

The War against Ukraine and Its Lessons for NATO Militaries: Food for Thought

by Alessandro Marrone

One year of full-fledged conventional war fought on the European continent between two large countries, including a nuclear power, is obviously a historical watershed for NATO and the whole Euro-Atlantic area, whose strategic implications are yet to be fully assessed.

The conflict has already destroyed a number of expectations widely shared in Western Europe, including the ideas that Putin would not have invaded the whole of Ukraine, that Western sanctions would have paralysed his ability to wage a prolonged military campaign, or that Europeans would have diminished their military support to Ukraine over the first wartime winter. Given the ongoing “fog of war” and uncertainty about future scenarios, it is perhaps too early to identify lessons for allies and their militaries. Still, the following elements may be considered food for thought for the Western defence policy communities, *cum grano salis*.

Conventional deterrence reloaded

First and foremost, allies have to better prepare for a war with Russia in order to deter Moscow from starting it. NATO defence planning never disregarded collective defence and the requirements for a large-scale, high-end conflict against a peer competitor.

Yet, as a matter of fact, three decades of focus on crisis management and stability operations largely shaped and shifted the priorities, doctrines, structures and forces of several allies, particularly in Western Europe, away from state-to-state war. Moreover, over the 2000s, such an expeditionary focus concurred to a greater priority for light forces among several members, as well as a downsizing of the NATO integrated military command.

After the 2014 Russian invasion of Crimea, the tide began to slowly turn towards conventional deterrence and defence based on larger and heavier

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forces, but only on 24 February 2022 a real sea change occurred. One year later, allies are reflecting on how to revise their force planning and capability development accordingly.

Preventing a war of attrition

In this regard, a key point to be taken from the Russian war against Ukraine is attrition.¹ The magnitude of both human casualties and destruction of military equipment shouldered by Ukrainians have not been experienced by the Americans since the Vietnam war, and by Europeans since 1945. Furthermore, the conflict is taking place according to the “front/trench” logic, a type of warfighting that had been put aside prior to the war in Ukraine.² To prevent such an attrition war scenario from coming true, two crucial, complementary aspects have to be balanced by allied militaries.

On the one hand, they have to invest in next-generation capabilities able to counter and outmatch the Russian military. They include missile defence³ against hypersonic weapons, fifth- and sixth-generation aircraft, next-

generation main battle tanks⁴ and helicopters, as well as advanced naval combat systems.⁵ To make just but one example, the Russia-Ukraine war put an end to the assumption that Western armed forces would enjoy air superiority after destroying the enemy’s air defence: survivability is again a key issue for both fixed and rotary-wing aircraft, to be addressed through a mix of elements including hardware and technologies as well as doctrines, tactics and procedures.

On the other hand, the war in Ukraine has demonstrated the importance of mass.⁶ Ukraine could stand the Russian invasion only thanks to an unprecedented flow of military equipment from the West.⁷ Accordingly, in most cases, for NATO allies a large-scale acquisition of state-of-the-art equipment is necessary to create the critical mass to prevent and eventually win an attrition war in terms of armour, manoeuvre, logistics and ammunition stocks. Vis-à-vis the Russian threat, quality and technology can no longer come at the expense of quantity: a

¹ On the attrition occurred see Douglas Barrie and Yohann Michel, “War in Ukraine, Where Quantity As Well As Quality Matters”, in *Military Balance Blog*, 22 April 2022, <https://www.iiss.org/blogs/military-balance/2022/04/war-in-ukraine-where-quantity-as-well-as-quality-matters>.

² Laurent Bansept, “Le retour de la haute intensité en Ukraine: Quels enseignements pour les forces terrestres?”, in *Focus stratégique*, No. 111 (July 2022), <https://www.ifri.org/en/node/24521>.

³ Alessandro Marrone and Karolina Muti (eds), “Europe’s Missile Defence and Italy: Capabilities and Cooperation”, in *Documenti IAI*, No. 21|05 (April 2021), <https://www.iai.it/en/node/13072>.

⁴ Alessandro Marrone and Ester Sabatino (eds), “Main Battle Tanks, Europe and the Implications for Italy”, in *Documenti IAI*, No. 20|07 (April 2020), <https://www.iai.it/en/node/11536>.

⁵ Alessandro Marrone and Elio Calcagno (eds), “Naval Combat Systems: Developments and Challenges”, in *Documenti IAI*, No. 23|01 (January 2023), <https://www.iai.it/en/node/16476>.

⁶ Julian Brazier, “Mass, Mobilisation and Reserve Forces”, in *RUSI Occasional Papers*, September 2022, <https://rusi.org/explore-our-research/publications/occasional-papers/mass-mobilisation-and-reserve-forces>.

