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MODERN DETERRENCE CHALLENGES AND SWEDISH INTERESTS

Around the globe, deterrence and nuclear weapons issues have returned to the forefront of international attention, but in conditions that differ significantly from the Cold War era. The new strategic environment could affect Sweden's security and prosperity in profound ways. Hence, the rising generation of Swedish leaders—especially in government, academic, media and private sector positions involving foreign and defense affairs—needs to keep abreast of modern deterrence challenges.

Deterrence: a few basics

While Cold War strategists never developed an agreed definition of deterrence, today the term generally is understood to apply where: a potential aggressor declines to take action against another, such as a military invasion, because it fears unacceptable retaliation – a situation known as “deterrence by punishment”; or the potential aggressor declines to take action because it fears the other can prevent that action from succeeding – a situation known as “deterrence by denial”. Often, public debates focus on the “punishment” approach (e.g., using nuclear-armed missiles and/or aircraft against the aggressor's homeland), although

deterrence “by denial” (e.g., employing air and missile defenses, or conventional ground forces) can be effective in some scenarios and have less catastrophic results for both sides. Indeed, these deterrence methods are not mutually exclusive: a potential aggressor might be effectively deterred because it simultaneously fears unacceptable retaliation and harbors doubts regarding its ability to overpower its target's defenses.

That said, there is no simple formula to calculate the strength (or vulnerability) of a specific nation's approach to deterrence. The size, composition, and readiness of its military forces are obviously important, but hard to quantify factors also play a critical role. These can include a nation's history, strategic culture, leadership psychology, and confidence—or lack thereof—in its allies and partners. Moreover, such assessments influence both sides of a potential

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conflict. The renowned British strategist, Michael Quinlan, captured the essential dilemma faced by national security decision-makers when he observed: “Deterrence is a concept for operating upon the thinking of others”.

Understanding the particular dynamics of nuclear deterrence is especially difficult. Empirical data on the effects of nuclear weapons in wartime is limited to the experiences of Hiroshima and Nagasaki in August, 1945, when the U.S. used one relatively low yield weapon against each target, killing an estimated total of 300,000 persons. However, in that case, the Americans acted without fear of incurring a nuclear response. Once nuclear weapons are available to both sides in a conflict, their destructive power raises the question of whether a military “victory” is attainable in any meaningful sense. At the same time, the mere existence of a nuclear arsenal cannot guarantee deterrence. If a nuclear power lacks confidence in the reliability and survivability of its deterrent, if it lacks credible planning for nuclear scenarios, or if its leaders are believed to rule out nuclear use even in the most extreme circumstances, an aggressor could be tempted to exploit such information or perceptions to its advantage.

Changing nature of deterrence

Deterrence is not a static condition, and it has evolved since the Cold War in at least three important ways. First, deterrence is in transition from a “bipolar” to “multipolar” environment. During the Cold War, the U.S. and Soviet Union engaged in an essentially bipolar contest for global leadership, which came to the brink of nuclear conflict during the Cuban missile crisis in 1962. That near-death experience paved the way for an almost 30 year stand-off, where geostrategic and nuclear arms competition co-existed with various arms control and other efforts to preserve and enhance strategic stability. Today, despite having substantially reduced their nuclear arsenals, the U.S. and Russia once again see each other as geo-strategic adversaries,

especially following the Russian invasion of Ukraine in 2014.

However, Washington and Moscow now must cope with multipolar challenges, as well. The U.S. sees China’s military (including nuclear) modernization efforts and its pursuit of regional dominance as a major challenge to American and broader Western interests in the Asia-Pacific region. Hoping to deepen its ties with China, Moscow has been careful not to openly express concerns with Beijing’s expanding power and influence, but one wonders if their “strategic partnership” is durable. North Korea’s nuclear weapons and ballistic missiles are another post-Cold War phenomenon, obliging the U.S. to update its deterrence thinking and bilateral alliance relationships in the region (especially with Japan, South Korea, and Australia). Unlike North Korea, Iran has stopped short of becoming a nuclear-armed state, but its nuclear activities have become a source of concern within and beyond the Gulf region.

A second evolution since the Cold War involves “extended deterrence”. Extended deterrence means that a country is both able and willing to deter aggression not only against its own territory, population, and vital interests, but also against that of an ally or group of allies. During the Cold War, the “linkage” between U.S. strategic nuclear forces and several thousand U.S. nuclear weapons forward-based in and around Europe became the sine qua non of the American commitment to deter or, if necessary, repel a Soviet attack. With the end of the Cold War, the U.S., France and U.K. slashed their nuclear arsenals, and NATO substantially reduced the role of nuclear weapons in its deterrence and collective defense strategy.

