



Does Trump (again) Want a Trade War? What to Expect, and the Path Forward

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Strengthening the U.S.-ROK Alliance Through MRO (Maintenance, Repair, and Overhaul) Cooperation: Strategic Imperatives in a New Trump Era

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On February 3, 2025, two weeks into his presidency, President Trump unexpectedly announced a 25% tariff on Canada and Mexico. The affected countries are likely to retaliate with their own tariffs, and given the strong economic ties between the three nations, the ensuing trade war is expected to have significant economic consequences—consequences that would far outweigh any benefits to their respective national industries. A key lesson from the trade war sparked by the Smoot-Hawley Tariff Act of the 1930s is that tariff policies are often driven more by political motivations—or even miscalculations—than by economic rationale. Trump's recent move signals a departure from the post-World War II U.S.-led global order, which has been built on free trade and America's role as the world's policeman. In response, South Korea must prepare for increasing uncertainty in the global trade environment.

Introduction

As promised during his presidential campaign, the re-elected U.S. president, Donald Trump, is waging a multifaceted trade war against both allies and adversaries. Most notably, he announced plans to impose a 25% tariff on Mexico and Canada, along with a 10% tariff on China. However, as of February 3rd, Trump backed down from imposing tariffs on Canada and Mexico, granting a 30-day reprieve on the tax hike. Still, concerns remain that his trade war could expand further, triggering retaliatory measures

worldwide and hindering global trade and economic growth.

Trump's philosophy is that raising trade barriers will encourage domestic industries to produce more goods within the U.S., while the tariff revenues will help finance government expenditures. Tariff revenue once made up a significant portion of the U.S. tax income before the 1900s, when the country was still not heavily industrialized. However, as the U.S. completed its industrialization, it needed to expand its markets abroad, and, in line with the principle of reciprocity, had to liberalize trade in goods. To date, trade liberalization has benefited the global economy,

culminating in China's membership in the WTO and the USMCA, a revised version of the former NAFTA, which is a free trade agreement between Canada, the U.S., and Mexico.

Donald Trump's primary motivation for imposing tariffs appears to be political rather than economic. As seen in the U.S.-China trade war, tariffs are often used as a retaliatory measure against countries accused of engaging in unfair trade practices. In most cases, retaliatory tariffs have been directed at adversaries. However, what sets the tariffs against Canada and Mexico apart is Trump's justification—he is invoking a national emergency, linking the tariffs to border security and narcotics control. This aligns with his political strategy of attacking Biden-era immigration policies and stirring public sentiment against asylum seekers and refugees. Additionally, the move seems aimed at appealing to his Rust Belt voter base by claiming that these tariffs will help revive domestic industries such as manufacturing.

In today's highly globalized and interconnected supply chains, it is difficult to precisely measure the impact of abrupt tariff shocks. However, unlike the U.S.-China trade war during Trump's first presidency, broad tariffs on closely linked economies such as Canada, Mexico, and the EU are expected to have significant consequences for the global economy. Moreover, once tariffs are imposed, they tend to be long-lasting, as demonstrated by the ongoing U.S.-China trade war. Although the tariffs on China remained in place under Biden due to political pressure to appear tough on China, a trade war with allies—once it escalates—will be equally difficult to reverse.

The Economics of Tariffs – Revenue and Protectionism

A tariff is a tax imposed on goods crossing borders, particularly on imports. According to economic historian Douglas A. Irwin of Dartmouth College, while the world has largely shifted toward a low-tariff era since the 1990s, and tariffs as a policy tool are now seen as largely obsolete, U.S. tariff history has followed a more tumultuous path rather than a consistent trend. Notably, during the period of Republican dominance in Congress from the end of the Civil War to the Great Depression, U.S. trade policy was heavily protectionist. In contrast, the election of Democrat Woodrow Wilson briefly ushered in a period of trade liberalization, though it was short-lived.

In economic circles, the objectives of tariffs are often summarized as the "3Rs": revenue, restriction, and reciprocity. Revenue refers to the government's ability to raise funds without increasing domestic tax rates. This was particularly important when the U.S. government was in its infancy before the 19th century and during times of massive expenditures, such as the U.S. Civil War. Alexander Hamilton, one of the Founding Fathers and the first Secretary of

the Treasury, was especially concerned about generating sufficient tax revenue—primarily from tariffs—to pay off the substantial debt accrued during the Revolutionary War. Trump appears to be reviving this idea, suggesting that he can lower income taxes for Americans by increasing tariff revenues, which would ultimately be paid by exporting countries.