⁷ For an overview of arms supplies to Ukraine see Mark F. Cancian, “Aid to Ukraine: Much More Than Tanks”, in *CSIS Commentaries*, 2 February 2023, <https://www.csis.org/node/103720>.

different mix of high-valued and expendable assets is necessary.

Drones are a case in point. They have been part of sophisticated Ukrainian attacks that succeeded in sinking the Russian flagship Moskva – a major military victory for Kyiv⁸ – and have been successfully employed by Russia to saturate Ukrainian air defence, paving the way for missiles and bombs hitting Ukraine's critical infrastructure.⁹ Western militaries should make a quantum leap in integrating drones and counter-drones capabilities into land, air and naval warfare at tactical and strategic levels: as about 90 per cent of unmanned aircraft systems (UAS) employed in Ukraine were expendable, those to be procured must be for the most part cheap and attritable.¹⁰

Such an increased effort on mass should include the necessary investment in maintenance, repair and overhaul, in order to increase the real availability of European capabilities well beyond the current low percentage of combat-ready units out of forces available on paper. Last but not least, logistics have

been recognised by several experts as one of the major weaknesses of Russian invading forces,¹¹ and could be an Achilles' heel also of allies in the event of a large-scale conflict. Stocks and supply lines should be substantially enhanced to sustain a larger military effort than previous Western campaigns over the post-Cold War era.

Doctrine, tactics, training, command and control

Military power is not only about hardware, and the importance of sheer numbers should not be overestimated. One year ago, many observers expected Russia's overwhelming military to defeat Ukrainian defence in a few weeks. Instead, the relative ineffectiveness of Russia in terms of strategy, use of intelligence, planning, preparation and execution has been a major cause of the initial operational failures to capture Kyiv.¹² Broadly speaking, in the first months of the offensive, Russian advances have seemingly been hampered by poor tactics, leadership and logistics,¹³ including with regard to the employment of aircraft, helicopters and main battle tank fleets. Doctrine,

⁸ Amélie Ferey, "Par-delà le Moskva: la persistance du fait naval dans l'environnement stratégique", in *Briefings de l'Ifri*, July 2022, <https://www.ifri.org/fr/node/24395>.

⁹ Ottavia Credi et al., "Short Range Air Defence: Operational and Technological Developments", in *Documenti IAI*, No. 22|07en (September 2022), <https://www.iai.it/en/node/15971>.

¹⁰ Mykhaylo Zabrodskyi et al., "Preliminary Lessons in Conventional Warfighting from Russia's Invasion of Ukraine: February-July 2022", in *RUSI Special Reports*, 30 November 2022, <https://rusi.org/explore-our-research/publications/special-resources/preliminary-lessons-conventional-warfighting-russias-invasion-ukraine-february-july-2022>.

¹¹ Seth G. Jones, "Russia's Ill-Fated Invasion of Ukraine: Lessons in Modern Warfare", in *CSIS Briefs*, June 2022, <https://www.csis.org/node/65579>.

¹² Pierre de Dreuzy and Andrea Gilli, "Russia's Military Performance in Ukraine", in Thierry Tardy (ed.), "War in Europe: Preliminary Lessons", in *NDC Research Papers*, No. 23 (May 2022), p. 25-40, <https://www.ndc.nato.int/download/downloads.php?icode=767>.

¹³ Ben Barry, "Superior Tactics Frustrate Russia but Ukraine's Supply Line May Be Vulnerable", in *IJSS Analysis*, 12 April 2022, <https://www.ijss.org/blogs/analysis/2022/04/superior-tactics-frustrate-russia-but-ukraines-supply-line-may-be-vulnerable>.

tactics, planning, training, discipline, leadership and morale are as intangible as crucial elements in a state-on-state war, as shown by the Ukrainian armed forces holding the ground and fighting back an enemy far larger and more powerful on paper.

Against this backdrop, NATO militaries must revise and revamp their doctrine, training, command and control capabilities for large-scale, joint and combined operations. They should also practice them through adequate, regular, multinational drills within NATO. This is particularly important for Europeans, which are called to share a greater burden of Europe's collective defence as the US mid- to long-term strategic priority remains China and the Indo-Pacific. Indeed, European allies will have not only to ensure the commitment to forward defence on Alliance's Eastern flank for a long time, but also to allocate a bigger share of their best units at high-readiness level in the framework of the NATO response force and the new force model.

Stocks and industrial capacity

A comprehensive allied posture focused on collective deterrence and defence against a peer threat needs to be supported by adequate military stocks, as well as an industrial capacity fit for the task. Here, again, the problem is mainly for Europeans, as unexpected, robust and prolonged military supplies to Ukraine have reduced military stocks in the EU to the bare minimum.¹⁴

¹⁴ Léo Péria-Peigné, "Stocks militaires: une assurance-vie en haute intensité?", in *Focus stratégique*, No. 113, <https://www.ifri.org/fr/node/25795>.

