As the strategic competition among great powers is gaining intensity, there was an important document published for commemorating the 70th anniversary of the ROK-US alliance; the Washington Declaration. This document is relatively short but contains an ironclad commitment towards the alliance. After the publication of the Declaration, there have been heated debates as to the pros and cons of its effectiveness. While one side argues that this is no more than a repetition of previous rhetorical statements, the other appreciates its strongest commitment for nuclear deterrence, both of which mainly focus on analysis and interpretation of Korean perspectives. Since this document is an outcome of two constituents of an alliance, the concerns of both sides should be assessed in order to evaluate whether this Washington Declaration is durable and creditable. In filling the gap of the U.S. side, this forum focuses on the U.S. perspectives regarding underlying sources of the Washington Declaration, with emphasis on consistency between threat perception, national security needs and contents of the Declaration.

1. Contents of the Washington Declaration

The Washington Declaration is a part of President
Biden and President Yoon’s summit to mark the 70th anniversary of the ROK-US alliance along with the United States-Republic of Korea Leaders’ Joint Statement, press conference and other activities, including an address to the U.S. Congress and other institutions. The main goal of this declaration is building up a developed and assured commitment on extended deterrence, which is specialized on U.S. nuclear commitment against North Korea’s nuclear threats by mentioning "in the strongest words possible their commitment to the combined defense posture under the U.S.-ROK Mutual Defense Treaty." Especially, in order to increase its credibility towards the commitment, the U.S. included the sentence of 'make every effort to consult with the ROK on any possible nuclear weapons employment on the Korean Peninsula,' which can be read that all manner of activities related to nuclear weapons should be jointly decided by the two states. There are three main contents different from previous agreements dealing with extended deterrence: the Nuclear Consultative Group (NCG), increased role of the ROK, and regular visibility of strategic assets.

The establishment of the NCG is a distinctive outcome in the Washington Declaration. Both states agree on establishing the NCG "to strengthen extended deterrence, discuss nuclear and strategic planning, and manage the threat to the nonproliferation regime posed by the Democratic People’s Republic of Korea (DPRK). The role of the NCG will be in active engagement, making deeper cooperative decision-making on nuclear deterrence possible. It works through enhanced dialogue and information sharing regarding growing nuclear threats to the ROK and the region.

The second part of the Declaration is the increased role of the ROK side in the nuclear and combined defense posture. This is also related to the first NCG establishment where the ROK should participate in the nuclear planning phase. In addition, the ROK will support conventional capability for U.S. nuclear operations, both in combined exercises and in a contingency, on the application of nuclear deterrence on the Korean Peninsula. The ROK will do more in the planning and execution of nuclear operations when contingencies occur because of the ROK’s longstanding commitment to the Nuclear Nonproliferation Treaty.

The third part is the enhanced visibility of commitment. In order for the Declaration to be credible, U.S. strategic assets such as nuclear ballistic missile submarines should be a visible element of any deterrence effort. A new table-top exercise in addition to the existing bilateral, interagency table-top simulation will be activated to strengthen and enhance the ironclad ROK-US alliance.

2. Biden Administration’s Threat Perception and National Security Strategy

Theoretically, whether a joint agreement, such as the Washington Declaration, is promising and credible for the future depends on the willingness of both states. In an asymmetrical alliance, however, the stronger side matters more than the weaker one since offering nuclear capability is the element that only the U.S. can provide. Therefore, the willingness and underlying causes for the Declaration should be analyzed in-depth through understanding the U.S. national security strategy with its threat perception.

