Trends in Military Buildup in the Middle East

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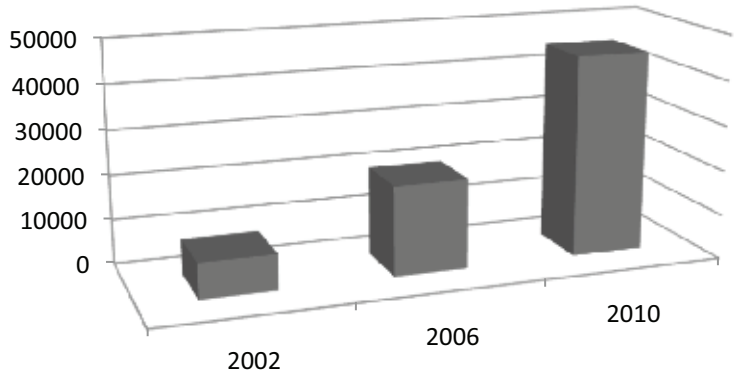
Middle East states continue to figure among the world's leading arms customers. However, executions of arms deals are slow processes, and changes in the military capacities of states rarely occur overnight. As such, trends in arms acquisitions presented in previous recent INSS annual publications are still valid. These include: acquisition of the most advanced and sophisticated weapon systems, primarily by oil-rich countries; efforts to develop indigenous military industries; and reduction of expenses by upgrading older weapon systems instead of buying new ones. The non-oil-rich countries in the region that do not receive security assistance from the US cannot participate in the advanced weaponry market. Instead, they tend to adopt asymmetrical doctrines that enable them to balance the technological advantages of their rivals. They rely more and more on guerilla warfare and terrorism on the one hand, and on strategic capability achieved by acquisition of ballistic missiles, artillery rockets, and weapons of mass destruction on the other. Non-state actors such as Hizbollah and Hamas continue to develop semi-regular military forces with large inventories of artillery rockets, as well as anti-tank and anti-aircraft capabilities (figure 1).

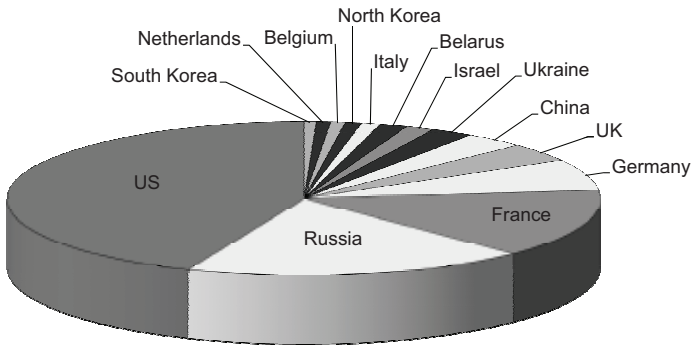
The US remains the biggest weapons supplier to the region. Russia has also made attempts to extend its market share in the region, but so far with limited success. Other important players are key European Union countries, particularly France and the UK (figure 2). In addition, indigenous military industry plays a very important role in some states in the region. Israel and

Figure 1. Hizbollah Rocket Arsenal



Source: INSS Middle East Military Balance Project

Figure 2. Weapons Suppliers to the Middle East



Source: INSS Middle East Military Balance Project

Turkey operate the most advanced industries, while the UAE is investing extensive resources to build its own military industry. Iran has tried to be as autonomous as possible in its weapons production, although its industry's actual capability is far smaller than officially declared.

What follows is a brief summary of the most important recent developments in some of the region's countries.

Algeria

Algeria is in the midst of a large weapons deal with Russia (approximately $7 billion). As part of this deal, Algeria received T-90 tanks and Su-30 MKA combat aircraft. It was also supposed to take possession of long range S-300 PMU-2 anti-aircraft missile systems, Pantsyr S-1 anti-aircraft systems for point defense, and Yak-130 training planes. The deal, however, encountered many obstacles. Dozens of Mig-29 SMT jets were supplied and then rejected by Algeria, because their performance was deemed unsatisfactory. In return Algeria received 28 additional Su-30 MKA planes. For its navy, Algeria issued a tender for four frigates, with France, Germany, and Great Britain competing for the deal; it seems that the deal will eventually go to Italy. Algeria also benefits from limited American military aid (a total of $700,000 in 2008), and it purchased night vision equipment, as well as Beechcraft 1900D surveillance planes from the US.

