

MLRS

A possible Norwegian countermove against the Bastion Defense

By Ragnhild Tau Strand Oanes

In the current security political situation, the Russian Bastion Defense has gained renewed actuality, and is increasingly being highlighted as a potential threat towards Norwegian sovereignty in the ongoing debate. It is therefore interesting to note that this concept at its core is to be seen as a defensive concept thought to be used in a major conflict against a more or less equal opponent. As such, it is not likely to be seen as a major threat in the case of an isolated Norwegian-Russian conflict of interest, but may in return affect Norwegian interests if a conflict elsewhere on the globe escalates above a certain level.

The majority of Russia's strategic submarines are stationed at the Kola Peninsula, and these capacities are of crucial importance to Russia's defense. Their main function is to act as a deterrent from attacking Russia with

nuclear weapons. A robust second-strike capability is the very core of Russian defense planning. The Bastion Defense is therefore aimed at protecting these submarines by creating an extensive anti-access/ area denial (A2/ AD) "bubble," in order to preserve Russia's second-strike capabilities. Most of the elements in this concept will be found within the sea domain, but one must assume that it also will include, at least in part, essential elements within the land and air domains.

The first line of the Bastion Defense will most likely consist of nuclear-powered "hunter-killer" submarines with torpedoes and long-range missiles, supported by long-range air capabilities. This line will go from Greenland, via Iceland to the British Isles (the GIUK gap). Behind this line, there will be several defense lines consisting of a variety of ca-

pabilities within the sea, air and land domains. In such a context it may, inter alia, become necessary for Russia to occupy parts of Norwegian territory, in order to deploy long-range land-based air defense here. The creation of A2/AD bubbles will first and foremost become a necessity due to NATO's expected air supremacy. Especially "hunter-killer" submarines will be vulnerable to long-range patrol aircraft, such as the P-8 Poseidon or P-3 Orion. It is also worth noting that Russian maritime capabilities from the Northern Fleet have very limited abilities to perform a long-range anti-air defense of their own. The vessels that currently possess such capacities are also largely in the final stage of their lifespan. These shortcomings must probably be compensated by initially extending the physical distance between NATO territory and the vital installations on the Kola Peninsula. This can be done by, as an example, occupying Norwegian territory from Grense-Jakobselv to Porsangen or Lyngen. A full-scale invasion is therefore unlikely; it would rather be a matter of taking and holding a limited part of Norwegian territory. This may be accomplished by amphibious operations, land operations, air operations and hybrid operations, or through a combination of these.

The starting point of a possible conflict in which the Bastion Defense is activated is unlikely to take place within the context of a bilateral Norwegian-Russian conflict. A more relevant example would be a conflict of interests in the Baltics, where former Soviet states end up being occupied. The occupation could then be followed up by threats of defending the occupied areas with nuclear weapons if necessary. In this situation, it will be imperative to activate the Bastion Defense in order to maintain Russian second-strike capabilities.

At an early stage of the conflict, it will therefore be a possibility that parts of Norwegian land territory become occupied. This can

be expected to happen as part of a chain of events, where the Russians establish a forward line of operations between Greenland and the British Isles as described earlier. In such a scenario, the opponent will seek to create a comprehensive A2/AD bubble around his most vital and vulnerable installations on the Kola Peninsula. These installations are crucial in order to maintain Russian nuclear capacities. Simultaneously, this will create a situation where Russian units completely or partially block the supply lines across the northern Atlantic. In other words, two goals can be achieved over a relatively short time: Both maintaining second-strike capabilities, while at the same time weakening NATO's ability to hold its own territory over a short and medium time span, as an example in the former Soviet states in the Baltics.

Russian land-based A2/AD "bubbles" can be assumed to have a full range of around 300 kilometers, primarily being based on long-range missiles within the air and sea domains. As an example, SS-N-26 or SS-C-5 anti-ship missiles in conjunction with S-300 or S-400 air defense missiles. These will then be protected and supported by land capacities, including missiles and rocket launchers such as Iskander and 9A52-4 Tor-nado.

In relation to Norwegian territory, it will most likely be the case of a relatively limited action, at least initially. This implies that the operation may have to be carried out with fairly limited resources, as political and strategic interests will indicate that the center of gravity of the conflict will be outside Norwegian territory. Some analysts believe that the Bastion Defense may be expanded, and that areas as far south as Møre or Jæren can come under occupation. If this were to be the case, such operations would require a considerable amount of resources, and would therefore hardly take place in the initial stages of a conflict.

If Russian forces successfully

establish a forward Bastion Defense in the manner described, one of the consequences will be that NATO comes to face noticeable difficulties in order to reinforce the European theater. This will especially apply to the Scandinavian and Baltic areas of operations. Since the Baltic States may be expected to become a possible gravitational center in a future conflict, this may early on imply serious consequences for the alliance's ability to defend its own territory.

As mentioned, the installations on the Kola Peninsula are vital, both in order to maintain Russian second-strike capabilities and in the extension of this, in order to implement the Bastion Defense. In order to ensure these, it must be assumed that Russian forces will aim to occupy parts of Norwegian territory so to increase the physical distance between NATO-controlled territory and the Kola installations. This assumption is based, among other things, on declassified documents from both sides during the Cold War. A comprehensive A2/AD "bubble" around the area in question will discourage attacks on these installations through traditional capacities from the air or sea domain, while leaving them out of reach for current land forces. However, development is taking place, especially within the area of ammunition technology, which in the foreseeable future will allow us to attack the very core of the Bastion Defense by relatively simple means. This could again contribute to deterrence from triggering this concept.

