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SOUTH KOREA AND NATO

BOOSTING SECURITY, CYBER THREATS, AND NORTH KOREA

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Introduction

South Korea and the North Atlantic Treaty Organization (NATO) have engaged in dialogue since 2005. The Republic of Korea (ROK) established a diplomatic mission to NATO, and discussions regarding non-proliferation, cyber defence, science and technology, counterterrorism, interoperability, and defence against chemical, biological, radiological, and nuclear (CBRN) agents took place between the two entities throughout the following few years. As a result, the two entities have become closer. Today, the threats to both South Korea and NATO have come closer together, with China establishing a 'No-limits friendship' with Russia, and the Democratic People's Republic of Korea (DPRK) supplying the Russian military with artillery shells for their war in Ukraine.

The 2013 cyber-attacks in South Korea, attributed to elements within the DPRK, brought attention to the issue of cyber security in the country, leading the ROK to join the Cooperative Cyber Defence Centre of Excellence (CCDCOE) in May of 2022. The ties of both cyber and conventional threats to North Korea, and an increasingly converging security outlook has brought NATO and the ROK closer together.

History

Since its independence, the ROK has faced a security threat from its neighbouring states in the north and the east. The large-scale conflict between South Korea, and North Korea, or the DPRK broke out on the 25th of June 1950 and lasted three gruelling years. Over the three years, the war saw an increase in the number of combatants, which included the USA, along with UN forces, on the side of the South Koreans, and the People's Republic of China (PRC) supporting and fighting alongside the North Koreans. With the signing of the Korean Armistice Agreement in 1953, fighting on both sides was reduced to a minimum, an event that is largely regarded as the end of the Korean War. However, the DPRK has continually acted as an aggressor against its southern

¹ "Relations with the Republic of Korea."

² Huang, "China-Russia Relations - a Visual Explainer."

³ Jazeera, "North Korea Sends Russia Artillery Rounds for Satellite Advice: S Korea."

neighbour, with continued attacks towards the ROK, including but not limited to the Korean DMZ Conflict (Second Korean War), the sinking of the ROKS *Cheonan*, the artillery shelling of Yeonpyeong Island by the DPRK, in 2010 and 2024 and finally the 2013 cyber-attacks upon the ROK by elements in the DPRK. These attacks have shaped the ROK's defence strategies over the decades of Independence and their choice of making and maintaining allies who will support and assist them in facing their threats. Hence, with the Russo-Ukrainian war now leading the Russian leadership to forge further military ties with their neighbours to the East, the PRC becoming bolder with their actions in the Indo-Pacific, and the DPRK becoming increasingly hostile towards their southern neighbour, NATO has begun taking a turn eastward, and South Korea is ready to receive them.

NATO in the East?

The obvious question to ask before moving into the details of South Korea and NATO's partnership is 'Why is NATO in the East?' The defensive alliance was founded and expanded around the threat of Soviet invasion and the expansion of its sphere of influence in Western Europe. Following the collapse of the USSR and the Eastern Bloc at the end of the Cold War, NATO was reconceived as a "cooperative security" organization whose mandate was to include two main objectives: to foster dialogue and cooperation with former adversaries in the Warsaw Pact and to "manage" conflicts in areas on the European periphery, such as the Balkans.⁴

So why the Indo-Pacific? NATO's official statement on the topic is as follows:

"The Indo-Pacific is important for the Alliance, given that developments in that region can directly affect Euro-Atlantic security. Moreover, NATO and its partners in the region share a common goal of working together to strengthen the rules-based international order."

⁴ "North Atlantic Treaty Organization | History, Structure & Purpose."

⁵ "Relations with Partners in the Indo-Pacific Region."