Meanwhile, the geography of extended deterrence changed; the most plausible flashpoint for military confrontation with Russia moved from the old inner German border to the Baltic allies and Poland. Today, while not questioning the continuing need for U.S. extended deterrence, some Europeans have argued that the relatively small number of

U.S. forward-based non-strategic nuclear weapons—less than 5 percent of the total present on European territory during the Cold War—are no longer essential for that purpose and should be withdrawn from Europe. Others, especially those in northeastern Europe who feel most exposed to Russian pressure, oppose their withdrawal, at least in the absence of Russian elimination of their much larger arsenal of non-strategic nuclear weapons.

A third transformation involves the impact of new technologies on deterrence. During the Cold War, the U.S. and Soviet strategic programs—as well as the much smaller French and U.K. programs—prioritized nuclear weapons. Indeed, those weapons and delivery systems continue to play a central role in Russian, U.S., French, and UK deterrence strategies, but the intersection of technological change and the new, multipolar threat environment complicates deterrence calculations. Several trends since the early 1990's are of particular concern. The proliferation of nuclear, missile, and related technologies made it possible for Pakistan and North Korea to join the ranks of nuclear weapon states, and their pace of development has generally exceeded expectations. In addition, new technologies have facilitated the development and proliferation of non-nuclear and dual-capable weapons that can have strategic effects. These include new precision-guided intermediate and longer-range strike weapons, ranging from cruise and ballistic missiles, to unmanned but armed submarine vehicles, to new hypersonic delivery vehicles designed to penetrate missile defenses. Meanwhile, other categories of advanced technologies—offensive cyber, anti-satellite, artificial intelligence, autonomous weapon systems—pose a particular threat to intelligence, surveillance, and reconnaissance assets, as well as command and control networks, that constitute a vital backbone for nuclear deterrence.

Implications for Sweden

To paraphrase Leon Trotsky's dictum on war: "You may not be interested in nuclear weapons, but nuclear weapons are interested in you". Although Sweden is a non-nuclear weapon state in full compliance with the Treaty on the Non-Proliferation of Nuclear Weapons and other international commitments, it cannot be indifferent to changes in the international security environment that threaten to halt or reverse progress in reducing nuclear arsenals, the risk of their use, and the spread of nuclear weapons beyond the nine states either declared or considered to hold them.

Take, for instance, developments involving Russia. Americans and Europeans might not fully agree on the details of Russian doctrine, and there is some debate over whether Russia has a so-called "escalate to de-escalate" strategy, which could lower the threshold for nuclear use in a crisis. But there is broad transatlantic agreement that Russia's nuclear modernization program has been extensive, that it maintains a large stockpile (estimated at some 2,000 warheads) of non-strategic nuclear weapons in addition to its strategic forces, and that it has engaged, in recent years, in what amounts to "nuclear saber rattling" with its conduct of military exercises (some of which have included simulated nuclear attacks), and menacing rhetoric. When Russia's nuclear programs are viewed alongside its conventional force improvements and, especially, its military posture and exercises opposite the Baltic States, there is little doubt that Moscow aims to increase its overall capability for rapid power projection in the region, making it more difficult for NATO to assist a threatened ally or partner. Russia's violation of the 1987 Intermediate Nuclear Forces Treaty, which ultimately led to the agreement's recent demise, was consistent with other efforts by Moscow to establish "escalation dominance" in the Nordic-Baltic region.

Meanwhile, NATO's consensus on nuclear policy is under stress. By way of background, while NATO is a self-declared "nuclear alliance," it does not own nuclear weapons. Instead, the strategic forces of the Alliance, particularly those of the U.S., are the "supreme guarantee of the security of the Alliance," while the independent strategic nuclear forces of the U.K. and France have a deterrent role of their own and contribute significantly to the overall security of the Alliance. But the three "nuclear allies" are not the only allies capable of participating in nuclear missions. This is because, over the years, NATO has developed "nuclear-sharing arrangements" under which U.S. nuclear gravity bombs based in Europe could be released, only upon U.S. presidential authorization, to a small number of NATO allies with special combat aircraft and crews able to conduct nuclear missions under NATO command and control.

The presence of those weapons has been especially controversial in Germany, where the Social Democratic Party earlier this year appointed a commission to re-evaluate its positions on foreign and security policy, including Germany's role in those nuclear-sharing arrangements. In past years, there has been widespread concern in NATO that if the Germans were to break ranks on nuclear sharing arrangements, other participating European allies would follow suit and either terminate the basing arrangements and/or no longer maintain their dual-capable aircraft and crews able to perform nuclear missions. This could cause some Americans to question the underlying value, costs, and risks of maintaining extended deterrence, as it would appear that Europeans (except for the French and British) were prepared to shirk their fair share of the nuclear risks and responsibilities.

