit an all-time high. Large parts of southern Europe saw up to two weeks of very strong heat stress, corresponding to a perceived temperature of between 38 and 46 degrees. The South of Spain experienced up to 60 days of this level of heat stress. Italy saw temperatures of 48.2 degrees. These values were even higher in Northern Africa and the Middle East, with Tunis hitting 49, Agadir 50.4, and Algiers 49.2 degrees.



This year was also marked by record high sea level rise, continued ocean warming and melting of glaciers and natural disasters with immense human and socio-economic toll. In February and March, Tropical Cyclone Freddy hit Madagascar, Mozambique, and Malawi. In August, the Hawaiian island of Maui was struck by a deadly wildfire, killing 97 people and burning the historic city Lahaina to the ground. Greece was confronted with the largest single fire ever to be recorded in Europe, destroying an area larger than New York City. Meanwhile, Canada's wildfire season burned six times its 10-year average. In September, Storm Daniel brought on torrential rains in the Mediterranean that resulted in devastating floods in Libya – the worst in its history – killing more than 5,000 people and leaving more than 10,000 (still) missing. The coastal city of Derna was particularly affected, not least due to years of neglect of key dams and the ongoing conflict between the UN-backed government in Tripoli and the eastern rival authority of General Khalifa Haftar governing Derna, hindering a timely and effective response. In November, severe floods in the Horn of Africa left more than 795,000 displaced in Somalia. Many had already been forced to flee the country in previous months due to drought and conflict, fuelling an already urgent humanitarian crisis.

The physical intensification of climate change has wide-spread socio-economic consequences, increasing the fragility and vulnerability of large populations. While the climate-security nexus gained increasing attention, climate mitigation and adaptation efforts remain insufficient. Mitigation measures are still far from agreed goals, with further overall increases measured of carbon, methane, and nitrogen emissions. With the top five emitters – China, US, India, EU, and Russia – deeply divided on broader geostrategic issues, decisive collective action is unlikely to occur in the short term. With the ongoing trade war between the US and China, a neutral India focused on economic growth, and a Russia that is undermining European security and stability, the EU is increasingly looking at middle powers to support a more effective response to climate change. More discussions were held in 2023 about expanding the role of the UNSC to address climate-related conflict challenges, with India lifting some of its reservations, but China and Russia still blocking progress there.

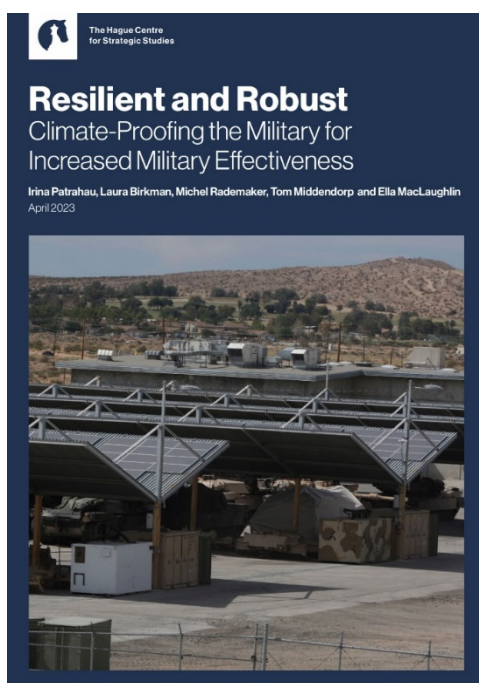
More broadly, geopolitical unrest and regional conflicts in Ukraine and the Middle East fuelled great power competition, threatening to divide the international community even further. This will inevitably affect the global community's ability to respond swiftly and decisively to climate change mitigation and adaptation.

Not all hope is lost, as there is evidence that climate change is still seen as an opportunity for collaboration in an otherwise deeply fragmented world. China and the US announced an agreement in November to ramp up wind, solar and other renewable energy, and the broader aim to displace fossil fuels. Further, NATO is upscaling its efforts in the field of climate security. While under the Paris agreement, there is no specific requirement to cut emissions from military operations, NATO formally recognised climate change as a threat multiplier and one of the defining challenges of our times. In 2023, the world's biggest defence alliance opened its Centre of Excellence on climate and security (CASCOCOE) in Canada, released three big reports on the implications of climate change on NATO operations in 2023. Finally, more governments are recognising that water is still a bigger source for cooperation than for conflict and are taking measures to improve water use and allocation.

Further prospects for smart and collective action hinged in large part on the outcome of the [COP28 in Dubai](#). This COP mattered because it was the first global stocktake on climate action since the Paris Agreement (2015) and would determine the ambition of the updated nationally determined contributions (NDCs), or country level commitments to combat climate change. Starting strong with a substantial financial agreement on loss and damage, major hurdles remain to push emitters to phase out fossil fuels sooner and support a global adaptation agenda. Overall, stalled agreement on mitigation will likely lead to increased competition on climate adaptation, as countries may scramble to take (unilateral) action in regions of geostrategic priority and interest. Where the impacts of climate change are set to worsen and the effects increasingly pose (national) security threats, issues surrounding climate security will become increasingly relevant for the climate change agenda moving forward.

In 2023, HCSS expanded its [Climate and Security Programme \(CASP\)](#) portfolio, supported governments and organisations in their efforts to address climate-related security challenges, raised further awareness and understanding about the climate-security nexus, continued to build on its research, and enhanced its data-driven methods and early warning systems to support policy and decision makers. The sections below offer a summary of the key activities in 2023.

[Laura Birkman, Senior Strategic Analyst](#)



Report | Resilient and Robust: Climate-Proofing the Military for increased military effectiveness

Authors: Irina Patrahau, Laura Birkman, Michel Rademaker, Tom Middendorp and Ella MacLaughlin; with contributions by Richard Nugee, Sharon Burke, Richard Brewin and Eric Engelbrecht.

Since the Ukraine war, there has been a growing recognition of the importance of climate proofing the armed forces as a precondition for operational effectiveness, rather than as a positive side effect. Energy security is now a priority of NATO and the EU.

[This HCSS report](#), made possible by a financial contribution from the Luxembourg Government, shows how new technologies can help armed forces reduce their carbon and logistical footprint, while maintaining - or even strengthening - their operational effectiveness. Better incentives for green innovation can help to reduce costs and improve operational capability at the same time.

Water, Peace and Security Partnership (WPS)

In 2023, the [Water, Peace and Security \(WPS\) partnership](#) expanded its work both at the global and regional scale. HCSS focused on the work in Iraq and continued to lead WPS engagement in the region. In January, HCSS contributed to a Mercy Corps publication and workshop held in Erbil, Kurdistan, on the topic: “Basra: Water and Social Cohesion; Scenarios: Preparing for a new water crisis, 2023-2025”. In March, Irina Patrahau represented the WPS partnership in the “Water, War and Peace” side event at the UN Water Week and as a follow-up presented the WPS Global Tool and Iraq work to USAID. HCSS led the WPS participation in the plenary of this year’s Berlin Climate Security Conference and participated in a number of EU dialogues and events. During COP28, HCSS brought the WPS partnership into a number of side events hosted in the COP28 Presidency Pavilion, Youth and Children Pavilion, and EU Pavilion.

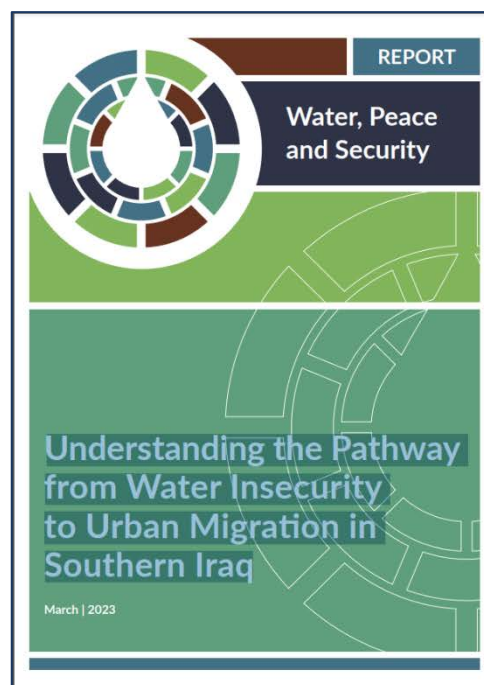
Throughout the year, the [WPS Iraq engagement](#) substantively advanced through the building of partnerships with non-governmental organisations active in the field of water and climate-related issues in the South of Iraq. The strategic and carefully selected partnerships further deepened WPS capacity development at provincial and local levels. Collaboration with one local partner was completed and consisted of the delivery of various training modules and workshops focused on raising awareness on the water-security nexus with a view to better understand water-conflict dynamics, the development of causal loop diagrams to better understand the water situation and human responses to it, and conflict-sensitive dialogue facilitation with various user groups affected by water-related security challenges. These events were organised together with WPS partners IHE Delft, Deltares, and International Alert. Two train the trainer sessions were also completed in collaboration with the local NGO Humat Dijlah with the aim to prepare the organisation for the facilitation of the Dijlah Talks in December 2023 and province-based stakeholder dialogues in Basra, Wasit and Missan in January 2024. Through these local and provincial level engagements, WPS aims to contribute to the increased understanding of the water-security nexus, the prevention and mitigation of water-related security challenges such as urban migration or inter-provincial conflict over water sharing and seek out opportunities for water-based cooperation.

Building on the outcomes of the national, provincial and local level work, the WPS policy dashboard for Iraq was finalised. Additionally, the HCSS Datalab developed Iraq-based causal models to identify the causal relations between various factors of the water-security nexus and develop optimal policy interventions. These outputs will serve various planned events in 2024.

WPS Paper | Understanding the Pathway from Water Insecurity to Urban Migration in Southern Iraq

Authors: Toka Mahmoud, Irina Patrahau, Alicia Vignali, with contributions from Laura Birkman, Judith Blaauw, Frederique de Groen, Susanne Schmeier, Tobias von Lossow and Rolien Sasse.

In southern Iraq, decades of water insecurity have influenced migration patterns by endangering agricultural output and the livelihoods of farmers. While a direct link between water insecurity and migration cannot be drawn, water insecurity may indirectly increase migration patterns by impacting individuals’ livelihoods, health, energy and food security. Learn more about what the Iraqi authorities and the private sector can do in a [new update from the Water, Peace and Security \(WPS\) partnership](#).



UN 2023 Water Conference

From March 22-24, the UN 2023 Water Conference took place at the UN Headquarters in New York, the first global UN freshwater conference in nearly 50 years, co-hosted by Tajikistan and the Netherlands. The conference comes at a moment when climate change is exacerbating a global water crisis that is severely affecting half the world's population, and presented an unparalleled opportunity to advance water on the global sustainable development agenda. "Water is a critical resource for managing the great societal challenges of today. Thinking more strategically about water will be essential to combat climate change, secure human well-being, and preserve national security", HCSS senior strategic analyst and climate security expert Laura Birkman stated, on the importance of the Conference.

Over 500 side events were organized in connection with the Conference, both in-person and virtually. HCSS is proud to have [hosted and co-hosted a number of these side events](#), together with our partners. The events attracted wide participation from around the world and left the participants feeling invigorated and inspired. Or, as HCSS special strategic advisor Tom Middendorp put it: "On the third day of the UN Water Conference we ran out of water quotes and one-liners, but we did not run out of sense of urgency."



Side Event | Water and Security Serious Game

On March 22, HCSS hosted an [online Climate & Security Serious Game](#), led by Michel Rademaker. Participants took part in a moderated serious game focused on the case study of the Sinai Peninsula in Egypt. This serious gaming exercise intended to create awareness and understanding of the complexities behind conflict-sensitive water management, promote decision making in climate-vulnerable areas and stimulate the development of innovative ideas that could support conflict sensitive water management strategies in the Sinai. This event contributed to the thematic areas 'Water for Sustainable Development' and 'Water for Climate, Resilience and Environment'. More than 110 participants played the game for approximately 2-2.5 hours.

Side Event | Water, War, and Peace

HCSS strategic analyst Irina Patrahau participated in a panel on ["Water, War, and Peace"](#). The official side event brought together experts from the frontlines of global water security to explore deep and growing links between water and conflict, and the essential strategies to reduce the risk of water-related violence and find paths to peace.

Water and energy systems are regularly targeted in the Russia-Ukraine war, Iraq, Africa, and elsewhere. Access to water has often been a catalyst for tensions and violence, and water itself has long been a target and tool of war. How are the links between water and security changing? In an increasingly water-stressed world, what essential strategies can reduce the risk of water-related violence and what are the paths to peace? As Irina Patrahau stated: "Water security is not just about water – it's about food, energy, health and human security. Water-related security risks must be addressed through comprehensive cross-sectoral strategies."



During the panel, organised by the Pacific Institute, together with HCSS, Circle of Blue and the World Resources Institute, Patrahau presented the work of the Water, Peace and Security (WPS) consortium on water security in Iraq. “The Water, Peace and Security approach combines early warning tools with causal models and participatory analyses in order to alleviate water-related security risks in vulnerable areas,” Irina Patrahau explained. Other speakers in the panel included Peter H. Gleick (Pacific Institute), Liz Saccoccia (World Resources Institute) and Carl Ganter (Circle of Blue), who also acted as moderator.

Side Event | Nature-based Solutions for Water and Peace

HCSS senior strategic analyst Laura Birkman presented the HCSS security assessment framework at a panel discussion organised by The Weather Makers, in collaboration with HCSS, Anthesis and Tamatta, at the UN Headquarters. The panel on *‘Nature-based Solutions for Water and Peace’* used a practical and well-researched case-study for the Sinai Peninsula to demonstrate how we can turn the tide of soil degradation and water scarcity while taking into account the social, economic, political and security dynamics of a region.

“To manage the vicious cycle between water scarcity and instability, it is critical to develop adaptation solutions that are nature-based and conflict-sensitive, so that efforts to improve a situation don’t lead to further strains and stresses at local and community level,” Laura Birkman reflected on the panel.

Other high-level speakers in the panel included Juliette Kool, Water Resource Engineer at The Weather Makers, Bianca Nijhof, Associate Director at Anthesis Group, John D Liu, Member of the Advisory Board of the UN Decade on Ecosystem Restoration, Tom Middendorp, Chair of the International Military Council on Climate and Security (IMCCS), Dennis Kerkhoven, Co-founder at Tamatta, Lara Muller, Director Public Sector at Invest International and Robert De Bruin, Director Corporate Affairs at Van Oord. Topics addressed include the opportunity for the offshore industry and water sector to play a leading role in the regeneration of ecosystems worldwide; how data, science and technology can be redirected to support the design ecosystem-based management approaches; novel blended finance arrangements; and future-proof investment strategies for Nature-based Solutions.



Webinars, Presentations and Events

Appraisal Mission to Iraq

From 17-27 February, Laura Birkman joined an appraisal mission to Iraq led by the German government and GIZ. Her role was to support the identification of climate security hotspots and develop a theory of change to support anticipatory conflict- and gender-sensitive adaptation interventions. During the 10-day mission, the delegation travelled across the country and spoke with different ministry representatives, governorate authorities, academics, civil society organisations, and NGOs working in Baghdad, Basra, and Anbar. The findings were used to support future climate security programming efforts of the German government in Iraq.

2nd Annual Erbil Forum

On completion of the mission, Laura travelled to Erbil in Kurdistan to participate in the 2nd Annual Erbil Forum focused on “Turning Points and the Future of the Middle East”, where she was a speaker in a roundtable panel “Climate Change and Water Issues in the Middle East, Iraq, and Kurdistan Region”. The Forum was co-organised by the Kurdistan-based Rudaw Research Center in partnership with the Washington Institute, the Atlantic Council, and the Wilson Center.

Defence Symposium ‘Climate Change and Conflict’

On 14 March, Laura provided a keynote at the Ministry of Defence Symposium ‘Climate Change and Conflict’ at the Kromhoutkazerne in Utrecht, where she provided insights into the broader security implications of climate change, the different pathways between climate change and conflict, the added value of early warning systems, and the increasing need for integrated military operations.

Berlin Climate and Security Conference

On October 5, Laura Birkman attended the Berlin Climate and Security Conference, co-hosted by the German Foreign Office and Adelphi, where she moderated a plenary panel on the early tools of the Water, Peace, and Security partnership. Participants of the panel included WPS partners World Resources Institute and International Alert, as well as the International Crisis Group.

Berlin Security Conference

On November 28-29, Laura Birkman attended the Berlin Security Conference, where she participated as a speaker in the only panel dedicated to climate security. The aim of the session was to explore the implications of climate change on our evolving security and defence landscape, the ways in which armed forces can operate as mitigation and adaptation multipliers as well as technological drivers in a non-fossil future, and how low carbon futures can support and strengthen operational readiness. The panel was moderated by General (ret.) Tom Middendorp, chairman of the IMCCS. Other speakers included Head of Research and Deputy Head of the German Institute for Defence and Strategic Studies (GIDS) Professor Dr. Stefan Bayer, the German State Secretary Claudia Mueller, Euromil chair Emmanuel Jacob, NATO climate security lead Richard Brewin, and Head of the Italian Forestry Carabinieri Raffaele Manicone.



Webinar | Crowds & Machines, The Next Phase

How can advanced data technologies like satellite imagery and machine learning support the development of climate change policies? On Wednesday, March 15th, Hans van 't Woud (BlackShore), Koen Verberne (52impact) and Laura Birkman (HCSS) took a deep dive into the unique approach developed by the [Crowds & Machines consortium](#) that combines game-driven crowd source analytics, machine learning, and strategic analysis. [The online panel](#) provided an overview of the approach and invited participants to get an exclusive look at this innovative and ambitious project. Understanding the impact of climate change is crucial for the development of effective climate change mitigation policies. Advanced data technologies can play an important role in understanding the impact of climate change. The Crowds & Machines project is a joint operation of BlackShore, 52 Impact B.V. and HCSS, and is supported by the European Space Agency (The ESA Φ-lab). All generated labels are intended to be delivered as open data, and will be shared through ESA's AI4EO Initiative.

Richard Nugee joins HCSS as Special Strategic Advisor on Climate Security

In January, HCSS was pleased to announce that Lieutenant General (Retd) Richard Nugee has joined us as non-resident [Special Strategic Advisor on Climate Security](#). Richard Nugee CB CVO CBE has earned international recognition for bringing the implications of Climate Change and Sustainability to the Defence and National Security sectors. After a full career in the British Army, as his final role he wrote a Review of Defence's approach to Climate Change and Sustainability. On joining HCSS, he stated: "I am excited to be joining HCSS as an advisor as the Centre is at the forefront of understanding the relationship between our security and the effects of climate change and environmental damage. It is essential that we understand and act to ensure that the security of our citizens is maintained in the turbulent and unpredictable future resulting from climate change and biodiversity loss."

1st Risk Analysis Conference, Frontex, Poland

On September 12, Nino Malekovic participated in the 1st Risk Analysis Conference “Growing with partners” organized by Frontex in Warsaw, Poland. The audience included national border management agencies of EU member states and the US. As a panelist of the Risk Analysis and Tools Panel, Nino presented advances that HCSS achieved in causal modelling of climate security risks. Along with the lessons learned, using the causal models of climate security risks, Nino demonstrated the potential of causal methodology for policy applications to issues and challenges of interest to Frontex and other participants. The latter included but were not limited to hybrid threats, migration, and cross-border crime. The presentation was very well-received, so much so Frontex already acknowledged the practical relevance of the presented methodology for the agency's policy programs, by including the elements of the presentation into the agency's decisions.

Demonstration: From Causal Models to Optimal Policy Design

On October 9, HCSS Chief Data Scientist Nino Malekovic demonstrated the utility of causal models of naturally caused armed conflict for developing optimal policy designs that are intended for conflict mitigation purposes in Iraq. Nino demonstrated how to use the causal models to diagnose the vulnerability and susceptibility of Iraqi municipalities to environmentally caused armed conflict. Having benchmarked three different approaches to the development of optimal policy designs for conflict mitigation purposes, Nino also demonstrated how to use the optimal policy designs for targeting of Iraqi municipalities with causal interventions that are intended to mitigate such conflict most effectively.

Visit of US William and Mary College to HCSS

In June, Laura Birkman and Nino Malekovic presented the Climate and Security Programme to a group of 20+ [students from the US-based William and Mary College](#). Laura provided further insights into the programme's research pillars, partnerships and ongoing projects, while Nino provided a demonstration of the data-driven work, with a special focus on the causal models that the HCSS Datalab is developing to support the design of smarter interventions that address root causes of climate-related conflict. The event was followed by a lively Q&A about the broader work of HCSS, its contribution to policy and decision making, and what it is like to work at a think tank.

Youth Peace Initiative panel | Is Water a Driver of Peace and Conflict?

On May 11, strategic analyst Irina Patrahau participated in the panel discussion “[Is Water a Driver of Peace and Conflict?](#)”, where she gave a presentation on “Water before conflict: water as a risk and mitigation tool.” With increasing competition over the availability of freshwater sources, both on a transboundary and national scale, water resources can be a trigger of conflict, water could serve as a weapon in conflict, and could be a casualty of wars. Furthermore, it can be a source of peace, cooperation, and sustainable development. Organised by the Youth Peace Initiative (YPI), a youth led organisation that promotes the inclusion of youth in peace and reconciliation processes, the event dove into the water-peace-and-conflict-nexus with the help of four experts in the field, to discover the different roles of water in conflict and its effects on a transboundary and national scale. The panellists explored how water can also be a source of peace and cooperation in different stages: prevention and risk mitigation, during the eruption of conflict, and on the road towards peace.

Weaponization of the Environment Conference

On May 26, strategic analyst Irina Patrahau participated in the [Weaponization of the Environment Conference](#) organised by Utrecht University. The conference aims to contribute to debates on the instrumentalization of the environment within different political contexts. The focus was on various topics related to the weaponization of the environment including, but not limited to environmental peacebuilding, acts of resistance, environmental governance (e.g. land grabbing), militarization, national security, and more. Irina spoke about *Water, Peace, and Security in Iraq* at the panel on environmental security, providing a deeper insight into the interplays of climate, security, and weaponization of the environment.

Event | Climate Security in the Indo-Pacific: how can Europe contribute?

The Indo-Pacific is a region with high vulnerability to climate-related hazards such as coastal, riverine flooding, heatwaves, and tropical storms. At the same time, the Indo-Pacific is a region that is experiencing rapid economic growth while coming to terms with the long-term threats of global warming and climate change. On May 11th, HCSS in cooperation with the Embassy of France in the Netherlands and the Institut Français des Pays Bas, organised an event on '[Climate security in the Indo-Pacific: How can Europe contribute? Dutch-French Dialogues on the Indo-Pacific.](#)' During the symposium, Dutch and French experts came together to discuss climate security in the Indo-Pacific, as well as the role that European states could play in mitigating climate-related hazards in the region. Speakers included Laura Birkman, Senior Strategic Analyst at HCSS and Head of the Climate and Security Programme; Joseph Dellatte, Research Fellow for Climate, Energy, and Environment at the institut Montaigne's Asia Program; Alistair Cook, Coordinator of the Humanitarian Assistance and Disaster Relief Programme and Senior Fellow at the Centre for Non-Traditional Security Studies, S. Rajaratnam School of International Studies, Nanyang Technological University, Singapore.; and Nicolas Regaud, Senior Advisor for climate to the Vice-Chief of the defence staff to the French Ministry of Defence.