As is well known, the Biden administration’s main concerns are threats posed by the strong states of Russia and China, which are both autocracies and are the source of threats as the product of competition between democracies and autocracies. Though these two strong powers are challenging the status quo established by the U.S., the evaluation of their threat perception is different. The threat posed by Russia, which initiated the military invasion of Ukraine, is regarded as an immediate threat to the free and open international system that is established by the U.S. By contrast, China is regarded as 'the only competitor with both the intent to reshape the international order and which increasingly possesses the economic, diplomatic, military, and technological power to advance that objective.' Based on this threat perception, the U.S. sets reactions to China as its priority by maintaining a competitive advantage while constraining the
The directions that the U.S. responds to threats and challenges are three-fold: invest in American power and influence, build the strongest coalition of nations and modernize its military. The first one is about investing U.S. national power for keeping its competitive edge through implementing modern industrial and innovation strategy, investing in people of the middle class and strengthening democracy at home. Biden’s strategy starts from a domestic build-up, in which he argues that there is no clear distinction between domestic and foreign policy and the future of America’s success depends on internal strength and resilience which originates from a strong middle class and domestic support. The second line of effort is related to building up strong and multiple coalitions by using diplomacy. Compared to China which is the main security challenger, the number of allies and friendly nations of the U.S. is unrivaled. The coalition is among not only democratic nations exclusively, but also any country that supports a rules-based order. Therefore, in addition to the existing alliances such as NATO, bilateral treaty allies, Five Eyes, AUKUS, QUAD, and the G7, inclusive coalitions such as the UN, ASEAN, several states from Africa and the Middle East will be targets for diplomacy. The third direction is modernizing and strengthening the military with integrated deterrence as a last resort and with the informed consent of the American people. The utility of military forces rests on deterring attacks and aggression against the U.S. with a most combat-credible in the world. The integrated deterrence contains domains, regions, the conflict spectrum, the U.S. government, and allies and partner integration on the basis of nuclear and conventional weapons integration.

The unique characteristics of the Biden administration’s national security strategy based on these three lines of effort can be summarized as being a domestically originated, coalition increasing deterrence strategy. The reference point of foreign and security policy for the Biden administration is whether the effect of policy is domestically supported or not, especially by the middle class. In addition, to respond to Chinese threats, the number of states that support the international order made by the U.S. should be increasing with integrated deterrence throughout all domains.

3. Biden Administration and Washington Declaration

Whether the Washington Declaration is credible depends on the willingness of the U.S. more than that of the ROK, as mentioned above. This question can be verified through testing whether the Declaration is consistent with the directions of the Biden administration’s strategy; namely, domestic support, increasing coalitions, and integration.

Whether the Washington Declaration is getting domestic support or not is the first reference. Even though there was not much research regarding this inquiry after the Declaration was announced, there are some hints that can be helpful regarding how American people think in terms of the ROK. Based on the public opinion survey done by the Chicago Council on Global Affairs in September 2022, favorability and positive feelings are at an all-time high and the American public remains committed to defending South Korea against North Korea’s threats. On the Country Thermometer, ROK’s favorability reached 61 on a 0-100 scale, a 17 point increase from 44 in 2006, since which it has consistently increased. Additionally, 7 in 10 (72%) American people support long-term U.S. military bases in South Korea. Based on these public survey results of ordinary U.S. citizens, one sure thing is that there should be no negative repercussions from building up a close relationship through increased assurance of extended deterrence to the ROK, Putnam’s two-level game theory, postulates that when the size of the win-set (degree of the domestic acceptability) is increasing, the possibility of reaching an agreement is larger because the domestic audience will accept whatever deal the agreement consists of. The Biden administration, which is very concerned about domestic support,
does not seem to be suffering from the contents of the Washington Declaration.

Regarding the second concern about whether the Washington Declaration is contributing to coalition building or not, since the ROK-US has been a treaty alliance for 70 years, there seems to only be an internal utility that the Declaration will bring. However, the possibility exists to expand the bilateral relationship between the ROK-US to trilateral relations among ROK-US-Japan. Though, there is no specific statement and phrase that implies further development, there is the possibility for the U.S. to utilize this close connection to improve the ROK-Japan relationship as mentioned in the Indo-Pacific Strategy published on February 2022. In the strategy, one of the Indo-Pacific Action Plan is ‘expanded US-Japan-ROK Cooperation.’ It is very unusual to designate specific country names in the strategic document publically, but eagerness exists towards the enhancement of trilateral cooperation in coping with major Indo-Pacific challenges. Since Japan also faces nuclear threats from North Korea, the Washington Declaration dealing with North Korea’s nuclear threat has the potential to be applicable to Japan for the U.S. This implies that the utility of the Washington Declaration for the U.S. is extremely useful and expandable. Therefore, there is no reason for the U.S. not to abide by or do something that degrades the commitment.

