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## The missile threat in the Mediterranean: implications for European security

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### Theme

The proliferation of missiles and rockets has steadily grown in the Mediterranean. The issue will constitute one of the central challenges for NATO and EU policies in relation to their southern flank.

### Summary

Given the contemporary flow of missiles and rockets in the Mediterranean, the security challenge posed by these arsenals is likely to remain a major concern for European security in coming years. This paper provides, first, an overview of the contemporary security environment, from the spread of Libya's MANPADs across North Africa to Hezbollah's missile strategy in the Levant. It then explores three different types of scenarios in which these devices could play a central role. Finally, it underlines the implications for the EU and NATO and offers some policy recommendations regarding military planning and regional partnerships.

### Analysis

As NATO sets up its 'Strategic Direction South Hub' at the Joint Forces Command in Naples to address challenges in the Mediterranean, it is worth looking at the recent developments in missile proliferation and how they affect the security environment in both North Africa and the Levant. These days, missile defence might not catch the attention of politicians as it did 10 years ago but that does not mean that the threat has disappeared. On the contrary, it is likely to grow bigger and more complex in coming years as shown by the contemporary flow of missiles and rockets in the Mediterranean and their potential use against European military forces or civilian targets. This paper offers a brief overview of missile proliferation in the region and discusses three types of scenarios that would require critical policy decisions.

### The long history of missile proliferation in the Middle East

Missile proliferation is nothing new in the Mediterranean and was historically driven by the Arab-Israeli conflict. Arab armed forces embarked on ballistic programmes in the early 1970s in order to counter the conventional primacy of Israeli forces. Helped by the

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<sup>1</sup> The views expressed in this paper are strictly those of the author. They do not reflect the views of the UAE National Defense College or of the government of the United Arab Emirates.

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USSR, the Egyptians acquired Frog-7 missiles (with a 70km range) and Scud-Bs (300km) in 1973. Three of these Scud-Bs were launched during the Yom Kippur war to destroy Israeli bridges along the Suez Canal –although they failed to reach their targets–.<sup>2</sup> Like Egypt, Syria began its search for rockets and missiles in the 1970s. The Soviet Union was also the primary provider to Damascus of short-range ballistic missiles. In North Africa, Libya too purchased Scud-Bs and Frog-7 during that period.

The 80s saw an increased use of these weapons in the region. In 1986 Libya retaliated to a US air raid by firing two Scuds on the Italian island of Lampedusa. That same year, Iraq and Iran used ballistic missiles in the so-called ‘war of the cities’, a bloody episode of the eight-year conflict in which armed forces targeted urban centres in both countries. By 1990, Iraq was described by the US intelligence community as having ‘the most aggressive and advanced ballistic missile development program in the Arab world’.<sup>3</sup> Emboldened by his missiles, Saddam fired 42 Scud missiles on Israel right after the start of Operation Desert Storm in January 1991.

The end of the Cold War and the 1991 Gulf War led to major changes in the regional missile race. As an embargo was imposed on Iraq, its arsenal aged and it became difficult for Saddam Hussein to match the regional competition. Libya, Syria and Iran became the most active countries in the Middle East, developing and purchasing all sorts of delivery systems. The cause of greatest concern was that the three countries also started seeking non-conventional payload, working on the weaponisation of chemical and biological agents as well as investing resources in the development of nuclear energy and its potential military use.<sup>4</sup>

But the following years would see two of these three states dismantling their arsenals. In 2003, fearing a Western intervention, Gaddafi decided to give up his WMD programme, and Libyan chemical, biological and nuclear programmes as well as long-range delivery systems were subsequently dismantled.<sup>5</sup> Ten years later, in the middle of a protracted civil war, the Syrian regime of Bashar al-Assad also conceded a disarmament plan of its chemical weapons –though the complete dismantlement of the arsenal remains uncertain–. Still, these events left Iran, a country with no Mediterranean coast, as the de facto biggest proliferator in the Middle East.