New Zealand's Climate Change Ambassador Kay Harrison visits HCSS

On May 8th, Laura Birkman and Michel Rademaker had the honour to [welcome Kay Harrison, New Zealand's Climate Change Ambassador](#), for a discussion on climate security and the geopolitical implications of the Dutch / European climate policies and expectations for the coming years.

The Climate Change Ambassador represents New Zealand at international climate change meetings, summits and negotiations. She leads New Zealand's delegation to meetings of the United Nations Framework Convention on Climate Change and the negotiations of the Paris Agreement rulebook. Harrison is also Divisional Manager of the Climate Change Division at the Ministry of Foreign Affairs and Trade.

Rademaker and Birkman presented the HCSS [Climate and Security Programme \(CASP\)](#). CASP seeks to bridge the gap between researchers, policymakers and practitioners working on climate-related security challenges in Europe and around the world. The programme aims to develop and operationalize a realist framework and approach to climate action, raise awareness and understanding about the nexus between climate-related risk, instability and conflict, and provide data-driven assessments and early warning support to policy and decision makers.

New Zealand's international climate change work programme includes engagement on climate change with the Pacific, through trade agreements, regional associations, and in coalitions such as the Friends of Fossil Fuel Subsidy Reform and the High Ambition Coalition. Its objectives are to seek an effective global response to climate change to which New Zealand contributes responsibly and through which Pacific climate resilience improves.



The 14th Hague Roundtable on Climate and Security

On September 12, 2023, [The Hague Roundtable on Climate and Security](#) was assembled for the 14th time, gathering experts, diplomats, NGO, and institutional representatives to discuss the impact of climate change on the military, conflicts and humanitarian crises. This edition of the Roundtable was organised with the Canadian Embassy in The Hague, in partnership with the NATO headquarters. Around 60 participants represented 40 embassies and organizations in the meeting. The event included a [session with senior strategic analyst Laura Birkman](#), Head of the Climate and Security Programme at HCSS, who delivered a compelling address titled "Turning Vicious Cycles of Climate Change and Conflict into Opportunities for Collaboration & Peace: An Integrated, Informed & Inclusive Approach."

In her presentation, Birkman exposed methods for water conflict risk assessment and peacebuilding. By analysing possible conflict pathways, she showed how conflict risks can be predicted for better preventive action. "It's all hands on deck. We need smart, comprehensive, and integrated climate security approaches translated into actions on the ground," Birkman stated. The combination of water expertise and peacebuilding knowledge can be used to create cooperation in areas of resource competition prone to tensions. The need to identify the root causes of conflicts was also expressed. Though the case study of Iraq, it was shown that the problem of resource scarcity intersects with pre-existing socio-political conditions, as the country's economy and institutions have been fragilized by years of war.



COP 28 – 2023 United Nations Climate Change Conference

The 2023 United Nations Climate Change Conference, more commonly referred to as COP28, was held from 30 November until 12 December 2023, at the Expo City, Dubai. The 28th conference, it has been held annually since the first UN climate agreement in 1992, and is intended for governments to agree on policies to limit global temperature rises and adapt to impacts associated with climate change.

HCSS was honoured to have [hosted and co-hosted several events during the COP28](#). HCSS participation at the COP28 aimed to highlight research methods, good practice, and findings that could support decision makers when discussing climate-related security challenges and determining the course of action for the next years.

HCSS had three key messages for the COP.

1. Climate insecurity relates to the negative impacts of climate change on peace and security, and the extent and manner in which actors choose to respond to it. To mitigate climate insecurity, focus should be placed on both (a) accelerating the energy transition in spite of increasing global tensions; and (b) enhancing adaptation efforts to prevent and mitigate climate security risks.
2. Climate-related conflict risk is a key challenge of the next decades. Risk can be turned into resilience and opportunity for cooperation by employing comprehensive and conflict sensitive approaches to climate action. Data-driven early warning tools and causal methods that provide insights into the context-specific factors contributing to conflict risk bring significant advantages to political and community leaders when integrated with local knowledge.
3. Youth representatives are driving forces of innovation and represent major population groups in emerging economies. Their vision but also their support are essential when developing informed, integrated and inclusive solutions for climate-related challenges along the water-energy-food nexus.

HCSS Events at COP28 in Dubai

Starting on December 4th, HCSS strategic analyst Irina Patrahau took part in the panel discussion [“Political and Strategic Issues Challenging International Climate Action”](#) as part of the TRENDS /Atlantic Council 3rd Annual Conference on Sustainable Security: The Soft and Hard Implications of Climate Action.

Together with the Arab Youth Green Voices and the Netherlands Embassy in Jordan, HCSS deputy director Michel Rademaker and HCSS strategic analyst Irina Patrahau hosted an [in-person moderated Serious Game](#) at COP28 on December 8, focused on the case study of the Sinai Peninsula in Egypt. The game stimulates a situation whereby participants act as decision makers tasked with the challenge of mitigating the impact of water, energy, and food-related risks, as well as increasing the adaptive capacity of vulnerable communities. In doing so the serious gaming exercise fulfilled two purposes: (1) creating awareness and understanding of the complexities behind the Water-Energy-Food nexus in climate-vulnerable areas; and (2) stimulating the development of innovative ideas that could support Water-Energy-Food management strategies in the Sinai.



HCSS strategic analyst Irina Patrahau moderated a panel discussion “[The Climate-Extremism Nexus in Iraq: Challenges and Opportunities for Peacebuilding](#)” on December 9. The event was co-organised by HCSS and the Water, Peace and Security (WPS) partnership, in collaboration with the Iraqi Ministry of Water Resources, & the Royal Netherlands Meteorological Association (KNMI). During the session, Irina aimed to broaden and sharpen the understanding of challenges arising from the link between climate change and violent extremism in Iraq, as well as discuss methods and approaches to mitigate these challenges.

On December 10, strategic analyst Irina Patrahau participated in a high level panel discussion on “[Water for Peace and Security: From Risk to Resilience](#)”. Together with the Water, Peace and Security (WPS) partnership, The International Federation of Red Cross and Red Crescent Societies (IFRC), the UN Convention to Combat Desertification (UNCCD), and the UN Economic Commission for Europe (UNECE), the event highlighted the global issue of water scarcity as a fundamental threat to human health, peace, and security. The participants of the panel aimed to raise the issue at the highest political levels and showcase innovative solutions and strategies addressing water scarcity and local, national, and transboundary water management. Moreover, this event sought to initiate a meaningful dialogue with nations that currently lack water cooperation agreements, ushering in the inception of the Transboundary Water Cooperation Coalition.

Additionally, HCSS participated in a panel discussion on “[Winning with Water – Tools that support Conflict Sensitive Adaptation](#)” on December 10. HCSS deputy director Michel Rademaker moderated the event, while HCSS strategic analyst Irina Patrahau was one of the speakers. It was co-organised by HCSS, Deltares and Wetlands International under the umbrella of the Water, Peace and Security (WPS) partnership. The event highlighted best practices and lessons learnt from using innovative methods and tools to support timely, informed, and inclusive adaptation action in regions prone to water-related conflict by using examples from WPS engagement in Mali, Ethiopia, Kenya, and Iraq.



4. Defence and International Security

The growing conflict of interests and increasing confrontation between the important actors in the world is perhaps the most dominant development of the current era. The ongoing war in Ukraine is on the one level a relatively localized (but extremely deadly) military clash, but on another level a confrontation between the West and Russia, with China looming in the background. But it is not only the European theatre that is of concern. The Indo-Pacific, where the US-China rivalry is unfolding and Europe has major interests, also continues to receive [our close attention](#).

The return of great power rivalry also offers room for conflict between medium-sized and smaller players, often on a regional scale. Despite the presence of a Russian peacekeeping force, Azerbaijan managed to capture the Armenian enclave of Nagorno-

Karabakh. In the Middle East, with Hamas's attack on Israel and Israel's retaliation in Gaza, the powder keg has exploded again, albeit for now in the form of a local war (but, again, with a large number of casualties). The Sahel region and sub-Saharan Africa are extremely unstable with a series of coups and destructive conflicts between governments, warlords and militia groups in countries such as Ethiopia and Sudan. The UN has been forced to withdraw from Mali and the French from Niger. And the forecast for the coming years is anything but rosy.

Military confrontation is just one manifestation of great power rivalry. Economic and technological competition is another. Power thinking and geopolitical considerations increasingly color international trade policy, reflected in increasing mercantilism, zero-sum thinking, tit-for-that transactional policies and protectionism. And it is inevitable that state interference and influence activities aimed at Western democracies and societies will further increase in the coming years. [Hybrid threats](#) against national security, below the level of open armed conflict, will become increasingly the norm, and require active countermeasures. In their most visible form, hybrid actions target vital infrastructure both physically and digitally. In particular, with the sabotage of the Nord Stream pipelines in September 2022 as a wake-up call, the vulnerability of offshore vital infrastructure, e.g. in the North Sea, has come under the spotlight, with HCSS having [a clear contribution in the debate](#).

In short, global instability directly impacts the Netherlands and Europe. With the Ukraine war and the economic rivalry with China, the Netherlands has clearly linked security and industry policy in the [Sectoragenda Maritieme Maakindustrie](#). But the impact is not only felt at state level. Over the past few years, geopolitics and geo-economics have become top agenda items in the boardrooms of internationally operating companies. For HCSS, this tendency has manifested itself in a growing interest from the private sector in our interpretation of where we stand and are heading in a volatile global security environment, culminating in the [HCSS Boardroom initiative](#).

The surge in energy costs, the influx of Ukrainian refugees and the trade restrictions for e.g. ASML are examples of how the global security environment affects our daily lives. With our expanding network of national and international knowledge partners, HCSS is well equipped to serve our broadening portfolio of customers to orientate and navigate in this complex and increasingly dangerous world.



Frank Bekkers, Director of the Security Programme

The War in Ukraine

Symposium | Looking back and looking ahead based on One Year of War in Ukraine

With the Russian invasion of Ukraine in 2022, the world received a harsh wake-up call about the return of 'power politics'. The end of this conflict is not yet in sight, but a debate about its preliminary and estimated impact is appropriate. That is why [HCSS organized a mini-symposium on February 13](#), almost one year after the start of the war, to look back – and look forward.

Mrs Olena Halushka from Kyiv (board member and co-founder of the Ukraine-based Anti-Corruption Action Center) was invited as a keynote speaker to discuss the most important lessons of the past year and her future expectations for Ukraine, under the watchful eye of a full room with journalists, opinion makers and representatives of Non-Governmental Organizations and the Ministries of Defence and Foreign Affairs. Also present was Maksym Kononenko, ambassador for Ukraine in the Netherlands, who expressed his appreciation for everything that the Netherlands did for Ukraine.

The impressive keynote was followed by a debate from a Dutch perspective with Mrs. Halushka and a number of Members of the House of Representatives: Derk Boswijk (CDA), Alexander Hammelburg (D66) and Peter Valstar (VVD), who discussed, among other things, Leopard tanks, combating corruption in Ukraine, the training of Ukrainian soldiers by the Netherlands and reconstruction after the war. In the discussion about the situation after the war, discussion mainly focused on reconstruction, legal prosecution of Russia under international criminal law, an ICC mandate with permanent investigative capacity, UN accountability for acts of aggression in the context of a 'return to a rule-based international order', accelerated reforms with help from the EU and prospects for EU and NATO membership.



Report | Lessons from Land Warfare: One Year of War in Ukraine

Authors: Frederik Mertens, Björn de Heer, with contributions by Tim Sweijs, Paul van Hooft and Frank Bekkers

What preliminary lessons can we learn after one year of war in Ukraine? After the Russian invasion of neighbouring Ukraine, a large-scale and even nuclear war in Europe is no longer unthinkable. European armed forces are not equipped for a war in the highest spectrum of violence, and American support is still necessary for the defence of European territory. HCSS has focused on land combat [in this first analysis](#). Of course the Ukraine war has many dimensions: there is fierce fighting on land, at sea and in the air, while cyberspace, the electromagnetic domain, information warfare and space also play a vital role. But the war in Ukraine is mainly about defending, conquering and retaking territory in which the Russian and Ukrainian armies play the main role and all the other means of power of the Russian and Ukrainian state are the main task to support this decisive battle.

Report | How should Russia be deterred?

Authors: Rob de Wijk, Frank Bekkers and Tim Sweijs.

The Russian invasion of Ukraine marked a turning point in European security. It made it clear to everyone that the time when our armed forces mainly focused on peace-promoting operations far from home was over. The war makes it harshly clear that the NATO area itself is now under threat. To understand how to deter Russia, it is necessary to reexamine some insights and concepts from the Cold War in light of the current era with both clearly similar and distinctly different characteristics. [In this study](#), Rob de Wijk, Frank Bekkers and Tim Sweijs try to answer the question of how we should deal with this new and at the same time old threat. War prevention through deterrence is central.





House of Representatives | Round Table on the Risks of Heavy Weapons in Ukraine

The standing committee for Defence of the Dutch House of Representatives held a [round table discussion](#) on February 8 on the risks of the use of heavy weapons in Ukraine. On behalf of HCSS, Rob de Wijk and Peter Wijninga were asked to share their insights. “The world must prepare for a long war in Ukraine,” the experts warned the MP’s.

Snapshot | First Tanks, Fighters next?

Authors: Frederik Mertens

[This snapshot](#), dives into Ukraine’s call for fighter aircraft and the role of air defence systems in the war. Despite successfully defending against the Russian air force for a year, the ongoing Russian missile campaign suggest the need for air reinforcements. However, the paper emphasizes that acquiring fighter aircraft involves logistical challenges, requiring specialized training for pilots and ground personnel. The process is expected to take longer than reequipping the Ukrainian army with Western armour.

Report | A Comprehensive Strategy to secure Ukraine’s Future

Authors: Rob de Wijk and [The Alphen Group](#)

As Russia’s war of aggression enters its 2nd year, the Western definition of success must remain the re-establishment of Ukraine as a secure and sovereign European democracy with all the rights and responsibilities that entails. This [Ukraine Strategy by The Alphen Group \(TAG\)](#) addresses the scope and extent of Western support required to reinforce that goal across the diplomatic, informational, military and economic domains. A new European security system will be needed in order to restore respect for the principles of international law that Russia has violated and, over time, to lay the basis for a new relationship with Russia, whatever the outcome of the war. And, in the short term, it will also be indispensable in order to maintain a sufficient level of support from Western public opinion.

RuBase Symposium | One Year into the War in Ukraine: What Did We Miss? Where Do We Stand? Can We Do Better?

On April 6, HCSS was honoured to welcome [General \(ret.\) Philip M. Breedlove, the former Supreme Allied Commander Europe \(SACEUR\)](#), for a presentation on his thoughts on one year of war in Ukraine. Together with Adam N. Stulberg (Professor & Chair, Sam Nunn School of International Affairs, Georgia Institute of Technology), and HCSS principal scientist Stephan De Spiegeleire, he participated in a panel moderated by HCSS director of research Tim Sweijjs.

It has been over a year since Europe and the world woke up to the large-scale unprovoked and mostly unexpected invasion by Russia of Ukraine. This was yet another major strategic misreading by the west - one of so many over the past few decades. Do we now have a better analytical grip over Russia's strategic thinking and acting now than we did a year ago? Have our strategic decision-support tools and methods improved? Is there any evidence that the artificial intelligence revolution that is mushrooming all around us (e.g. chatGPT and Bard) is starting to have an impact on these issues as well? Could it, and if so - how?

The Georgia Institute of Technology and HCSS have been engaged in a [3-year basic research programme - RuBase](#)), investigating what we actually know about Russia, how we know it, and how we can improve what we know. As part of their outreach effort, Breedlove, Stulberg and De Spiegeleire presented their thoughts on the war and on the underlying knowledge base – as well as some of the key findings of the RuBase project – to a group of high-level policymakers and experts.

General Breedlove lamented the lack of strategic clarity regarding the specifics of Western support for Ukraine. He underscored that widespread claims of providing “all means necessary” and “for as long as it takes” are insufficient for developing time-lines, logistics, etc. that lie at the crux of military planning. Accordingly, he suggested that political leaderships should be nudged to provide more definition to the West's commitment to stand firm with Kyiv.



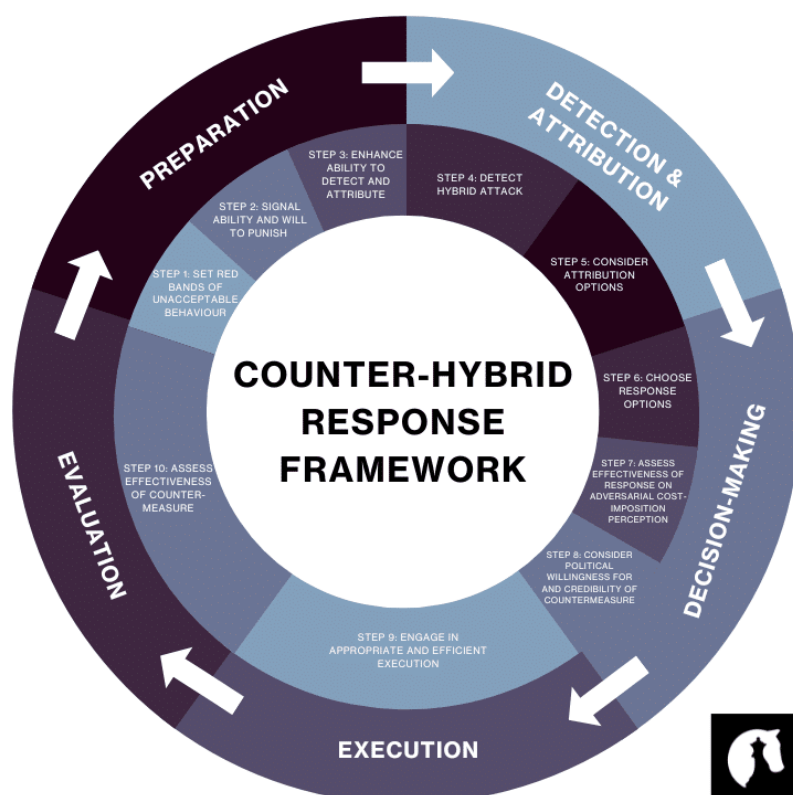
Hybrid Threats

Hybrid threats pose a dangerous challenge to liberal Western democracies, who for too long have been complacent when it comes to dealing with contemporary hybrid adversaries. [Hybrid threats](#) denotes a spectrum of objectionable activities ranging from violent to non-violent in both the military and civil domain. The key to countering hybrid threats is through the development of international norms of behaviour. At HCSS, we monitor and analyse the evolving threat landscape, and develop new strategic concepts to counter hybrid threats and offer concrete tailor-made policy solutions to partners across the Alliance.

Report | Ten Guidelines for Dealing with Hybrid Threats: A Policy Response Framework

Author: Mattia Bertolini, Raffaele Minicozzi and Tim Sweijs. Contributors: Ella MacLaughlin.

Rival states increasingly use hybrid tactics to influence democratic processes and exploit the vulnerabilities of their opponents. As a response, Western governments have progressively enhanced their situational awareness and developed capabilities to minimise damages from hybrid threats. In addition, they have also started to respond proactively to hybrid threats by implementing a range of policies to not just increase resilience and bolster defence but also to shape the adversary's behaviour through deterrence measures. However, deterring hybrid aggressors remains a difficult task. Therefore, [this new HCSS report](#) by Mattia Bertolini, Raffaele Minicozzi and Tim Sweijs provides a set of non-technical policy guidelines for a counter-hybrid posture for small and middle powers (SMPs) that explains how core good practices of cross-domain deterrence can be developed, applied and embedded into policies and practice.



Guest Paper Series: Campaigning against Hybrid Threats



Campaigning in the Grey Zone: Towards a Systems Approach to Countering Hybrid Threats

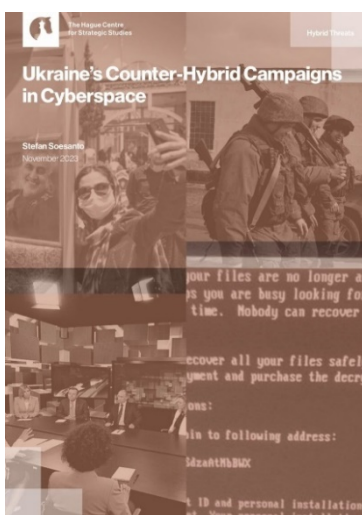
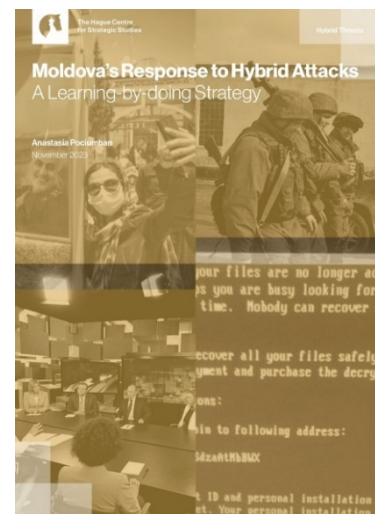
Author: Sean Monaghan (CSIS) and Tim McDonald (Pardee RAND).

While the theory and practice of military campaigning has been refined for centuries, there is no dedicated guidance on how to design and implement campaigns to counter hybrid threats for modern security practitioners across government. Meanwhile, existing military planning guidance is not suited for planning complex, non-military counter-hybrid campaigns. [This paper](#) develops an alternative approach to campaigning against hybrid threats based on systems thinking principles. Their key innovation is to characterise grey zone competition as a complex adaptive system. This allows the central tenets of military operational planning to be refined based on systems logic. The result is a series of principles for campaigning in the 'grey zone' between peace and war, augmented by a guide to action based on three functions: understand, act, and adapt. The authors illustrate this approach and provide real-world context through example campaigns.

Moldova's Response to Hybrid Attacks: A learning-by-doing Strategy

Author: Anastasia Pociumban.

Moldova's counter-hybrid campaigns have been a "learning by doing exercise", writes guest author Anastasia Pociumban in this new HCSS paper, providing an empirical review of Moldova's response to hybrid threats, which significantly increased following Russia's full-scale war against Ukraine. Russia's invasion of Ukraine on the 24th of February 2022 had immediate repercussions for Moldova, with the looming threat of the conflict spreading and the potential for military assaults originating from Russia to the south and through Transnistria. [This paper](#) by Anastasia Pociumban delves into Moldova's counter-hybrid measures against Russian hybrid threats, with a specific focus on the aftermath of Russia's full-scale invasion of Ukraine. The author then also evaluates external support extended to Moldova and concludes with recommendations for the EU and its member states regarding further assistance for the country.



