

Arab Defense Industry Papers News Bulletin

Volume 2, Number 10

1 November 2017

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The Big Picture

Egypt

Al Defaiya, 31 October 2017. Egyptian President al Sisi has appointed Mohammed Farid Hegazy as the new **Chief of Staff of the Armed Forces**. Hegazy has been the Secretary General of the Ministry of Defense. His predecessor Mahmoud Hegazy has been appointed as presidential advisor (<http://bit.ly/2zo0CIY>).

Al Bawaba, 3 October 2017. Egypt has destroyed “a shipment of **anti-tank missiles from North Korea**.” In response to reports by the Washington Post, Egypt’s Ministry of Foreign Affairs clarified that the “shipment was not intended to be sent to Egypt” (<http://bit.ly/2xJDyAS>).

GCC

Stratfor, 6 October 2017. “The U.S. military said on Oct. 6 that it would be **halting** some of its **joint exercises** with members of the Gulf Cooperation Council (GCC) in an effort to encourage a resolution to the countries’ months long dispute with Qatar” (<http://bit.ly/2z4J3M1>).

Iran

Stratfor, 30 October 2017. “In a speech to parliament, Iranian President Hassan Rouhani said Iran will **continue to produce ballistic missiles** and that this does not violate international agreements. (...) U.N. Security Council

Resolution 2231 prohibits Iran from undertaking any activity related to the development of ballistic missiles capable of delivering nuclear weapons” (<http://bit.ly/2ykXrma>).

U.S. News, 13 October 2017; *The National*, 23 October 2017. U.S. President Donald Trump imposed new “sanctions against Iran's Islamic Revolutionary Guard Corps (IRGC) (...), but **ultimately stopped short** of designating the zealous political and military front as a **terrorist organization** as some more hawkish lawmakers and advisers had urged.”

Against this background, U.S. Secretary of State Rex Tillerson “warned global companies that they **do business with the IRGC ‘at their own risk’**,” during a press conference with Saudi Foreign Minister Adel Al Jubair on 23 October 2017. According to *The National*, “a senior state department official, who asked not to be identified, said the administration was making a distinction between investment in IRGC-linked entities and those not tied to the group” (<http://bit.ly/2z8wtxc>; <http://bit.ly/2hu2ITp>)

Iraq

Daily Sabah, 31 October 2017. “The central Iraqi government is planning to start **paying the salaries of Kurdish Peshmerga fighters** and civil servants working for the Kurdistan Regional Government (KRG) soon, Iraqi Prime Minister Haider al-Abadi told reporters on (31 October 2017). The KRG has been struggling to pay the Peshmerga and its employees since 2014, after Baghdad stopped payments to it because of a dispute about oil-sharing revenue” (<http://bit.ly/2z2Ti63>).

Jordan

Jane's Defence Weekly, 10 October 2017. On 9 October 2017, **German Luftwaffe** Tornado jets were on their first mission from Al-Asraq to conduct reconnaissance flights (<http://bit.ly/2xGhWEz>).

Qatar

Gulf Times, 26 October 2017. “Russian Defense Minister Sergey **Shoigu** and Qatar’s Minister of State for Defense **Khalid bin Mohammad Al Attiyjah** signed a defense cooperation agreement on 25 October 2017. The **military-technical agreement** relates to air defense as Qatar is interested in different types of Russian air defense systems. Both countries also used the meeting to discuss other bilateral affairs such as military training and opportunities to boost bilateral defense cooperation.” The signing of the agreement to place during Shoigu’s first ever visit to Qatar (<http://bit.ly/2A1Um7D>).

The Peninsula, 24 October 2017; *Gulf Times*, 28 October 2017. Qatar has opened the “new headquarters of the **military attaché office** of the State of Qatar in Washington, DC” on 24 October 2017. Qatar will soon also open an office in Los Angeles. (<http://bit.ly/2ykU1ju>; <http://bit.ly/2zolnW7>).