NATO solidarity also could be affected by developments in the arms control field. Over more than five decades, several types of U.S.-Soviet and, later, U.S.-Russian formal agreements, coordinated actions, and risk reduction accords have demonstrated that adversarial or hostile

states can still have important interests of military policy in common. From the first Strategic Arms Limitation Treaty in 1972 to the New Strategic Arms Reduction Treaty in 2010, the sides have progressively increased transparency and predictability, and decreased the size of their nuclear arsenals without sacrificing either side's ability to deter the other or to modernize, within agreed constraints, their respective deterrents. With the collapse of the INF Treaty, New START is the last remaining bilateral agreement limiting strategic weapons and delivery systems, but it will expire on February 5, 2021, unless Washington and Moscow agree before then to extend its provisions by another five years, as permitted by the treaty. Moreover, as of mid-November, the sides have not announced a start date for formal negotiations.

This situation is worrisome. It is far from clear, for example, that the current U.S. administration appreciates that its NATO allies expect to see a robust arms control posture by Washington as a quid pro quo for their continued support to enhancements to NATO's nuclear posture and its preservation of nuclear-sharing arrangements required to respond to Russia's behavior. Furthermore, if the administration is perceived as indifferent or hostile to extending New START, it will risk losing the approval of the Democratic-controlled House of Representatives to fund the nuclear modernization and missile defense programs. This is why a number of prominent American experts have proposed a pragmatic approach, which would include extending the New START agreement while initiating high-level "strategic stability talks" in various formats—bilaterally with Russia, trilaterally (to include China), and eventually multilaterally (to include France, the U.K., and potentially others). The purpose of these talks would not be to negotiate new arms control treaties in the short term, but to have an in-depth discussion of each side's strategic concerns and to identify practical measures to reduce the risk of war—which is, after all, the shared objective of deterrence and arms control.

Beyond its regional neighborhood, Swedish diplomatic, security, economic, and humanitarian interests could be affected, to varying degrees, by developments far from its borders. A failure of deterrence on the Korean peninsula would have dramatic consequences. These might include a sharp deterioration in U.S. relations with China and Russia, a reappraisal of U.S. alliances with Japan and South Korea (if brash action by Washington was perceived as partly responsible for a conflict), and a significant transfer of U.S. military assets from Europe to meet urgent war-fighting tasks in Asia. A military conflict between nuclear-armed India and Pakistan, as the latter's prime minister warned in August in an op-ed in the *New York Times*, would have "consequences for the whole world". As well, the continued unraveling of the 2015 Joint Comprehensive Plan of Action that placed limits on Iran's nuclear programs could further heighten military tensions in the Gulf region—where the U.S. and Iran narrowly avoided a direct military clash over the summer—and rekindle interest in Turkey, Saudi Arabia, and Egypt in acquiring a nuclear weapons capability of their own.

That Swedish officials and non-government experts have, since the end of the Cold War, tended to focus their analysis and engagement on nuclear non-proliferation and disarmament issues rather than acknowledge the contribution of Western nuclear forces to deterrence is perhaps understandable. And some might see a more public discussion of deterrence and the role of nuclear weapons as unnecessary and/or politically counterproductive. But enhanced understanding of the nuclear dimensions of deterrence would complement, not detract from, Swedish interest in non-proliferation and arms control. At the same time, while Sweden is not a NATO ally, its growing national defense effort—reflected in areas such as enhanced readiness, increased investment, strengthened bilateral and multilateral defense cooperation efforts, and hosting of and participation in multilateral exercises focusing on territorial defense—substantially contributes

to conventional deterrence of potential Russian aggression in the Nordic-Baltic region.

Finally, if one accepts that there will be a continuing role for nuclear weapons as part of an effective Western deterrent against any such aggression, then Sweden logically should take a long, hard look before joining efforts that delegitimize the possession of nuclear weapons or dilute the primacy of the NPT. Indeed, the Swedish government's announcement in July that it will not sign the UN Treaty on the Prohibition of Nuclear Weapons "in its current form" is, perhaps, a grudging recognition of that hard reality.

Author's note:

For further reading on this subject, please see:

["Strategic Deterrence Redux: Nuclear Weapons and European Security"](#) by Leo Michel and Matti Pesu, FIIA Report 60, September 2019.

["Exploring the Role Nuclear Weapons Could Play in Deterring Russian Threats to the Baltic States"](#) by Paul Davis, J. Michael Gilmore, David Frelinger, Edward Geist, Christopher Gilmore, Jenny Oberholtzer, and Danielle Tarraf, RAND Corporation, Fall 2019.