Ukraine's Counter-Hybrid Campaigns in Cyberspace

Author: Stefan Soesanto.

In reaction to the Russian invasion of Ukraine on February 24, 2022, the Ukrainian government stood up a variety of digital services and volunteer groups to counter Russia's aggression in and through cyberspace. [The paper by](#) Stefan Soesanto provides readers with insights into (a) how the IT Army and Internet Forces are internally organized and structured, (b) how they function and conduct their campaigns, (c) how they are incorporating volunteers from across the globe and at home, and (d) how these two groups are linked to the Ukrainian government. The author also touches upon broader questions, such as (e) the discernible impact of these campaigns, (f) the subsequent complications for law of armed conflict, and what lessons could be learned.

Future War: Rethinking Fire and Manoeuvre

On 27 September, HCSS and NATO HQ Supreme Allied Command Transformation co-hosted an [event on “rethinking fire and manoeuvre”](#), a symposium focused on what the future of warfighting means for the alliance. Consisting of a day of discussions led by top defence and security experts, it convened representatives from across the alliance to support this work.

The overall purpose of the event was to set the scene for the next Chiefs of Defence Conversation led by SACT in January 2024. The [day-long symposium](#) featured a keynote address and op-ed presentations by senior academics, researchers, and defence officials from across Europe and North America who shared perspectives across three core theme panels: (1) Warfighting across Shaping, Contesting and Fighting, (2) Technology and the Changing Fight, and (3) The Future of Command in NATO.

HCSS Director of Research Tim Sweijs and Richard Perks, Defence Planning Programme Manager at NATO Allied Command Transformation (ACT), kicked off the event with a word of welcome and speeches on the future of warfighting.

Brigadier General (Ret.) Ben Barry (International Institute for Strategic Studies) subsequently presented a keynote address, challenging the audience to think critically about what the future of war looks like for NATO. He then sat down with Tim Sweijs and HCSS founder Rob de Wijk for a Q&A session.

Our first panel on “Warfighting across Shaping, Contesting and Fighting”, chaired by Sweijs, asked hard questions about Multi-Domain Operations, one of the biggest ideas dominating Western military thinking, featuring contributions by Olivier Schmitt (Center for War Studies, University of Southern Denmark) on “MDO and the Future of War”, Dwight “Buzz” Philips (RAND Corporation) on “MDO in the US – Threats and Solutions” and Heather Venable (USAF Air Command and Staff College) on “MDO across Warfighting Contexts”.



What does emerging technology mean for the future of warfare? Can Europe build what it needs to defend itself? Our 2nd panel on “Technology and the Changing Fight”, chaired by Antonio Calcara (University of Antwerp) explored these (and more) challenging questions for NATO. Featuring panellists Nina Kollars (U.S. Naval War College) on “The Impact of EDT and the Conduct of Contemporary War”, Élie Tenenbaum (Ifri – Institut français des relations internationales) on “Capability, Capacity, and MDO”, and Simona Soare (European Parliament) on “Europe’s Defence Technology Base”.

Before the lunchbreak, our audience was treated to a special virtual expert Op-ed by Elena Wicker (Army Futures Command) on “Faddish Language in Military-Strategic Thinking”.

The 3rd and final panel of the day on “The Future of Command in NATO”, chaired by HCSS strategic analyst Davis Ellison, dove deep into the question of what does it mean to ‘command’ in contemporary warfare. Different cultures, services, and government action all have to be coordinated. But how? And what does it look like? Expert panellists Jim Storr (on “The Changing Character of Command”), Henrik Breitenbauch of the Royal Danish Defence College (on “The Future of NATO Command and Control”) and HCSS senior strategic analyst Paul van Hooft (on “Economic and Military Denial and Command Across Instruments of Power”) picked apart this tricky subject.



Symposium Report | Rethinking Fire and Manoeuvre across the physical and non-physical aspects of domains

Authors: Davis Ellison and Tim Sweijs, with contributions by Tom Connolly.

How should we think about the future of war? Is there a new revolution in military affairs? How much can we really learn from contemporary conflicts? Is NATO ready for its next challenges? This [conference report offers a consolidated review](#) of the discussions held during the seminar “Rethinking Fire and Manoeuvre across physical and non-physical aspects of domains”, organised by HCSS in partnership with NATO Headquarters Supreme Allied Command Transformation (HQ SACT) on 27 September 2023.

A core conclusion of this symposium is that NATO will be challenged, in its current approaches and thinking, to engage in the type of high-intensity war seen in Ukraine. However, we should not overlearn from current wars. The character of a war is inherently bound up in its unique political ends, geographies, actors, and ways of warfighting. Better thinking on how to use fire and manoeuvre (in both its physical and non-physical aspects) and on how to build necessary capacities can open a window into turning Europe’s latent military potential into something real.



Report | Breaking Patterns: Multi-Domain Operations and Contemporary Warfare

Authors: Davis Ellison and Tim Sweijs. Contributors: Carlina Grispen-Gelens and Björn de Heer, Matti Suomenaro, Nathan Lokhorst, and Tom Connolly.



Warfighting concepts shape our views on past, present and future wars. They contain an implicit criticism of past approaches, while offering proposals to avoid earlier mistakes and/ or to address current challenges. Today the dominant concept within NATO and other technologically advanced militaries is multi-domain operations (MDO). MDO aim to combine and coordinate effects from across military and sometimes non-military actions. Different militaries stress the need to act across military services and to better coordinate with civilian authorities.

[This study examines](#) whether and how the adoption of MDO concepts can help armed forces achieve military success. The report argues that MDO could break away from the worst patterns of past conceptual work, though this will require concerted changes in prevailing approaches. As such, this study provides an intellectual framework as well as a set of guidelines that strategists and force developers can use to better assess and qualify MDO-type approaches across different countries, and, importantly, how such concepts can best be further developed.

Guest Paper | Multi-Domain Operations: Passing the Torch

Author: Dr Dwight “Buzz” Phillips, edited by Tim Sweijts

How did Multi-Domain Operations (MDO) emerge as a concept in the military world, and what were the catalysts that drove its development? What factors have influenced the evolution of MDO, and how does it parallel the historical development of concepts like AirLand Battle? The development of Multi-Domain Operations in the military world is an intricate journey, marked by a confluence of ideas, catalysts, and pragmatic considerations. [This paper by Dwight “Buzz” Phillips \(RAND\)](#) delves into the complex evolution of MDO, highlighting how it emerged as a result of diverse dialogues within the military and civilian defence sectors. The critical backing of senior Army leadership and the urgency sparked by Russia's invasion of Crimea were instrumental in propelling MDO forward.

Guest Paper | The Promise and Peril of Emerging Disruptive Technologies for Joint and Combined Multi-Domain Operations

Author: Dr Nina Kollars, edited by Tim Sweijts

What are the implications of incorporating Emerging Disruptive Technologies (EDTs) into Multi-Domain Operations (MDO)? How does a critical and sceptical approach aid in evaluating the ethical and strategic aspects of merging EDTs with MDO? [This paper by Dr. Nina Kollars](#) delves into the complex landscape of modern military operations, highlighting the dual potential of ‘promise and peril’ in the adoption of Emerging Disruptive Technologies (EDTs) as the central focal point for conducting Multi-Domain Operations (MDO). Dr. Kollars emphasizes the need for a critical and sceptical approach when exploring the merger of two intricately jargonized and inflated terms, EDT and MDO. Rather than focusing on how warfare is currently conducted, her inquiry centres on how we aspire to engage in conflict in the future. This perspective necessitates a deep examination of our own ethical and strategic foundations.

Guest Paper | The Changing Character of Command

Author: Dr Jim Storr, edited by Tim Sweijts.

Why are large HQs and lengthy orders a problem in modern land force command? How can individual planning methods improve efficiency in land force operations? In the realm of western land force command, a fundamental issue plagues the system: oversized land force headquarters (HQs) producing lengthy, complex orders at a snail's pace. Dr. Jim Storr delves into this pressing concern, emphasising the vulnerabilities of large HQs and the impracticality of protracted orders in modern warfare. [This paper underscores the necessity for change.](#) Some armies are aware of this. In the last year every battlegroup and every formation in the Australian Army has ‘culled’ its organization and its processes. Dr. Storr dissects the core problem - how real human beings do, or should best, make decisions and plan.

The Interviews

During the symposium on September 27th, HCSS Director of Research Dr Tim Sweijts also conducted interviews with several of the top defence and security experts invited, which can be viewed on the [conference website](#) and [YouTube playlist](#).

Strategic Stability: Deterrence and Arms Control

Deterrence and arms control are often perceived to be in contradiction with one another, but they are in fact complementary. Deterrence is raising the costs and risks of unwanted actions by an adversary to dissuade them from taking those actions; arms control is finding common ground between adversaries on which costs and risks are acceptable and how states can achieve strategic stability. Questions of deterrence and arms control have become more complicated over the past decade, driven by intensified geopolitical competition in Asia and Europe, by emerging technologies, such as artificial intelligence and cyber capabilities, or refinements in existing technologies, such as ballistic, hypersonic, and cruise missiles. Today, the arms control regime of the Cold War is in trouble, unlike the bipolar world of past, the US would now have to find common ground with both Russia and China. How Europe can shape a reinvigorated arms control regime is an open question, but one which HCSS seeks to answer in our [Deterrence and Arms Control programme](#).

Report | Good Fear, Bad Fear: How European Defence Investments could be leveraged to restart Arms Control Negotiations with Russia

Authors: Paul van Hooft and Davis Ellison. Contributors: Adam Meszaros and Michal Gorecki. Editors: Paul van Hooft and Tim Sweijts. Quality Assurance: Rob de Wijk.

The European nuclear arms control regime is in bad shape, due to the end of the INF Treaty (Intermediate-Range Nuclear Forces Treaty), the ABM Treaty (Anti-Ballistic Missile Treaty), the CFE Treaty (Treaty on Conventional Armed Forces in Europe), and even the START Treaty (Strategic Arms Reduction Treaty). Russia has invested heavily in new technologies and the United States wants China to be included in any future agreements, while China has shown no interest. This leaves Europeans sitting on the sidelines when it comes to crucial developments for their own security. Europeans need to find ways to pressure Russia and diminish their reliance on the United States. What is the potential for European investments in advanced conventional weapons that could incentivise Russia back to the negotiating table?

[This brief explores](#) the potential of competitive approaches to arms control. A competitive approach to arms control is built on the assumption that an actor recognises that its long-term future security is looking progressively worse if they do not act now to stabilise the qualitative and quantitative military balance of power.



Report | Pathways to Disaster: Russia's War against Ukraine and the Risks of Inadvertent Nuclear Escalation



Authors: Paul van Hooft, Davis Ellison and Tim Sweijs. Contributors: Adam Meszaros and Michal Gorecki.

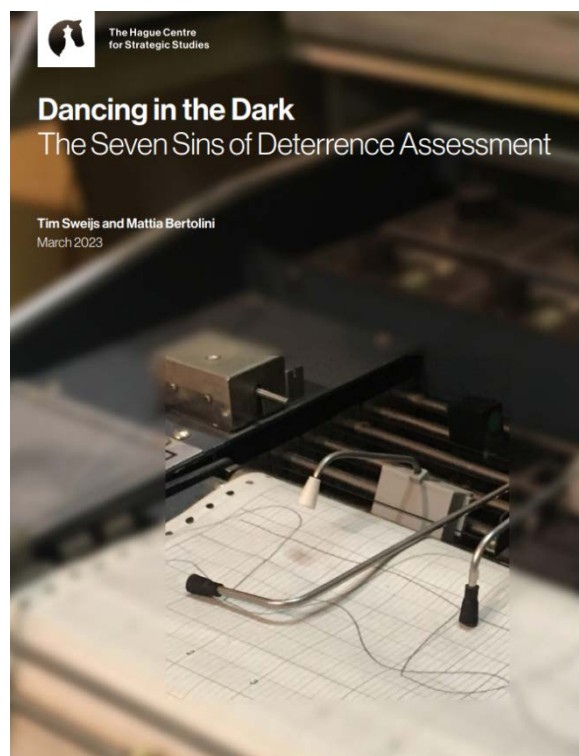
The risk of inadvertent nuclear escalation due to actions in the conventional domain is a serious, and underrated, feature of the current stand-off between NATO and Russia, following Russia's 2022 invasion of Ukraine. [This brief](#) notes that NATO leaders and armed forces need to be conscious of unintended signals that can follow the placement of weapons, the movement of forces, and support to Ukraine, especially considering the deteriorating state of Russian armed forces. The main conclusions are concerning: there are an increasing number of pathways that could lead to inadvertent escalation. As NATO-Europe continues to support Ukraine, we suggest a series of measures to avoid inadvertent escalation. Among others, we stress that caution be taken with NATO's nuclear and conventional posture, including the placement of conventional missiles within range of threatening Russia's nuclear capabilities.

Report | Dancing In The Dark: The Seven Sins of Deterrence Assessment

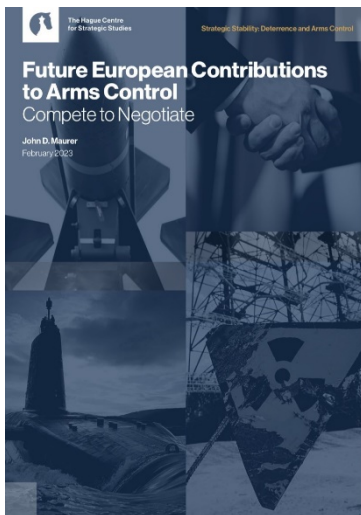
Authors: Tim Sweijs & Mattia Bertolini.

Do NATO's deterrence policies really have an impact on Russian behaviour? As miscalculation fears rise after a Russian fighter jet collides with a US drone over the Black Sea, how do we truly know if we understand our opponent's signals – and they understand ours? After all, deterrence is not possible if we do not understand each other's signals: not only must we understand our adversary, but our adversary must also understand us.

To fill a current research gap and respond to the pressing demand to design effective deterrence policies, [this HCSS report](#) identifies seven sins of deterrence assessment. The authors subsequently respond to these seven challenges with seven maxims for deterrence assessments. By heeding these maxims listed deterrence analysts can increase the validity of their deterrence assessments and provide policymakers with a toolkit to measure, evaluate, and improve their deterrence strategies based on sound analysis.



Guest Paper Series on Strategic Stability: Deterrence and Arm Control



Guest Paper | Future European Contributions to Arms Control: Compete to Negotiate

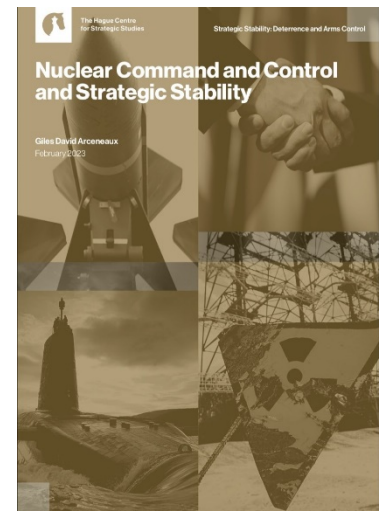
Author: John D. Maurer (Air University).

Increasing violence by revisionist regimes, like China and Russia, is breaking the current arms control regime. [This paper argues](#) that for Europe today, then, the single most important contribution to the future of arms control is to choose to compete. European countries can best respond by leaning into military technical competition in the short term to produce better arms control results over the longer term. European countries should consider how they can best stand with other law-abiding nations around the world to compete more effectively in military technology and structure future negotiations with an eye towards restraining violent revisionist challenges.

Guest Paper | Nuclear Command and Control and Strategic Stability

Author: Giles David Arceneaux Arceneaux (University of Colorado).

[This paper evaluates](#) the effects of nuclear command and control systems on strategic stability in crisis scenarios. This study defines the concept of nuclear command and control, details the challenges that command and control systems pose for strategic stability, identifies challenges to strategic stability emanating from Russia, China and North Korea, and discusses opportunities for policymakers to reinforce strategic stability in those regions. Although nuclear command and control systems are difficult to shape directly, policymakers can promote strategic stability by engaging in near-term efforts to strengthen nuclear deterrence and long-term efforts to achieve limited arms control agreements between countries.



Guest Paper | Arms Control and Deterrence: The Euromissiles, Then and Now



Author: Susan Colburn (Duke University).

The prospects for meaningful arms control negotiations seem slim these days. Russia's full-scale invasion of Ukraine has only exacerbated this sense of pessimism about the future of arms control. [This paper argues](#) that looking to the past can help us consider the advantages and potential risks resulting from this broad approach. Colburn takes the case of NATO'S Euromissiles struggle to argue that there are not neat lessons to be drawn from history nor are there any easy frameworks that can be exported and applied to the problems of the present. Instead, thinking about the challenges that faced NATO in the 1960s, 1970s, and 1980s can provide new perspective on the difficulties in today's security landscape, particularly in Europe.

Guest Paper | Alternative Options to Strengthen Small State Deterrence in the Face of new Great Power Competition

Authors: Erick Nielson C. Javier (National Defense College of the Philippines).

Deterring aggression is a constant challenge for both small states and their larger allies and partners. For many small states, resource and military limitations lead them to resort to guerrilla warfare or other denial strategies, hoping to use the fear of a prolonged insurgency with large human and financial losses to deter aggression.

[This paper](#) asserts that traditional concepts for small states' defence and deterrence, such as "deterrence by insurgency" and non-offensive defence, are insufficient, and that instead, small states should be encouraged and supported to build up sufficient military capability that allows them to hold adversaries at greater risk. This may require the calibrated transfer and development of affordable strike technologies such as increasingly capable drones and long-range guided missiles, paired with improved strategic thinking, the development of theories of victory, and enhanced coordination with appropriate maritime enforcement agencies, that allow for small states to succeed in preserving their sovereignty without resorting to costly insurgencies or risking failures of deterrence. The paper ends with some policy considerations tailored for small states in Southeast Asia, like the Philippines, facing particular deterrence challenges.



Carré Symposium | How should Russia be deterred? Consequences and choices for the Royal Netherlands Army

Authors: Rob de Wijk, Frank Bekkers and Tim Sweijts.

The Russian invasion of Ukraine marked a turning point in European security, making it clear to everyone that the time when our armed forces mainly focused on peace-promoting operations far from home was over. In a [recent HCSS study](#) we try to answer the question of how we should deal with the new and old Russian threat. War prevention through deterrence is central. Authors Rob de Wijk, Frank Bekkers and Tim Sweijts wrote a shorter version for a [special theme issue of Carré](#), the magazine of the Dutch Officers Association.

On May 12, Frank Bekkers and Tim Sweijts also spoke at the symposium '[Land Operations: Core Task Warfighting](#)' of the Royal Netherlands Army, where they emphasized that Russian revisionism and Putin's frustration are real and not just for the stage. We therefore need to think about how we can take other countries' security perceptions seriously.



Strategic Monitor: Police

On behalf of the Dutch police, HCSS is developing the multi-year [Strategic Monitor Police programme](#). This research programme aims to provide an 'outside-in' and future-oriented view and interpretation of relevant trends and developments to support the strategy creation process of the Dutch police.

Report | Social Disenchantment of the Middle Class

Authors: Frank Bekkers, Eline de Jong, Laura Jasper and Ella MacLaughlin, with contributions by Mattia Bertolini and Giovanni Cisco.

The presence of a strong and prosperous middle class is extremely relevant for guaranteeing the social and political stability of democratic societies. But the middle class is under pressure. Many middle class citizens feel their social status, job and income to be vulnerable and are aware of the risk of social decline. As a result, they develop feelings of dissatisfaction with and distrust in the government, institutions and society in general. In the Netherlands, the erosion of the middle class is not too bad, but here too the optimistic view of progress that characterized the middle class for decades is crumbling: the lower middle class fears for its own future, the upper middle class for the future of the next generation. Signals of dissatisfaction with and distrust in government are also visible in our country. [This HCSS report](#) takes a closer look at 3 categories of far-reaching manifestations of disillusionment among middle groups: protest votes, drop-out behaviour and radicalization in ideas and action.

Report | Competition between Superpowers and Social Stability in the Netherlands: the Risks of Russian Gas, Chinese Raw Materials and Taiwanese Chips for Vital Sectors

Authors: Joris Teer, Mattia Bertolini and Benedetta Girardi.

The Netherlands could be economically disrupted if geopolitical competition leads to export bans on critical raw materials and disruption in the production and supply of semiconductors. This is the alarming conclusion of researchers Joris Teer, Mattia Bertolini, and Benedetta Girardi [in a new HCSS report](#). The war in Ukraine is a manifestation of an underlying trend: great powers, or countries with exceptional political, economic and military power, are involved in ever-increasing geopolitical competition. This development could severely disrupt the Netherlands because it endangers the foundations of Dutch prosperity, well-being and security.

Report | Next Generation Organised Crime: Systemic Change and the evolving Character of Modern Transnational Organised Crime

Authors: Julien Bastrup-Birk, Erik Frinking, Linde Arentze, Eline de Jong and Frank Bekkers.

This multi-disciplinary HCSS report summarises the findings of a study examining strategic trends and likely trajectories in the evolution of transnational organised crime and organised crime groups (OCGs), situating these within the wider context of global systemic and structural change. [This study highlights](#) several implications for the international community's response. It first explains how the framework introduced in this study can be leveraged for the purposes of strategic and predictive multi-disciplinary analysis of organised crime developments and as an aid to formulating policy interventions. Finally, it makes the case for encouraging the incorporation of crime-relevant provisions within post-conflict settlements and better reflecting the subject and study organised crime within the fields of international relations, international security and strategic studies given the increased propensity for OCGs to act as agents of influence and political change in the modern world.



Report | The State of the Rule of Law: where are we, where are we going?

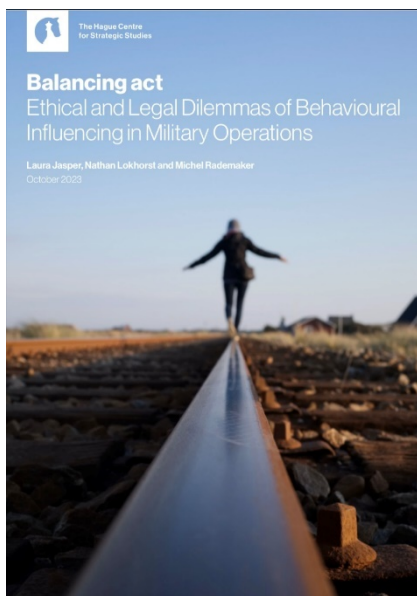
Authors: Linde Arentze, Diederik Dekkers, Paul Sinning, Frank Bekkers and Tim Sweijts. With contributions from: Arnoud van Bree, Eline de Jong, Laura Jasper and Tara de Klerk.