Saudi Arabia

Defense Security Cooperation Agency, 6 October 2017. "The State Department has made a determination approving a possible Foreign Military Sale to the Government of Saudi Arabia for Terminal High Altitude Area Defense (THAAD) and related support, equipment and services for an estimated cost of \$15 billion." Saudi Arabia has requested 44 THAAD launchers, 360 interceptor missiles, 16 THAAD Fire Control and Communications Mobile Tactical Station Groups, and 7 AN/TPY-2 THAAD radars (<http://bit.ly/2ijBBov>).

Al Arabiya; Middle East Strategic Perspectives, President of Russia, 5 October 2017. Saudi Arabia has agreed to purchase the S-400 air defense system from Russia. This was announced during King Salman's visit to Moscow in early October 2017. The MoU, which was signed by Rosoboronexport and Saudi Arabian Military Industries, also hints at technology transfer to Saudi Arabia and local manufacturing of parts of the system. According to a statement released by the office of the Russian President, both countries also inked an agreement on licensed production of AK103 Kalashnikov rifles and munitions (<http://bit.ly/2gTdVXI>; <http://bit.ly/2lGuVWR>; <http://bit.ly/2xV85iq>).

Syria

Stratfor, 30 October 2017. "Chairman of the Russian State Duma Defense Committee Vladimir Shamanov said **Russia has achieved the major goals of its military campaign in Syria** and expects the Syrian government to restore control over its eastern border by the end of 2017, Tass reported Oct. 30. The Kremlin's special envoy for Syria, Alexander Lavrentiev, said Syrian President Bashar al Assad is expected to launch a dialogue with various representatives from Syria" (<http://bit.ly/2xJQwP2>).

Turkey

Reuters, 30 September 2017. Turkey's biggest overseas military **base**, which cost US\$50M, was opened on 30 September 2017 in **Somalia's capital**. Turkish officers will train over 10,000 Somali soldiers at the base, thus cementing ties between both countries (<http://reut.rs/2yJkT8B>).

United Arab Emirates

Al Bawaba, 19 October 2017. The UAE has appointed Omar Sultan Al Olama (27 years) as the country's **Minister of State for Artificial Intelligence**, a newly created role (<http://bit.ly/2yCiob5>).

Defense Industry

Israel

Jane's Defence Weekly, 17 October 2017. Rafael Advanced Defense Systems is offering to integrate the **laser 'kill' system** it has developed for its Drone Dome counter-unmanned aerial vehicle (C-UAV) system onto South Ko-

rea's own domestically built solution." South Korea has decided "to adopt its own C-UAV system, (which) currently has no 'kill' element to it" (<http://bit.ly/2ik3k8o>).

Jane's Defence Weekly, 16 October 2017. "Israel Aerospace Industries (IAI) and Hankuk Carbon have established a joint venture (JV) to develop unmanned aerial vehicles (UAVs) in South Korea. The JV has been named **Korea Aviation Technologies (KAT)**, and will focus on the development of vertical take-off and landing (VTOL) UAVs for the military and civil markets" (<http://bit.ly/2z55L94>).

Iran

Al Defaiya, 29 September 2017 and 6 October 2017. According to Rear Admiral Habibollah Sayyari, Commander of Iran's Navy, "the country's experts will build a **new destroyer** in the current Iranian year (ending on 20 March 2018). (...) He underlined that the new destroyer would be more advanced than its predecessors, Jamaran and Damavand." At the end of September 2017, Rear Admiral Sayyari already announced the country would soon unveil new indigenous **surface and subsurface platforms**, without providing further details (<http://bit.ly/2z58Oy0>; <http://bit.ly/2iQ1osd>).

Saudi Arabia

Argaam, 31 October 2017; *Arab News*, 1 November 2017. **Saudi Arabian Military Industries (SAMI)** has appointed Ahmed al-Khatib as chairman and Dr Andreas Schwer as CEO. Ahmed al-Khatib is Chairman of the Saudi General Entertainment Authority. Until recently, Dr Schwer was Chairman of the Board of Rheinmetall International Holding AG. In this function, he was also involved in the German defense company's activities in Turkey. Saudi Arabia's Energy Minister Khalid Al-Falih and Prince Faisal bin Farhan Al-Saud, a senior advisor to the Saudi ambassador in the U.S., are also on the board of directors. They will be joined by "three international experts who will join the board at a later date" (<http://bit.ly/2yiazs8>, <http://bit.ly/2eAQmly>; <http://bit.ly/2z477kB>)