Egypt

Egypt, like Israel, benefits from steady American defense aid, and receives $1.3 billion a year. An agreement signed in 2007 ensures Egypt the continuation of this aid at least until 2018, which enables Egypt to purchase American-made weapons without having to worry about economic difficulties. Egypt's primary deals in recent years have included AH-64D Apache attack helicopters (though the acquisition of the Longbow radar system for these helicopters has not yet been approved) and additional M1A1 tanks. These tanks are bought as kits for assembly in Egypt. Since starting to purchase these tanks, the Egyptian defense industry has assembled 880 such tanks, and the most recent transaction, now underway, includes an additional 125 tanks. At the same time, Egypt has not refrained from buying weapons from other sources, finances permitting. It is negotiating with Germany to buy Type 214 submarines (a model quite similar to the Israeli Dolphin class submarine).

Iran

Iran is in the midst of a long process of rearming its military. Reports of large arms deals with Russia appear regularly in the media, although several of these deals have not in fact materialized. The most important

of these deals is the contract to supply Iran with the S-300-PMU-1 model of long range air defense missile systems. Although Russian officials have repeatedly reiterated their commitment to proceed with the deal, the deal has not yet materialized. Russia seems to be dragging its feet under international pressure against arming Iran, while refraining from canceling the deal altogether.

Iran continues to rearm itself with locally produced arms, mainly missiles and rockets. In the field of long range ballistic missiles, Iran has made progress on two tracks: liquid fuel-based missiles and solid fuel-based missiles. In the first track, Iran developed the Safir-e Omid satellite launcher, a liquid fuel two-stage missile that launched the Kavoshgar research capsule and the Omid satellite in February 2009. A further development in the same direction was the heavy satellite launcher Simorgh, which was displayed in public but not yet tested. In the second track, Iran is also developing a two-stage solid fuel powered surface-to-surface missile intended to reach a range of up to 2,000 km. This missile, alternately known as Ghadr, Sejjil, or Ashura, was tested for the first time in November 2007 (and again in May and December 2009), and may enter operational service within a few years.

It is harder to estimate Iran's true R&D and production capabilities in other fields. The Iranian media reports regularly about the development of innovative weapon systems – tanks, armored personnel carriers, fighter planes, helicopters, various missiles (sea-to-sea, air-to-air, anti-tank), and more – but it is difficult to distinguish between propaganda and actual progress. It does not seem that Iran is in fact capable of producing in significant quantities all the types and models it professes to produce. Iran is certainly capable of producing several models of artillery rockets, and perhaps some anti-tank and sea-to-sea missiles (based on Russian and Chinese designs). However there is no evidence, for example, that Iran is producing fighter planes with real capabilities of engaging in a modern battle, although it claims to have this capability.

Iraq

Iraq is in the process of rebuilding its army from scratch. This is taking longer than expected, and has been accompanied by a host of problems

– recruitment of suitable personnel, graft and corruption connected to questionable arms deals, and more. In purchasing, the Iraqi army is mostly engaged in the most basic outfitting of a military force, because little of the old Iraqi armed forces remain.

In late 2008, the US Congress was asked to authorize a number of large arms acquisitions valued at several billion dollars that will ultimately include M1A1 MBTs (some of which are already in Iraq), several hundred Styker and Guardian APCs, AT-6B training planes, and Bell 407 helicopters armed with Hellfire missiles. The Iraqi government also announced its future intention to procure F-16 combat aircraft. Coupled with the difficulties involved in its force buildup, Iraq is also starting to face the challenge of the withdrawal of most of the US forces, which by virtue of their presence have thus far guaranteed the day to day security of the country.