Pressure on democratic constitutional states appears to be increasing globally, as evidenced by the recent storming of government buildings in the US and Brazil. Although the Dutch rule of law scores consistently high on an international level, social dynamics show signs of erosion.

[This HCSS report](#) examines the current state of the Dutch rule of law based on literature research and data analysis. While the analysis does not indicate an inevitable slide in rule of law health, it clearly points to signs of erosion.

Behavioural Influencing in the Military Domain

For as long as wars have occurred, information has been a vital in shaping outcomes on the battlefield. In recent years, the role of information in conflict only gained importance, as information and communication technologies advance and cognitive psychology evolve. With the ever-larger and more evasive employment of information-based capabilities to target human cognition, boundaries between the battlefield and beyond have faded. To further discussions on and advance our understanding of the use of information to influence behaviours in the military context, the Royal Netherlands Army has commissioned the [Platform Influencing Human Behaviour](#).



Report | Balancing Act: Ethical and Legal Dilemmas of Behavioural Influencing in Military Operations

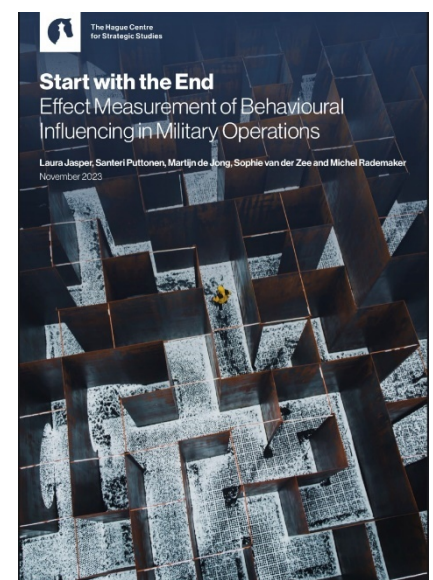
Authors: Laura Jasper, Nathan Lokhorst and Michel Rademaker

The military employment of information has a long history in influencing the outcome of war and conflict on the battlefield, be it by deceiving the opponent, maintaining troop confidence, or shaping public opinion. Recent technological advances have been a driving force in enhancing the possibilities and scope for military operations in the information environment. With that comes a renewed discussion on applicable ethical and legal frameworks in the information environment, but even more so, where the ethical and legal boundaries of those frameworks lie, and which dilemmas arise across those boundaries. [The intent of this research](#) is not to provide answers or solutions to existing ethical or legal dilemmas, but rather to facilitate the discussion on this topic and to highlight when, where, and why these dilemmas may occur.

Report | Start with the End: Effect Measurement of Behavioural Influencing in Military Operations

Authors: Laura Jasper, Santeri Puttonen, Martijn de Jong, Sophie van der Zee, and Michel Rademaker.

Information has long determined the outcome of war, both on the battlefield and by winning hearts and minds. This paper sets out an overview of methods to measure the effect of behavioural influencing operations in a military context, with a focus on the processes and different stages associated with effect measurement. In doing so, it seeks to explore under which conditions, and with which tools the effects of behavioural influencing tactics can be measured. This allows for determining the effectiveness of interventions, and it aids the effectiveness and predictability of the use of behavioural influencing tactics. As such, [this paper serves](#) as a basis and steppingstone for further research into the topic that is effect measurement of behavioural influencing in the military context.



Guest Report: Cognitive Effects in Combined Arms: A Case Study of the Division 2025

Authors: Markus Iven, Laura Jasper and Michel Rademaker. Edited by Alessandra Barrow.

Recent developments in NATO doctrine on Strategic Communication and Information Operations highlight the need to influence human decision-making and behaviour; in other words, the need to create cognitive effects. [This paper provides](#) advice on how to adapt military command structures to use communication capabilities and specialised staff as a military tool. To make this paper's findings of immediate use, the German-Dutch Division 2025 project is used as a case study. It combines the German 10 Armoured Division and Dutch 13 Light Brigade to a binational high readiness force for collective defence by 2025.

Watch Laura Jasper's summary of the paper via the [HCSS YouTube](#):



Behavioural Influencing & the Cognitive Effects in Combined Arms: A Case Study of the Division 2025

Podcast | Disentangling Disinformation

Disinformation and misinformation are nothing new, it's had many names and guises, but Russia's invasion of Ukraine has brought conflict into our media like never before. With that comes a barrage of disinformation. In this 1st episode of the new podcast series "[Disentangling Disinformation](#)" produced by the British Embassy in the Netherlands, HCSS strategic analyst Laura Jasper pins down what disinformation is and what it is not, how it works and how we can prepare ourselves for it.

Paper Series | Information-Based Behavioural Influencing and Western Practice

Edited by Arthur Laudrain, Laura Jasper, and Michel Rademaker, the [Information-based Behavioural Influencing and Western Practice paper Series](#) presents a collection of cutting-edge research and analysis on the intersection of information warfare, human behaviour, and military practice. The series serves as a valuable resource for policymakers, military professionals, and researchers seeking to navigate the ever-evolving landscape of information-based capabilities and their influence on human cognition and decision-making.

Guest Paper | Deception as the Way of Warfare: Armed Forces, Influence Operations and the Cyberspace Paradox

Authors: Peter B.M.J. Pijpers (Netherlands Defence Academy) and Paul A.L. Ducheine (Netherlands Defence Academy and University of Amsterdam).

Influence and deception are age-old techniques to mislead an opponent, techniques that were often applied without the threat or use of force. The application of operations such as 1943 Operation Mincemeat was limited due to the labour-intensive preparation and planning, and the capabilities at hand (paper, radio) restricted the impact. Cyberspace proved to be a catalyst to unlock the information environment, taking away restrictions in means and making influence operations via Internet and social media available for all sort of (non-state) actors. [As this paper](#) highlights the question is, however, whether the current cyberspace-induced manipulative influence operations truly differ from the old-school deceptive and misleading operations.



Guest Paper | Smart Tactics or Risky Behaviour? The Lawfulness of Encouraging Civilians to Participate in Targeting in an Age of Digital Warfare

Authors: Pontus Winther (LL.D. Swedish Defence Research Agency) and Per-Erik Nilsson (Ph.D. Uppsala University).

[This paper](#) examines the implications of digital technology in modern warfare, focusing on the challenges it poses to International Humanitarian Law (IHL) in the context of the Russian invasion of Ukraine. Specifically, the study analyses the use of smartphone applications and chatbots by Ukrainian civilians to become advanced “spotters” of enemy movements. It argues that such participation in the targeting process can result in civilians losing their legal protection from direct attacks. This has several legal consequences, including the risk of civilians being lawfully killed or injured by Russian armed forces, potential trials for detained civilians under Russian domestic law, and increased difficulty in proving Russian IHL breaches.

Guest Paper | The Concept of Information Manoeuvre: Winning the Battle of Perceptions

Authors: Judith T. van de Kuit, Naomi Keja, Jacoline C. Slaager (TNO).

Information has always been critical to the battlefield. Today, however, developments have greatly changed the information environment: such as globalization, digitalization, increased data volume and velocity, and decreased credibility of information. Combined with the disruptive effects of new information technology, this has resulted in an ever-growing importance of information during conflicts. [In this brief](#) many questions are addressed about Information Manoeuvre in the operating environment, leaving room for applied research to start investigating its characteristics and its span. In this paper, the authors explore four fundamental elements of Information Manoeuvre and identify three dilemmas concerning its scope and conceptual considerations.

Guest Paper | Cognitive Warfare as Part of Society: Never-Ending Battle for Minds

Author: Robin Burda (Masaryk University).

[This paper](#) examines the experiences of Czechia and Ukraine in dealing with Cognitive Warfare (CW) and the implications for the European Union (EU) and the North Atlantic Treaty Organisation (NATO). It highlights the challenges faced by liberal democracies, which have their “hands tied” against CW threats. Cooperation and support of proven policies against CW are crucial for the EU and NATO to remain strong. The paper emphasises the importance of each nation addressing CW within their own societies while encouraging the EU and NATO to enforce necessary defensive measures. A balance between improving democracy and regulating malign influences in media and society is essential.

Guest Paper | Influencing Security Professionals: are they biased and by which source?

Author: Johan de Wit (Delft Technical University).

This paper presents brief summaries of four key studies that explore the factors that drive our intuitive or reasoned perceptions of risk. The first part presents two studies on information and the sources of information that are the foundations for this perception. The second part of this paper presents the summaries of two studies that explore the biases and heuristics that affect the decision maker in the interpretation of information. These studies are all conducted in the professional security domain to investigate real-life security risk decision making. The results of this paper identify some fundamental human traits that can be exploited to influence human decision behaviour. The paper highlights how a responsible decision maker should be aware of these traits and take them into account in their own daily praxis, as the results clearly and undoubtedly show the effects of these phenomena on judgements of, especially, experienced professionals.

Guest Paper | A discursive analytical approach to understanding target audiences: How NATO can improve its actor-centric analysis

Author: Yannick Smits (Leiden University and American University of Armenia).

This paper addresses two puzzles that stand central to this undertaking. These are, first, how to increase the success-potential of information-based behavioural influencing operations before these operations are implemented and, second, how to better measure the effects of these operations in the post-campaign phase. Without devaluing the psychological and sociological methods that NATO predominantly uses to better understand a target audience (TA), this paper assumes a discursive analytical approach to address this twofold puzzle. Presuming that understanding how people are inclined to act depends upon understanding how they talk about themselves and Others, it therefore argues that interpreting how a TA discursively constructs its identity-behaviour nexus increases NATO's insight into a TA's receptivity to IBI before and after its application.

Guest Paper | Behavioural influence interventions in the information environment: Underlying mechanisms and techniques

Authors: J.E. (Hans) Korteling, Beatrice Cadet and Tineke Hof.

This paper explores the application of (neuro)scientific and psychological insights to systematically influence the judgment, reasoning, and decision-making of various actors in the context of information warfare. This paper begins by examining the neuro-evolutionary origins of cognitive biases and their subconscious effects on human thinking, which often deviate from logical, probabilistic, and plausible reasoning. The authors propose that information warfare can effectively exploit these cognitive biases to achieve desired outcomes. The paper argues for the development of a comprehensive framework and methodology, including subtle influence interventions, operational procedures, risk-management strategies, and support tools, while adhering to democratic, juridical, and ethical principles.

Other Defence and Security Publications

Report | The future National Deployment of the Armed Forces

Authors: Frank Bekkers, Hans van der Louw and Bjorn de Heer. Thanks to Peter Bos and Paul Ducheine for their valuable input.

What will the future implementation of the national deployment of the armed forces most likely look like? And what (additional) capabilities does Defence need for this so that it can continue to comply with international obligations? When considering the role of the armed forces in the national domain, the growing interrelationship between international and domestic security is decisive. The classic image of defending 'the national territory' is completely outdated, [this new HCSS report states](#). The possible threats facing our country require a layered approach in which various government agencies, companies, social organizations and citizens all play a role. The armed forces form a structural partner in the security chain.

Policy Brief | The Government does not sufficiently fulfill its core Task of Safety

Authors: Pieter van Vollenhoven, Lodewijk Gunther Moor and Chelsey Delpeche

Safety is and remains a core task of the government. But in this [policy brief](#), Pieter van Vollenhoven, Lodewijk Gunther Moor and Chelsey Delpeche raise serious questions about the way in which the government has given substance to this core task – in defence, the national police, as well as with regard to companies, organizations and citizens.. The need for the introduction of 'independent supervision' is once again endorsed in order to be able to warn society in a timely manner if the government's performance of this core task is compromised.





Presentations, Visits and Events

House of Representatives Defence Committee | Strategy to protect North Sea Infrastructure

In the coming decades we will move more and more vital components to the North Sea. Think of (internet) cables, pipelines and wind farms. HCSS released a study in 2021 on the rapid economic development of the North Sea, "[The High Value of the North Sea](#)", in which security risks and vulnerabilities played a prominent role. The government now recognizes the sabotage threat to our vital infrastructure at sea. The undersea explosions near the Nord Stream gas pipelines last year clearly exposed this vulnerability. Therefore, on May 17, HCSS strategic analyst Joris Teer, one of the researchers and authors of that report, at the invitation of the [Dutch House of Representatives committee for Defence](#), gave a briefing where he shared his knowledge and recommendations on the vulnerabilities and dangers to vital infrastructure in the North Sea.

Online Seminar | Evaluating NATO Enlargement: from Cold War Victory to the Russia-Ukraine War

On May 17th, HCSS hosted an online seminar on "[Evaluating NATO Enlargement: from Cold War victory to the Russia-Ukraine War](#)", with Anna van Zoest, James Goldgeier, Joshua Shiffrinson, Paul van Hooft, Davis Ellison and Tim Sweijts.

The seminar follows the recent publication of [Evaluating NATO Enlargement: From Cold War Victory to the Russia-Ukraine War](#) by Palgrave Macmillan (Eds. James Goldgeier and Joshua Shiffrinson) and acted as an expert book launch for the work. The seminar featured input from three of the authors, including editors James Goldgeier and Joshua Shiffrinson, as well as senior strategic analyst Paul van Hooft, who contributed the chapter: [Every Which Way But Loose: The United States, NATO Enlargement, European Strategic Autonomy and Fragmentation](#).

5. Energy and Raw Materials

The intensification of great power rivalry drove geopolitical and geo-economic developments in 2023, and its impacts on energy markets have been greater than ever before. Energy security and affordability are key avenues of strategic competition. Governments experienced firsthand the extent of societal and economic disruption brought by weaponised import dependencies. First Europe went through the costly process of decoupling from Russian oil and gas. Then the US and some of its allies, including the Netherlands and Japan, experienced in a series of tit-for-tat measures of barriers in the trade of critical minerals and technology with China. Supply chain security concerns intensified on a global scale. Western and European governments have been trying to stabilize current energy markets while taking control over capabilities needed for the new energy system, like extracting and processing critical minerals.



The [HCSS Energy and Raw Materials Initiative](#) addresses the ways in which the changing geopolitical landscape affects global energy markets by offering targeted strategic analyses to public and private stakeholders. Our work is continuously expanding as the energy transition is an increasingly pressing issue for public and private actors alike. In 2023, we focused on oil and gas markets on the one hand, and critical raw materials supply chains on the other hand.

Oil and gas markets reached a point of relative stability compared to previous years but they remain vulnerable to geopolitical disruptions and market volatility. To a large extent, decoupling from Russia marked a shift for European energy markets from the stability of long-term contracts to the unpredictability of spot markets, bringing new supply security risks. While the energy transition is a given, European actors are facing key dilemmas around the timing of the transition in relation to supply security, affordability and sustainability. These topics have been addressed throughout this year's publications.

At the same time, the European Critical Raw Materials Act and the subsequent national initiatives of European states brought urgency to invest in mineral supply chains. This is meant to ensure that vital sectors like healthcare, transport and defence are maintained while the energy transition is accelerated. The focus of our work at HCSS has been to identify challenges and opportunities to strengthen European mineral security, both in terms of domestic industrial capabilities and international partnerships with trustworthy suppliers.

[Irina Patrahau, Strategic Analyst](#)

Report | Advancing European Mineral Security: Insights from the Dutch Industry

Authors: Irina Patrahau, Michel Rademaker, Lucia van Geuns and Jeff Amrish Ritoe.

What are the challenges and opportunities for Dutch companies to expand their presence in the CRM sector and contribute to diversified and resilient supply chains? [This new HCSS report](#) builds on first-hand insights from industry representatives and offers recommendations on how the Dutch government can support companies in diversifying CRM supply chains. The study aims to inform the implementation of the [Nederlandse Grondstoffenstrategie](#) and [European Critical Raw Materials Act](#). This report builds on insights from over 30 interviews with industry representatives from the Netherlands and was commissioned by the Netherlands Ministry of Foreign Affairs.

Report | Strategic Raw Materials for Defence: Mapping European Industry Needs

Authors: Benedetta Girardi, Irina Patrahau, Giovanni Cisco, Michel Rademaker.

What raw materials are used to build next-gen aircraft fighters, tanks and corvettes? What is the supply chain risk of these materials? [This new HCSS report](#), made possible by a financial contribution from the Dutch Ministry of Economic Affairs and Climate Policy, looks at military applications and their components to map out the European defence industry's raw materials dependence, as well as uncover the vulnerability of supply. Forty critical and 'soon-to-be' critical raw materials are deemed strategic for the European defence industry in this report. These are used across the air, sea and land domains in various military applications and components. Based on an assessment of probability and impact of supply disruptions, the report ranks materials according to their supply risk for European defence.



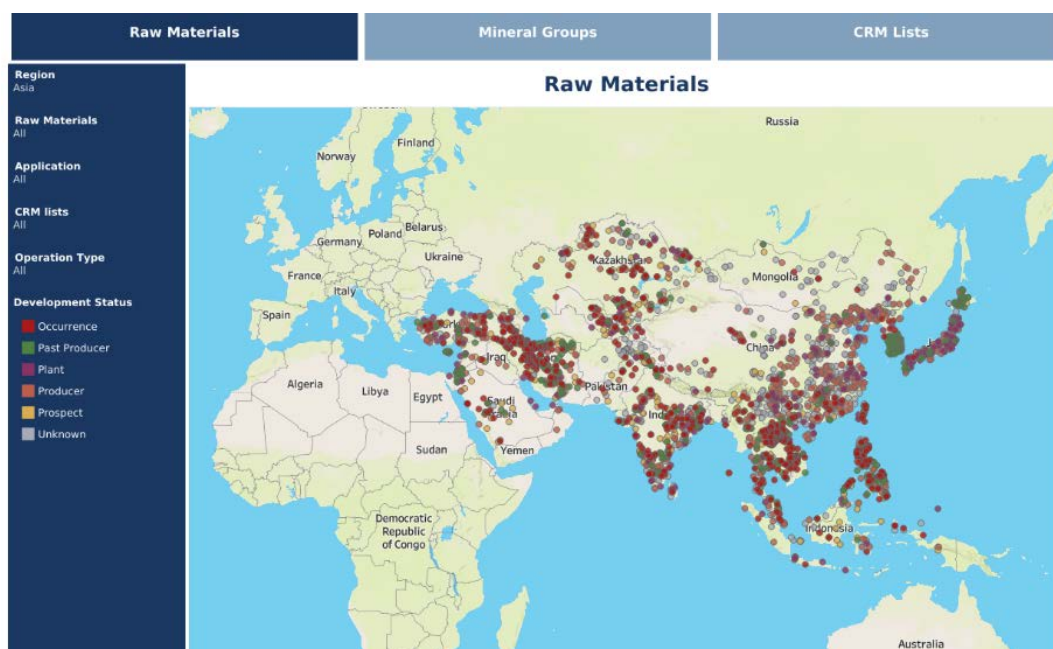
HCSS Recommendations in the national Raw Materials Strategy

Minister Micky Adriaansens (Economic Affairs and Climate Policy), Minister Liesje Schreinemacher (Foreign Trade and Development Cooperation) and State Secretary Vivianne Heijnen (Infrastructure and Water Management) presented the national Raw Materials Strategy to the House of Representatives this year. The Dutch Raw Materials Strategy, which aims to increase the security of supply of critical raw materials in the medium term, makes [reference to 3 reports](#) from the Hague Centre for Strategic Studies:

- [Scenario study Nuclear Energy](#); Uranium is an essential raw material for nuclear energy. The geopolitical risks in the field of material acquisition are relatively limited in the long term with nuclear energy. There are sufficient uranium reserves worldwide and there is a diversity of suppliers. In addition, it is possible to store uranium for a long time without degradation of the material.
- [Securing Critical Materials for Critical Sectors: Policy options for the Netherlands and the European Union](#); The Netherlands and the EU are highly dependent on other countries for critical raw materials and raw material extraction is often highly geographically concentrated. For example, most of the rare earth metals come from China, cobalt mainly comes from the Democratic Republic of Congo and lithium from Australia. But our strategic dependencies are not only in the extraction of raw materials, they are even more concentrated when we look at refining: China has occupied a very significant position in recent years. built up in the refinery.
- [Cobalt Mining in the EU: Securing supplies and ensuring energy justice](#); Most raw materials are not scarce in an absolute sense, there is plenty of them in the earth's crust, but they do have to be extracted. However, the supply of raw materials is quite rigid in the short term. Opening and operating a mine takes 10-15 years and in addition, many critical raw materials are extracted as a by-product of other raw materials, such as indium with zinc. Many critical raw materials can also be extracted in Europe - although not in the Netherlands. For example, Scandinavia and Ireland have lithium and rare earth metals. Finland, Sweden and Greenland have reserves of cobalt.

Critical Raw Materials Dashboard

In November, HCSS launched the [Critical Raw Materials Dashboard](#). Critical Raw Materials (CRM) are used across the vital sectors of the global economy and society including clean energy, digital technology, healthcare, defence and space. This HCSS Dashboard provides information about the geographical spread of resources, reserves, extraction and processing capabilities for a wide range of raw materials. The dashboard displays the materials included in the [2023 EU Critical Raw Materials list](#) as well as other non-energy and non-animal raw materials that are important for the above-mentioned sectors.



Workshop | Accelerating cross-border cooperation on hydrogen infrastructure: North Rhine Westphalia – The Netherlands

The existing energy supply relationship between industrial consumers in North-Rhine Westphalia (NRW), Dutch seaports and other supply chain partners is an important basis for the acceleration of green hydrogen supply chains between the Netherlands and NRW. In [June 2023](#), [HCSS co-organised a workshop](#) on cooperation between the Netherlands and North Rhine Westphalia, following the success of the [Netherlands Hydrogen Accelerator Workshop](#) in October 2022.

This event was hosted by the Dutch association of tank storage companies (VOTOB) and the German independent tank storage association (UTV). Various stakeholders of the current and potential future hydrogen supply chains between NRW and Dutch seaports came together to share information, align efforts as well as discuss necessary changes and developments to accelerate investments in specific infrastructure projects. The workshop utilised bespoke 3D models of the different supply chains and a large-scale map of the Netherlands and North-Rhine Westphalia. The workshop highlighted several key measures that need to be taken to improve cross-border green hydrogen supply chains, including; closer policy alignment between the governments of North Rhine-Westphalia and the Netherlands, aligning infrastructure projects across borders and more clarity about planning, licensing and off-take.

The main takeaways from the workshop are highlighted in a [Factsheet](#) authored by HCSS strategic analyst Irina Patrahau and assistant analyst Laura Elisa Niemann and an explainer video produced by HCSS PR and Communications Assistant Alessandra Barrow.



Paper | Decarbonising Maritime Bunkering in the Netherlands and the Embargo on Russian Oil

Authors: Irina Patrahau, Lucia van Geuns (HCSS) and Jasper Faber, Emiel van den Toorn (CE Delft).

How can the European boycott on Russian oil affect maritime bunkering in the Netherlands? And how do these sanctions interact with ambitions to decarbonize shipping under Fit-for-55? [This new report by HCSS and CE Delft](#), made possible by a financial contribution from the Dutch Ministry of Infrastructure and Water Management, develops qualitative storylines that focus on the impacts of the sanctions on Russian oil on bunkering in ARA and the implementation of FF55 plans up to 2030.