However, in the United States, it is not the exporter who pays the tariff but rather the importer who is responsible for reporting and paying the tax to the government. According to economic taxation theory, these costs are then passed on to consumers in the form of higher prices. As a result, tariffs almost inevitably lead to a decline in demand for imported goods, offsetting potential gains in government revenue. This concept aligns with the Laffer Curve, which illustrates an inverted U-shaped relationship between tax rates and revenue, showing that excessively high taxes can discourage economic activity and ultimately reduce tax revenue. Early U.S. Treasury secretaries were also aware of this dynamic and sought to raise tariffs without stifling imports, which served as a crucial tax base.

Restriction refers to the role of tariffs in fostering domestic industries. This is one of the most common justifications for protectionist policies, as tariffs shield emerging industries from global competition. There is broad consensus that manufacturing-led growth often requires some degree of early-stage protectionism. Trump has repeatedly cited President William McKinley of the late 19th century and his high-tariff policies as a model for his own trade measures. While it is true that the U.S. experienced rapid industrialization during McKinley's presidency, there is an important caveat: at the time, the U.S. remained highly open to immigration, capital inflows, and technology transfers from leading economies such as the United Kingdom. Therefore, tariffs alone cannot be credited as the sole driver of the industrial boom during that period.

Furthermore, while protectionist policies can help domestic industries grow and create jobs, there is significant debate over their overall effectiveness compared to alternative measures. According to an estimate by the Peterson Institute for International Economics, each job saved through "Made in America" requirements in public procurement could cost taxpayers up to \$250,000. This calculation accounts for the fact that while tariffs may protect certain upstream industries—such as steel production—they can simultaneously harm downstream industries that rely on steel as an input. Additionally, there is concern over "cascading protectionism," where initial protectionist measures create demand for further trade barriers beyond what the government originally intended. This could lead to petitions from downstream firms seeking similar protections, ultimately resulting in greater welfare losses for consumers and reduced economic efficiency.

In essence, most economists agree that abrupt policies like raising tariffs often lead to unintended consequences.

For example, even if the motivation is to protect domestic industries, such policies may come at a significant cost to consumers, even though there are more economically efficient ways to support struggling or emerging industries. Additionally, whether tariffs can serve as a reliable tax base is also questionable, as the government must work hard to maintain a steady flow of imports despite rising prices.

The Political Economies of Tariffs – Tools for Negotiations

Returning to the three Rs of tariffs—revenue, restriction, and reciprocity—reciprocity refers to the use of tariffs as a bargaining chip in trade negotiations, such as those with China. While this motive may seem more indirect compared to the other two, it is often inevitable, as unilateral tariff impositions typically provoke retaliatory measures from the affected countries. These retaliatory measures often lead to "tariff wars," which can harm both economies. As a result, economists are concerned that the effects of tariffs, including their indirect consequences, may be more damaging in the short term than in the long run. However, history shows that using tariffs as a bargaining chip relies on a precarious negotiation process, often shaped by the political dynamics of both countries involved.

An infamous example of this is the Smoot-Hawley Tariff Act, signed into law on June 17, 1930. Enacted during the Great Depression, which began with the stock market crash of 1929, the law imposed tariffs on hundreds of products, raising average U.S. tariffs to 45% (up from 38%). Countries heavily reliant on trade with the U.S., such as Canada, immediately retaliated with their own tariffs, while other European nations followed suit as the financial crisis spread to the continent in 1931. Moreover, former U.S. trading partners began forming preferential trade agreements that excluded the U.S., such as Britain's "imperial preferences." This system granted lower tariffs to former colonies like Canada, which hurt U.S. exports of goods like agricultural products and textiles to the British market. As a result, about one-quarter of U.S. exports to Britain and Canada were impacted by the indirect fallout from the Smoot-Hawley tariffs.

For the seven decades following the Smoot-Hawley Tariff Act, U.S. trade negotiations primarily focused on reducing tariffs with partner countries. In 1934, Congress passed the Reciprocal Trade Agreement Act, which granted the president full legal authority to negotiate trade deals. However, this authority rarely led to the introduction of new import protections, although certain clauses—such as Section 232 of the Trade Expansion Act of 1962 and Section 301 of the Trade Act of 1974—provided the president with the power to impose protectionist measures. These two clauses formed the basis for the tariffs imposed during Trump's

first administration on imports from China, citing national security concerns and investigations under Section 301.