### The contemporary environment

If the missile threat in the Mediterranean is ancient, its contemporary strategic meaning has evolved. Whereas proliferation from the 70s was driven by regional competitors, the arsenals circulating today in the Mediterranean are mostly controlled either by non-state armed groups or external powers.

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<sup>2</sup> Joseph Bermudez (1991), ‘Ballistic Missiles in the Third World: Egypt and the 1973 Arab-Israeli War’, *Jane’s Intelligence Review*, vol. 3, nr 12, December, p. 537.

<sup>3</sup> Central Intelligence Agency (1990), ‘Iraqi Ballistic Missile Developments’, Memorandum, July (CIA Electronic Reading Room, released under the Freedom of Information Act).

<sup>4</sup> Stephane Delory (2011), ‘The dynamics of missile proliferation in the Middle East and North Africa’, EU-Non Proliferation Consortium, Background paper, 6/VII/2011.

<sup>5</sup> William Tobey (2014), ‘A message from Tripoli: How Libya gave up its WMD’, *Bulletin of the Atomic Scientists*, 8/XII/2014.

In Libya, the chaos following the war led to the looting of the country's stocks of weapons and ammunition. Given Gaddafi's record in missile proliferation, analysts and decision-makers fear that the unravelling of the country and its security infrastructures will lead to a massive flow of missiles and rockets throughout North Africa. In particular, the concern focuses on the likelihood of terrorist organisations or militias stealing and using man-portable air-defence systems (MANPADs). Easily transportable and requiring only a limited level of training, MANPADs in Libya were said to amount to around 20,000 before the 2011 NATO operation.<sup>6</sup>

This figure was later downgraded, given the estimated number of those that had been either used by Gaddafi or destroyed by the NATO air campaign. Still, a 2015 report from the Small Arms Survey evaluated that between 3,000 and 12,000 Libyan MANPADs could be currently circulating in the region. Noticeably, the broad discrepancy in the numbers shows the degree of uncertainty surrounding them.<sup>7</sup> Over the past few years, the UN Panel of Experts on Libya identified Libyan MANPADs in Lebanon, Syria, Mali, Egypt and Tunisia, as well as in the Central African Republic.<sup>8</sup> If there has been no report of these systems yet being used, either in Libya or elsewhere in the region, the implications are significant enough to demand better resources to monitor the flow.

But even without the Libyan conundrum, North Africa has witnessed several incidents involving rockets. In March 2016, al-Qaeda in the Islamic Maghreb claimed responsibility for a rocket attack against a gas facility in southern Algeria. The damages were limited –there were no victims among the plant's employees– and the rockets launched were indigenous, according to the Algerian authorities.<sup>9</sup>

The Egyptian military has also been facing for several years the challenge of extremist groups using rockets in the Sinai. In January 2014 the group known as Ansar Bayt al-Maqdis claimed a MANPAD attack against an Egyptian military helicopter that killed five soldiers. Although the investigation initially assumed that the system used by the terrorists originated from Libya, military experts later disputed the evidence and suggested that it was in fact an indigenous system.<sup>10</sup>

Perhaps more worrying was that Ansar Bayt al-Maqdis, later that same year, pledged allegiance to the Islamic State (IS). The latter is already suspected of having acquired some of the Libyan MANPAD stocks. Moreover, the IS in Iraq was believed in 2014 to have raided bunkers on the outskirts of Baghdad that stored 2,500 rockets armed with

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<sup>6</sup> According to an estimate by General Carter Ham during a hearing before the US Senate Armed Services Committee, 7/IV/2011, <http://www.africom.mil/media-room/transcript/8204/africoms-ham-testifies-before-the-senate-armed-ser> (last accessed 13/VIII/2017).

<sup>7</sup> Small Arms Survey (2015), 'Missing missiles: the proliferation of man-portable air defence systems in North Africa', Issue Brief, nr 2, June.