Defense Exports

Israel

Al-Bawaba, 2 October 2017. The **U.S. Army** is the first user the **Trophy active-protection system** outside Israel. The U.S. Army has contracted General Dynamics Lands Systems to add the system developed by Rafael Advanced Defense Systems and Elta Group to a number of M1A2 Abrams tanks. The costs are close to US\$10M with around \$350,000 per tank. Integration shall be completed by March 2019 (<http://bit.ly/2wsrH9N>).

Turkey

Quwa, 30 October 2017. UzAuto of **Uzbekistan** and Turkey's Nurol Makina have reportedly signed an MoU to **co-produce 1,000 Ejder Yalcin 4x4 ar-**

mored vehicles. The MoU also “includes rights for UzAuto to re-export” the vehicle to third countries (<http://bit.ly/2iNsJem>).

Anadolu Agency, 10 October 2017. Ukronboronprom has signed a contract with Turkey’s Aselsan for the delivery of **communications systems** worth around \$44M (<http://bit.ly/2ih4jGv>).

C4Defence, 10 October 2017. “Aselsan signed a sales contract for the supply of “Zaslon-L” **Active Protection Systems** with SFTE Spets Techno Export (Ukraine), while Roketsan signed a cooperation agreement with the same company for the joint development of **explosive reactive armor (ERA)**” (<http://bit.ly/2lD8Wj1>).

Defense Modernization and Support

Jordan

Jane’s Defence Weekly, 27 October 2017. “The Jordan Armed Forces (JAF) is retiring its 9K33 Osa (SA-8 ‘Gecko’) **mobile surface-to-air missile systems** as part of its on-going reorganization (...).” According to JDW, the JAF is offering 52 Osas for sale. The Czech Republic, Poland, Ukraine, and a US company are said to be interested (<http://bit.ly/2yTmA77>).

Kuwait

Defense Security Cooperation Agency, 13 October 2017. Pending agreement by the U.S. Congress,

- Boeing is set to provide continued logistics support for Kuwait’s **C-17** aircraft for additional three years with the option for two additional years. The contract is worth around \$343M (<http://bit.ly/2iU4ziI>).
- Kuwait is set to receive “218 **M1A1 Abrams tank** hulls with 120mm cannons and 218 AGT-1500 (M1 Tank Series) engines in support of its M1A2 tank recapitalization”. The estimated contract value is \$29M (<http://bit.ly/2h2x2C5>).

Saudi Arabia

Arab News, 31 October 2017. Technology companies throughout the Kingdom will get **startup funds** up to SR500 million (\$133.3 million) from the King Abdul Aziz City for Science and Technology (KACST) during the first quarter of next year (<http://bit.ly/2lD7pcx>).

Arab News, 30 October 2017. In an interview with Al Arabiya TV Mar Allen, Marc Allen, President of **Boeing** International, indicated that the company is “currently building **wings** for military aircraft along with other parts in **Saudi Arabia**. We are applying huge changes to turn F-15s to F-15 SAs” (<http://bit.ly/2iO58KT>).

Department of Defense, 16 October 2017. Boeing “has been awarded a \$240,195,180 fixed-price-incentive-firm contract for the Royal Saudi Air Force airborne warning and control system (**AWACS**) modernization pro-

gram phase 1. This contract provides for AWACS mission computing, navigation and communications upgrades, as well as the next generation in identification, friend or foe enhancement designs" (<http://bit.ly/2gRI6hY>).

Turkey

Quwa, 26 October 2017. In order to get the engine development and production contract for Turkey's next-generation fighter program (TFX), Rolls-Royce is said to make full use of the UK government's "Open General Export License". According to Turkish media, "the license was issued to **free all British companies involved in the TFX to export the requisite technology** necessary for the program to Turkey" (<http://bit.ly/2z5OHZA>).