Regarding the controversial tariffs on Mexico and Canada, the White House issued a statement on February 1st declaring that the measure is intended to address "the extraordinary threat posed by illegal aliens and drugs, including deadly fentanyl," which "constitutes a national emergency under the International Emergency Economic Powers Act (IEEPA)." The statement emphasized that Trump is fulfilling his campaign promises and that the U.S. is facing an emergency situation due to the influx of gangs and narcotics illegally crossing from neighboring countries. Given the 30-day suspension of the tariffs after Mexico deployed 10,000 troops to secure its border with the U.S., it seems likely that the tariffs are more about political posturing than genuine economic strategy. As Canadian Prime Minister Justin Trudeau quickly pointed out, both countries may impose retaliatory tariffs on the U.S., which could have unprecedented economic consequences.

Interest Group Dynamics do not Necessarily Align with Geopolitics

After decades of trade liberalization, global supply chains have become increasingly complex, enabling everyday consumers to access an unprecedented range of quality goods and services. The United States, for example, is economically closely tied to its neighboring countries, Mexico and Canada, as many parts of its supply chains are outsourced to these nations for maximum efficiency. Trade statistics reveal that Canada (\$308B) and Mexico (\$294B) are the top two export destinations of the U.S., with China in third place at \$151B—less than half of what is exported to Canada. In terms of imports, China (\$551B) leads, followed closely by Canada (\$438B) and Mexico (\$421B).

Due to this reliance, Trump's announcement was immediately met with harsh criticism from various trade and consumer associations, who expressed concerns that it would exacerbate inflation and contract economic activity. Traditional economic theory aligns with this view, arguing that free trade ultimately benefits everyone, while protectionist policies like tariffs are typically supported by specific industry groups, such as steel workers. In this context, those who support tariffs are often the ones who stand to benefit from protectionist measures. However, it remains unclear who, if anyone, stands to gain from tariffs against Canada and Mexico.

This raises the question: what motivates Trump's inclination toward tariffs? Initially, Trump gained popularity among rural, low-income white populations in states like Ohio and Pennsylvania, where there was hope that he could revive the dwindling manufacturing base. However, the decline of manufacturing and the large trade deficit are driven by macroeconomic factors, such as levels of economic

development, which tariffs alone cannot easily address. Moreover, one of Trump's most ardent supporter groups—farmers from rural areas—are among those most likely to be harmed by trade wars. In fact, during Trump's first administration, when he considered pulling out of NAFTA (the North American Free Trade Agreement), the Secretary of Agriculture persuaded him that his rural voting base—who rely on exports to Canada and Mexico—would likely be collateral damage in a trade war.

Douglas A. Irwin views trade policy as an interplay of interest group lobbying and accidents, shaped by a flawed political process. As evidence, Irwin argues that the Smoot-Hawley Tariff Act, contrary to popular belief, was not a stimulus response to the Great Depression but was actually conceived as early as 1928, when the U.S. economy was still at its peak. At that time, it was the concerns of the poor rural population that captured the attention of many politicians in Washington, leading to the proposal of tariffs on agricultural goods to protect American farmers. As the discussion progressed, other interest groups became involved, and the tariff expanded to include manufacturing products as well. However, the politicians did not foresee the retaliatory tariffs that would follow, nor did they anticipate the harm to the very farmers the law sought to protect—those who relied on exports to foreign countries. Additionally, the changing macroeconomic conditions, particularly the onset of the Great Depression in the 1930s, only worsened the negative impact of the tariffs.

After the devastation of the Second World War, the United States was determined to establish a global order that was economically integrated and backed by its military superiority. This was largely driven by the desire to avoid the mistakes that led to that conflict due to the fallout from the one that preceded

it. However, the unfortunate Smoot-Hawley Tariff Act serves as an example of how a poorly designed policy with good intentions can have devastating consequences—not necessarily due to the law itself, but because of the political distortions that accompany it. The policies of the Trump era seem to fit well into this category, as it remains unclear who benefits from the tariffs, and it is difficult to justify them even with political motivations beyond the pursuit of his personal beliefs.

are consumer goods with highly elastic demand, meaning even a small rise in tariffs could lead to a significant drop in demand, which would slow down South Korea's export-driven economy.