The last but not the least, is about integrated deterrence. The Washington Declaration contains the increased roles of ROK’s conventional capability for nuclear operations, which can be the essence of nuclear and non-nuclear integration, since the ROK declared that it will abide by the NPT, which means it has no intention to develop its own nuclear weapon unless the threat will have jeopardized the supreme interests of ROK, the dependence of it on nuclear weapons through the U.S. shall increase. The U.S., having enough stockpiles of nuclear warheads, needs more conventional capabilities because of resource constraints and overseas deployments. Since nuclear modernization is the only way to keep strategic advantage over other state challengers, more resources will be spent on nuclear delivery systems and command and control systems, during the period that U.S. nuclear capability is developed, the need for the integration of conventional and nuclear weapons also increases. The ROK’s conventional capabilities will be an important source for augmenting U.S. conventional capacity because any military conflict in the Indo-Pacific will be an overseas deployment, which is not advantageous for the U.S. to become engaged in a war of attrition. Therefore, development of ROK’s conventional capabilities is not only beneficial for its own sake, but also augments sources for ROK-US integrated deterrence.

4. Concluding Remarks

Based on the analysis focusing on the U.S. perspective, the Washington Declaration is very consistent with the Biden administration’s threat perception and policy concerns. Domestically, the Declaration could be interpreted as an improved relationship with a favorable state (ROK) in which there will be less of a possibility for the American public to oppose this agreement. In addition, the extensibility of a bilateral relationship to tri-lateral cooperation and utility of conventional capability by ROK military coincides with needs and directions that the U.S. is pursuing.

There has been a heated debate over whether the Washington Declaration is meaningful and endurable. Though this kind of constructive discussion is recommendable, it is a time to find a way to maximize our interests from the outcomes of the Declaration. The current status of the Declaration is different for the respective constituents of the alliance. One side is split but the other one is united. In this case, the country with divided domestic support has better bargaining power than the unified side based on the two-level game offered by Putnam. In order for both states to sustain and endure the commitment, the two states collectively are trying to develop the way to satisfy the needs of the states,
President Yoon Suk-Yeol’s Visit to DARPA: Significance and Prospects for Korea-U.S. Defense Science and Technology Cooperation

Jaeyoung Cho
Associate Professor, College of Business, Prairie View A&M University

The recent visit of Korean President Yoon to the United States marked a significant chapter in the relationship between the two countries, extending the bonds of their alliance. In addition to visiting the National Military Command Center (NMCC), President Yoon achieved a historic milestone by becoming the first foreign leader to visit the Defense Advanced Research Projects Agency (DARPA). This visit holds profound symbolic meaning, reflecting the growing emphasis on science and technology as a cornerstone of the bilateral partnership between Korea and the United States.

President Yoon’s engagement with DARPA, a distinguished agency of the U.S. Department of Defense renowned for pioneering transformative technologies, holds exceptional significance. During his visit, President Yoon expressed his aspiration to expand the involvement of Korean scientists in DARPA’s initiatives. This recognition of advanced science and technology as integral to both economic development and national security conveys a resolute message regarding Korea’s commitment to fortifying its technological capabilities.

The impact of President Yoon’s visit to DARPA reaches far beyond the realm of diplomacy. It exemplifies a strategic maneuver that charts the future trajectory of Korea-U.S. relations, firmly grounded in intensified technological collaboration and a shared dedication to fostering regional stability. By leveraging this visit as a foundation, both nations can forge a path toward mutual growth and prosperity, driven by their collective pursuit of scientific advancement.

The science and technology exchanges between Korea and the United States have a rich history that traces back to the aftermath of the Korean War in the 1950s. During this critical period, the United States played a vital role in assisting the rehabilitation of Korea’s economy and infrastructure. This support extended to the development of Korea’s science and technology institutions and the training of its scientists and engineers. These initial efforts laid the groundwork for the flourishing science and technology ecosystem that thrives in Korea today.