Paper | European Tank Storage and changing Geopolitical Landscapes

Authors: Irina Patrahau, Lucia van Geuns and Michel Rademaker.

What are the implications of growing protectionism and strategic competition for Europe's energy security and decarbonization? [This HCSS paper](#) focuses on the impact of the war in Ukraine on European energy security and decarbonization, with a specific focus on the tank storage sector. First, the paper looks at the impacts of the war on market volatility and supply security in the short term (2-3 years). Second, it provides an overview of the challenges and opportunities arising from the transition on a longer term (10-20 years). Finally, recommendations are derived to support a smooth transition from fossil fuels to green technologies and ensure supply security in the process.

Paper | Energy Trade in the Netherlands: Past, Present and Future

Authors: Irina Patrahau, Lucia van Geuns and Michel Rademaker.

What does it take to be an energy trade hub? Energy trade has shaped geopolitics over the last two centuries, creating economic and geopolitical dependencies according to energy consumption and production patterns. The ARA region – Amsterdam, Rotterdam and Antwerp – is one of the largest liquid bulk trade hubs in the world. Today, energy trade is changing. Hydrogen, synthetic fuels and bioenergy are replacing fossil fuels. Trade routes will shift, new suppliers will emerge, and new interdependencies will be established. Being a trading centre for new energy sources is by no means a given. Using publicly available data, [this HCSS report](#) sheds light on the role of the Netherlands as an international energy trade hub. It looks back at the country's development as an hub for oil and natural gas, and forward at the main characteristics of emerging commodity markets.



Paper | Natural Gas Extraction in the Netherlands: Impact on Affordability, Supply Security and Climate

Authors: Jilles van den Beukel and Lucia van Geuns.

What possible future scenarios are there for Dutch gas production? And what is the impact on affordability and security of supply? In this [new HCSS study](#), commissioned by Energie Beheer Nederland (EBN), energy specialists Jilles van den Beukel and Lucia van Geuns look at two options: a scenario in which the current suboptimal investment climate is continued, and a scenario that assumes a significant improvement in the investment climate, in particular through faster and more predictable procedures.

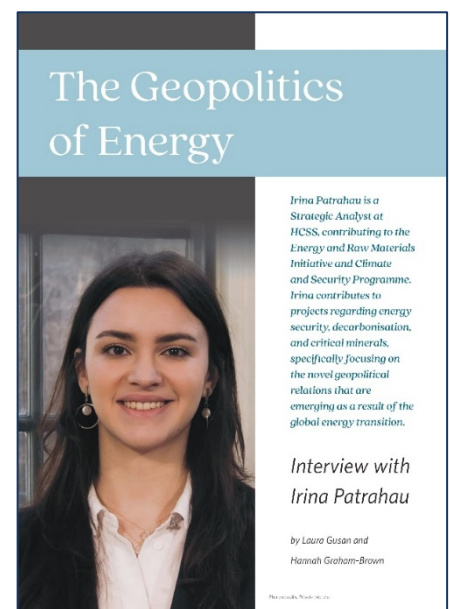
Paper | Oil and Gas during the Energy Transition

Authors: Jilles van den Beukel and Lucia van Geuns.

At a time when a lot of attention is being paid to the development of the new energy system, [this HCSS study](#) by energy specialists Jilles van den Beukel and Lucia van Geuns focuses on the question of what the farewell to the old, fossil system will look like. The European Union (EU) still consumes a lot of oil and gas, but hardly produces it anymore. People are ill-prepared for the risks this entails. A rapid energy transition is desirable, but it should not be the only strategy to deal with these risks.

Jason Magazine | The Geopolitics of Energy

“The war in Ukraine has shown us the importance of energy autonomy.” In the latest edition of [Jason Magazine](#), editors Laura Gusan and Hannah Graham-Brown sat down for an insightful interview with HCSS strategic analyst Irina Patrahau to discuss the critical topic of Climate Security. Patrahau plays a pivotal role in the Energy and Raw Materials Initiative and the Climate and Security Programme at HCSS, where she contributes to projects regarding energy security, decarbonisation, and critical minerals, specifically focusing on the novel geopolitical relations that are emerging as a result of the global energy transition.



6. Strategic Technologies and Industrial Policy

Over the last thirty years, the global economy has become more intertwined than ever before. Today's economic great powers – the United States, China and the European Union (EU) – are bound by a web of international value chains. They are dependent on each other for key technologies and critical preliminary inputs such as semiconductors, fossil fuels, critical raw materials and food. As a result, they rely on each other's good will for the production of end-products in medical, ICT, defence and energy sectors.¹ In fact, all across value chains one finds critical inputs. In the digital realm, they can be end-products or applications (e.g., cloud environments), components (e.g., semiconductors) and materials (e.g., rare earths).



Our vital sectors depend on these inputs. Critical raw materials should be regarded as the skeleton of the modern, digital economy. Semiconductors can be best described as its central nervous systems. Without critical raw materials (CRM) such as silicon, gallium and rare earths, no semiconductors can be produced. Without either CRM or semiconductors, communication networks, datacentres and software cannot be created. The German government in September 2023 pinpointed the role that its 5G network plays in similar terms, namely as “the ‘central nervous system’ of Germany as a business location.”² The implications of the loss of access to something as frivolous as a nail in the poem *For want of a Nail* comes to mind. “For want of a nail the shoe was lost; for want of a shoe the horse was lost; for want of a horse the battle was lost. For the failure of the battle the kingdom was lost.”³ Not having access to a nail (or in today's world China-supplied materials like gallium and germanium) may have far-reaching effects.

China on one side and the United States and the European Union on the other view each other as rivals again. As a result, the economic great powers have come to heavily rely on parties they distrust for the functioning of their vital sectors and general prosperity. In 2023, these states increasingly leverage chokepoints in the international economy against one another.⁴ The Netherlands, Japan and the US reached an agreement to no longer allow lithography equipment manufacturers (i.e. ASML) to sell the second-to-last semiconductor manufacturing systems to Chinese semiconductor manufacturers. In response, China introduced export restrictions for the key materials, gallium, germanium, graphite and rare earths. We learned in 2022 that once tensions reach breaking point, rival-supplied critical economic may become weapons that inflict massive costs. Russia's 2022 *de facto* gas export boycott against the EU has long-lasting effects on our business climate.

¹ The Federal Government of Germany, ‘Strategy on China’ (Federal Foreign Office, 2023): 12, <https://www.auswaertiges-amt.de/blob/2608580/49d50fecc479304c3da2e2079c55e106/china-strategie-en-data.pdf>.

² Mathieu Pollet et al., ‘Nordstream Trauma Leads Berlin to Draw up Fresh Huawei Bans’, *POLITICO*, 19 September 2023, <https://www.politico.eu/article/germany-draws-up-partial-ban-on-huawei/>.

³ Variations of this rhyme, attributed to a variety of people, have appeared over the last 1000 years.

⁴ States that have “political authority” over chokepoints, or “central nodes in the international networked structures through which money, goods, and information travel,” can use these nodes to coerce adversaries, by either threatening to cut-off or actually cutting off “adversaries from [these] network flows.” Henry Farrell and Abraham L. Newman, ‘Weaponized Interdependence: How Global Economic Networks Shape State Coercion’, *International Security* 44, no. 1 (1 July 2019): 45, 46, https://doi.org/10.1162/isec_a_00351.

Fear of overdependence and of losing “technological-edge” led rival great powers –first China, then the US and now the EU– to vastly expand their industrial policies. Their plans to make their economies more geopolitically robust, oftentimes do not sit easily with WTO-rules and international norms.⁵ The pursuit of these strategies has contributed to a process of great economic power *decoupling* and to some extent also *bloc formation* in specific strategic sectors. EU leaders have argued that decoupling is “neither viable – nor in Europe’s interest”. They call for “de-risking” relations with China instead.⁶ Scholars, however, express great scepticism. The self-accelerating dynamic of tit-for-tat economic security policies cannot be guided to a desirable end-point, they argue.⁷

In fact, the separation unleashed by competing industrial policies may not remain gradual or predictable at all. Decoupling in strategic sectors may be followed by a more extreme geoeconomic split. A military crisis in East Asia between the US and its allies on the one hand and China on the other will likely lead trade relations between them to reach breaking point. In 2024, with consequential elections in both Taiwan and the US coming up, HCSS will closely track military competition in the Taiwan Strait and the East and South China Sea for flashing red lights. Similarly, it will keep close tabs on the development of new and more radical innovation and industrial policies by the economic great powers.

Joris Teer, Strategic foresight and China analyst



⁵ Joris Teer, Mattia Bertolini, and Benedetta Girardi, 'Competitie Tussen Grootmachten En Maatschappelijke Stabiliteit in Nederland: De Risico's van Russisch Gas, Chinese Grondstoffen En Taiwanese Chips Voor Vitale Sectoren' (The Hague: The Hague Centre for Strategic Studies (HCSS), April 2023), II, <https://hcss.nl/report/competitie-grootmachten-en-maatschappelijke-stabiliteit-nederland/>.

⁶ 'Speech by President von Der Leyen at the College of Europe in Bruges', Text, European Commission, 4 December 2022, https://ec.europa.eu/commission/presscorner/detail/en/speech_22_7487.

⁷ Viking Bohman, 'The Coming Decoupling from China Consequences for the EU's Economic Security Strategy' (Swedish National China Centre, 2023), 3, <https://kinacentrum.se/wp-content/uploads/2023/07/decoupling-final.pdf>. ; Chris Miller, 'The West's de-Risking Strategy towards China Will Fail, Says Chris Miller', *The Economist*, 4 August 2023, <https://www.economist.com/by-invitation/2023/08/04/the-wests-de-risking-strategy-towards-china-will-fail-says-chris-miller>.

Reports and other outputs

Throughout 2023, HCSS has spearheaded various initiatives, projects, and events in the field of strategic technologies and industrial policy. Joris Teer, Mattia Bertolini and Benedetta Girardi published *Great power competition and social stability in the Netherlands: The risks of Russian gas, Chinese raw materials and Taiwanese chips to vital sectors*. This report adds a new perspective because it specifically identifies the potential consequences of disruptions in the supply of raw materials and semiconductors for vital sectors in the Netherlands, and therefore for social stability.

Notably, for a project on Digital Open Strategic Autonomy (DOSA) commissioned by the Ministry of Economic Affairs and Climate, HCSS hosted a roundtable with experts from industry and universities. This roundtable explored how the Netherlands and the EU can achieve strategic indispensability in digital value chains. A position of strategic indispensability strengthens Europe's geopolitical position, and thereby reduces the risk of the weaponization of critical economic inputs – such as critical raw materials and legacy semiconductors – against the EU.

Part of this project was the development of a strategic dependence risk framework. This framework helps policymakers to assess the impact and likelihood of supply-related strategic dependence shocks, based on a set of twelve indicators. This provides policymakers with a tool to gauge and compare the risk-levels of strategic dependencies that perhaps seem too dissimilar to compare at first sight. The report *The Great Game of Chokepoints: Assessing Geopolitical Risks and Advancing Dutch and European Strategic Indispensability in Digital Value Chains* by Joris Teer, Abe de Ruijter and Michel Rademaker will be published in early-2024. The framework was subsequently leveraged to gauge the risks of China-supplied offshore wind energy and electrolysis products. This analysis will be featured in a conjoint upcoming report by Joris Teer and Abe de Ruijter with TNO, titled *The Geo-Economics of the Energy Transition: Towards Resilient Renewable Energy Supply Chains for the EU*.



As part of the annual Strategic Monitor, Joris Teer, Abe de Ruijter and Anna Sophie den Ouden wrote *Blocs and Barriers: Are there Limits to Decoupling in the Next Five Years?* Joris Teer presented research findings at DHL-organized geopolitical risk round tables for semiconductor, chemical and logistics executives at the Valencia DHL Sustainable Logistics Summit and at the SEMICON Europa conference in Munich.

In February 2024, Han ten Broeke and Joris Teer will present *Taiwan crisis scenario's* in the Dutch House of Representatives. They have been commissioned by the Permanent Committee on Foreign Trade and Development Cooperation (BHOS) to map the geoeconomic effects of a military crisis around Taiwan on Dutch vital sectors and the general economy.

Event | Summit on Responsible Artificial Intelligence in the Military Domain: REAIM 2023

Author: Tim Sweijs, with contributions from Tara de Klerk.

Artificial Intelligence—or AI—applications are affecting the character of war and international security more broadly in a variety of ways. Our human history of war features a long succession of new technologies that have affected how wars were fought. On February 15 and 16, the government of the Netherlands hosted the first global [Summit on Responsible Artificial Intelligence in the Military Domain: REAIM 2023](#) in The Hague, a platform for all stakeholders to discuss the key opportunities, challenges and risks associated with military applications of AI.

Tim Sweijs participated in the breakout session on “Realities of Algorithmic Warfare: Use, Impact & Regulation”, where he was a speaker in one and moderated a second out of the 3 panels. How have these technological developments and the increasing use of AI in military operations been changing the way that wars are fought? “AI applications are affecting the character of war in a variety of ways, not yet through Battalions of Anthropomorphic Terminators but through the integration of AI in existing applications, along the entire OODA loop,” Sweijs said. “This will not only affect the tactical, but also the strategic level of war: imagine what a Deep Fake of Vladimir Putin announcing the launch of nuclear weapons will do to strategic stability. The impact of AI on the character of war and on international stability is here, it is real, and can be expected to progressively materialise in the years to come,” Sweijs concluded.

What are the effects of this kind of technology on the OODA loop in military strategy, and how does AI change the role of human commanders in the decision-making process in warfare? “Typically, people tend to give the nod to AI to applications as long as they are novel, and as long as they solve problems that were previously associated with human intelligence,” Tim Sweijs commented. “They thereby give it an aura of magic. But when that application becomes mainstreamed and commonly used, people stop calling it AI.”

Sweijs later published his opening remarks in the paper [The Realities of Algorithmic Warfare: Some Thoughts on the Impact of Military Artificial Intelligence Applications](#).



Report | Emerging Disruptive Technologies in an Era of Great Power Competition

Authors: Hugo van Manen, Stella Kim, Adam Meszaros and Michal Gorecki, with contributions by Rob de Wijk, Frank Bekkers, Joris Teer and Tim Sweijts.

While emerging (and) disruptive technologies (EDTs) play a critical role in generating economic prosperity, they also generate a bevy of challenges, posing both risks and opportunities. In the current competitive global environment, Dutch policymakers should seek to reduce the Dutch innovation ecosystem's vulnerability to technological practices and to improve its ability to compete internationally, while simultaneously seeking international cooperation to regulate the societal impact of EDTs. [This report offers recommendations](#) to policymakers of what can be envisaged as possible solutions.

Report | Defending the Digital Domain: The Effort to build a Cyber Resilient India

Authors: Adam Meszaros, Kamalaeswari Raghu, Hana Masood, Konstantijn Rondhuis, Siddhardha Kollabathini, Dr. Praveen Naidu Vummadisetty, Alessandra Barrow and Michel Rademaker.

As the largest and most diverse democracy on earth the struggle to keep the India secure within cyberspace and all other domains is significant. India is currently undergoing efforts to digitise its economy and infrastructure. Consequently, the number of users to be safeguarded by securitisation of the cyber domain is rising rapidly. To become an economically developed digital nation, India must therefore also adopt a holistic approach in tackling challenges to its cybersecurity. [This report was published](#) as part of the Indo-Dutch Cybersecurity School 2022 (IDCSS22).



The Correspondent: Without China, there would be no Solar Panels, MRI Scanners and Fighter Jets in Europe

Europe is dangerously dependent on raw materials giant China. If we want to get rid of that, we have to get our hands dirty, says HCSS strategic analyst Joris Teer in [an interview with De Correspondent](#). That means: mining in our own backyard and making deals with dictators. Left or right: Europe must learn to choose between evils. 'We consider our economy more important than territorial expansion or nationalistic historiography, and conveniently assume that other countries think so too', Teer said. 'But tensions between major powers have only increased in recent years. There is a hefty price tag on curbing dangerous dependency, but the war in Ukraine shows that Europe can suffer a huge blow if it does not prepare for the use of economic pressure in conflicts. Ultimately, Xi Jinping has power over us because we do not want to bear the costs, both environmental and economic, of our vital production processes. Europe must learn to choose between evils.'

BBC Business Daily | ASML: Inside Europe's most valuable Tech Company

Dutch tech giant ASML makes the most advanced machines used in the manufacturing of microchips - but who should have them? In a dedicated episode, [BBC World Service's Business Daily](#) talks to HCSS strategic analyst Joris Teer about the geopolitical bind the Dutch technology giant finds itself in, as it finds itself squeezed in the contest between the two strongest powers on the planet, China and the United States. How serious is the US in restricting or reducing China's current access to the technology that ASML produces? "I'm convinced that the Americans are almost all-in," says Teer, whose work at Dutch thinktank The Hague Centre for Strategic Studies (HCSS) focusses on anything China-related, from military development to the semiconductor industry.

Teer: "When the Dutch government was in the process of withholding the export license for the highest degree of technology of ASML EUV machinery, the Chinese ambassador said 'we would not like the Netherlands to break under US pressure,' basically saying that it would of course negatively effect China-Netherlands relations. That already put us in sort of a bind there. But two days later, the American ambassador in the Netherlands said 'We've made it very clear to the Dutch, we believe this kind of sensitive technology doesn't belong in certain places.' There are few examples that more concretely show the binds that a small and mid-sized ally of the United States that does a lot of business with China can get into."

EUISS Chaillot paper | Cyber Arms Watch and Transparency on States' Cyber Capabilities

Cyber capabilities: what are the most and least transparent countries? In their latest Chaillot paper titled "[A language of power - Cyber defence in the European Union](#)", the EU Institute for Security Studies (EUISS) make use of the HCSS Cyber Arms Watch to examine the evolution of the EU's Cyber Defence policy and analyse the role of cyber defence within the Union's broader security strategy.

The [Cyber Arms Watch](#), published by HCSS in May 2022, offers a transparency index on the offensive cyber capabilities of 60 states. It compares the degree to which states are transparent about their declared cyber capabilities to outside perceptions of those capabilities. Transparency on states' cyber capabilities helps reduce misunderstandings and gives more predictability in the international #security environment. This contributes to reducing the risks of conflict. However, countries are often reluctant to release such data. Declared capabilities rating indicates to what extent a state publicly discloses information about its offensive Cyber Capabilities. On the other hand, Perceived Capabilities Rating indicates how outsiders observe the offensive cyber capabilities of a state, using open-source information.

The Indo-Dutch Cyber Security School (IDCSS) 2023

The [Indo-Dutch Cyber Security School \(IDCSS\)](#) is an annual event organized by Dutch and Indian organizations for students based in the Netherlands or India and young professionals interested in cyber security issues. The central goal of this school is to give students and young professionals the opportunity to grow professionally and academically, through lectures and online action learning, in the sphere of cyber security. Held from 6th of October to 10th of November, this year's edition included 3285 participants.

Over the years the Indo-Dutch Cyber Security School has held lectures on topics such as forensics in cybersecurity, data protection, blockchain, artificial intelligence, cyber arms watch and cloud computing. This year, new subjects such as Cryptography and AI were also addressed. Our expert speakers come from a range of backgrounds in computer science, crisis and security management, law and industry. At the IDCSS23, HCSS deputy director Michel Rademaker hosted the 'Cyber Resilience Game', an online serious-game that allows students to practically engage with hypothetical cyber incidents.

Since its inception the IDCSS has been supported by over twenty partners in industry, research and government. Our partners have included Governments of Karnataka and Telangana in India, The Hague Municipality, Embassy of India in The Netherlands, The Hague University of Applied Sciences, the [Global Commission on the Stability of Cyberspace](#), TU Delft, Verizon and Symantec. As a result, students can partake in IDCSS for a nominal fee and distinguish themselves in front of their potential employers. This year's sponsors include: The Municipality of The Hague, Embassy of the Kingdom of The Netherlands in New Delhi, Embassy of India in The Hague, Government of Telangana, Data Security Council of India (DSCI), The Cybersecurity Centre of Excellence. This year our Academic partners include GNITS, JITS and VNR VJIEET, our outreach partners include TASK, our promotional partners include IEEE Education Society YP Adhoc Committee and our challenge partners include CCoE and Blue Cloud.

INDO-DUTCH CYBER SECURITY SCHOOL 2023

Online action learning for students and
young professionals

October - November 2023

#IDCSS23





HCSS signs MoU with Data Security Council of India (DSCI)

On January 23, HCSS executive director Paul Sinning [signed an MoU](#) with Dr. Sriram Birudavolu, CEO of the Cybersecurity CoE Telangana, a joint initiative of the Data Security Council of India (DSCI) and the Government of Telangana, to accelerate the state's cybersecurity momentum. The MoU will facilitate FDI, promote knowledge sharing, talent mobilization and collaboration on innovation, legal frameworks and emerging technologies among the cybersecurity ecosystems.

HCSS together with DSCI organized the [Indo-Dutch Cybersecurity School 2022 \(IDCSS\)](#), an annual event organized by Dutch and Indian organizations for students based in the Netherlands or India and young professionals interested in cyber security issues. Last year's edition included nearly 3000 participants, and hosted 21 lectures from the world's leading experts in cybersecurity, such as the former US Cyber Diplomat Christopher Painter, CSIS Fellow Dr. Alexander Klimburg, GDPR and Cyber Law expert Benedetta Podesta and Dr Akash Thakar, forensics expert.

The Netherlands is emerging as a hub for India in Europe. There are over 200 Indian companies present in the Netherlands, including all the major IT companies such as TCS, HCL, Wipro, Infosys, Tech Mahindra as well as Sun Pharmaceuticals and Tata Steel. Also, there are over 200 Dutch companies present in India, including major Dutch companies like Unilever, Philips, Akzo Nobel, DSM, KLM and Rabobank. These companies all need OT- and IT-security that is comprehensive and inclusive, multistakeholder, multidisciplinary and internationally scoped.

Collaboration is in the Dutch DNA and we work together with India extensively on cybersecurity, says Michel Rademaker, HCSS deputy director and one of the key persons behind the IDCSS. India has a huge talent pool of IT professionals and students and Netherlands has the expertise of implementing PPP models of collaborations throughout the world.

South Africa-Netherlands Cyber Security School (SANCS)

HCSS has joined with Stellenbosch University (SU) and is thrilled to announce the inaugural [South Africa-Netherlands Cyber Security School \(SANCS\)](#) will be held from 11 March to 18 April 2024. This innovative online learning event aims to foster collaboration and knowledge exchange between students and young professionals from South Africa and the Netherlands. By creating a platform for cyber security enthusiasts to connect, this school will pave the way for stronger ties and cooperative efforts in tackling the challenges of the digital age.