In an opinion piece by The University of Sydney, the author suggests that NATO's 2022 strategic concept may have the answer.⁶ Many major non-NATO countries who have supported NATO Points 13 and 14 in the NATO 2022 strategic concept claim that:

"The People's Republic of China's (PRC) stated ambitions and coercive policies challenge our interests, security and values."⁷

Point 13 further goes on to say:

"The PRC employs a broad range of political, economic and military tools to increase its global footprint and project power while remaining opaque about its strategy, intentions and military build-up. The PRC's malicious hybrid and cyber operations and its confrontational rhetoric and disinformation target Allies and harm Alliance security. The PRC seeks to control key technological and industrial sectors, critical infrastructure, and strategic materials and supply chains. It uses its economic leverage to create strategic dependencies and enhance its influence. It strives to subvert the rules-based international order, including in the space, cyber and maritime domains. The deepening strategic partnership between the People's Republic of China and the Russian Federation and their mutually reinforcing attempts to undercut the rules-based international order run counter to our values and interests."

NATO has therefore identified the PRC as a challenge to alliance security⁹ and has also acknowledged the deepening strategic partnership between the PRC and the Russian Federation to "undercut the rules-based international order"¹⁰, as mentioned above. The Concept further goes on to mention:

"Erosion of arms control, disarmament and non-proliferation architecture has negatively impacted strategic stability" ¹¹

⁶ "Why Is NATO Expanding Its Reach in the Asia-Pacific Region."

⁷ North Atlantic Treaty Organisation, "NATO 2022 STRATEGIC CONCEPT."

⁸ ibid

⁹ ibid

¹⁰ ibid

¹¹ Ibid

This comes from Point 18 of the Concept, which also claims that:

"The potential use of Chemical, Biological, Radiological and Nuclear materials or weapons against NATO by hostile state and non-state actors remains a threat to our security" 12

Point 18 also mentions DPRK and the PRC as developing their CBRN programmes. The Concept states that the DPRK is "...continue(ing) to develop their nuclear and missile programmes." ¹³ And have also "...resorted to the use of chemical weapons." ¹⁴

With regards to the PRC, the Concept mentions that:

"The PRC is rapidly expanding its nuclear arsenal and is developing increasingly sophisticated delivery systems, without increasing transparency or engaging in good faith in arms control or risk reduction...On the basis of our longstanding cooperation, we will enhance the NATO-EU strategic partnership, countering cyber and hybrid threats and addressing the systemic challenges posed by the PRC to Euro-Atlantic security." ¹⁵

Finally, mentioning the region as a whole, the Concept, in Points 43 and 45 outlines their interests in the Indo-Pacific:

"The Indo-Pacific is important for NATO, given that developments in that region can directly affect Euro-Atlantic security. We will strengthen dialogue and cooperation with new and existing partners in the Indo-Pacific to tackle cross-regional challenges and shared security interests." ¹⁶

Thus, NATO has established a vested interest in the Indo-Pacific.

13 Ibid

¹² Ibid

¹⁴ ibid

¹⁵ Ibid

¹⁶ ibid

Area for Cooperation

Having established a motive for NATO to establish itself in the Indo-Pacific, the area and extent of their cooperation with the ROK must be discussed. The ROK faces conventional, cyber and a nuclear threat from the DPRK, and has been at the receiving end of North Korean aggression in the past, as has been established earlier in the brief. Concerning these threats, NATO and South Korea have been increasing and boosting partnerships on Cyber security and arms control, disarmament, and non-proliferation.¹⁷¹⁸

Defence Industry and Boosting Security

The president of the Republic of Korea, Yoon Suk Yeol, has also established an aim for the Republic of Korea: The aim to become the world's fourth-largest weapons exporter. Such an aim works well for South Korea and NATO, as it boosts security ties between the two entities. Poland has already gotten a significant amount of South Korean armaments; in 2022, the two countries reached a \$13.6 billion agreement. Hundreds of *Chunmooo* rocket launchers, 1,000 K2 tanks, 600 K9 self-propelled howitzers, and FA-50 fighters were sent to Poland in 2023; domestic manufacturing of the K2 will begin in 2026. The deal was notable because of its size and the amount of armament involved, even for the biggest defence actors in the world.

¹⁷ "Relations with the Republic of Korea."

¹⁸ Shin, "South Korea, NATO to Boost Partnership on Security, Cyber Threats."

¹⁹ Shuhei, "South Korea Sets out to Become World's Fourth-Largest Arms Trader."