Over the years, the Korea-U.S. science and technology relationship has matured and evolved into a multifaceted partnership characterized by mutual contributions and collaborations. What

---

President Yoon Suk-Yeol’s Visit to DARPA: Significance and Prospects for Korea-U.S. Defense Science and Technology Cooperation

initially started as a predominantly one-sided relationship centered around aid and capacity building has transformed into a dynamic alliance reflecting the strategic interests and global technological trends of both countries.

In its early stages, the exchanges were primarily focused on industrial and manufacturing technologies, aligned with Korea’s drive towards industrialization in the 1960s and 1970s. As Korea’s economy grew and advanced, the focus shifted to more sophisticated domains such as semiconductors, telecommunications, and later expanded to include biotechnology and information technology in the 1980s and 1990s. In recent years, collaboration has extended to cutting-edge frontiers like artificial intelligence, robotics, and quantum computing.

Currently, Korea-U.S. science and technology exchanges are at an unprecedented high point. Both countries recognize the pivotal role of scientific collaboration in fostering their strategic partnership. These exchanges span across various sectors, encompassing government, academia, and industry. Korean companies have established significant presences in innovation hubs like Silicon Valley, while American tech giants have invested in research and development initiatives within Korea. Moreover, numerous partnerships and exchanges thrive in the academic realm, involving universities and research institutions.

The future outlook for Korea-U.S. science and technology relations appears promising. The visit of the Korean President to DARPA exemplifies the shared commitment placed by both countries on science and technology within their bilateral relationship. As the global technological landscape continues to evolve, the focus of these exchanges is expected to shift and expand to embrace emerging areas.

UNDERSTANDING DARPA

DARPA stands as an indispensable and influential institution within the global technology landscape, with a rich legacy of innovation and impact. Established in 1958 by President Dwight D. Eisenhower in response to the Soviet Union’s launch of the Sputnik satellite, DARPA was tasked with a crucial mission: to ensure the technological superiority of the U.S. military and preempt technological surprises from adversaries. From its inception, DARPA’s mission went beyond merely matching the technological advancements of other nations. Instead, it aimed to foster breakthrough technologies that would surpass existing capabilities—a ‘high-risk, high-reward’ approach that has consistently propelled the United States to the forefront of technology, influencing both military applications and civilian life.

DARPA’s influence on the global technology landscape is vast and diverse. The agency’s contributions span from the creation of ARPANET, the precursor to the internet, to the development of GPS technology, both of which have transformed the world. By organizing its structure into technology offices with specific focuses, DARPA actively encourages multidisciplinary research and the convergence of technologies.

Among DARPA’s notable achievements, some have had profound effects on our daily lives. The creation of ARPANET in 1969, which later evolved into the internet, revolutionized global communications. Similarly, DARPA’s pioneering work on GPS technology in the 1970s has had far-reaching impacts, from navigation systems to time-stamping financial transactions. More recently, DARPA’s investments in artificial intelligence and machine learning are paving the way for the next wave of technological innovations.

---

DARPA plays a critical role in the U.S. defense and technology sectors, acting as a vital bridge between basic scientific research conducted in universities and the applied research and development undertaken by industry and the military. By funding projects at the cutting edge of technology, often in areas deemed too risky or long-term for commercial entities, DARPA ensures a constant flow of new technologies to maintain and enhance U.S. military capabilities and national security.\(^{11}\)

### THE SIGNIFICANCE OF THE KOREAN PRESIDENT’S FIRST VISIT TO DARPA

The inaugural visit of the Korean president to DARPA holds immense significance, representing a pivotal moment in the evolving nature of the Korea-U.S. relationship against the backdrop of a changing international order and the persistent North Korean nuclear threat.\(^{12}\) The notable emphasis on science and technology during this visit signifies Korea’s emergence as a global tech powerhouse and underscores the critical role of technology in shaping global affairs, particularly in the realm of national security.

This visit carries multifaceted implications that contribute to the broader narrative of the bilateral relationship. Firstly, it highlights the indispensable role of science and technology in strengthening the bond between the two countries, with President Yoon’s recognition of their significance in national security and defense innovation. Given the ongoing nuclear threat from North Korea, the emphasis on collaboration in military science and technology strengthens Korea-U.S. extended deterrence efforts and underscores the mutual commitment to safeguarding regional stability.