<sup>8</sup> United Nations Security Council (2016), 'Final report of the Panel of Experts on Libya established pursuant to resolution 1973 (2011)', 9/III/2016, p.40.

<sup>9</sup> 'Algérie: al-Qaïda revendique l'attaque à la roquette contre un site gazier', *Jeune Afrique*, 19/III/2016.

<sup>10</sup> Jeremy Binnie (2014), 'Egyptian Intel Says Igla Used to Down Helicopter', *Jane's Defence Weekly*, 7/II/2014.

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the lethal nerve gas sarin.<sup>11</sup> Given the logistical constraints in trafficking with chemical weapons, the group would have been hard pressed to move such arsenals between such distant theatres as Libya and Iraq. Nevertheless, some of its military cadres would have been able to circulate more easily in order to provide training and to coordinate future missile attacks.

If MANPADs are relatively rudimentary capabilities, the Lebanese theatre may be where the most sophisticated threat in the Mediterranean's shores is currently located. Thanks to the Iranian regime, the Lebanese Hezbollah has become the most advanced non-state armed group in the region –and a serious contender to many states–. This is in large part due to its inventory of missiles and rockets. The group started acquiring and launching Katyusha rockets in the early 1990s. Despite several wars with Israel (1992, 1996 and 2006), the stockpile kept growing. In 2016 Israel's Ministry of Defence evaluated the arsenal at 150,000 rockets.<sup>12</sup> If Hezbollah is now able to build its own rudimentary rockets, the most advanced systems it operates –short- to medium-range ballistic missiles– have been supplied through Syrian-Iranian support. The level of sophistication (range, accuracy and function) is unprecedented for a non-state actor that could easily use these systems in the Mediterranean.

Additionally, Hamas and smaller Palestinian armed groups in the Gaza Strip emulated the Hezbollah model as regards rockets. Qassam rockets were used there for the first time in 2001 and have now become central to the strategy of these organisations. Qassam rockets are home-made projectiles whose cost per unit is said to amount to less than US\$1,000. At most, they have a 15km range which mainly threatens Israeli cities on the country's southern Mediterranean coast, such as Ashkelon.<sup>13</sup>

If, so far, these threats emanate from non-state actors –though the Hezbollah arsenal arguably equals that of a conventional army–, one external power has increasingly been using its missile arsenal in the Mediterranean: Russia. Following its military intervention in the Syrian conflict, Russia deployed warships and submarines in the Eastern Mediterranean in late 2015. Since then it has repeatedly fired Kalibr cruise missiles from the sea against Islamist targets on Syrian territory.<sup>14</sup> The latest were fired in June 2017 from two frigates, the Admiral Essen (751) and the Admiral Grigorovich (745), and a submarine, the Krasnodar (K-148).

Russia's fleet in the area is equipped with some of its most advanced missiles. Its base in Tartus operates P-800 Onyx supersonic anti-ship cruise missiles as well as surface-

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<sup>11</sup> Sinan Ülgen & Can Kasapoğlu (2016), 'A Threat-Based Strategy for NATO's Southern Flank', Carnegie Europe, June.

<sup>12</sup> See Avi Issacharoff (2017), 'Israel raises Hezbollah rocket estimate to 150 000', *Times of Israel*, 12/XI/2015; and Jean-Loup Samaan (2017), 'Missile warfare and violent non-state actors: the case of Hezbollah', *Defence Studies*, vol.17, nr 2, Spring, p.156-170, p.161.

<sup>13</sup> Jean-Loup Samaan (2015), *Another Brick in the Wall: Israel's Experience with Missile Defense*, US Army War College, Carlisle, p.22.

<sup>14</sup> Reuters (2017), 'Russia fires cruise missiles at Islamic State targets from Mediterranean', 31/V/2017, <http://www.reuters.com/article/us-mideast-crisis-syria-russia-idUSKBN18R01K> (last accessed 13/VIII/2017).