The global economy will likely become more uncertain as the leading economy, the U.S., is swayed by the decisions of a few policymakers. In contrast to the first Trump administration, which was filled with experienced bureaucrats, the second administration is increasingly populated by individuals who are aligned with Trump's agenda, or personal aides, many of whom are novices in the complexities of governance. We can expect continued disruptions across various fields, and the outcomes are often unlikely to follow rational expectations. According to Douglas Irwin, this unpredictability is a market dynamic that we failed to observe over the past few decades.

Korea is likely to become the next target for Trump's tariffs, given its significant trade surplus with the United States. Unlike close neighbors Canada and Mexico, I doubt that the U.S. public will be as invested in defending South Korea's role in the U.S. economy. However, on the bright side, Trump's new barriers against China can be an opportunity for South Korea, whose export portfolio largely overlaps with the competing neighbor. Only a robust foundation of economic fundamentals and carefully planned resilience strategies will help navigate this tide of uncertainty.

References

- "The Observatory of Economic Complexity" : oec.world global trade data
- "Does Trump Want a Trade War? What You Need to Know about Smoot-Hawley Tariffs and the 1930s", Chad P. Bown (PIIE) and Douglas A. Irwin (PIIE), March 21, 2018
- "The high taxpayer cost of "saving" US jobs through "Made in America"", Gary Clyde Hufbauer (PIIE) and Euijin Jung (PIIE), August 5, 2020 5:30 AM
- "Trump and the history of tariffs. With Doug Irwin -What history tells us about the shape of tariffs to come", FT Podcast The Economics Show, January 20, 2025

Impacts on Korea and What to Expect

South Korea, one of the United States' closest trading partners, is likely to face severe consequences if it becomes collateral damage in the ongoing Trump tariff war. As of 2024, South Korea relies on the United States for more than 15% of its exports, heavily concentrated in manufactured goods such as cars, automobile parts, machine parts, and refined petroleum. Most critically, many of these products

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The re-election of President Donald Trump in 2025 is anticipated to affect the U.S.-ROK alliance significantly, emphasizing economic nationalism and burden-sharing. To adapt, South Korea can leverage its advanced Maintenance, Repair, and Overhaul (MRO) capabilities to strengthen alliance cooperation. MRO cooperation is crucial for maintaining military readiness and ensuring operational sustainability of U.S. forces in the Indo-Pacific region, facing such threats as North Korea's missiles and China's influence. South Korea's role as a critical maintenance hub not only enhances its strategic position within the alliance but also aligns with Trump's transactional alliance approach by providing cost-effective support, thereby institutionalizing MRO cooperation to stabilize the alliance amidst political fluctuations. Furthermore, expanding MRO cooperation offers economic and technological benefits, fostering growth in South Korea's defense industry and reinforcing its strategic role in regional security. However, challenges such as U.S. regulatory restrictions and infrastructure needs must be addressed to fully integrate MRO operations. Policy recommendations include harmonizing export controls, modernizing infrastructure, and expanding workforce training to solidify MRO as a pivotal element of the U.S.-ROK alliance, ensuring both nations are equipped to handle future security challenges in the region.

Introduction

The re-election of Donald Trump as the President of the United States in 2025 is expected to bring significant shifts in the U.S.-ROK alliance. With Trump's emphasis on burden-sharing, economic nationalism, and strategic realignment, South Korea must adopt proactive strategies to reinforce bilateral cooperation. One of the most effective avenues for sustaining and strengthening the alliance is through robust Maintenance, Repair, and Overhaul (MRO) cooperation. As a key pillar of military readiness and defense industry collaboration, MRO cooperation enhances operational sustainability, strengthens economic ties, and reinforces alliance credibility amid evolving geopolitical challenges.

The Indo-Pacific region faces growing security concerns, including North Korea's missile threats and China's expanding influence. In this complex security environment, U.S. military operations require reliable logistical support, and South Korea's advanced MRO capabilities provide an essential solution. By positioning itself as a critical maintenance hub, South Korea not only ensures the operational efficiency of U.S. forces but also strengthens its strategic role within the alliance. This collaboration fosters technological and industrial cooperation, making MRO a valuable asset for both nations.

Moreover, MRO cooperation aligns with Trump's transactional approach to alliances, providing tangible

economic and strategic benefits. By offering cost-effective and high-quality maintenance solutions, South Korea can reduce the financial burden on U.S. military operations while expanding its own defense industry. Institutionalizing MRO cooperation through formal agreements will help insulate the alliance from political fluctuations, ensuring long-term stability and reinforcing South Korea's position as a vital security partner in the Indo-Pacific region.