Israel

Annual US military aid to Israel for 2010 is in the amount of $2.77 billion. This sum is intended almost in its entirety for military buildup. On the basis of an agreement reached with the US in August 2007, this aid is slated to increase gradually and will total, in the decade ending in 2018, $30 billion. Israel's rearmament is therefore a fairly predetermined and continuous process and does not portend any unexpected reversals. Thus, Israel is also less affected than other nations by changes in the global or local economic situation.

After the Second Lebanon War (2006), the IDF invested large sums in restocking weapons and munitions, with an emphasis on procurement of large quantities of modern types of munitions for the air force, such as the GBU-39 small diameter bombs and GPS-guided JDAM bombs. As for large arms deals, Israel has completed its intake of all 100 Sufa F-16I fighter jets, and also took delivery of five Nahshon aircraft (Gulfstream G550), some intended for intelligence gathering (going under the name of Eitam in the air force) and some for aerial command and control missions (known in Israel under the name Shavit). The platforms were bought in the US and arrived in Israel starting in 2005, to be installed with Israeli-made systems.

Israel announced its intention to equip its air force with F-35 planes in the coming decade, but negotiations are still underway on the terms of the deal. There are numerous obstacles to conclusion of the deal at the moment. First of all, the F-35 program itself suffers from delays and runoffs. The price of a single unit is rising as delays are accumulating and is now estimated at over $130 million. Second, Israel demands access to the aircraft's software, as well as the ability to install Israeli-made systems – requests that have not been granted by the US authorities. Third, there are concerns that the political tensions between Prime Minister Netanyahu's government and the US administration may affect President Obama's willingness to approve large arms deals with Israel in the near future. Thus far, however, the Obama administration has consistently addressed Israel's security needs very positively.

In addition to the F-35, the Israeli air force ordered nine advanced C-130J transport aircraft, estimated at $1.9 billion. The air force is also replacing its Tzukit training planes that have served for over 40 years with the US-made Beechcraft T-6 Texan II (which received the name Efroni in the IAF). In addition, the Israeli navy ordered two more Dolphin class submarines, which are being constructed in Germany.

In many areas Israel is rearming with locally produced arms. Recent emphasis has been on development and production of active anti-ballistic missile defense systems and anti-rocket defense systems. Israel ordered more Arrow batteries on top of the two operational batteries it already deploys. At the same time the entire Arrow project is undergoing a process of upgrading to help it achieve greater success in handling the long range missile threat from Iran. Similarly, Israel is investing in two additional active defense systems. The first is David's Sling, meant to provide defense against rockets and short range ballistic missiles with a range of 40-200 km (particularly heavy rockets of the kind fired from Lebanon in 2006). The second is Iron Dome, meant to defend against shorter range rockets and missiles such as the Qassams and Grads fired both from the Gaza Strip and Lebanon. David's Sling is scheduled to finish the development stage in 2012, while Iron Dome is scheduled to enter operational service this year.

In addition, Israel continues to develop and acquire space assets: in 2007, the Ofeq-7 photo reconnaissance satellite, replacing the old Ofeq-5,

was launched into space, and in early 2008, using an Indian Polar satellite launcher (PSLV), the TecSAR surveillance satellite was launched, allowing for intelligence gathering by day or night and in any weather.

Israel has very little competition in the area of UAVs. Recently the air force deployed the new Shoval and Eitan long endurance UAVs, capable of loitering in the air for extended periods of time at high altitudes. Both are intended to fulfill extended missions – over 40 hours long – and will undertake reconnaissance and intelligence gathering missions. Side by side with the larger UAVs, IDF units are being equipped with the Skylark-I mini UAVs, made by Elbit. These are small, quiet, and easily operated mini UAVs, carried by soldiers in combat units for the purpose of intelligence gathering from "the other side of the hill" at short distances (up to 10 km). Recently, the Skylark I LE, which has somewhat extended endurance, was chosen as the model for additional military units.

Finally, Israel has expanded its acquisition of self-produced weapon systems for the ground forces. One of the lessons of the Second Lebanon War led to the military starting to equip itself with the Namer IFV, based on the hull of the Merkava MBT. In addition, both the Merkava Mark IV and the Namer will be equipped with active anti-tank defense systems (using two different, competing systems: Trophy, produced by Rafael, for the Merkava Mk IV, and Iron Fist, produced by IMI and Elbit, for the Namer).

