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**RUSSIAN NUCLEAR
STRATEGY: IMPLICATIONS
FOR DETERRENCE AND
ARMS CONTROL**

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Introduction

Against the backdrop of Russia's invasion of Ukraine, expectations of a stable, predictable, and indivisible European security order have seemingly failed to materialise. Given the implications of the war, debates surrounding nuclear weapons returned to public scrutiny after long being confined to a niche of experts and policymakers. Arguably, the conflict triggered the most serious nuclear crisis since the end of the Cold War, which is exacerbated by the allusive wording of Russian officials and pundits regarding the use of nuclear weapons. Anxiety about Moscow's first strike against Kyiv or its allies slowed down support for the invaded country. As such, this InfoFlash considers the implications of Russian nuclear posture for Ukraine and Europe, analysing the structure of Russian nuclear forces and doctrine, and their relations with Moscow's strategic goals.

The Nuclear Dimension of Russia's Invasion of Ukraine

Nuclear weapons have been relevant to the conflict since its earliest stages. First, even though Ukraine's application to NATO seemed a dead letter before the invasion and nuclear warheads were never deployed to NATO's eastern flank, Russia proved dissatisfied with the enlargement of the Alliance and its nuclear umbrella. Second, Ukraine briefly possessed the world's third-largest nuclear stockpile but handed it over in exchange for a security pledge from the Nuclear Weapon States (NWSs) under the Non-Proliferation Treaty (NPT). Third, claims by Moscow that its nuclear umbrella extends over the occupied territories make a fair resolution of the conflict increasingly challenging. In this regard, NATO's calibration of military aid and its refusal to impose a no-fly zone over Ukraine seemingly point to the effectiveness of nuclear blackmail. Fourth, after enabling the invasion, Belarus, a major buffer state between Russia, Ukraine, and three EU/NATO members, yielded to Moscow's pressure, amending its long standing nuclear-free status and negotiating the deployment of non-strategic nuclear warheads on its soil (Napoli, 2022). Fifth, and finally, Russia rescinded its ratification of the Comprehensive Nuclear Test Ban Treaty (CTBT) and suspended its participation in the New Strategic Arms Reduction Treaty (New START), the gold standard for transparency and confidence-building in nuclear arms control. With the New START set to expire in 2026, the prospect of a world without strategic arms control seems more likely than ever before.

The Structure of Russian Nuclear Forces

Before examining the nuclear strategy of the Russian Federation in greater depth, it is necessary to outline the structure of its nuclear forces. By the end of the Cold War, the nuclear forces of the Soviet Union (USSR) were comparable in both quality and quantity to those of the United States (US). After the dissolution of the USSR, four newly independent states retained a share of the Soviet nuclear arsenal: Russia, Belarus, Kazakhstan, and Ukraine. However, only the Russian Federation inherited the status of NWS under the NPT, while the other three agreed to nuclear disarmament in exchange for negative security assurances. From the perspective of the Russian military and political leadership, the limitations imposed by the START Treaties on the number of deployed strategic nuclear warheads enshrined stability with the US. As such, strategic nuclear warheads, delivery systems, and storage facilities were not open to modernisation until the mid-2000s.

Non-strategic nuclear weapons were not subject to the same legal restrictions but shrunk in numbers because of unilateral and reciprocal arms reduction initiatives undertaken by the USSR. Meanwhile, owing to budgetary constraints, the Russian conventional forces declined in personnel, equipment, and combat readiness. Likewise, the country had no early warning satellites but only a radar system that could detect the launch of a missile a few minutes before the impact. For all the above reasons, when relations with the US and NATO began to deteriorate, Moscow prioritised the modernisation of its nuclear arsenal to compensate for the weakness of its conventional deterrent (Pavlov, 2020). According to the Russian Ministry of Defence, as late as 2022, newer military hardware made up 91.3 per cent of its nuclear capabilities, but it is hard to verify such claims independently (Kristensen et al., 2023).

As of early 2023, the Bulletin of Atomic Scientists assessed that Russia possessed approximately 4,489 active nuclear warheads. Of these, only 1,674 were deployed on strategic delivery systems: about 834 on land-based ballistic missiles, 640 on submarine-launched ballistic missiles, and 200 on heavy bomber bases. Additionally, roughly 999 strategic warheads and 1,816 non-strategic warheads were in storage. Remarkably, the storage sites are in close proximity to the borders of Belarus, Ukraine, and the frontline countries of the EU and NATO (Kristensen et al., 2023).

Insights into Russian Nuclear Doctrine

Along with the nuclear and conventional capabilities inherited from the USSR, the Russian Federation retained the same strategic priorities and concepts. The US remained its principal opponent, a fact which did not change as relations improved. However, with a conventional force in decline and a short early warning time, Moscow stepped back from its previous policy of 'no first use', thus increasing the weight of nuclear weapons, particularly non-strategic, in military calculations. Though the details of Russian nuclear doctrine are not disclosed, the most relevant principles are found in official documents, such as the 2014 Military Doctrine of the Russian Federation and the 2020 Foundations of State Policy in the Area of Nuclear Deterrence. Both contain the same statement: 'The Russian Federation shall reserve the right to use nuclear weapons in response to the use of nuclear and other types of weapons of mass destruction against it and/or its allies, as well as in the event of aggression against the Russian Federation with the use of conventional weapons when the very existence of the state is in jeopardy' (Pavlov, 2020).