²⁰ Lee and Smith, "Insight: Inside South Korea's Race to Become One of the World's Biggest Arms Dealers."

²¹ Pikulicka-Wilczewska, "Poland Buys 48 Light Combat Aircraft from South Korea."



Figure 1:K9 Self-Propelled Artillery (Source: "[육군3보병사단]선배님들의'3·7완전작전' 명성 이어가겠습니다.")

The reason for Seoul ramping up its defence export industry lies in the North. Due to persistent vetoes by China and Russia, the UNSC has been unable to respond to North Korea's missile testing with new resolutions since the beginning of 2022. In light of this impasse, South Korea must look for new allies and a new global governing organisation to confront the growing dangers posed by North Korea. Thus, the Yoon administration's turn to NATO, following the successful restoration of trilateral relations between the United States, the ROK, and Japan through shuttle diplomacy between Seoul and Tokyo, suggests that South Korea has expanded its diplomatic sphere to Europe to garner fresh international support for its North Korean issues.²²

Apart from the defence export industry, South Korea also took part in DEXTER, which stands for Detection of Explosives and Firearms to Counter Terrorism. DEXTER was a major SPS project in

²² Kim, "What Is Yoon's NATO Strategy?"

which scientists in the ROK took part. The project's goal was to create an integrated and reasonably priced sensor-fusion system that could detect explosives and firearms in public areas without interfering with pedestrian traffic.²³

Cyber Security

South Korea is no stranger to cyber security threats, as has been established earlier with the mention of the cyber-attacks of 2013. According to the National Intelligence Service (NIS) of South Korea, on average, 1.2 million hacking attempts were made against the country daily in 2022.²⁴ The severity and regularity of recent assaults forced the South Korean government to create a National Cybersecurity Strategy, which calls for enhancing alliances with overseas businesses and raising funding prospects for the country's cybersecurity sector.²⁵

South Korea is also a member of CCDCOE, being the first Asian country to join the centre. At this early stage of enhancing cybersecurity cooperation, this agency is of the greatest interest to South Korea. The fact that South Korea opted to join demonstrates how seriously the nation's decision-makers take cooperation in cyberspace, not only with NATO but also with the EU and other European nations. The fact that NATO decided to grant South Korea membership is also evidence of Seoul's standing as a reliable ally with skills and knowledge that the alliance values.²⁶ It also goes forward to show that NATO is dedicated to keeping and growing its foothold in East Asia.

CCDCOE was established in Estonia on the 14th of May 2008, in response to the 2007 cyber-attacks on Estonia²⁷. In 2009, CCDCOE held its inaugural conferences on cyber security, with one session concentrating on technological and legal issues and the other on research on cyber warfare. Following the highest standards of scholarly study, the yearly International Conference on Cyber Conflict, or CyCon, has grown into a community-building event for cyber security experts in its ten years of existence.²⁸

²³ "Relations with the Republic of Korea."

²⁴ "South Korea Cybersecurity."

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²⁶ "South Korea-NATO Cybersecurity Cooperation: Learning to Work Together in the Face of Common Threats - Elcano Royal Institute."

²⁷ "Connect the Dots on State-Sponsored Cyber Incidents - Estonian Denial of Service Incident."

^{28 &}quot;About Us."

Since 2010, CCDCOE has arranged Locked Shields, the world's biggest and most intricate live-fire cyber defence exercise, once a year. Over the years, this technical exercise has grown significantly, simulating every aspect of a large-scale cyber incident. Cyber security professionals can practise strategic decision-making, legal and media communication, as well as protecting military and regular IT systems along with vital infrastructure.²⁹

Given that cybersecurity is a worldwide issue and that both parties feel threatened and vulnerable, it makes sense for them to concentrate on it. This is a global threat in part because of the potential cooperation between China, Russia, and North Korea in this area as well as each nation's autonomous cyberattacks on other parties, such as South Korea, NATO, and NATO members. In this way, the rising perception among US, European, and Asian policymakers, and experts that the Indo-Pacific and Euro-Atlantic security arenas have combined to form a unified security domain is best summed up by cybersecurity. Thus, we can anticipate that South Korea-NATO collaboration will continue to develop in this critical sector.³⁰