Saudi Arabia

The most impressive deal in recent years was the purchase of 72 Typhoons ordered from Great Britain at a cost of $7-9 billion. Saudi Arabia also ordered upgrades for its Tornado and for its F-15S combat aircraft. Another major deal, signed in mid-2009, involves upgrade to the Saudi Arabian National Guard (SANG). The contract, worth some $2.2 billion, is for the acquisition of different types of combat armored vehicles. The upgrade program is typically divided between the US and France, from which SANG ordered new artillery pieces.

Additional arms orders include more M1A2 tanks from the US, as well as upgrades for existing tanks, a transaction of some $3 billion. This project also includes setting up a large facility that will assemble the tanks in the kingdom.

UAE

The UAE armed forces are among the militaries that have grown most intensively. The UAE, like other Gulf states, prefers to deal with a variety of vendors, and buys primarily from the US and France, though it is willing to do big business with Russia as well. After the supply of the newest fighter jets was completed (the UAE beefed up its air force with 63 Mirage 2000-9 planes from France and 80 F-16E/F planes, a model developed specifically for the Emirates), the country has continued to procure equipment for the air force, navy, and air defense forces. It signed a deal to upgrade 30 Apache helicopters to the AH-64D model, and ordered three Airbus A330 refueling aircraft. More recently it ordered twelve C-130J tactical transport aircraft as well as six C-17 Globemaster strategic transport aircraft.

The Baynunah ships project has been underway for several years. These corvettes were designed in France, and the first of them is being built by the CMN shipyard in Cherbourg, France. The rest are constructed in Abu Dhabi by ADSB. Despite the French design and local manufacture, some of the armaments will actually be American-made. Thus, for example, the UAE has ordered RAM missiles from Raytheon Corporation to defend the ships against sea-to-sea missiles.

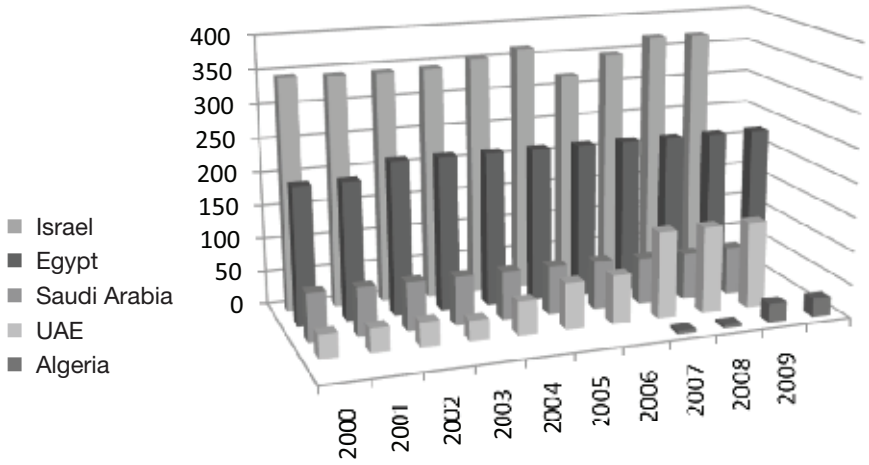
In the realm of air defense, the UAE was scheduled to receive the Russian-made Pantsyr S-1 systems, short range mobile air defense systems developed in Russia at the UAE's request and with its funding. The UAE is investing heavily in air defense systems and ballistic missile defense systems that will be supplied in the coming years in different deals estimated at some $9 billion, to include in the short run upgrades for the Patriot missile batteries it already has and purchases of the PAC-3 interceptors (for missile interception) for these batteries. In the longer run it will include the purchase from the US of THAAD dedicated anti-ballistic missile defense systems. The value of this transaction is estimated at about $7 billion.