Jane's Defence Weekly, 24 October 2017. **Anka-S UAV** developed by Turkey will soon begin **SATCOM tests**. Anka-S UAVs will be equipped with a "Turksat 4B SATCOM system to extend its control (which) will give it a range of thousands of kilometers" (<http://bit.ly/2xH1gxR>).

Jane's Defence Weekly, 22 October 2017. Turkey has reopened the tender for the **Altay main battle tank engines**. The Undersecretariat for the Defense Industry released a RFP on 18 October 2017 to locally develop the power pack of the Altay engine (<http://bit.ly/2znikgP>).

Jane's Defence Weekly, 19 October 2017. BMC and the Turkish Undersecretariat for the Defense Industry (SSM) have reportedly signed a contract to produce a **power pack** "for new-generation **tracked light armored vehicles**. BMC is believed to have been awarded the project without tendering" (<http://bit.ly/2zoiXGL>).

Quwa, 16 October 2017. The Turkish Navy has successfully test-fired the indigenous **Atmaca anti-ship missile** (ASM), Admiral Ahmet Cakir, technical head of the Turkish Navy, announced. According to reports, Atmaca is similar to the Exocet, C-802 and Harpoon ASM (<http://bit.ly/2lxcoLQ>).

Quwa, 15 October 2017. Tusas Engine Industries seems to have completed the development of the **PD170 Turpoprop engine for the Anka MALE UAV** produced by TAI. According to Turkey's *C4Defence* journal, "the PD170 is 5 kg heavier than the Anka's current power plant, but it will improve the Anka's power-to-weight ratio thanks to its higher power output than the existing engine" (<http://bit.ly/2zVl3gq>).

Jane's Defence Weekly, 5 October 2017. "Turkey plans to build a six-tonne attack helicopter called the **ATAK-2** produced entirely locally without foreign help", Ismail Demir, Head of the Turkish Defense Industries Undersecretariat, announced on 3 October 2017 (<http://bit.ly/2z9KzOX>).

Defense Procurement

Bahrain

Al Bawaba, 18 October 2017. Lockheed Martin and Bahrain have inked a deal for the purchase of **16 upgraded F-16 fighter jets**. In March 2017, the U.S.

State Department had informed Congress about the planned sale of these jets with a contract value worth up to \$3.8bn (<http://bit.ly/2z3vlcp>).

Quwa, 17 October 2017. According to Sheikh Nasser bin Hamad El Khalifa, Commander of Bahrain's Royal Guard, the country is negotiating the purchase of the **S-400 air defense system** with Russia, *RIA Novosti* reported (<http://bit.ly/2gRgPfm>).

Egypt

La Tribune, 23 October 2017. The **French Ministry of Finance has vetoed** the sale of 12 additional Rafale fighter jets to Egypt, because Cairo's creditworthiness is at risk. According to *La Tribune*, the veto of the Ministry of Finance extends to all contracts with Egypt, military and civilian (<http://bit.ly/2xgSpmb>).

Quwa, 18 October 2017. On 18 October 2017, the Egyptian Navy welcomed the **first Gowind 2500** corvette produced by the French Naval Group and the **second Type 209 diesel-electric submarine** manufactured by Germany's thyssenkrupp Marine Systems (<http://bit.ly/2lfTN73>).

Israel

Jane's Defence Weekly, 25 October 2017. Rafael Advanced Defense Systems will supply the Israel Defense Forces with more than 1,000 **Spike LR II missiles**. The new missiles have extended reach when fired from the ground and from helicopters (<http://bit.ly/2hrIxjx>).

Jane's Defence Weekly, 24 October 2017. On 23 October 2017, Germany and Israel confirmed the finalization of an MoU for the sale of three additional **Dolphin-class submarines**. The German government will fund around €540M (\$635M), or a third of the cost (<http://bit.ly/2ID10OI>).

Jordan

Jane's Defence Weekly, 26 October 2017. "The **first six of 15 F-16 multirole fighters** that the Netherlands have sold to Jordan were flown out of Volkel Air Base by Jordanian pilots for their new home at Al-Azraq Air Base on 25 October" (<http://bit.ly/2A2bMRE>).