Because of the war, Europe has a further and urgent reason to move beyond the current fragmentation of both the demand and supply sides of the European defence market.

Joint procurement programmes are key for effective and affordable multinational solutions to the armed forces' needs, including the development of next-generation capabilities and the acquisition of a large number of state-of-the-art systems and ammunitions.

The EU institutions can and should provide economic incentives for joint efforts by member states to replenish and increase stocks together,¹⁵ and to augment the production capacity of the European defence industry by pooling demand. European countries, within both the NATO and EU frameworks, have to plan joint military investments over the mid-to-long term also to encourage the private sector to autonomously invest in factories, personnel and supply chains.

The path towards a credible deterrence

Finally, a scenario of NATO-Russia conflict would be different from the current war against Ukraine. In the event of a Russian conventional attack against a European NATO member, the full conventional military might of the US and Europe would be mobilised. This includes long-range weapons, air and naval capabilities able to inflict on

¹⁵ Felix Arteaga et al., "To Face the Russian Threat, Europeans Need to Spend Together – Not Side by Side", in *Euractiv*, 19 April 2022, <https://www.euractiv.com/?p=1745658>.

the Russian Federation in a few weeks far more damage than the Ukrainians bravely did over one year.

Still, the resilience of the Russian military, state and defence industry should not be underestimated, as history teaches. One year of war in Ukraine has demonstrated that despite a flawed initial strategy,¹⁶ and vis-à-vis robust Western support to Kyiv, Moscow prefers to lose an incredibly large part of its military resources on the battlefield, in terms of both blood and treasure, rather than to seek a truce. A NATO strategy would avoid as much as possible a nuclear escalation following a Russian attack, keeping the conflict at the conventional level.

Therefore, considering the risk-prone attitude of the Kremlin and Russian society's resignation to sacrifices, NATO militaries have to ensure a credible conventional and nuclear deterrence by denial in Moscow's eyes. This implies defending from day one the border of the Eastern flank, through a solid forward defence backed not only by rapid reinforcements of land forces but also by effective and timely multi-domain operations across the cyber, space,¹⁷ air and naval domains to stop a Russian attack.

¹⁶ Alessandro Marrone et al., *The Russia-Ukraine War, Security in Europe and European Defence*, Rome, IAI, November 2022, <https://www.iai.it/en/node/16243>.

¹⁷ Alessandro Marrone and Michele Nones (eds), "The Expanding Nexus between Space and Defence", in *Documenti IAI*, No. 22|01 (February 2022), <https://www.iai.it/en/node/14669>.

Managing NATO-Russia arms control

Such a credible deterrence should be accompanied by a renewed allied effort towards Russia on arms control and non-proliferation, including both conventional and nuclear weapons. The usefulness of such an effort may look counter-intuitive as the West is actively supporting Ukraine's defence against the Russian invasion through unprecedented supplies of weapons. Still, as happened in the darkest hours of the Cold War, channels of communication with the Russian Federation are necessary to avoid miscalculations, unintended escalation and extremely dangerous military incidents. A fortified NATO border with Russia stretching from Scandinavia to the Black Sea, far closer to Saint Petersburg and Moscow than in the 1980s, has to be properly managed to ensure the strategic stability of the Euro-Atlantic area.

The art of transparency and confidence-building measures among enemies has to be drawn from the Cold War experience, and adapted to the 21st-century reality of five operational domains, as well as emerging disruptive technologies from hypersonic weapons to artificial intelligence.¹⁸ As Europeans will have to share a greater burden of Europe's collective defence, they should also develop a more nuanced, coherent and updated view on the arms control side of deterrence. Since both

¹⁸ Sonia Lucarelli, Alessandro Marrone and Francesco N. Moro (eds), *NATO Decision-Making in the Age of Big Data and Artificial Intelligence*, Brussels, NATO, March 2021, <https://www.iai.it/en/node/12844>.

conventional and nuclear forces are inevitably part of the Russian strategy, they should be properly factored into the Western approach. This is even more important considering Vladimir Putin's decision to suspend Russian participation in the New START Treaty, which paves the way for dangerous miscalculation and escalation.¹⁹

To conclude, one year of large-scale, conventional war in Europe has proven that even remote, worst-case scenarios may rapidly materialise. NATO members cannot afford to be caught by surprise when it comes to the collective security of their territories and populations.

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¹⁹ Andrew Roth and Julian Borger, "Putin Says Russia Will Halt Participation in New Start Nuclear Arms Treaty", in *The Guardian*, 21 February 2023, <https://www.theguardian.com/p/nczbc>.

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