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to-air missiles (S-300s and S-400s).<sup>15</sup> Given the extent of the capabilities the Russian military has allocated to its Mediterranean Task Force, the purpose goes clearly beyond the ongoing intervention in Syria and heralds a longer-term build-up in the Mediterranean.

If non-state capabilities and the Russian presence are the immediate challenges in the Mediterranean, classic state-to-state competition should not be dismissed. Although a conflict between North African countries remains unlikely today, diplomatic relations between them are still strained, especially between Algeria and Morocco. The dispute between the two countries over the Western Sahara remains alive and has been recalled in various political statements over the past few years.<sup>16</sup> The idea of an open conflict between Algiers and Rabat is, fortunately, still unlikely –especially given the common threats both countries face from extremist organisations in North Africa–. However, setting aside the political conditions that would be necessary to lead to such an escalation, the confrontation itself could be devastating from an operational standpoint.

In the current order of battle, Algeria has a decisive quantitative superiority although both countries have equipped their armed forces with a wide range of artillery and air-defence capabilities. Neither has strategic ballistic or cruise missiles. Purchasing primarily from Russia, the Algerian military has a variety of weapons systems, including 100 surface-to-air missiles (among them the Pantsir-S1 and Strela-1 & 2). Its army operates Kornet antitank guided missiles and 48 BM-21 Grad systems while its naval forces (submarines, frigates and amphibious ships) store multiple missiles such as MBDA's Aster. It has also received S-300 air-defence batteries from Russia. On the other side, Moroccan firepower is smaller but includes similar systems (BM-21 Grad and Aster). Compared to Algeria, Moroccan capabilities are mostly from France or the US. A significant naval build-up has been launched with five major bases (Casablanca, Nador, Dakhla, Agadir and Ksar Shgir). Moroccan ships are equipped with Exocet MM40 anti-ship missiles as well as VL Mica surface-to-air systems. An operational scenario, given these resources, could take the form of a limited high-intensity exchange involving air and maritime components. For military planners, such a conflict falls under the most vexing category of scenarios: highly unlikely but with enormous regional consequences.

### Emerging threats and future scenarios

These multiple developments in the Mediterranean reflect the growth of the missile and rocket presence in the area, the increased number of non-state actors equipped with these armaments and, eventually, the threat they represent to European security. Against such a backdrop, there are three different types of scenario according to which arsenals play a central role:

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<sup>15</sup> Charles Frattini III & Genevieve Casagrande (2017), 'Russia's Mediterranean Threat to NATO', Institute for the Study of War, 13/VII/2017, <http://iswresearch.blogspot.ae/2017/07/russias-med-threat-to-nato.html?m=1> (last accessed 13/VIII/2017).

<sup>16</sup> Raphael Lefevre (2016), 'Morocco, Algeria and the Maghreb's cold war', *Journal of North African Studies*, vol. 21, nr 5, pp.735-740.

1. A terrorist attack on a civilian target. The unknown flow of MANPADs in North Africa and the recent use of these systems by Islamist groups indicate that the threat of rocket attacks is likely to remain high. Projectiles such as these do not challenge the structural balance of power between conventional armed forces and a terrorist organisation but enable the latter to inflict damage easily, quickly and cheaply. Some militias in Libya could use them as bargaining chips to gain political influence but other groups such as IS or al-Qaeda in the Islamic Maghreb could be tempted to use them directly and contemplate attacks on civilian aircraft or ships passing near the North-African shores of the Mediterranean. If, for instance, the territorial gains of IS in the Levant and Libya were to be severely diminished as a result of the US-led coalition campaign, the group could see rocket attacks on European civilian targets as an effective way to upset the Western narrative of its imminent defeat.
2. A maritime spill-over of conflicts onshore. Preventing the extension of an ongoing struggle on land to the sea has become harder for local forces and external powers. The 2008 surge in piracy attacks in the Gulf of Aden, caused by the unravelling of Somalia, made this trend evident a decade ago. The Yemen conflict is another contemporary indicator: as the Saudi-led coalition intensified its campaign, the Houthi insurgents started firing ballistic missiles on ships crossing the Bab-el-Mandeb strait. For instance, in October 2016 a vessel from the United Arab Emirates was struck in the Red Sea by a missile launched from Yemen. A maritime spill-over differs from the first scenario as it is not an isolated act but rather a new step in the escalation of a conflict. For groups facing an overwhelming offensive onshore this could be an effective option of horizontal escalation.