Thus, South Korea, which is still trailing behind the organisation and the majority of its members but is making progress, might benefit from exchanging intelligence and information-sharing practices with NATO. South Korea is particularly interested in NATO's capabilities in this area, which target nations and regions including China and Russia. Seoul, on the other hand, has unmatched knowledge and intelligence on North Korea, one of the states that uses cyberspace the most actively to strengthen its security and weaken that of its adversaries. North Korea is and will remain the primary focus of South Korean cyber operations and countermeasures, for obvious reasons. NATO can benefit from this. In addition, NATO and South Korea ought to be prepared to support one another in the event of a cyber emergency, such as outside cyberattacks on one or the other.³¹

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²⁹ ibid

³⁰ "South Korea-NATO Cybersecurity Cooperation: Learning to Work Together in the Face of Common Threats - Elcano Royal Institute."

³¹ ibid

North Korea

The DPRK poses an obvious threat to the ROK. With provocations and attacks as recent as 2024,³² they are by no doubt the first and foremost security threat to the ROK. The DPRK has conducted missile tests, artillery firing and cyber-warfare upon the ROK even after tensions seemingly reduced after the Korean Peace Process of 2018-19. The DPRK's relations with Russia and China, two countries whom NATO have concerns over, with them saying:

"The Russian Federation is the most significant and direct threat to Allies' security and to peace and stability in the Euro-Atlantic area." 33

As the DPRK grows ever closer to the Russian Federation and the PRC, South Korea finds NATO to be an increasingly important and obvious partner. The ROK already has a mutual defence treaty with the United States of America (USA) and adding NATO to its arsenal of allies would only benefit the ROK further.

Way Forward

Both the ROK and NATO will benefit by increasing their cooperation with each other and strengthening partnerships between NATO countries and the ROK. A move towards this would be to increase the diversity of security partnerships between NATO and the ROK. While the ROK already conducts military exercises with the US³⁴, it should increase training drills and exercises with other NATO countries in the Indo-Pacific, such as the United Kingdom and France. South Korea's ambitions to become a weapons exporter can also be enhanced by NATO countries who are looking to upgrade and improve their military equipment.

³² Bae, Yeung, and Lendon, "South Korea's Military Says North Korea Fired Artillery into Maritime Buffer Zone in 'Provocative Act."

³³ North Atlantic Treaty Organisation, "NATO 2022 STRATEGIC CONCEPT."

³⁴ Kim, "South Korea, US Conduct Week-Long Firing Drills near North Korea Border."

Conclusion

In conclusion, the developments between the ROK and NATO are increasingly required to effectively balance the Indo-Pacific and keep the status quo of the region and the nations within it following a rules-based international order. Suffice it to say, however, that such a partnership will draw the ire of the PRC, the Russian Federation and the DPRK, which will bring them closer together in terms of partnerships in economics and defence. While necessary from the South Korean perspective, it will lead to further polarization in global politics, with lines drawn in the sand possibly cementing themselves to one position.