This same provision is routinely clarified and expanded in press statements made by Russian officials and pundits. For instance, as early as 2018, Putin himself claimed that: 'Our concept is based on a launch-on-warning strike. This means that we are prepared and will use nuclear weapons only when we know for certain that some potential aggressor is attacking Russia, our territory' (Arbatov, 2021). Following the invasion of Ukraine, allusions to the use of nuclear weapons increased further. On 22 February 2022, Putin stated: 'whoever tries to hinder us or threaten our country or our people should know that Russia's response will be immediate and will lead you to consequences that you have never faced in your history'. Later, in a briefing with the Russian Defence Minister Sergey Shoigu and the Chief of General Staff Valery Gerasimov, he placed the Russian nuclear forces on a higher alert status.

On 21 September of the same year, when annexing four Ukrainian regions, Putin declared: 'if Russia feels its territorial integrity is threatened, we will use all defence methods at our disposal, and this is not a bluff' (Sinovets, 2023).

Nuclear Weapons and Cross-Domain Coercion

Whoever attempts to understand Russian nuclear strategy faces a dilemma. On the one hand, Western scholars and military planners may wrongly assume that Russian political and decision-makers share the same intellectual categories, thus falling into the trap of mirror imaging. On the other, Russian official documents and publications can be intentionally misleading or deceptive and often contradict evidence from military manoeuvres and exercises (Blank, 2020).

Against this backdrop, it would be a mistake to consider Russian nuclear strategy as a stand-alone issue and decouple it from changes in national military thinking since the early 2000s. Indeed, while affected by conventional inferiority vis-à-vis the US and NATO, the Russian political and military leadership misinterpreted democratic breakthroughs in Georgia and Ukraine as Western attempts to undermine Moscow's sphere of privileged influence by waging war below the threshold of conventional and nuclear escalation. As a response to such an emerging challenge, the Russian military scholarship developed the concept of 'New Generation Warfare' (NGW), a paradigm that Dima Adamsky properly summarises as 'cross-domain coercion' (Bērziņš, 2019; Adamsky, 2020).

The concept of NGW envisages a blending of kinetic and non-kinetic means to achieve victory with minimal use of resources against the opponent, ideally, a NATO-backed country. Drawing from both the Soviet theory of operations and lessons from the Revolution in Military Affairs (RMA), NGW heavily relies on deception and disinformation to shape the battlefield before the beginning of military action, which is often conducted by deniable proxy forces. Eventually, a political and economic campaign is orchestrated to coerce the enemy into a pre-determined set of options, to its detriment (Bērziņš, 2019; Adamsky, 2020). Against this framework, strategic and non-strategic nuclear weapons would enable Moscow to start regional wars from a position of dominance and, by deterring NATO from intervening, exert reflexive control against a conventionally stronger enemy (Blank, 2020; Blank, 2022). As Heather Williams pointedly noted: 'Russia's strategy relies heavily on information warfare and nuclear coercion at opposite ends of the spectrum of escalation. It is heavily weighted in the early stages to sow discontent within states that are domestically weak and capitalising on regional disputes. The strategy does not linger in the conventional stages, wherein Russia would be inferior over the long-term in a conflict with NATO, and instead relies on nuclear coercion to avoid escalation' (Williams, 2019).

Conclusions

Against this backdrop, cross-domain coercion has seemingly set the course of action in Ukraine since the beginning of the conflict. Once Ukrainian resilience and the resolve of the EU and NATO had thwarted the invasion, Moscow leveraged its nuclear forces to draw a red line on a no-fly zone and certain kinds of military aid. Though most Russian nuclear statements are deliberately vague, hard to verify, and perhaps not even grounded in reality, Ukraine's allies have deemed them as inherently credible, restraining their commitment and emboldening further nuclear threats, which included a reconsideration of international arms control agreements (Blank, 2022; Sinovets, 2023). On the other hand, Kyiv persistently crossed Moscow's red lines with strikes on the illegally annexed territories and the Russian Federation itself. As a result, the EU and NATO countries considerably increased their military supplies in terms of quality and quantity, but refrained from moves that could appear irrevocably escalatory, such as the imposition of a no-fly zone over Ukraine (Sinovets, 2023). Given the poor performance of Russian conventional forces and the challenges of procuring cutting-edge technology because of sanctions, Moscow's reliance on nuclear weapons is likely to increase in the future. Moreover, Russia is experiencing a steady demographic, societal, and economic decline. With nuclear weapons remaining the last guarantee of super-power status and international influence, hardliners in the Kremlin will likely perceive future arms control negotiations as unilateral concessions to the West (Arbatov, 2017).

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