Lebanon

Al Bawaba, 9 October 2017. Lebanon is to receive **six Super Tucanos** from the U.S. and will get the first two within the next couple of weeks, *Al Bawaba* reported. "Lebanese pilots and support crew have been training in the U.S. for months" (<http://bit.ly/2huxzdc>).

Qatar

BAE Systems, 10 October 2017. Qatar requests **six Hawk trainers** from BAE Systems to complement the acquisition of 24 Eurofighter Typhoon jets, the company revealed on 10 October 2017 (<http://bit.ly/2zkWdHB>).

Turkey

Russia Beyond the Headlines, 4 October 2017 and *Reuters*, 9 October 2017. Russia seems unwilling to share **technology on friend-or-foe identification systems for the S-400** air defense system Turkey wants to purchase, *RBTH* reported. In response, Turkey could turn its back on Russia and agree to jointly produce an air defense system with somebody else, Turkey's Foreign Minister Mevlut Cavusoglu said according to *Reuters*. Power wrangling on defense contracts has become a constant feature of Turkish defense procurement projects in the recent past (<http://bit.ly/2hrZzyf>; <http://read.bi/2ya4WuY>).

United Arab Emirates

TASS, 3 October 2017. "The United Arab Emirates wants to buy over a squadron (= up to 12 jets) of **Sukhoi Su-35 advanced fighter jets** from Russia and the contract may be signed by the yearend, a source in the system of military and technical cooperation told *TASS*" (<http://bit.ly/2xZX67h>).

Military Cooperation and Training

Bahrain

Al Defaiya, 13 October 2017. Bahrain and Saudi Arabia launched joint **naval drills** on 13 October 2017. Exercise Bridge 18 aims at "consolidating Riyadh-Manama naval ties, increasing combat preparedness, supporting and reinforcing joint forces in case of naval confrontations and strengthening joint operational coordination" (<http://bit.ly/2zoKvvQ>).

Iran

Al Defaiya, 26 October 2017. "Iran and **Azerbaijan** held the first meeting of their joint defense commission with the aim of strengthening defense and military ties and cooperation, Fars News Agency (FNA) reported. (...) the two sides discussed ways to prepare a roadmap for the further expansion of military and defense cooperation" (<http://bit.ly/2xKyqfW>).

Daily Sabah, 2 October 2017. "Iran deployed 12 tanks and artilleries to the border with northern Iraq on Monday amid tensions in the wake of the Kurdistan Regional Government (KRG) referendum, according to a KRG administration official." The deployment occurred within the framework of a joint exercise with Iraq (<http://bit.ly/2htNOHm>).

Jordan

Al Defaiya, 5 October 2017. "Chairman of the Joint Chiefs of Staff of Jordan, Lt. General Mahmoud Freihat, received a **German military delegation** for talks on the latest developments in the region and bilateral ties. According to the Jordan News Agency Petra, the two sides discussed cooperation and coordination on various issues of interest" (<http://bit.ly/2zovlq7>).

Al Defaiya, 3 October 2017. "King Abdullah II of Jordan discussed with **Singapore's Minister for Defense** Ng Eng Hen, means to boost cooperation between Jordan and Singapore, mainly in the military fields as well as the latest developments in the region. According to Jordan News Agency Petra, King Abdullah and Singaporean Minister stressed the importance of intensifying regional and international efforts to fight terrorism" (<http://bit.ly/2z3n36L>).

Kuwait

Al Defaiya, 3 October 2017. Major General Abdullah Yaqoob Al-Foudari, Commander of the Air Force of Kuwait, visited the Air Headquarters in Islamabad in early October 2017. **Pakistan's** Air Chief Marshal Sohail Aman "offered **support and cooperation** in the field of aviation and military training to Kuwait" (<http://bit.ly/2xKnG14>).

Oman

Al Defaiya, 13 October 2017. "Commander of the Royal Air Force of Oman (RAFO) Air Vice Marshal Matar bin Ali al-Obaidani held separate meetings with **Iranian Defense Minister** Brigadier General Amir Hatami and Deputy Chief of Staff of the Iranian Armed Forces for International Affairs General Qadir Nezami in Tehran. The two sides underscored the need for consolidation and enhancement of friendship and tranquility in the region and cooperation and peaceful coexistence among neighbors, Fars News Agency (FNA) reported" (<http://bit.ly/2iUdikY>).