As the U.S. continues to recalibrate its global military posture, the ability of allies to provide reliable logistical and maintenance support will be a key determinant in sustaining regional force projection. South Korea's MRO infrastructure, combined with its technological expertise and skilled workforce, makes it a natural hub for sustaining U.S. military assets in the Indo-Pacific. Strengthening MRO cooperation will not only fortify the operational readiness of allied forces but also reinforce the strategic rationale for maintaining a robust ROK-U.S. alliance in the years ahead.

Strategic Significance of U.S.-ROK MRO Cooperation

MRO cooperation is essential for maintaining the combat readiness of both U.S. and South Korean military forces. As security concerns intensify in the Indo-Pacific, the

need for efficient and cost-effective maintenance services has grown substantially. South Korea's world-class MRO facilities provide a regional solution to these challenges by offering prompt and reliable maintenance for U.S. and allied forces. By leveraging its advanced shipbuilding and aviation sectors, South Korea ensures that critical assets, such as naval warships, fighter jets, and transport aircraft, remain fully operational without the delays associated with transcontinental logistics.

Additionally, MRO cooperation plays a crucial role in reducing maintenance costs and downtime for U.S. forces deployed in the Indo-Pacific. Instead of sending military equipment back to the U.S. mainland for repairs, utilizing South Korea's MRO facilities allows for faster turnaround times, improving overall force readiness. This logistical efficiency enhances the U.S. military's ability to rapidly respond to emerging threats, reinforcing deterrence strategies in the region.

From a strategic perspective, MRO cooperation further cements South Korea's role as a security provider rather than just a beneficiary of U.S. protection. The ability to maintain and repair U.S. military assets enhances South Korea's self-reliance while demonstrating its commitment to the alliance. By institutionalizing MRO collaboration, South Korea can reduce its dependence on external logistics while ensuring that its own military assets are sustained through a robust and locally supported maintenance framework.

MRO cooperation also aligns with the broader strategic goal of strengthening the defense supply chain in the Indo-Pacific. Given the vulnerabilities exposed by supply chain disruptions in recent years, the ability to conduct in-theater maintenance is critical. By reinforcing South Korea as a key MRO hub, the alliance mitigates risks associated with overreliance on distant supply chains and enhances operational resilience. Furthermore, this cooperation opens avenues for interoperability, as U.S. and South Korean forces develop standardized maintenance procedures and integrate their logistical operations for greater efficiency.

Another key aspect of MRO cooperation is its contribution to joint force integration. Regular collaboration between South Korean and U.S. defense industries fosters closer ties, improving technological exchange and workforce development. This synergy enhances the operational effectiveness of joint military exercises, ensuring that maintenance crews are well-versed in servicing allied equipment. As South Korea continues to acquire advanced military platforms, including F-35 fighter jets and next-generation naval vessels, aligning MRO capabilities with U.S. standards will be critical in sustaining joint operations.

Furthermore, the expansion of South Korea's MRO industry creates new diplomatic opportunities beyond the U.S.-ROK alliance. By positioning itself as a regional leader in defense maintenance, South Korea can extend its MRO services to other Indo-Pacific allies, including Japan, Australia, and ASEAN

nations. This broader engagement strengthens multilateral security networks while reinforcing South Korea's role as a central pillar of regional defense cooperation.

MRO cooperation is not just a logistical necessity but a strategic imperative for the U.S.-ROK alliance. By enhancing force readiness, reducing logistical dependencies, and strengthening supply chain resilience, MRO collaboration ensures that both nations are prepared to meet emerging security challenges in the Indo-Pacific. As geopolitical tensions evolve, institutionalizing and expanding MRO cooperation will be critical in maintaining a stable, effective, and forward-looking alliance.

Economic and Technological Advantages

Beyond its military implications, MRO cooperation offers substantial economic and technological benefits. The expansion of MRO facilities not only strengthens South Korea's defense industry but also provides extensive employment opportunities, stimulating local economies and fostering high-skilled job growth. As the global defense industry becomes increasingly interconnected, MRO collaboration positions South Korea as a key hub in the international defense supply chain, attracting investment from major U.S. and global defense contractors.