The South Africa-Netherlands Cyber Security School (SANCS) is an annual online event organised by Dutch and South African organisations for postgraduate students and young to mid-career professionals who are interested in cybersecurity issues and are based in Southern Africa or the Netherlands. The central goal of this school is to give SANCS students the opportunity to grow professionally and academically in the sphere of cybersecurity through free expert lectures and online action learning.

Our cybersecurity education initiatives cover a diverse array of subjects including forensics in cybersecurity, data protection, blockchain, artificial intelligence, cyber arms monitoring, and cloud computing. Our esteemed speakers hail from various fields such as computer science, crisis and security management, law, and industry. Students of SANCS24 will also enhance their understanding through practical learning challenges, completed within interdisciplinary teams and evaluated by our collaborating partners.

SANCS is co-organised and supported by a wide range of partners from industry, research and government. Our partners for 2024 include The Hague centre for Strategic Studies, Stellenbosch University, the Centre for Artificial Intelligence Research (CAIR) and the Embassy of the Kingdom of the Netherlands in South Africa. As part of the SANCS, students have the opportunity to play the National Cyber Resilience Game. The intent of the game is to further educate the students on all different aspects of cyber resilience and challenge them to assess what capabilities are required to make South Africa more cyber resilient, find out more about [HCSS serious gaming here](#).

SOUTH AFRICA - NETHERLANDS CYBER SECURITY SCHOOL 2024

Empowering Students and Young Professionals:
Explore Cybersecurity through Online Learning

March - April 2024

#SANCS24



7. External Publications

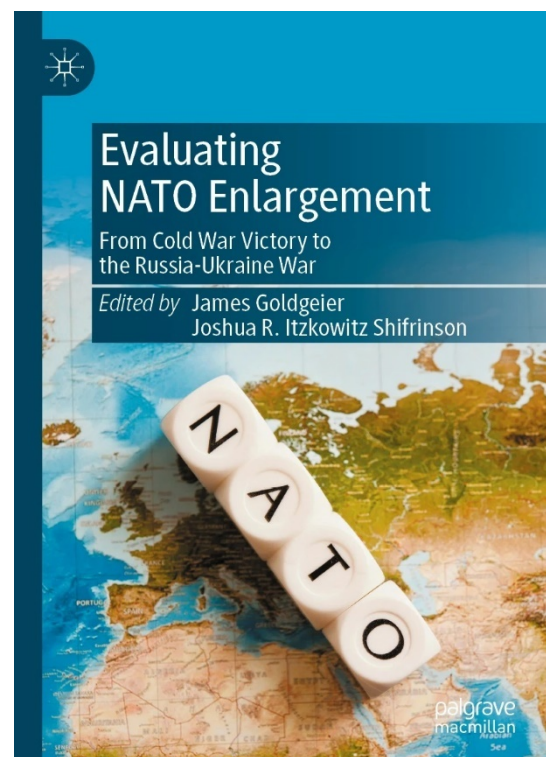
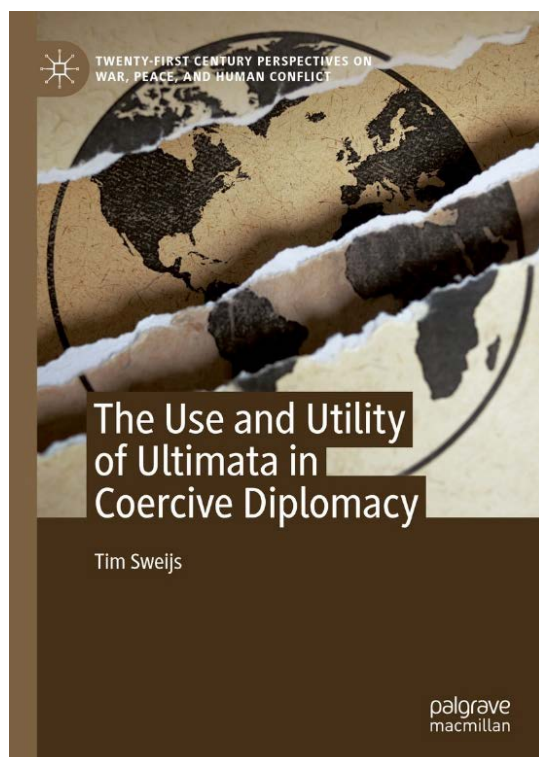
Throughout the year, HCSS analysts and experts have regularly shared their insights and knowledge in other prestigious publications. From thought-provoking op-eds in influential newspapers to comprehensive scholarly articles in major international magazines, our strategic analysts have actively contributed to global dissemination and conversation on today's critical issues.

We hereby proudly highlight a year of prolific engagement and impactful contributions.

Book | The Use and Utility of Ultimata in Coercive Diplomacy by Tim Sweijjs

HCSS Director of Research Tim Sweijjs published his new book "[The Use and Utility of Ultimata in Coercive Diplomacy](#)" in June, "a pathbreaking", "sophisticated" and "nuanced exploration" of ultimata as a core concept in the scholarship of coercive diplomacy, according to renowned critics. Ultimata constitute strong coercive threats that consist of a specific demand from the opponent, a deadline for compliance, and the promise of violent punishment in case of non-compliance. The book delves into Western strategic, political, and legal thought and traces the historical evolution of ultimata from Antiquity to the present day. Contrary to conventional wisdom, this book challenges the scholarly assumption that ultimatum strategies are necessarily risky. Through a comprehensive analysis of a newly compiled [dataset featuring 87 ultimata](#) issued from 1920 to 2020, Sweijjs unveils a new perspective on the effectiveness and outcomes of ultimata.

Sweijjs recently completed an edited volume titled *Beyond Ukraine: Debating the Future of War* (forthcoming: Hurst, 2024) and is working on another project titled *Rethinking Force Development in An Age of Disruption: Defence Planning for Small and Middle Powers* (Routledge, 2024).



Evaluating NATO Enlargement | Every Which Way But Loose: The United States, NATO Enlargement, European Strategic Autonomy and Fragmentation.

HCSS senior strategic analyst Paul van Hooft has [contributed a chapter](#) to the latest work to examine NATO enlargement following the Russian invasion of Ukraine in 2022. [Evaluating NATO Enlargement: From Cold War Victory to the Russia-Ukraine War](#), published by Palgrave Macmillan (Eds. James Goldgeier and Joshua R. Itzkowitz Shiffrin) reviews the history and consequences of NATO's post-Cold War enlargement into Central and Eastern Europe. It offers a nuanced discussion of the merits and drawbacks of NATO enlargement across the different actors involved and compares the results of the policy against potential alternatives that were not chosen. Particular attention is given to NATO enlargement's influence on the course of U.S. foreign policy, democracy and security in Central and Eastern Europe, NATO's own development as a political and military institution, and relations with China and Russia.

Van Hooft contributed the chapter titled, [Every Which Way But Loose: The United States, NATO Enlargement, European Strategic Autonomy and Fragmentation](#). In this chapter van Hooft argues that NATO enlargement stabilised Central and Eastern Europe, but undermined long-term European security in other ways. The chapter draws on interviews with US officials and shows a preoccupation with consolidation of stability in both Europe and outside of it, an institutional predisposition towards NATO, and an absence of constraints on US policies. In the end, these contradictory policies diluted European strategic cohesion and overburdened European militaries, while expanding the commitments inherent to the Alliance, leaving Europe underprepared for the confrontation with Russia following its invasion of Ukraine.

The Alphen Group | A Comprehensive Strategy to secure Ukraine's Future

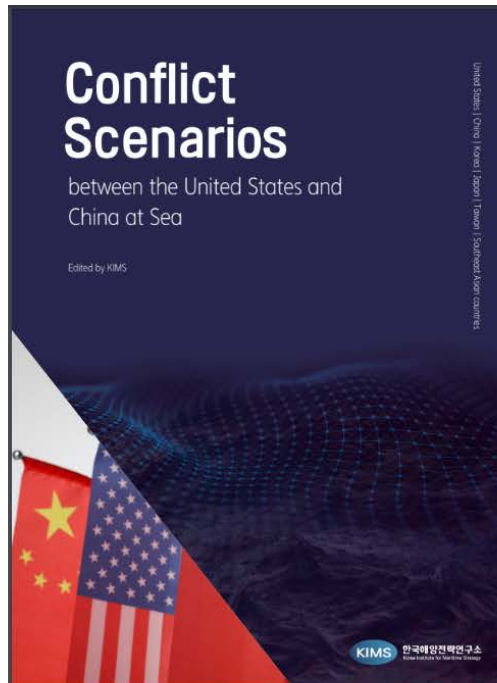
Authors: Rob de Wijk and [The Alphen Group](#)

As Russia's war of aggression enters its 2nd year, the Western definition of success must remain the re-establishment of Ukraine as a secure and sovereign European democracy with all the rights and responsibilities that entails. This [Ukraine Strategy by The Alphen Group \(TAG\)](#) addresses the scope and extent of Western support required to reinforce that goal across the diplomatic, informational, military and economic domains. A new European security system will be needed in order to restore respect for the principles of international law that Russia has violated and, over time, to lay the basis for a new relationship with Russia, whatever the outcome of the war. And, in the short term, it will also be indispensable in order to maintain a sufficient level of support from Western public opinion.

War On The Rocks | Mind The Middle Powers

The U.S. may be rushing into an overly narrow conception of geopolitics, obsessed with China and (to a lesser degree) Russia, treating a vital set of middle powers as necessary adjuncts to those rivalries rather than as strategic actors in their own right, argue Tim Sweijs, HCSS Director of Research, and Mike Mazarr, Senior Political Scientist at RAND, in an [article for War On The Rocks](#).





Korea Institute for Maritime Strategy | Structure and Contingency: War Onset in the East China Sea

Authors: Paul van Hooft, Tim Sweijs and Stella Kim.

What could trigger a conflict in the East China Sea between China on one side and Japan and the United States on the other, and what would that conflict look like? [This chapter](#) by Paul van Hooft, Tim Sweijs and Stella Kim, part of a larger volume “Conflict Scenarios between United States and China at Sea” published by the [Korea Institute for Maritime Strategy](#), imagines conflict and escalation scenarios in the East China Sea, by analysing structural drivers of China, the US, Japan, South Korea, and other regional states’ maritime strategies, territorial disputes, and geographic constraints. The chapter also explores how “gray zone strategies”—strategies that exploit ambiguity about actors or territorial jurisdiction—risk creating contingencies that trap actors into escalatory paths.

CSP Journal | Beyond Deterrence: Reconceptualizing Denial Strategies and rethinking their Emotional Effects

Authors: Tim Sweijs and Samuel Zilincik.

In [a new article](#) for Contemporary Security Policy (CSP), Tim Sweijs and Samuel Zilincik outline why strategic theorists and practitioners should care about the role of different emotions that are associated with distinct denial logics, and what this means for practice and future research. Contrary to detailed work on deterrence by punishment, Western strategic thought about denial and its effects is conceptually muddled at the expense of effective strategy-making. This article seeks to reconceptualize denial and rethink its emotional effects. It defines denial as a strategy aimed at frustrating the adversary’s military power and proposes four different denial logics: capability elimination, operational paralysis, tactical degradation, and strategic effect reduction. It then turns to the effects through which these denial logics generate favourable consequences, and singles out the emotions of despondency, resignation, fear, and disappointment as the key factors that mediate their impact.



Politico | Action on Critical Minerals is needed now

As tensions with China grow, Western countries need to do more to finance and build alternative supply chains for critical minerals. Bringing new sources of supply from trusted partner countries is the only way the West can address China's choke hold on critical minerals, argue Chris Miller, author of "Chip War", and HCSS strategic analyst Joris Teer in [an opinion piece for Politico](#). Advanced economies — and especially the EU — need better mechanisms for bringing new supply online. Opening new mines and refineries in democracies is difficult due to extensive consultation processes and "not-in-my-backyard" sentiments. Bringing new sources of supply from trusted partner countries online is the only way to address China's choke hold. Action is needed immediately because according to one estimate, it takes between 7 and 20 years to open a new mining facility. The alternative is to let China consolidate advantages in a sphere where it has escalation dominance, at a time when escalation looks increasingly likely.

Bulgarian Diplomatic Institute | Oil Markets after the Invasion of Ukraine: Moving towards Strategic Competition

Authors: Irina Patrahau and Lucia van Geuns.

The world oil map is being redrawn. What does the global oil market look like a year after the invasion in Ukraine? What are the foreseen trends in the global oil market in the next 10-15 years? HCSS strategic analysts Irina Patrahau and Lucia van Geuns explore how these shifts and market volatility are affecting European industries and their competitiveness, in this [article written for the Bulgarian Diplomatic Institute's Foreign Affairs Research Paper](#) on "Energy and Climate Diplomacy".

Journal of International Affairs | Emerging from the War in Ukraine into a secure Energy Transition



HCSS strategic analyst Irina Patrahau contributed an article for Columbia University's Journal of International Affairs: Vol. 75, No. 2, Spring/Summer 2023, [War in Ukraine: The World Responds](#). In her essay, Patrahau analyses the impact of the Ukraine war on the EU's approach to energy security, taking CRM as a case study. In [Emerging from the war in Ukraine into a secure energy transition](#), Patrahau compares the EU's energy supply security policies on gas with the similar absence of a strategic vision on the supply security for critical raw materials. In essence, the EU followed the same path in both instances, Patrahau argues: reliance on the market, little regard for geopolitics and only minor adjustments following various geopolitical crises (such as the cut off of Russian gas supplied to Ukraine in 2009, the annexation of the Crimean Peninsula by Russia in 2014 and the rare earth disputes between China and Japan in 2011). The EU only really acted after the Russian invasion of Ukraine in February of last year: the war in Ukraine proved to be a very late wake-up call for many European policymakers, Patrahau continues. The European Union has now realized the need to step up its game, but is decades behind its strategic competitors, especially after years of progressive deindustrialization. The EU must catch up with its strategic competitors and strengthen its resilience before a new supply security crisis emerges, Patrahau concludes.

NRC | Buy smarter to compensate for dwindling Weapons Supplies

European countries must not only invest more in weapons and ammunition supplies quickly, but also coordinate their purchases better, write HCSS strategic analysts Paul van Hooft, Frederik Mertens and Adam Meszaros in an [op-ed for NRC](#). More coordination in purchases gives Europeans a better negotiating position vis-à-vis the arms industry. This way, costs can be reduced without sacrificing combat power. This also reduces the arms industry's uncertainties about long-term demand, allowing the cost price to be further reduced. The biggest European war in decades and the collapse of the security order should provide sufficient motivation.

Atlantisch Perspectief | On Arms Control, Europe should get off the Sidelines

Europe's arms control regime inherited from the Cold War is crumbling, and according to HCSS senior strategic analyst Paul van Hooft sitting on the sidelines is not an option, he writes in an [article for Atlantisch Perspectief](#), the magazine of the Netherlands Atlantic Association. He explores the urgency of engaging with rivals and adversaries, including China, competing with Russia by investing in advanced conventional weapons, and prioritize strategic stability through arms control. "Engagement on arms control is precisely something where the need to do so is greatest with rivals and adversaries, rather than with partners and allies."

The Strategy Bridge | Civil-Military Relations in Multinational Organizations

How can civil-military relations be used as a lens for us to understand the outcomes of wars in which multinational organizations are involved? This article by HCSS [strategic analyst Davis Ellison for The Strategy Bridge](#) uses civil-military relations as a guide (rather than a strict framework) and the specific case of NATO to show the benefit of applying this approach. It shows, using the example of NATO in Afghanistan, how civil-military dynamics within the organization itself structured the campaign and impacted the alliance's strategy and operations.

NRC | Optimism about NATO is unjustified

NATO seems to have been resurrected. But since the end of the Cold War, geopolitical relations have shifted, says HCSS senior strategic analyst Paul van Hooft in an [opinion piece for NRC](#). The alliance is still stuck on reflexes from the past when American power seemed untouchable, even though the world has changed significantly. Proponents of a rapid Ukrainian NATO membership are too easy to ignore the risk of direct confrontation between Western armed forces and Russia - with all the nuclear risks that entails.

Atlantisch Perspectief | Vilnius Autopsy: Not the Nineties

The July 2023 Vilnius summit has been viewed as another success that builds on the 2022 Madrid summit. In the wake of Russia's invasion of Ukraine, NATO has returned to its core activities of conventional defence and deterrence, as the Strategic Concept underlines writes Paul van Hooft in an article for the [magazine of the Netherlands Atlantic Association](#). However, the Allies need to prepare for a world with long-term structural changes in the distribution of power in the international system and deep uncertainty as a consequence of populist movements on both sides of the Atlantic. The ease and enthusiasm with which old reflexes returned is hardly uplifting.

Atlantisch Perspectief | Deterrence in Times of Confrontation: A Strategic Agenda

The long-standing rivalry between Russia and the West is reflected in the war between Russia and Ukraine. In an [article for Atlantisch Perspectief](#), HCSS Director of Research Tim Sweijs talks about what he calls the 'Third Act', in which confrontation predominates. There is no end in sight to the war and a protracted conflict is likely. Deterrence, escalation management and influencing are crucial elements in this complex situation.

The Daily Beast | China's Military is successfully catching up with the U.S. Fleet

China's military has been successfully catching up with the U.S. fleet by copying American designs for precision weapons, says [HCSS senior strategic analyst Paul van Hooft](#) in *The Daily Beast*. But it's having a harder time narrowing the gap in areas like stealth fighters. Paul van Hooft, an analyst at the Hague Centre for Strategic Studies, said that China's military has been successfully trying to catch up with the U.S. fleet by copying American designs for precision weapons. But, he said, China is having a harder time narrowing the gap in areas like stealth fighters and has tried to make up the gap by investing in artificial intelligence. He said that AI could help China in a future naval conflict by assisting its military more accurately target ships.

NRC | False Peace in Ukraine is more dangerous than War

Negotiating peace with Russia now is risky because it gives Russia the opportunity to recover and take back the initiative, HCSS senior strategic analyst Paul van Hooft wrote in January in [an op-ed for NRC](#). Academics, politicians and journalists wrote an open letter calling for support for peace negotiations between Ukraine and Russia in order to save human lives. That is a noble goal indeed, but they are wrong; there is no reason to think that if negotiations between Russia and Ukraine were to take place now, they would lead to lasting peace. The opposite is the case.

Blog | Chile's National Lithium Strategy

Populist talk or genuine intentions to become the largest producer of lithium in the world? As the world's 2nd largest producer of lithium, the exponential growth in demand for the metal has put Chile in a powerful position. On April 20th, Chile's President Gabriel Boric announced his National Lithium Strategy (NLS), which many media proclaimed to be a nationalization of the lithium industry. But is the NLS really a nationalization? According to HCSS strategic advisor Jeff Amrish Ritoe, it is too early to refer to it as such: one needs to take a closer look at what was announced at the presentation before coming to any conclusions, he [writes in his op-ed](#). Ritoe also spoke about Chile's lithium strategy on various media, such as the [Belgian VRT](#) and VPRO's [Bureau Buitenland](#).

FD | Israel-Hamas conflict demands more action from the EU

Europe reacted divided and apathetic to the war in Israel and Gaza. High time for a more active stance, HCSS strategic analysts Gerben Bakker and Tim Sweijs write in an [op-ed for the Financieele Dagblad](#). It is telling how little Europe is aware of this situation. But it cannot afford apathy: this war is a geopolitical powder keg that also threatens Europe's security.

NRC | 'Oppenheimer' is as pressing as can be: we have to learn to live with Nuclear Weapons

The apparently sudden return of nuclear weapons to the world stage surprised many Europeans, but that was unjustified, writes HCSS senior strategic analyst Paul van Hooft in [an op-ed for newspaper NRC](#). Christopher Nolan's Hollywood blockbuster movie Oppenheimer shows the beginning of the nuclear age. It also shows that the terrible dilemmas we still face today were already clear at the time. Despite our post-Cold War hopes, we have still not reached the end of that era. We have been lazy for thirty years. We still live in the world of Oppenheimer, Hiroshima, and Nagasaki: we have to relearn how to make the danger of nuclear weapons manageable.

NRC | The Netherlands must do more to guarantee sufficient and affordable gas in the coming winters

The Netherlands ignores the risks of a new energy crisis, HCSS energy specialists Jilles van den Beukel and Lucia van Geuns state in [an op-ed for NRC newspaper](#). With the gas tap in Groningen closing down completely this autumn, the Dutch Ministry of Economic Affairs and Climate acknowledges that this leads to a high risk for the security of supply. However, the Dutch government considers that risk acceptable. This fits in with a tradition of ignoring risks to the affordability and supply security of gas.

Telegraaf | We have to learn to live with a new Gas World

Just as oil prices did not return to their previous levels after the oil crises of the 1970s, gas prices will not return to the levels of the 2015-2020 period. We will have to learn to deal with this in the Netherlands, a country where much economic activity was based on cheap gas, write HCSS energy specialists Jilles van den Beukel and Lucia van Geuns in an [op-ed for De Telegraaf](#). We must persevere and pay more attention to the affordability and security of supply of our energy system; issues that have received little attention in the past decade. We must not only build a new energy system as quickly as possible, but also, until that new system is ready, maintain our old system in a sensible manner.

NRC | The forgotten Benefits of Groningen Gas

The committee of the parliamentary inquiry into natural gas extraction Groningen is selective in its search for the truth. The benefits of gas extraction in Groningen have not been discussed, write HCSS energy experts Jilles van den Beukel and Lucia van Geuns in [an opinion piece for NRC](#). The committee's report focuses on the residents of Groningen, and thus on the disadvantages of gas extraction. That's the strength, but also the weakness of the report. Because this is not just about Groningen residents. The loss of the benefits of Groningen gas for our economy, the affordability of gas and our country's finances posed a major dilemma for policymakers. By ignoring the benefits of gas from Groningen, the inquiry committee does not do justice to that dilemma.

8. Geopolitical Due Diligence

Since the Grand Opening of [HCSS Boardroom](#) last April, Great Power Competition has intensified. The US-China competition for leadership in high-end technologies, primarily in advanced semiconductors and artificial intelligence, is accelerating. Their efforts to secure critical economic inputs, such as raw materials and foundational chips for the energy, medical and defence sectors are also intensifying. The Netherlands including its private sector has been hit by these geopolitical shock waves.

The Netherlands is also caught in the crosshairs. As of September 1, the Dutch government put in place export restrictions on ASML's second to latest-generation lithography machines. Thus, exports to China of high-end technologies are increasingly restricted. China played its own trump card this summer: raw materials dominance. Exports of gallium and germanium, important for manufacturing semiconductors, medical systems and defence equipment, require an export licence from the Chinese government since August 1. These minerals are essential for a variety of modern technologies, including smartphones, F-16 jets, and MRI scanners. In October, the US took matters into their own hands by banning the export of more ASML systems. In response, China introduced export controls on graphite, a crucial component in energy transition, and mandated that Chinese exporters provide reports on the quantities and destinations of shipments of rare earth elements.