Hezbollah in Lebanon would certainly use the maritime space of Lebanon if a new war with Israel were to erupt. During the 2006 war the group was able to reach an Israeli missile-boat patrolling off the Lebanese coast by using a Chinese-made, Iranian-upgraded C-802 radar-guided missile. Therefore, a maritime spill-over in the Eastern Mediterranean in the case of a new Hezbollah-Israel conflict is very likely. As regards IS, the group does not so far seem to be preparing such operations although its Libyan branch might consider the option if European countries were to deploy forces in the future.

Likewise, a Morocco-Algeria conflict may become a naval stand-off, with both countries using their maritime capabilities to deter the other while avoiding onshore escalation. This would obviously be a major disruption in ship traffic in the Mediterranean.

3. Gunboat diplomacy with Russia. Compared to the war of nerves with Moscow in Eastern Europe, a direct confrontation with the Russian fleet in the Mediterranean remains a remote scenario. However, Russia's deployment of a massive naval task force backed by some of its most advanced missile systems in the area is not merely a consequence of its war efforts in Syria. It reflects Moscow's intention of demonstrating its ability and its resolve to project force in the region. It conveys a message of deterrence, according to which Russia has no intention of leaving the area and will not refrain from asserting its regional interests.

The Russian leadership may see this new naval footprint as an effective tool to assert its agenda in the Mediterranean, vis-à-vis potential competitors such as the US or even Turkey. Based on the arsenal onboard the Russian fleet, some analysts even go so far as to claim that the Russian naval build-up would constitute a denial-anti-access bubble in the Eastern Mediterranean.<sup>17</sup> At any event, in the form of the old-fashioned gunboat diplomacy, Moscow's aim is to use its naval power for strategic influence in the zone. If tensions were to escalate, if NATO were to launch an operation, the Russian footprint could dramatically constrain the ability of the Atlantic Alliance to deploy and protect its troops.

### Implications for European security

The three previous scenarios are different in both nature and consequences. Therefore, European countries –whether at the EU or NATO levels– cannot design a single policy to simultaneously respond to these challenges. Instead, countering missile proliferation on the southern flank will require a combination of measures:

1. Strengthening situational awareness. Our knowledge of the capabilities possessed by states and non-state actors in the Mediterranean and of the tactics they may pursue remains limited. The uncertainty that surrounds the existence of Libyan stocks of rockets circulating in North Africa requires better means of surveillance. Tracking capabilities is not sufficient: situational awareness also calls for a better understanding of the way missiles and rockets shape the strategic thinking of these extremist groups. In other words, we need to assess if these projectiles will be considered as a means of deterrence, of coercion, or alternatively as bargaining chips to accumulate power on the ground, or even worse, as instruments of terror for attacks on civilians.

As the threat of a terrorist attack against civilian targets is a concern for all states involved in the area, cooperation is an obvious, though complex, answer. Because Libyan arms have been detected in places from the Sahel countries to Syria, a comprehensive outlook of these illicit flows is possible only through better exchanges with local intelligence agencies. At the supranational level, the UN could provide the legitimate and credible framework to deliver a comprehensive assessment of the capabilities, the level of training and the potential strategies of extremist groups in this field. Such an initiative could help defuse the risks. This could be either through an expanded mandate for the UN panel of experts on Libya –which has repeatedly complained about insufficient cooperation from local actors– or through building up a new UN task force whose purpose would be to address the issue of non-state actors and their use of missiles in the Mediterranean.