South Korean defense firms can leverage MRO cooperation as an entry point for deeper engagement with U.S. defense contractors, opening doors for technology transfer, industrial partnerships, and co-development initiatives. By establishing joint ventures and research collaborations, both countries can facilitate the exchange of expertise in advanced manufacturing, automation, and digital maintenance technologies. This cooperation enhances South Korea's ability to develop cutting-edge defense solutions while strengthening interoperability with U.S. military forces.

Moreover, the integration of cutting-edge technologies such as predictive maintenance, artificial intelligence (AI), big data analytics, and digital twin technology in MRO operations significantly enhances efficiency and cost-effectiveness. AI-driven predictive maintenance can help to preemptively identify equipment failures, reducing downtime and improving overall operational readiness. Implementing smart diagnostics and automated repair processes can minimize human error, optimize resource allocation, and improve the speed of repairs, ensuring sustained military effectiveness.

By aligning MRO investments with emerging technological trends, South Korea can build an innovation-driven defense ecosystem that extends beyond traditional maintenance activities. Investing in cyber-secure MRO platforms ensures that maintenance operations remain resilient against cyber threats, a growing concern in modern warfare. Additionally, strengthening South Korea's position as a leader in smart

logistics and defense supply chain management enhances its competitiveness in the global defense industry.

Furthermore, the expansion of South Korea's MRO industry can support broader economic diversification efforts. By fostering partnerships with commercial aerospace companies, South Korea can expand its expertise into the civilian aviation sector, generating dual-use applications that benefit both military and commercial industries. This diversification not only reduces dependency on military contracts but also strengthens South Korea's overall aerospace industry, creating new revenue streams and business opportunities in global markets.

MRO cooperation also plays a pivotal role in reinforcing supply chain resilience. In recent years, global supply chain disruptions have highlighted the risks of over-reliance on a few key maintenance and production hubs. By expanding MRO capabilities, not just in terms of the aforementioned broader security structure, but in the specific case of supply chain

resilience, South Korea can position itself as a vital logistical center for Indo-Pacific allies, ensuring the region has access to critical repair and maintenance services without experiencing costly delays. Establishing regional partnerships with Japan, Australia, and ASEAN nations will further enhance collective defense readiness and create a more integrated, self-sufficient defense network.

MRO cooperation extends far beyond military sustainment; it serves as a driving force for economic growth, technological innovation, and regional security stability. By harnessing its advanced industrial capabilities, South Korea can solidify its role as a premier MRO hub, contributing to both its national security interests and the broader ROK-U.S. alliance. Investing in the future of MRO not only strengthens operational readiness but also fosters enduring economic and technological collaboration between the two nations, ensuring that their partnership remains resilient and adaptive in the face of global uncertainties.

Challenges and Policy Considerations

Despite its numerous advantages, MRO cooperation between South Korea and the U.S. faces several key challenges that must be addressed to ensure long-term success. One of the most significant barriers is regulatory restrictions, including stringent U.S. export control laws and technology transfer limitations. These restrictions can delay the approval process for sharing critical components and information, creating inefficiencies in MRO operations. South Korea and the U.S. must work together diplomatically to ease these regulatory hurdles and establish a streamlined process for technology-sharing agreements.

Financial considerations also play a crucial role in the success of MRO cooperation. Given Trump's emphasis on

cost-sharing, there is a possibility that the U.S. may seek greater financial contributions from South Korea in defense-related areas. If MRO cooperation is viewed as an alternative rather than a complementary aspect of burden-sharing, it could create tensions within the alliance. To avoid this, both nations should approach MRO cooperation as a mutually beneficial initiative that strengthens collective defense capabilities rather than simply a financial obligation.

Another challenge is the unpredictability of U.S. foreign policy under Trump's leadership. His transactional approach to alliances could lead to sudden shifts in defense priorities, impacting the long-term stability of MRO cooperation. To mitigate this risk, South Korea should push for formal agreements that institutionalize MRO collaboration, ensuring continuity beyond political changes.

Infrastructure and workforce development also present significant challenges. While South Korea has strong MRO capabilities, further investment is needed in specialized workforce training, certification programs, and advanced technological infrastructure to fully integrate with U.S. defense maintenance networks. Addressing these gaps will be critical in ensuring that South Korea's MRO sector meets the high operational standards required for U.S. military assets.

Additionally, geopolitical tensions in the Indo-Pacific could impact MRO cooperation. As China and North Korea monitor South Korea's growing defense ties with the U.S., increased pressure or economic retaliation could emerge. South Korea must navigate these geopolitical dynamics carefully while maintaining a steadfast commitment to alliance cooperation.