Furthermore, the visit serves as a platform to showcase Korea’s commitment to global technological engagement, demonstrating its aspiration to actively participate in the global technology ecosystem while recognizing the United States as a critical partner. DARPA, being at the forefront of cutting-edge technologies, presents an ideal collaborator for Korea’s ambitions to bolster its national security capabilities and effectively address the evolving challenges posed by the North Korean nuclear threat.

The impact of this visit extends beyond the bilateral context. It lays the foundation for enhanced cooperation in science and technology, potentially leading to joint research initiatives, technology exchanges, and closer collaboration between Korean institutions and DARPA. Such endeavors can stimulate economic growth, create new commercial opportunities, and strengthen national security by leveraging the advancements and expertise of both countries.

Moreover, the visit carries broader geopolitical implications. By aligning closely with the United States in the realm of technology, Korea signals its strategic orientation and contributes to shaping dynamics in the Asia-Pacific region. This is particularly significant given the ongoing strategic competition between the United States and China, as it adds another layer of complexity to the geopolitical landscape and highlights the importance of robust technological capabilities for maintaining a position of strength and influence.

Ultimately, this visit sets a precedent for future engagements between Korean leaders and U.S. institutions, opening doors for deeper and more frequent collaborations centered around science and technology. In the face of a changing international order and the persistent North Korean nuclear threat, this paves the way for a stronger bilateral relationship and enhanced mutual understanding. By leveraging their shared commitment to science and technology, Korea and the United States can navigate the complexities of the global landscape, foster innovation, and address the evolving challenges to regional and international security.

---


President Yoon Suk-Yeol’s Visit to DARPA: Significance and Prospects for Korea-U.S. Defense Science and Technology Cooperation

The emphasis on science and technology during this visit highlights Korea’s emergence as a global tech powerhouse and underscores the critical role of technology in shaping global affairs, particularly in national security.

The visit holds profound significance, demonstrating President Yoon’s recognition of the importance of science and technology in national security and defense innovation. It strengthens collaboration in military science and technology, reinforcing Korea-U.S. extended deterrence efforts in response to the North Korean nuclear threat. By aligning with DARPA, Korea showcases its commitment to global technological engagement and its aspirations to actively participate in the global technology ecosystem.

Beyond bilateral relations, the visit sets the stage for enhanced cooperation in science and technology, leading to joint research initiatives, technology exchanges, and closer collaboration between Korean institutions and DARPA. This collaboration not only stimulates economic growth and creates commercial opportunities but also strengthens national security by leveraging the advancements and expertise of both countries.

Geopolitically, Korea’s alignment with the United States in technology contributes to shaping dynamics in the Asia-Pacific region. In the context of the ongoing strategic competition between the United States and China, Korea’s emphasis on robust technological capabilities adds another layer of complexity to the geopolitical landscape and highlights the importance of maintaining a position of strength and influence.

President Yoon’s visit to DARPA establishes a precedent for future engagements between Korean leaders and U.S. institutions, fostering deeper collaboration centered around science and technology. It lays the foundation for a stronger bilateral relationship, enhanced mutual understanding, and shared growth and progress. The continued prioritization of science and technology in the partnership between Korea and the United States will enable them to navigate the complexities of the global landscape, address regional and international security challenges, and shape the trajectory of technological advancements.

Looking ahead, the Korea-U.S. science and technology relationship is poised to expand and address emerging challenges. While issues related to intellectual property rights, market access, and technology transfer persist, diplomatic efforts and a commitment to fair and open competition will be essential in successfully navigating these challenges. The shared dedication to science and technology provides a solid basis for a stronger bilateral relationship, fostering an environment conducive to mutual growth and prosperity.

President Yoon’s visit to DARPA marks a significant step forward in Korea-U.S. defense science and technology cooperation, laying the groundwork for innovation, collaboration, and shared success. By harnessing the power of science and technology, Korea and the United States can address global challenges, bolster regional stability, and shape the trajectory of technological advancements in the years to come.