Bibliography

- 1. "About Us," n.d. https://ccdcoe.org/about-us/.
- Bae, Gawon, Jessie Yeung, and Brad Lendon. "South Korea's Military Says North Korea
 Fired Artillery into Maritime Buffer Zone in 'Provocative Act." CNN.com, January 5, 2024.
 https://edition.cnn.com/2024/01/05/world/north-korea-yeonpyeong-island-artillery-intl-hnk/index.html.
- 3. Council on Foreign Relations. "Connect the Dots on State-Sponsored Cyber Incidents Estonian Denial of Service Incident," n.d. https://www.cfr.org/cyber-operations/estonian-denial-service-incident.
- Elcano Royal Institute. "South Korea-NATO Cybersecurity Cooperation: Learning to Work
 Together in the Face of Common Threats Elcano Royal Institute," October 4, 2023.
 https://www.realinstitutoelcano.org/en/analyses/south-korea-nato-cybersecurity-cooperation-learning-to-work-together-in-the-face-of-common-threats/.
- Encyclopedia Britannica. "North Atlantic Treaty Organization | History, Structure & Purpose,"
 January 3, 2024. https://www.britannica.com/topic/North-Atlantic-Treaty-Organization/NATO-in-the-post-Cold-War-era.
- 6. Huang, Han. "China-Russia Relations a Visual Explainer." South China Morning Post, n.d. https://multimedia.scmp.com/infographics/news/china/article/3214426/china-russia/index.html.
- 7. International Trade Administration | Trade.gov. "South Korea Cybersecurity," n.d. https://www.trade.gov/market-intelligence/south-korea-cybersecurity.
- 8. Jazeera, Al. "North Korea Sends Russia Artillery Rounds for Satellite Advice: S Korea." Al Jazeera, November 1, 2023. <a href="https://www.aljazeera.com/news/2023/11/1/north-korea-sends-russia-artillery-rounds-for-satellite-advice-s-korea#:~:text=North%20Korea%20is%20supplying%20munitions,(NIS)%20reported%20on%20Wednesday.
- 9. Kim, Ellen. "What Is Yoon's NATO Strategy?," August 11, 2023. https://www.csis.org/analysis/what-yoons-nato-strategy.
- 10. Kim, Jack . "South Korea, US Conduct Week-Long Firing Drills near North Korea Border." Reuters.com, January 4, 2024. https://www.reuters.com/world/asia-pacific/south-korea-us-conduct-week-long-firing-drills-near-north-korea-border-2024-01-

- <u>04/#:~:text=The%20exercise%20by%20a%20South,in%20a%20statement%20on%20Thursday</u>.Lee, Joyce, and Josh Smith. "Insight: Inside South Korea's Race to Become One of the World's Biggest Arms Dealers." Reuters.com, May 29, 2023. https://www.reuters.com/business/aerospace-defense/inside-south-koreas-race-become-one-worlds-biggest-arms-dealers-2023-05-29/.
- 11. NATO. "Relations with Partners in the Indo-Pacific Region." NATO, n.d. https://www.nato.int/cps/en/natohq/topics_183254.htm#:~:text=The%20Indo%2DPacific%2
 0is%20important,the%20rules%2Dbased%20international%20order.
- 12. NATO. "Relations with the Republic of Korea." NATO, n.d. https://www.nato.int/cps/en/natohq/topics_50098.htm.
- 13. North Atlantic Treaty Organisation. "NATO 2022 STRATEGIC CONCEPT." https://www.nato.int/cps/en/natohq/topics_210907.htm, June 29, 2022. https://www.nato.int/nato_static_fl2014/assets/pdf/2022/6/pdf/290622-strategic-concept.pdf.
- 14. Pikulicka-Wilczewska, Agnieszka . "Poland Buys 48 Light Combat Aircraft from South Korea." Reuters.com, September 16, 2022. https://www.reuters.com/business/aerospace-defense/poland-buys-48-light-combat-aircraft-south-korea-2022-09-16/.
- 15. Shin, Hyonhee. "South Korea, NATO to Boost Partnership on Security, Cyber Threats." Reuters.com, July 11, 2023. https://www.reuters.com/world/asia-pacific/south-korea-nato-boost-partnership-security-cyber-threats-2023-07-11/.
- 16. Shuhei, Ikehata. "South Korea Sets out to Become World's Fourth-Largest Arms Trader." NHK WORLD, November 30, 2023. https://www3.nhk.or.jp/nhkworld/en/news/backstories/2876/#:~:text=%22We%20aim%20to%20become%20the,sell%20it%20to%20the%20world.
- 17. The University of Sydney. "Why Is NATO Expanding Its Reach in the Asia-Pacific Region," July 14, 2023. https://www.sydney.edu.au/news-opinion/news/2023/07/14/why-is-nato-expanding-its-reach-in-the-asia-pacific-region--.html.
- 18. 국방일보. "[육군3보병사단] 선배님들의 '3·7 완전작전' 명성 이어가겠습니다," n.d. https://kookbang.dema.mil.kr/newsWeb/20220520/15/BBSMSTR 000000010023/view.do.