In January 2023, HCSS launched a new initiative: HCSS Boardroom. We leveraged our experience with corporate *geopolitical due diligence* to help Dutch and European companies and investor strategies to become more geopolitically shock-resistant. As the world faces increasing geopolitical fragmentation and a decaying liberal international order, HCSS Boardroom supports companies by identifying opportunities and mitigating risks. In 2023 we did this by organizing for boards of directors and supervisory boards at the Louwman Museum theatre, as well as for leaders of specific industry groups or individual companies at their respective locations.

Additionally, we completed several geopolitical due diligence projects. This involved, among other things, evaluating the geopolitical risks associated with a major infrastructure project in South America, developing strategies to address military risks that may threaten business operations in Taiwan, and identifying the most and least geopolitically unstable areas in the Indo-Pacific region for relocating production away from China. The involvement of Minister Liesje Schreinemacher of Foreign Trade and Development Cooperation in our Grand Opening, particularly her engaging Q&A session, underscores the deep-seated challenges facing Dutch firms and the government in this new geopolitical era.

As we move into 2024, HCSS Boardroom is gearing up to offer a new masterclass on an exciting theme. *Masterclass #2 The Geopolitics of the Energy Transition* will feature insights from HCSS energy experts Lucia van Geuns and Jilles van den Beukel. This means that HCSS Boardroom is expanding, and that four distinctive products will be offered in 2024 to make the Dutch private sector more geopolitically shock resistant.

At the same time, Joris Teer, China and Strategic Foresight Analyst, and myself will continue to teach *Masterclass #1 The Geopolitics of de-coupling: Russian Gas, Chinese Raw Materials and Taiwanese Chips*. We're also wrapping up our final geopolitical due diligence initiatives. Finally, we continue to engage in interactive crisis scenario's with boards and supply chain managers by making use of the *HCSS Taiwan crisis storylines geopolitical risk exercises*.

Han ten Broeke, Director of Political Affairs

HCSS Boardroom

Geopolitics has become an indispensable part of the boardrooms of the Netherlands. More and more directors, managers and executives in the Netherlands understand that geopolitics is not like a weather phenomenon, where you decide in the morning to bring an umbrella with you. [HCSS Boardroom](#) was founded to help companies and investors become more geopolitically shock-resistant in a world that is geopolitically fragmenting; a world that is showing signs of de-globalization and becoming less liberal. Over the past year, we achieved this by conducting masterclasses for company directors and supervisors at the Louwman Museum theatre, as well as for leaders of specific industry groups or individual companies at their respective location.

Masterclass #1: "Geopolitics of De-coupling: Russian Gas, Chinese Raw Materials and Taiwanese Chips"

This masterclass, taught by HCSS Boardroom founders Han ten Broeke, the Director of Political Affairs, and Joris Teer, a specialist in China and strategic foresight at HCSS, offers an immersive learning experience for companies. Enhancing the experience, there's an optional dinner following the masterclass. This provides a perfect setting for board members and their peers to discuss and integrate the geopolitical insights gained into the strategic framework of their organizations. It's an excellent opportunity to connect, share perspectives, and apply newfound knowledge in a practical context.



HCSS Boardroom Grand Opening | Q&A with Minister Schreinemacher

Putin's gas blackmail drove up your production costs and brought down our purchasing power. Biden's Inflation Reduction Act threatens to further deindustrialize Europe. American pressure to no longer supply the penultimate generation of ASML chip machines to China shows that the Netherlands cannot remain a bystander in the competition between superpowers. Washington is simply dragging the Netherlands into battle with Beijing, while China under Xi is conducting its economic coercive diplomacy against countries such as Australia and Lithuania and expanding its military manoeuvres around Taiwan. Limiting dependencies on China, especially on raw materials and intermediate products for vital sectors such as the defence, medical and sustainable energy industries, are now a top priority in the EU.

As major powers now pursue their national interests and upset the international playing field for companies and investors, you must make your (dis)investment decisions today. HCSS Boardroom was founded to help companies and investors seize opportunities and avoid risks in a de-globalizing world. Our goal is to contribute to a more geopolitically shock-resistant Netherlands.

For the [Grand Opening of HCSS Boardroom](#), the Dutch Minister for Foreign Trade and Development Cooperation, Liesje Schreinemacher, provided a Q&A, moderated by HCSS Director of Political Affairs Han ten Broeke. Beforehand, Joris Teer, China – and foresight analyst and Han ten Broeke gave a master class on the breaking points in our relationship with China, especially where semiconductors and strategic raw materials are concerned.



Grand Opening **HCSS Boardroom**

6 april 2023

16:00-20:30

Q&A

**Russisch gas, Chinese grondstoffen en
Taiwanese chips**

**Minister voor Buitenlandse Handel en
Ontwikkelingssamenwerking (BHOS)**

Liesje Schreinemacher

Masterclass #2: "Geopolitics of the Energy Transition."

HCSS Boardroom is gearing up to offer a new masterclass on an exciting theme: The Geopolitics of the Energy Transition. This masterclass, by Lucia van Geuns and Jilles van den Beukel, both highly experienced energy experts at HCSS, promises to offer valuable insights into the intricacies of the geopolitics of the energy transition. Mirroring the format of Masterclass #1, this session is designed to cater to board members or a select group of key decision-makers. Offering flexibility in venue selection, it can be tailored to a preferred location. Additionally, an optional follow-up dinner provides opportunities for further discussion and networking.

Geopolitical Due Diligence Projects

Integrating geopolitical risk analysis into corporate strategy? HCSS Boardroom offers specialized strategy sessions for Boards of Directors, Supervisory Boards, and select groups of corporate decision-makers, particularly those who have previously engaged in an HCSS Masterclass. In this process, HCSS Boardroom draws upon the expertise of our Subject Matter Expert network, which includes former diplomats and military officers, as well as alumni from our Masterclasses. Our approach is to identify the most critical geopolitical risks for companies. Collaborating closely with boards, we evaluate these risks. Specifically, we go into assessing both their likelihood of occurring and their potential impact on business operations. Furthermore, we work together to devise strategies not only to mitigate these risks, but also to capitalize on the opportunities they present.

Taiwan crisis storylines-geopolitical risk exercise

Geopolitical due diligence support can also focus on specific threats, such as the escalating military tensions between China and the United States over Taiwan. The implications of a conflict in Taiwan are expected to have a far greater impact on the global economy compared to conflicts like those in Ukraine or Gaza. This is primarily due to Taiwan's pivotal role in the world economy, notably as a major hub for semiconductor production. Furthermore, a military conflict in East Asia may initiate a sanction spiral involving China on the one hand and the United States and its European and Asian allies on the other. This creates new challenges for European businesses operating in both China and Taiwan. To address mitigate the risks of major geopolitical shocks in East Asia, HCSS Boardroom has designed the *Taiwan crisis storylines*-exercise.



9. HCSS Datalab

With the escalating prominence of AI applications in the realms of international development and security, HCSS has actively embraced the latest AI innovations through its dedicated HCSS Datalab. The Datalab spearheads interdisciplinary research, merging the expertise of strategic analysts and subject matter experts with our data scientists.

This collaborative approach has consistently yielded insightful outcomes, serving a broad spectrum of public and private sector clients. In 2023, the [HCSS Datalab](#) achieved significant advances in both theoretical and practical aspects, particularly in the domains of Causal AI and Natural Language Processing (NLP).

While Causal AI does yet have to meet its ChatGPT moment, leading tech entities have already bombarded Causal AI to be one of the key innovations in the future of AI. The reason it has gained so much prominence is that it takes part in the so-called explainable AI wave as it contributes to the interpretability and explainability of AI models. As HCSS values explainability as one of the core elements when presenting data driven solutions to stakeholders, HCSS has jumped ahead and implemented a variety of Causal AI applications over the past years.

Causal AI is very powerful, but unlike correlation based AI, Causal AI is a very delicate research object. In 2023, HCSS made substantial contributions to the academic discussion on Causal AI, detailing the subtleties and assumptions involved in its application. Together with the Leiden Institute of Advanced Computer Science (LIACS), HCSS chief data scientists Nino Malekovic and I published [an article in the Journal of Artificial Intelligence Review](#), which aims to disambiguate the different causal concepts that have emerged in causal inference and causal discovery from observational data by attributing them to different levels of Pearl's Causal Hierarchy.

Furthermore, HCSS has implemented a variety of causal policy-intervention models to provide policy-makers with effective policies that mitigate the probability of conflict outbreak in vulnerable regions.

Parallel to these developments, the increasing availability of textual data sources in international security has triggered the HCSS Datalab to advance its NLP capabilities significantly. The enhanced NLP pipelines, established in 2023, enable the rapid analysis of vast text volumes, assisting strategic analysts with sophisticated topic clustering and named entity recognition.

Looking beyond the achievements of the past year, the HCSS Datalab looks forward to several exciting developments in the future. In 2024, the Datalab plans to integrate its Causal AI applications with game theory, going to unexplored technological advances that are necessary for the applications in the international security sector. Additionally, the Natural Language Processing developments are intended to grow even further by fully automating the text analysis in a range of different security applications.

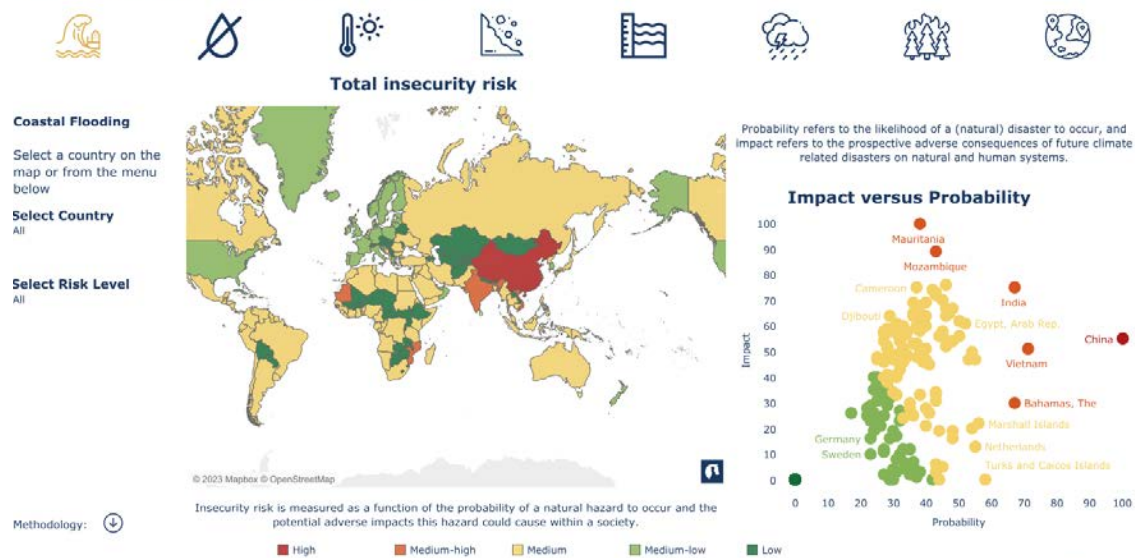


Maarten Vonk, Data Scientist

Climate Security Risk Monitor

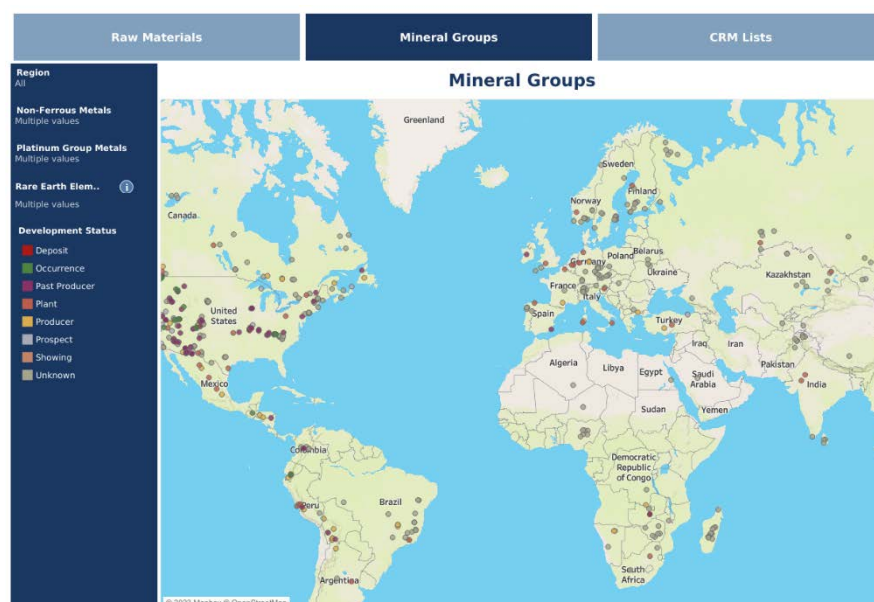
The [Climate Security Risk Monitor](#) maps the level of insecurity (deaths) caused by climate hazards. It is based on research of multiple models that exist and combines the best of those models.

Explore insecurity relating to Climate Hazards



Critical Raw Materials Dashboard

The [Critical Raw Materials Dashboard](#) provides information about the geographical spread of resources, reserves, extraction and processing capabilities for a wide range of raw materials.



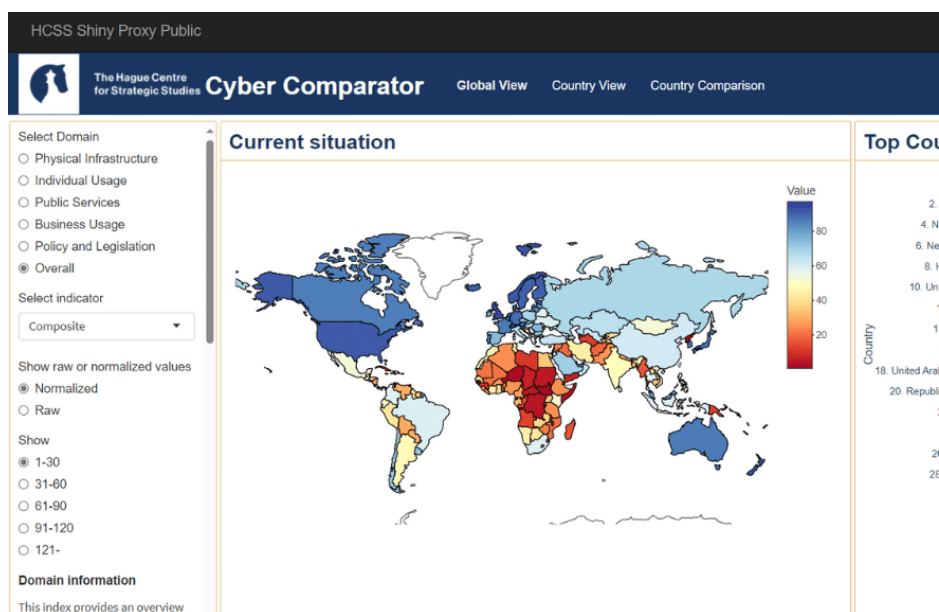
Cyber Arms Watch

The [Cyber Arms Watch](#) offers a transparency index on the offensive cyber capabilities of 60 states. It compares the degree to which states are transparent about their declared cyber capabilities to outside perceptions of those capabilities.



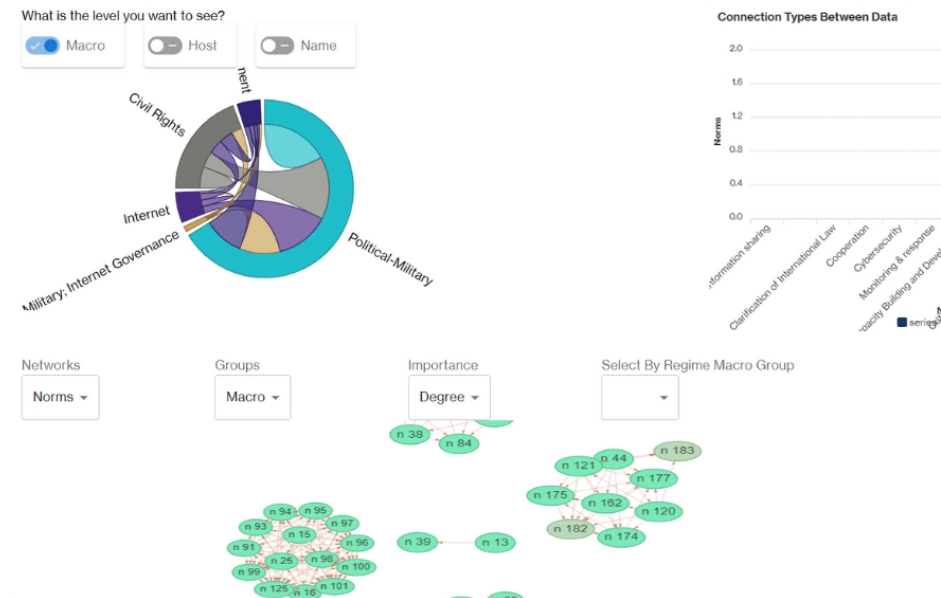
Cyber Comparator

The [Cyber Comparator](#) allows for an all-encompassing analysis of a country's state of being when it comes to cyber. It brings together relevant documents, existing physical infrastructure, information on users and services and many more indicators.



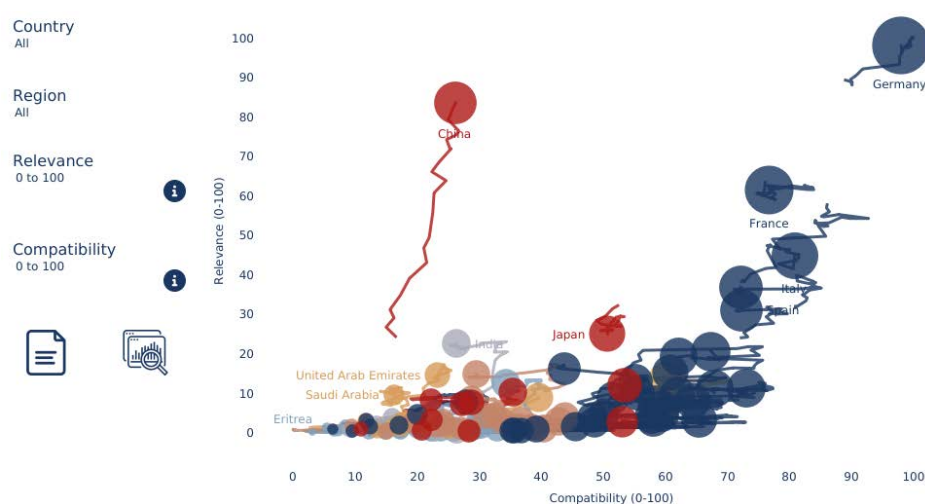
Cyber Norms Observatory

With more than 1400 existing norms, the [Cyber Norms Observatory](#) demonstrates how normative documents connect cyberspace. The monitor also shows how cyberspace depends on connectivity profiles between actors in cyberspace.



Dutch Foreign Relations Index

The [Dutch Foreign Relations Index](#) captures the relationship between the Netherlands and other countries in terms of cohesiveness across political, social, judicial, and military dimensions, aggregated into dual quantitative metrics of relevance and compatibility.



Explore parameters



10. Internship Programme and Student Visits

The HCSS [internship programme](#) offers a diverse opportunity involving research, analysis, data, communications, networking, copywriting, and policy development. Internship activities can range from conducting background research, data collection and analysis, co-writing reports and papers, to being involved in the organisation of workshops and conferences. Unlike your traditional run-of-the-mill 'get me coffee and copy my papers' internships, at The Hague Centre for Strategic Studies our interns – or 'assistant analysts' – are an integral part of a fast-paced professional team. Interns contribute to impactful products for various clients, ranging from government to NGOs to private sector and research organisations.

At HCSS, we seek to foster the next generation of experts by actively engaging with students around the world. We regularly participate in student career fairs, organise [online schools](#) and [host university visits](#), providing students with firsthand insights into the exciting opportunities within our organisation. HCSS ensures that its interns remain enrolled as students throughout their tenure, emphasising the importance of continuous learning and growth. Through these initiatives, HCSS offers students and young professionals a pathway to contribute meaningfully to the ever-evolving landscape of global affairs.



Our Internship Programmes

The General Internship

The General internship is our largest programme and activities covered can include background research, data analysis, data visualisations, report co-writing, and event organisation. Candidates should have a first rate academic background, strong transferable skills, and a keen interest in HCSS research topics such as international relations, defence and security, climate and energy security. A strong basis of analytical, writing and synthesising skills and excellent communication skills in English are required.

Water, Peace and Security Internship

Of the general interns, one may be chosen for the dedicated Water, Peace, and Security (WPS) project. The WPS partnership, established in 2018, pioneers tools to address water-related security risks and shift from water-conflict to water-peace cycles. HCSS aids WPS in Iraq. We seek motivated interns intrigued by water-related security, particularly those with Arabic proficiency for our Iraq-focused efforts. Interns can engage in cutting-edge research, raise awareness of water-related conflicts, aid dialogues with Iraqi stakeholders, and organise training modules and workshops.

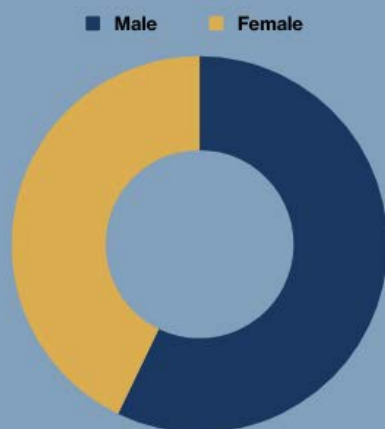
Data Internship

The HCSS Datalab offers an exciting internship to aspiring data scientists with an interest in international relations, defence, economics, climate and energy security. Tasks encompass hypothesis testing, data analysis, data visualisations, research, policy assistance, and workshop involvement. You will work on projects that utilise the latest data analysis tools such as, causal modelling, natural language processing and game theory. Requirements include affinity with computer science, statistics, mathematics, or related fields, fluency in programming languages like Python and strong English communication skills.

Opportunities and Mentorship at HCSS

The HCSS Internship program enables aspiring analysts to put their academic knowledge into practice, cultivate their personal skills, and acquire invaluable professional experience within a dynamic think-tank setting. Students get the opportunity to immerse themselves in an intellectually stimulating environment, where they can glean insights from dedicated staff members deeply passionate about their fields. The internship programme affords ample opportunities to connect with professionals hailing from both Dutch and international organisations. With our mentorship programme, each intern will be paired with an individual mentor who will guide their growth, offering support for their personal and professional development. HCSS opens internship applications twice a year; upcoming start dates are always announced on our website and social media platforms.

Internship Programme Cohort 2023





I also think that HCSS has put a lot of effort into offering programmes to help with the future development of interns. For example, we have one analyst who offered a training seminar on CV writing and another on writing for publications and these lessons can be used both during the internship and in future careers.