As of today, conventional tube artillery can achieve a maximum range of roughly 40 kilometers, but within the next few years this range will presumably be extended up towards 100 kilometers. Such a capacity will expand the battlefield significantly, and to some degree constitute a multi-domain capacity with the ability to combat targets within the land and sea domains with a high degree of precision, provid-

ed adequate target data. These capacities will nevertheless have some limitations, essentially being a delaying element towards a potential invader, thus with a significant potential as a casualty and loss provider. In order to hamper the activation of the Bastion Defense and, in its most extreme consequence help raise the threshold for actions that could trigger these scenarios, one will still need the ability to deliver precise fire over significantly longer distances. In this context, it is interesting to note that several parties, including the U.S. Army, are pursuing the development of rocket ammunition with greatly improved range. Today, the MLRS system can deliver fire up to 120 kilometers, and up to 300 kilometers using Army Tactical Missile System (ATACMS) semi-ballistic missiles. The latter has its range restricted by the Missile Technology Control Regime (MTCR), where land-based missiles with a payload exceeding 500 kilos may have a maximum range of 300 kilometers.

It is known from open sources that the U.S. Army currently has under development a new range of ammunition for the MLRS system, using conventional rockets that do not fall under the definitions of MTCR. The project specifications list a maximum range up to 499 kilometers. Lockheed Martin and Raytheon are currently competing over this contract, which will be awarded in 2019, and initial deliveries taking place in 2023. This weapons system will constitute a far more cost-effective capacity compared to long-range missiles such as the before mentioned ATACMS, and at the same time possess a satisfactory degree of precision and considerably longer range. Norway purchased a number of MLRS platforms in the late 1990s, but the system was "mothballed" as early as in 2005. Norway does, in other words, already possess this capacity, which could be re-established without costly material investments. The core investment

for future use of this system will then be limited to upgrades of existing materiel, e.g., to Mittleres Artillerie Raketen System/ Lance Roquette Unitaire (MARS2/ LRU) through incorporating the European fire control system. An upgrade of this type will also ensure that the system will be used in accordance with the "Convention on Cluster Munitions," a convention that Norway ratified in November of 2006. Furthermore, an upgrade will lead to greatly reduced sensor-to-fire times, a factor that is critical for successful fast paced artillery offense.

A long-range weapons system based on the MLRS will therefore be simple to convert into a multi-domain capacity, able to combat targets within the sea and air domains using land based artillery. In this context, it might also be seen as a relatively cost-effective threat to the very core of the Bastion Defense, the fixed installations on the Kola Peninsula. In order for the Bastion Defense to continue to work effectively under such a threat, the physical distance between NATO territory and the installations at Kola would have to be significantly extended, with the operational and logistical challenges that this entails.

In a future operational environment, it can be expected that a possible opponent possesses significant sensor capacities in combination with the ability to combat targets with a high degree of strength and precision. This means that the opposing forces will be able to limit our freedom of action and movement, and thereby limiting our access to the different domains within a limited geographical area. This is done through establishing A2/ AD "bubbles." One possible solution to this problem is through applying a land-centric multi-domain approach. This way, one will be able to secure terrain, restrict the opponent's freedom of action and thus counteract the creation of said "bubbles." This will presumably create a need to use Special Forces (SF) and intelligence,

surveillance, target acquisition and reconnaissance (ISTAR) units capable of directing fire, which, in cooperation with long-range tube and rocket artillery, can act as "door openers" for friendly joint forces, including those from air and sea domains, which so far have been denied access to the area in question. The neutralization of these "bubbles" will of course have to be performed at maximum strength, speed and effect, through carefully coordinated operations linked and synchronized through digital networks.

A combination of tube and rocket artillery, with access to a wide range of ammunition types with corresponding ranges and precision, will form a versatile toolbox also within more traditional scenarios. Assuming that the future will give access to an increased sensor surface, including through sensor information from submarines and F-35 airplanes, as well as timely and accurate target data from SF and ISTAR units, this will give us a highly increased accessibility towards enemy troop concentrations and high-value targets.

Target data collected by NATO allies can be included in the target imagery by coordinating them in Artillery Systems Cooperation Activities (ASCA). Standoff from the ground in, for example, Troms will also offer a greater degree of speed and mobility, as well as provide a significantly lower signature than from said submarines or F-35s, which in turn will give opposing forces less room for countermeasures.

Over time, one must also expect that new technology will provide increased opportunities as to direct fire toward moving targets. This will, in turn, imply that these type of artillery capacities will have a further enhanced effect, both in relation to the neutralization of A2/ AD "bubbles," executing our own area denial operations, as well as enabling the achievement of a highly improved effect of counter-fire.

This toolbox will also offer cost-effective solutions in most scenarios, offering access to a wide range of munitions where costs vary greatly based on properties and applications. This will in turn enable the optimization of the capacities at hand, from a cost-benefit analysis related to the target imagery in question.

In order to achieve the objectives described in this article, it will of course be necessary to enable a determination and ability of thinking in new directions. There is also a requirement to develop new doctrines and operational concepts that safeguard key objectives against current predominant threats. This will in turn involve extensive adaptation, both intellectually and culturally, where one must develop the ability to make holistic approaches within operational planning in which all domains will be assessed. In this context, it may be an idea to create a specialized multi-domain unit, possibly within the structure of Norwegian Brigade N, with the ability to integrate sensors into digital networks linked up to NATO network enabled capability.

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