Saudi Arabia

Saudi Press Agency, 12 October 2017. Saudi Army units arrived in **Pakistan** on 12 October 2017 for a **joint military exercise** called Al-Samsan 6. According to SPA, the exercise "is an extension of the training plans and programs of the Saudi armed forces prepared in advance to develop the combat skills of officers and soldiers of the Kingdom's armed forces so as to increase their level of combat readiness" (<http://bit.ly/2lyzthh>).

Arab News, 10 October 2017. "The Al-Rieck 2 joint military exercise between Saudi Arabia and **France** continues to train troops on planning and implementing military operations in mountain environments. Lt. Col. Abdullah Al-Otaiby, the Saudi training leader of the maneuver, clarified that the exercise aims to enrich the skills of special forces by exchanging military expertise and skills in mountain operations through intensive training", *Arab News* reported (<http://bit.ly/2z53vfV>).

United Arab Emirates

Al Defaiya, 31 October 2017. Sheikh Mohamed bin Zayes Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces received **French Defense Minister** Florence Parly to discuss both nations' bilateral agenda. The meeting took place on 29 October 2017 (<http://bit.ly/2zXbGKr>).

Al Defaiya, 17 October 2017. "UAE's Vice President, Prime Minister and Ruler of Dubai, His Highness Sheikh Mohammed bin Rashid Al Maktoum, received General Qamar Javed Bajwa, Chief of Army Staff of the **Pakistan Army**, at the Zabeel Palace, to discuss a range of issues regarding bilateral ties of friendship and co-operation between the two countries and their people" (<http://bit.ly/2zWBIxb>).

Cybersecurity and Space

Egypt

Al Bawaba, 5 October 2017. Egypt is about to set up a **National Space Agency**. "The government believes that it will boost Egypt's image in the space industry while critics believe it is a waste of money at a time when around 30% of the country's population lives below the poverty line" (<http://bit.ly/2z52Pam>).

Iran

SpaceWatch Middle East, 26 October 2017. "During a press conference marking World Space Week, the head of the Iran Space Agency (ISA), Mohsen Bahrami, provided an **update to the status of the five indigenously built satellites** awaiting launch in Iran (...):

- Designed and built by the Sharif University, the Doosti satellite is fully complete and only awaits a launch date. Designed to engage in remote sensing activity, it is a micro-sized satellite that weighs 50kg.
- The Amir Kabir and Nahid 1 satellites are in the final stages of their development, with both flight and engineering models near completion.
- Development and design of the Zafar satellite is still underway by Iran University of Science and Technology, and is projected to be completed by the end of (...) March 2018.
- The newest of the Iranian satellite initiatives, the Pars 1, is still in the conceptual phase, with design and construction elements just beginning under a consortium of Iranian universities across the country" (<http://bit.ly/2hvbvQj>).

Middle East and North Africa

TrendMicro, 10 October 2017. Trend Micro has released an in-depth report on the **digital underground in the Middle East and North Africa**. According to *Digital Souks* "regional marketplaces closely reflect the societies in which they operate. In this region, this facilitates itself in the 'spirit of sharing' mindset, held by those that operate here, with a feeling of brotherhood and religious alliance that transcends the illicit transactions that occur." As the Figure 1 illustrates, different products and services are available on regional underground sites.

According to the report "Hacktivism, DDoS attacks and website defacements are a staple in this region." "Stolen identities are sold in forums across the region. The Arabic forum hack-int in Egypt sells stolen identities for US\$18. The demand for personally identifiable documents is influenced by geopolitical tensions—their buyers wanting to flee active war zones, for

instance, leveraging them to migrate to other countries as refugees.” “Furthermore, Virtual Private Networks (VPNs) are a mainstay for cybercriminal activity and can be purchased due to the anonymity they provide” (<http://bit.ly/2zX2vtf>).