2. Supporting local state capabilities. Enhancing monitoring capabilities would allow Europeans to better assess the risk of a terrorist attack using missiles or rockets but, eventually, halting the flow of arsenals requires better local capacities in

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<sup>17</sup> Jonathan Altman (2016), 'Russian A2/AD in the Eastern Mediterranean: A Growing Risk', *Naval War College Review*, vol. 69, nr1, winter, p.72-84.

North Africa (coast guards, policemen and armed forces) in order to prevent the proliferation of these systems. This is the challenge that the Egyptian forces face in the Sinai. Algeria too, as the strongest North-African military power, will play a central role in this domain. For instance, following the hostage crisis of In Amenas in 2013, Algiers dramatically increased the number of its security posts along its border with Libya.<sup>18</sup> But the cornerstone of such an initiative has to be Libya: as long as the country remains divided between competing factions, the building of national security capabilities will be impeded and the stability of the whole region jeopardised.

In other words, the root cause for missile proliferation and their use in the Mediterranean is primarily the existence of a security vacuum in the area. In the long term, the threat can only be addressed through a local response. To support this goal, NATO could play an active supporting role by using its partnerships in the area –the Mediterranean Dialogue and its mission to the African Union– and put the issue of missile proliferation on the agenda of its joint training activities. Furthermore, the emphasis on regional cooperation could also indirectly alleviate the tensions between local states such as Algeria and Morocco.

3. Projecting stability through the deployment of European navies. To avoid the naval escalation of a conflict on the southern shores of the Mediterranean, European countries need to deny capabilities to the groups that might be tempted by such a move. This means not only an increase in the number of ships patrolling the area but an improvement in their naval capabilities.

This show of force would require measures at the national level that are far more costly than the three previous ones. The resources of European navies have decreased and only a few of them (namely, France, Italy and Spain) would be both willing and able to provide capabilities. With the US Navy focusing on the Gulf and the Asia-Pacific regions, and as Russian foreign policy increasingly relies on old-fashioned power politics –such as gunboat diplomacy in the Mediterranean–, the Europeans may have no choice but to enter the game on their own.

4. Adapting Europe's missile-defence architecture. The evolving security environment in the Mediterranean highlights the long-term relevance of NATO's deployment of missile-defence capabilities. In the long term, the spread of ballistic technologies to jihadist organisations will jeopardise the traditional reliance on deterrence and reinforce the need to build a robust defence against these projectiles. The build-up of Israel's Iron Dome over the last decade is a case in point that shows up the urgency of this challenge. Finally, the volatility of the threats identified above corroborates the need to implement a mobile missile

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<sup>18</sup> Farid Alilat (2016), 'Algérie : l'armée saisit des armes lourdes près de la frontière avec la Libye', *Jeune Afrique*, 11/III/2016.

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defence system –in opposition to the static plan of the Bush Administration– that coordinates the capabilities of European and US forces at the theatre level.<sup>19</sup>

All in all, missile defence might have been put on the backburner for a while within European circles, but the threat of missile proliferation has not faded away. The flow of MANPADs in North Africa, the rocket arsenal of Hezbollah and the deployment by Russia of advanced missile systems in the Eastern Mediterranean are critical challenges whose evolution needs to be monitored closely.

## Conclusions

The issue is not only the acquisition of advanced technology but the way these systems are changing the tactics and strategies of local players. If the past and present are the prologue of things to come, we may witness –in a not-so-distant future– situations where non-state armed groups would be able to coerce European conventional forces. In other words, if Europe wants to prevent escalation with a non-state actor or gunboat competition, missile proliferation in the Mediterranean should be urgently addressed at both the bilateral and multilateral levels.

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<sup>19</sup> On the state of the missile defence debate in Europe, see Gustav Lindstrom (2016), 'Missile defence in Europe: tying together the technical, political and security dimensions?', ARI, nr 73/2016, 13/X/2016.