Tara de Klerk, HCSS General Internship Programme 2023



The types of interactions that HCSS offers I think are unparalleled. In one moment, you can be talking to your fellow interns about a project that you are working on and in the next moment you can be talking to an analyst about what's happening around the world. What's great is that you have access to the type of knowledge that you would normally get in a book.

Giovanni Cisco, HCSS General Internship Programme 2023



I definitely advise you to apply for this internship, I would say the internship offers a lot of responsibilities and demands, however interns are given a lot of extra support. So, it is the perfect way to step into the research world without going straight into the deep end.

Inês Lains, HCSS Data Internship Programme 2023



11. Communications, Media and Outreach

Ever since its inception, HCSS has been a sought-after source for nuanced expert analysis in the media, but the Russian invasion of Ukraine at the beginning of last year really catapulted us into the public eye. Many of our strategic analysts and subject matter experts became familiar names and faces on television, radio, in podcasts and in newspapers, with HCSS now a household name when it comes to issues of geopolitics and international security. Leading to a record number of media appearances last year, that interest didn't slow down in 2023, as we've seen an even greater increase this year, so much so that we could not even fulfil all requests.



The war in Ukraine remained a topic of high interest, but our expertise was also requested for other conflicts later in the year, including a new crisis in the Middle East. With the larger public now realizing and feeling the direct consequences of emerging conflicts and major global trends on their daily lives, safety, security and livelihood, our experts have provided more than 2000 media appearances, offering nuanced perspectives on pressing defence issues, such as the reality of war on the European continent and the threat of nuclear escalation, as well as topics such as the climate security nexus, critical raw materials and the energy transition.

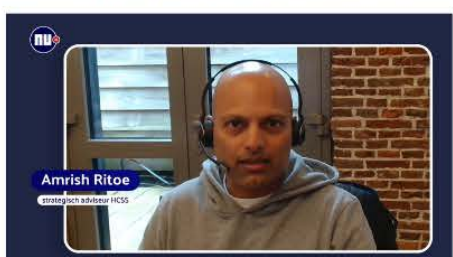
Besides daily calls from the Dutch press, we noticed an increase in requests for quotes, background information and interviews from international journalists and media too, with appearances in Newsweek, CNN, Focus, BBC, Der Spiegel, Foreign Policy, El Confidencial, the Wall Street Journal, Al Jazeera, Asahi Shinbun and the Washington Post to name a few, as well as major newspapers from many European countries. Our analysts and non-resident subject matter experts also produced opinion pieces in Dutch newspapers, as well as international media such as Time, The Daily Beast, Politico, The Hill, War On The Rocks, The Diplomat and The Strategy Bridge.

Our engagement and the number of followers across all the social media platforms used by HCSS, LinkedIn, Twitter/X, Facebook and Instagram, has seen a remarkable growth as well. Likewise, we've seen an increased number of followers on our YouTube account and subscribers to the HCSS newsletter. Moreover, our website attracted more visitors than ever before, and the number of PDF downloads of HCSS reports reached a record high.

We published more than 75 reports, papers, policy briefs and snapshots, organised a number of high level events as well as welcome several high profile visitors, and gave several briefings to parliamentary committees.

All in all, HCSS and its analysts did not suffer from lack of attention – some good, some not. As the consequences of the changing world order, and the competition, confrontation and growing animosity between great powers becomes tangible more and more every day, we remain convinced that the work of a thinktank like HCSS is more important now than ever before.

Patrick Willemsen, Communications Manager



Media Commentary and Analysis

Topping last year's media appearance record, our strategic analysts provided even more nuanced, in-depth and independent insights into international defence and security and the complexities of the changing geopolitical and geo-economic world order in 2024.

Our founder, Prof. Rob de Wijk, faithfully wrote his weekly column in newspaper [Trouw](#) as well as regular op-eds in [Nieuwe Oogst](#) and [Energiepodium](#). Additionally, his successful podcast, [the award-winning](#) BNR programme [Boekestijn en De Wijk](#), continued its relentless daily updates on the Ukraine war, with Rob only taking a brief summer hiatus, during which he was adequately replaced by experienced HCSS defence specialists Peter Wijninga and Patrick Bolder.

HCSS' strategic analysts were sought out for their expertise on numerous issues, from defence to the energy transition, from climate security to cyber warfare. They provided analysis, op-eds and interviews in national newspapers and magazines such as NRC, De Volkskrant, Algemeen Dagblad, Trouw, Financieel Dagblad, het Parool, and the Telegraaf, and defence-related publications such as the Military Spectator, Carré and the Militaire Courant. On television, our staff members could regularly be seen on late night talkshow Op1, WNL's morning television show Goedemorgen Nederland, RTL Nieuws, the NOS news, Tijd voor MAX, EenVandaag and Nieuwsuur, sometimes live from our very own [Studio HCSS](#).

Regular radio appearances were done for BNR Nieuwsradio, NPO Radio 1, Dit Is De Dag, VPRO's Bureau Buitenland, Met Het Oog Op Morgen, podcast De Dag and Spraakmakers, and on online outlets like Nu.nl and Telegraaf TV.

International Media Highlights

- Joris Teer on [BBC Business Daily](#); [ASML: Inside Europe's most valuable tech company](#)
- Paul van Hooft in [Business Insider](#); [The Netherlands gifted Ukraine a fleet of F-16 fighter jets 9 years after MH17](#)
- Tim Sweijs on [CNN](#); [Tanks for Ukraine once seemed unthinkable. Could fighter jets be next?](#)
- Laura Jasper in [Publico](#); [Terror e imagens violentas aceleram desinformação na guerra entre Israel e o Hamas](#)
- Davis Ellison in [Newsweek](#); [Why U.S. War Tactics Are Failing in Ukraine](#)
- Amrish Ritoe in [El Confidencial](#); [Cómo una isla olvidada puede cambiar el océano para siempre](#)
- Tim Sweijs in [Focus](#); [Eine Tragödie machte die Niederlande zum großen Ukraine-Helfer](#)
- Davis Ellison in [Focus](#); [Darum scheitern westliche Kriegstaktiken in der Ukraine](#)
- Joris Teer in [Foreign Policy](#); [Europe Aims to Break Its China Habit](#)
- Frederik Mertens in [Newsweek](#); [Sweden Joining NATO Is a Nightmare for Russia's Baltic Sea Fleet](#)
- Amrish Ritoe on [BBC Talking Business](#); [How the race for critical minerals is pitting China and the rest of the world against each other](#)
- Tim Sweijs in [Der Spiegel](#); [Die neue rote Linie](#)
- Joris Teer in [El Confidencial](#); [Una anécdota de Winston Churchill para explicar el peor escenario de la Guerra de los Chips](#)
- Paul van Hooft in [Newsweek](#); [NATO Has a Russian Submarine Problem](#)
- Tim Sweijs in [Tagesspiegel](#); [Militärische KI, der lange Weg zur Regulierung](#)
- Paul van Hooft in [Tagesspiegel](#); [F-16-Jets für die Ukraine: Bringen die Kampfflugzeuge den Durchbruch im Krieg?](#)
- Paul van Hooft in [The Daily Beast](#); [How America Would Be Screwed if China Invades Taiwan](#)
- Amrish Ritoe in the [Wall Street Journal](#); [Lithium Industry Looks to Australia for Refining, Not Just Mining](#)

HCSS PR & Communications

Facts and Figures



Report
downloads

64,370



8% on 2022



Newsletter
Subscribers

4,608



9% on 2022



LinkedIn
Followers

32,913



14% on 2022



X/Twitter
Followers

14,054



16% on 2022



YouTube
Subscribers

1,026



26% on 2022



Facebook
Followers

3,443



3% on 2022

Total site users 2023:

1,089,162

Top 10 countries by users:



* dated December 15, 2023

Overview: HCSS in Numbers

This year, HCSS published over 75 reports, papers, snapshots, policy briefs and factsheets. Our PR & Comms team uses a diverse set of channels to gain attention for our products and activities. In addition to a newsletter and press releases, we are present and active on various social media channels. Through our accounts on LinkedIn, Twitter, Instagram and Facebook, a proactive social media policy is pursued with the aim of reaching the widest possible audience, both nationally and internationally. Our reach and engagement grew significantly in 2023, with a particularly notable growth of our professional followers on our LinkedIn network, as well as strong growth on our Instagram account aimed toward a younger audience and a significant number of new followers for our YouTube channel, where we have been delivering regular fresh content.

The publications with the most downloads in 2023 are (as of 15 December, and in no particular order):

- [Strategic Raw Materials for Defence](#)
- [How should Russia be deterred?](#)
- [Lessons from Land Warfare: One Year of War in Ukraine](#)
- [Pathways to Disaster: Russia's War against Ukraine and the Risks of Inadvertent Nuclear Escalation](#)
- [Oil and Gas during the Energy Transition](#)
- [Great Power Competition and Social Stability in the Netherlands: the Risks of Russian Gas, Chinese Raw Materials and Taiwanese Chips for Vital Sectors](#)
- [The future National Deployment of the Armed Forces](#)
- [Resilient and Robust: Climate-Proofing the Military for increased Military Effectiveness](#)
- [The Strategic Interests of the Dutch Maritime Manufacturing Industry](#)
- [Energy trade in the Netherlands | Past, Present and Future](#)

BNR podcast "De Strateeg"

In 2023, podcast '[De Strateeg](#)', produced by HCSS in cooperation with our partner BNR Nieuwsradio, continued to see a steady increase in listeners and downloads. In 'De Strateeg', produced since March 2020, host Paul van Liempt discusses the latest developments in geopolitics and international security with HCSS experts, but also with experts from other organisations, policymakers and representatives from businesses.

Several high ranking guests were featured on the show this year, among them the Dutch Minister of Defence Ollongren. In 2022 we produced more than 40 episodes. Topics discussed range from the continuing war in Ukraine to the fight for critical raw materials, the energy transition, China's military ambitions, the future of NATO and the hot movie Oppenheimer and its relevance for the new nuclear reality.

The 10 most listened to episodes (in no particular order) of 2024 are:

- [What do we do if Ukraine loses?](#)
- [The unnerving actuality of the Oppenheimer film](#)
- [How future-proof is NATO?](#)
- [Towards a multipolar world order?](#)
- [How Europe is building its chemical strategy](#)
- [Is peace between Israel and the Palestinians ever possible? And if so, how?](#)
- [How should Europe prepare for the American presidential elections?](#)
- [Is European attention to the Indo-Pacific sweettalking for the Americans?](#)
- [Are we able to recycle all raw materials in Europe?](#)
- [Can China afford a major war?](#)



Working Visits and Briefings

Throughout the year, the Hague Centre for Strategic Studies welcomes high profile visitors from around the world at our office in the historic centre of The Hague to share insights into the work of our researchers, and foster dialogue and cooperation. In 2023 we were pleased to welcome [US Ambassador Shefali Razdan Duggal](#), Assistant Secretary of Defense for International Security Affairs [Dr. Celeste Wallander](#), the Mayor of The Hague [Mr. Jan van Zanen](#), and the Defence Minister of Estonia [Hanno Pevkur](#), along with a delegation including the Dutch ambassador to Estonia, Özlem Canel and the Estonian ambassador to the Netherlands, Lauri Kuusing, among others.

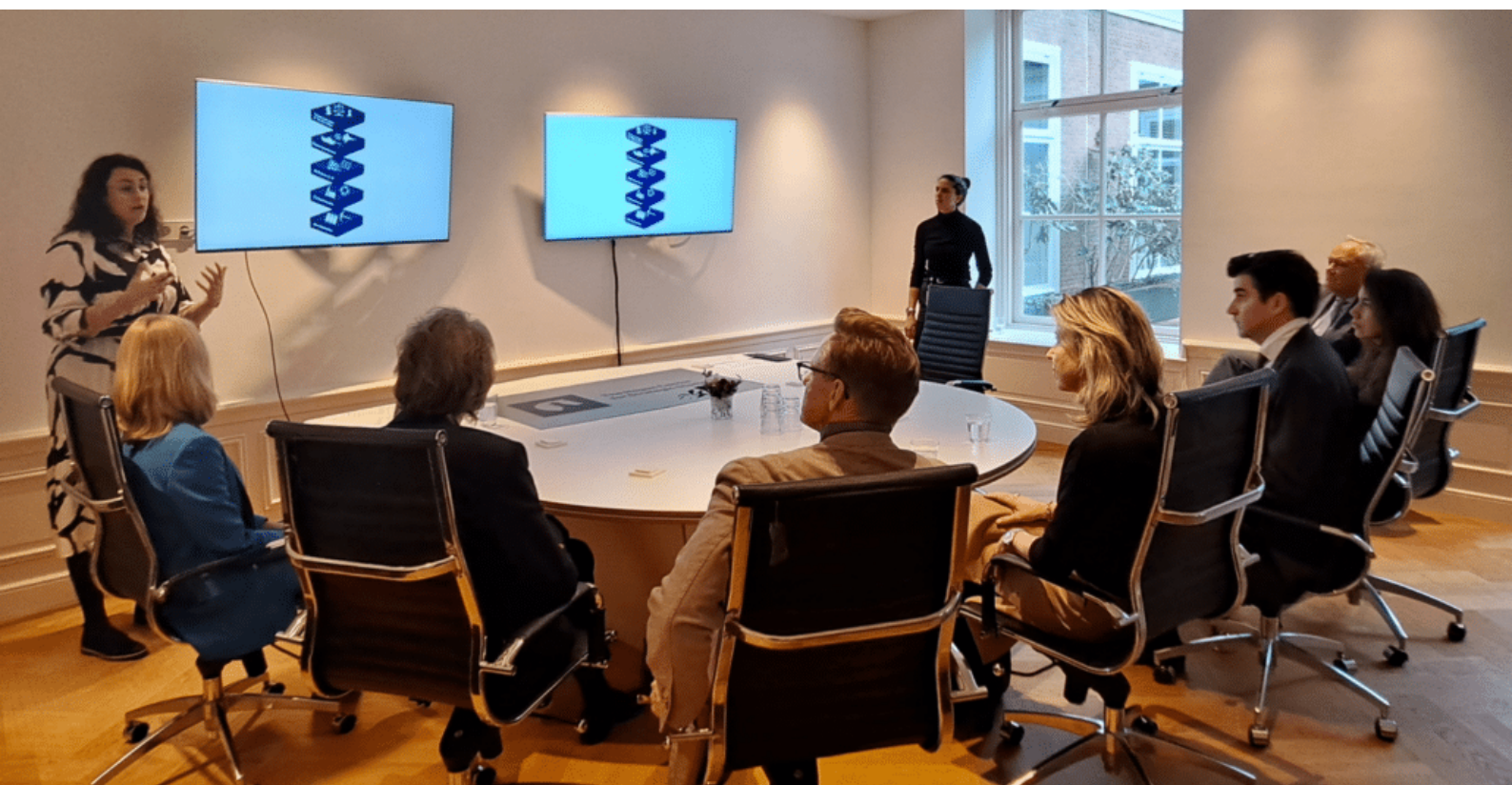
Dutch Minister of Defence Kajsa Ollongren visits HCSS

On March 22, the Minister of Defence for the Netherlands [Kajsa Ollongren](#) visited HCSS, where [she attended several briefings from our strategic analysts](#) on HCSS research and analysis. She was welcomed by HCSS founder Rob de Wijk, followed by a short introduction with director of political affairs Han ten Broeke and director of research Tim Sweijs, who stated: “We are happy to receive this acknowledgement, to see that Her Excellency appreciates the enormous importance of having direct access to a deep national knowledge base on international security, defence and strategy, and to the international networks that HCSS has nurtured for almost 16 years now – a vital asset at a time of enormous international turbulence.”

Strategic analyst Joris Teer briefed the Minister on the novel geopolitical dependencies and geo-economic challenges created by our dependence on foreign supplies of rare earth metals, such as the importance of Taiwan to the supply of semiconductors, as highlighted in the HCSS report [Reaching Breaking Point](#). Strategic analysts Paul van Hooft and Davis Ellison updated the Minister on the return of great power competition, as they provided an in depth look at the HCSS research programmes [Europe in the Indo-Pacific](#), the [Future of Transatlantic Relations](#) and [Strategic Stability: Arms control and Deterrence](#). The principal premise underlying these programmes is that Europe and the Netherlands must be more proactive and take on greater responsibility, given the close connectedness between the Atlantic and the Indo-Pacific theatre, where China has emerged as a challenger.

In the [HCSS Datalab](#), Minister Ollongren was briefed on [Critical Materials and Defence](#) by strategic analyst Benedetta Girardi, who stressed that raw materials are not only essential for Europe's energy and digital transitions, but their importance to the military domain is also equally vital. Over 40 critical and 'soon-to-be' critical raw materials are deemed strategic for the European defence industry in a recent HCSS report. These are used across the air, sea, and land domains in various military applications and components. Securing the supply of strategic raw materials for defence requires cooperation between the civil and military domain, cooperation at the European level to overcome supply-related obstacles, and transatlantic dialogue to ensure the supply of military technology.

Strategic analyst Linde Arentze then informed the Minister on how emerging technologies pose new [Hybrid Threats](#), and how these can be confronted through building resilience and deterrence capability. Disinformation, especially Russian interference, is a growing threat, and this can be confronted through international cooperation and norms. When Joseph Borrell announced the establishment of a [Disinfo ISAC](#) (i.e. an international platform for information exchange on countering disinformation), this was a direct implication of an [HCSS recommendation](#). Special mention was also made on the work HCSS has been doing for years on the effects of [Artificial Intelligence](#) in the military domain.



State Secretary for Defence Christophe van der Maat visits HCSS

State Secretary for Defence [Christophe van der Maat](#) paid a working visit to the HCSS on March 28. After a brief introduction with the Management Team, a number of HCSS research programmes were presented.

Strategic analyst Joris Teer gave a briefing on [semiconductors and critical technologies](#), followed by strategic analyst Laura Jasper on the HCSS platform around 'Influencing Human Behaviour', created to facilitate the debate on information manoeuvres and influencing behaviour in the military domain.

The return of great power competition and Europe's role in the Indo-Pacific were the next topics on the programme, explained in more detail by strategic analysts Paul van Hooft and Davis Ellison, who delved deeper into the HCSS research themes "[Europe in the Indo-Pacific](#)" and the "[Future of Transatlantic Relations](#)". What preliminary lessons can we learn after [one year of war in Ukraine](#)? That was the question that strategic analyst Frederik Mertens then discussed in his presentation.

Strategic analyst Irina Patrahau then informed the State Secretary about the critical materials needed for defence applications, emphasizing that these are raw materials that are often also essential for Europe's energy and digital transition. In a recent HCSS report, [more than 40 critical and raw materials](#) are considered strategic for the European defence industry.

Finally, State Secretary Van der Maat received a presentation from senior strategic analyst Laura Birkman about the HCSS [Climate and Security Programme \(CASP\)](#), which aims to bridge the gap between researchers and policymakers working on climate-related security challenges in Europe and the rest of the world.



12. About HCSS

Transparency and Ethical Principles

HCSS is a knowledge institute that conducts independent research. Our goal is to offer fact-based analysis of the challenges that our societies face in order to inform public discourse, public and private strategic decision making and contribute to international and national security in accordance with liberal democratic values. We typically conduct our research at the intersection of scientific research and strategic policy for governments, international organisations, and NGOs. We also offer analytical support to inform private sector strategic planning processes. Our work is funded through contract research, through research grants and we also develop our own initiatives.

Our fact-based analysis is intended to generate strategy and policy relevant insights that inform real world decisions. To further this cause, we conduct both basic and applied research, we host public and closed-door events, and we convene and engage with a wide range of stakeholders to further our own thinking and to stimulate debate on the pressing issues of our time. We are not linked to any political party nor beholden to any external corporate or national interests.

HCSS adheres to the ethical principles of independence, accountability, transparency and research integrity. Although other ethical principles may apply, these four principles are relevant for our knowledge institute, given our core mission and activities. The principles are clarified in terms of the standards that HCSS upholds and specified by practices that HCSS adheres to, which is subject to independent external audit. The principles, standards and practices are spelled out [in this document](#) on our website.

Funding

HCSS sources of funding that exceed €10,000 are disclosed in a statement on our website, and included here below. Sometimes, because of national security or company-confidentiality reasons, sources of funding could not be publicly disclosed. However, the sources of funding of all publicly available research products are always disclosed.

Starting in 2024, HCSS will disclose all clients in our annual report and financial overview.

Client Overview 2023

| |
|--|
| Clients: > 500k |
| Ministry of Foreign Affairs, The Netherlands |
| Ministry of Defence, The Netherlands |
| |
| Clients: 100k – 500k |
| Dutch National Police |
| TNO Defence, Safety and Security |
| US Department of Defence, Minerva Research Initiative, Social Science Research |
| Ministry of Economic Affairs and Climate Policy, The Netherlands |
| |
| Clients: 50k – 100k |
| NXP Semiconductors Netherlands B.V. |
| Taipei Representative Office in the Netherlands |
| NATO HQ Supreme Allied Command Transformation |
| Ministry of Justice and Security, The Netherlands |
| |
| Clients: 10k – 50k |
| VOTOB |
| CE Delft |
| Port of Rotterdam N.V. |
| European Centre of Excellence for Countering Hybrid Threats |
| Delft University of Technology (TU Delft) |
| South Holland Province |
| Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) |
| EBN BV (Energie Beheer Nederland) |
| FGS Global (Europe) GmbH |
| DEME Group |
| Federation of European Tank Storage Associations (FETSA) |

The Hague Centre for Strategic Studies (HCSS) was established in 2007 as an independent think tank with a small team of senior experts. It is now an established research institute in Europe with over 25 researchers that cover global governance and geopolitics; international security and defence; climate, energy and resources; and cyber security. Our mission is to transform global challenges of today into solutions for tomorrow.

HCSS works with clients from both the public and private sectors. We conduct research commissioned by both national and international organizations but also carry out research projects with the financial support of grant giving foundations. In addition to being trusted advisor to various governments, HCSS provides analysis to international organizations including the European Commission and NATO.

HCSS conducts its activities independently and in collaboration with its global network of affiliated experts. HCSS products are diverse: [full-fledged reports](#), issue briefs, quick topic reports, serious games. Our products often consist of strategic surveys, trend and scenario analyses, risk assessments, geopolitical and regional security analyses, operational evaluations, and policy briefs. We create [models and monitors](#) for public and private organizations to improve their situational awareness and provide them with a better understanding of their strategic environment. We also compile, collate and generate new datasets, design tailor-made analytical frameworks and build fully interactive web interfaces. Our in-house competencies include predictive modelling using both structural and dynamic data, web scraping, text mining, advanced internet search techniques and data visualization. HCSS experts are regularly asked to offer commentaries in global media outlets.

HCSS is also a platform for the exchange of ideas and development of new concepts and strategic insights. It regularly hosts symposia and roundtables where experts and stakeholders from government, research, society and industry convene to discuss pressing issues along different areas of interest.

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