Addressing these challenges through proactive policy measures, sustained investment, and diplomatic engagement will be essential to ensuring that MRO cooperation continues to enhance the U.S.-ROK alliance in a meaningful and long-lasting way.

Policy Recommendations

To maximize the benefits of MRO cooperation and ensure its long-term sustainability, South Korea and the U.S. should adopt a multi-layered policy approach that integrates diplomatic, industrial, and technological initiatives. Establishing a comprehensive bilateral framework will be essential in defining the scope, responsibilities, and financial commitments for MRO cooperation. These agreements should emphasize long-term continuity across different U.S. and South Korean administrations, minimizing the risk of abrupt policy changes.

Another crucial aspect is harmonizing export controls and technology transfer regulations. South Korea and the U.S. should work towards reducing bureaucratic obstacles related to export controls, ensuring smoother technology transfers.

This can be achieved through mutual agreements on licensing exemptions, controlled data-sharing mechanisms, and co-development of MRO technologies. Removing these barriers will not only enhance efficiency but also strengthen trust and collaboration between both nations' defense industries.

Expanding and modernizing MRO infrastructure in South Korea will be critical to handling the increasing demands of U.S. and allied military assets in the Indo-Pacific. Investments should focus on incorporating AI-driven predictive maintenance, digital twin technology, and automation to enhance efficiency and reliability. These improvements will ensure that South Korea remains a competitive and indispensable maintenance hub for the U.S. and its allies.

Equally important is the development of a highly skilled workforce capable of handling cutting-edge defense technologies. Establishing specialized training programs in collaboration with U.S. defense contractors and academic institutions will enhance technical expertise. Certification programs should be aligned with U.S. and NATO standards to facilitate interoperability, ensuring that South Korea's MRO industry meets global operational standards.

South Korea should also expand MRO cooperation beyond the U.S. by working with regional allies like Japan, Australia, and ASEAN nations to develop a regional MRO network. This would enhance collective defense readiness and further integrate South Korea into the broader Indo-Pacific security architecture. Strengthening these partnerships will provide additional opportunities for economic and technological collaboration while reinforcing multilateral security efforts.

Lastly, ensuring robust cybersecurity in MRO operations will be essential. Given the increasing threat of cyberattacks on defense infrastructure, cybersecurity measures must be embedded in all aspects of MRO processes. Joint ROK-U.S. initiatives should focus on developing secure data-sharing platforms, resilient digital maintenance networks, and AI-driven cybersecurity defenses to protect critical systems.

By implementing these strategic measures, South Korea and the U.S. can solidify MRO cooperation as a key pillar of the alliance, ensuring that both nations remain prepared for evolving security challenges in the Indo-Pacific region.

Conclusion

MRO cooperation is an essential pillar of the U.S.-ROK alliance, serving as a critical enabler of military readiness, economic growth, and technological advancement. By strengthening MRO collaboration, both nations can enhance their defense capabilities while fostering deeper industrial and technological integration. The long-term

institutionalization of MRO agreements will help mitigate alliance uncertainties and provide a foundation for sustained cooperation, even amid shifting political dynamics.

Beyond its immediate military benefits, MRO cooperation offers South Korea a strategic opportunity to elevate its position as a regional leader in defense maintenance. By expanding partnerships with U.S. defense firms and Indo-Pacific allies, South Korea can establish itself as a key player in the global defense logistics network, increasing its influence in regional security frameworks.

Furthermore, as security challenges evolve, the ability to conduct rapid and cost-effective maintenance will become increasingly vital. South Korea's ability to offer in-theater MRO solutions not only benefits the U.S. but also contributes to regional stability, reinforcing the alliance's commitment to maintaining a secure Indo-Pacific.

To fully realize the benefits of MRO cooperation, sustained investment in infrastructure, workforce training, and cybersecurity will be necessary. As emerging threats such as cyber warfare and supply chain disruptions continue to pose risks, integrating advanced maintenance technologies will be critical in ensuring operational resilience.

Ultimately, MRO cooperation is more than just a logistical necessity—it is a strategic imperative that strengthens the U.S.-ROK alliance, fosters economic and technological innovation, and reinforces regional security. By prioritizing MRO collaboration as a core component of their defense relationship, the U.S. and South Korea can build a more adaptive, resilient, and future-ready alliance capable of addressing the challenges of the 21st century.



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