Conclusion

The Middle East continues to be a major market for weapons, and of late there have been no substantial changes in the main trends of arms procurements. General trends in the region's inventories of main aerial, naval, and ground

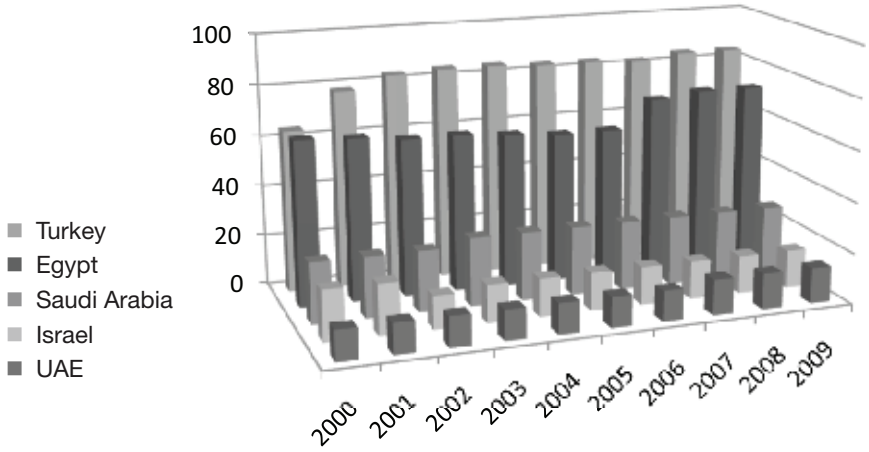
platforms appear in figures 3, 4, and 5. The recent conflicts in Gaza and Lebanon, however, have had some effects on the overall picture.

Figure 3. Advanced Combat Aircraft 2000–2009



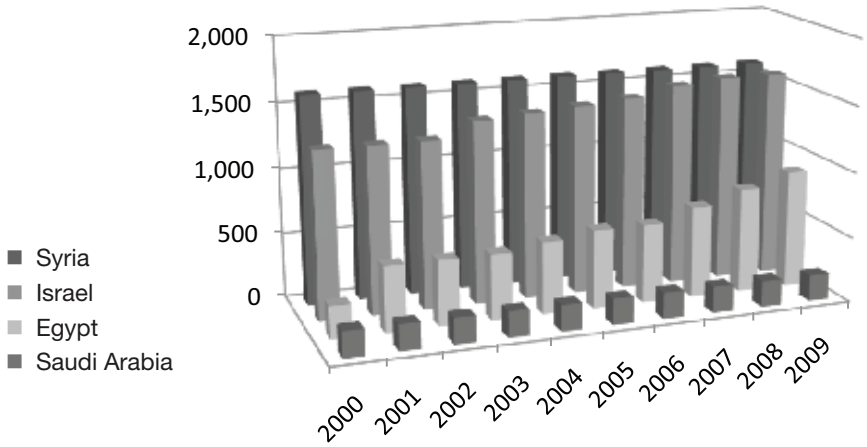
Source: INSS Middle East Military Balance Project

Figure 4. Naval Combat Vessels 2000–2009



Source: INSS Middle East Military Balance Project

Figure 5. High Quality Tanks ORBAT Development



Source: INSS Middle East Military Balance Project

For Israel and Syria, the lessons of the Second Lebanon War and Operation Cast Lead in Gaza were studied and have begun to be implemented. Israel, while still buying advanced fighter jets, surveillance, and early warning planes, and expanding its satellite capabilities, has also accelerated the rate of outfitting the military with anti-rocket systems and with better protected armored personnel carriers and tanks. For its part, Syria is enlarging its stock of artillery rockets and anti-tank weaponry. Hizbollah and Hamas, the non-state entities buoyed by the perception of successes of asymmetrical engagements, continue to rearm themselves with the same types of weapon systems, as well as some anti-aircraft weapons.

It is likely that weapons purchases in the Middle East will level off in the coming years. States with financing capabilities will continue to arm themselves with precision guided weapon systems, aerial warning systems, and intelligence. However, the importance of arms dedicated to fighting terrorism, defending against rockets and missiles, and protecting population centers will continue to grow as the threat of terrorism and guerilla warfare within and outside the region's states increases.