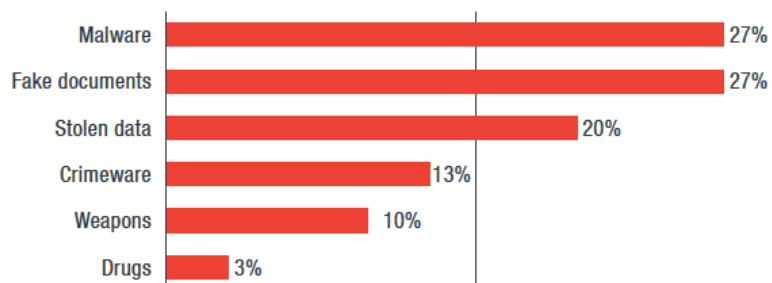


Figure 1: Distribution of products and services in the MENA underground services

Source: Trend Micro report cited above.

Saudi Arabia

SpaceWatch Middle East, 27 October 2017. “The Public Investment Fund (PIF) of Saudi Arabia and **Virgin Group** (Virgin), have signed a non-binding Memorandum of Understanding (MoU) for a partnership under which PIF intends to invest approximately \$1 billion into Virgin Galactic, The SpaceShip Company and Virgin Orbit, with an option for \$480 million of future additional investment in space services” (<http://bit.ly/2ykKfxR>).

SpaceWatch Middle East, 18 October 2017. “Saudi Arabia’s King Saud University and the **Northrop Grumman Corporation** are joining hands for **CyberArabia** to foster innovation in cyber security among Saudi university students. (...) Following the hands-on workshop portion of CyberArabia, the competition challenges students to find and eradicate cybersecurity vulnerabilities in virtual images of common operating systems” (<http://bit.ly/2z3Dq30>).

SpaceWatch Middle East, 9 October 2017. **Russia** and Saudi Arabia have signed an agreement on **space exploration cooperation**, during Saudi King Salman’s stay in Moscow. Details of the agreement remain to be announced (<http://bit.ly/2hvqAR6>).

Turkey

SpaceWatch Middle East, 11 October 2017. Turkey’s **small and medium-sized space companies fear being “squeezed out of satellite and space business** in favor of large companies such as Turksat, Roketsan, and Turkish Aerospace Industries (TAI).” Big space programs seem tailored to fit the leading state-backed companies, prompting “some to believe that winning such contracts has more to do with political patronage and personal corruption than” economic competitiveness (<http://bit.ly/2ymcjk6>).

United Arab Emirates

SpaceWatch Middle East, 19 October 2017. “The UAE Space Agency welcomed an official delegation from **Kuwaiti** scientific, research, and academic institutions visiting the UAE (...) to learn about the experience, achievements and future plans of the UAE space sector” (<http://bit.ly/2A4v4Wy>).

SpaceWatch Middle East, 12 October 2017. “The UAE Space Agency has signed a MoU, with the Government of the Grand Duchy of **Luxembourg**, defining a framework for collaboration and the exchange of information and expertise in the fields of space science, research, and technology” (<http://bit.ly/2zWzvlN>).

Al Defaiya, 28 September 2017. “UAE’s Vice President, Prime Minister and Ruler of Dubai, His Highness Sheikh Mohammed bin Rashid Al Maktoum, and His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, have launched the **Mars Science City project**, UAE national news agency WAM reported. The AED 500 million-City (\$137 million) will cover 1.9 million square feet, making it the largest space stimulation city ever built.” (<http://bit.ly/2huEbbi>).

About the ADIP News Bulletin

The Arab Defense Industry Papers (ADIP) is a new professional series focusing on the role of the defense industry in Algeria Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, Turkey, and the United Arab Emirates. The focus of the series is on the establishment of national defense industrial bases in these countries and joint collaborative defense projects as well as defense exports. The ADIP News Bulletin complements the analytical papers by providing information about current and upcoming developments relevant for the Arab defense industrial establishment. The ADIP News Bulletin is available by subscription. ADIP and the ADIP News Bulletin are joint initiatives of Borchert Consulting & Research AG and Verocy. For more information about ADIP, see: <http://www.arabdefenseindustry.com>.

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