Volume 6 Number 44 – Wednesday, 29 October 2014

Part I: Israeli Telecom Industry

1. Israeli Telecom Industry
2. Interview with Mr. Dov Feiner CEO of MTI Wireless Edge company
3. Epicos "Industrial Cooperation and Offset Projects"
4. D38999 - Ethernet filtered connectors for high bandwidth secure military applications
5. UDP communication optimization for inter-UAV communications in modern Network Centric Warfare operations
6. News from our A&D Business Network

Part II: Epicos Newsroom

1. Poland says will boost its eastern military capacity
2. US agrees deal to buy 43 more F-35 fighters: Pentagon
3. Israel to buy second batch of US F-35 fighters: media
4. UK to confirm first F-35 orders 'within weeks'
5. DCNS signs cooperation agreement with Airbus Defence and Space for the development of TANAN ship-based UAS

Israeli Telecom Industry

Israel's telecom sector has emerged as a world leader in developing innovative technologies, systems and solutions for telecom providers and integrators in an age when operators seek systems that can enhance the convergence process – their ability to provide fixed line, mobile, Internet and cable TV packages. Israeli telecom companies are world leaders in such areas as telemedicine and distance learning. All these diverse and innovative telecom technologies have one important attribute in common – the Israeli brand of entrepreneurship, which has been highly successful in transforming ideas into marketable products.

The technological supremacy of the Israeli telecom sector is also highlighted by the fact that several foreing companies invested in this sector. Philips is one of them. Additionally, Cisco Systems alone has acquired eight Israeli start-up companies for $945 million including three technology firms during 2004 for $340 million – P-Cube, Actona Technologies and Riverhead Networks.

Also, it is worth mentioning that the leading technological position of the Israeli companies in the telecom sector will result in the coming years in the enhancement of their competitive advantages in such areas as mobile and Internet applications, home networking, storage area networks, and wireless IP networking.

Combined innovations and cease-less attempts in the field of telecom have transformed Israel's industry into one of the world's most important players. The application of local engineers and scientists in devising leading-edge technologies and products is largely responsible for the changed face of the telecom industry in Israel today.

The Country's Telecom Industry is at the forefront of technological advancement, sophistication and efficiency by creating products of proven record of quality, reliability and serviceability. Based on this policy Israeli companies have recorded several successes on selling these products globally and it is expected that this will continue in the future.

Kyriazis Vasileios

Epicos Newsletter Head Editor

Interview with Mr. Dov Feiner CEO of MTI Wireless Edge company

Mr. Dov Feiner, CEO of MTI Wireless Edge, gave an exclusive interview to Epicos, regarding the position of the company in the international and national markets. Among others, he stated that: "In the military and defence market MTI operates worldwide through leading system integrators such as Elbit, Elta, Israel Aerospace Industries, leading European companies such as Indra and others, The US Navy, Harris and other US companies and leading Far East defence research and development companies."

1. Could you please describe the current position of MTI Wireless Edge in the national and international market?

MTI Wireless Edge is a leading and well known company in both the international and national commercial, military and defence markets. MTI's competitive advantage lies in its state-of-the-art designs and innovative use of materials and its uncompromised approach to quality solutions and products.

MTI is best known for its expertise in Ground (Fixed & Tactical), Marine and Submarine antennas as well as Airborne military antennas. MTI is the only independent company in the military market which provides solutions for terrestrial, airborne, marine, submarine, conformal, land and mobile applications from 2MHz to 40GHz.

Broadband Wireless Antennas

MTI's antennas operate in the most severe environmental conditions, according to the strictest military standards and have been deployed worldwide by large system integrators such as Indra, Lockheed Martin, Elta, Elbit, Elisra and others.

In the commercial market MTI is the only true "One Stop Shop" company providing solutions from 1-90GHz for Base Stations and Subscribers. MTI develops and produces antennas for leading OEMs for various systems and applications such as WiFi, WiMAX, Broadband Wireless Access, PTP, Small Cell Backhaul, RFID etc. in licensed and unlicensed bands.

2. Could you please briefly describe the history of the company?

MTI Wireless Edge has over 40 years of experience in antenna development. The company was originally founded as ELJIM specializing in radar antennas and later purchased by Elbit, the company started developing antennas for marine, submarine, mobile and fixed land systems. In 1994 the company was purchased by MTI and expanded the product offering

with products and solutions for the commercial market. Since 2006 MTI is publicly traded in the London Stock Exchange AIM (MWE).

Military Antennas

MTI leveraged the knowledge and expertise gained from the military market and entered the commercial market with antennas for Fixed Broadband Wireless and RFID systems.

MTI was among the first companies to start developing flat panel antennas.

MTI owns a production plant in Cochin, India which produces hundreds of thousands of commercial antennas annually.

3. Could you please describe the main services and/or products the company provides?

Today MTI Wireless Edge specializes in three markets:

a) Military and defence – providing antennas for multiple applications such as communications, SIGINT, COMINT, ELINT, ESM, COMJAM, DF systems and antenna arrays and others for fixed and mobile land, maritime, submarine and airborne systems. Antenna types include horn, blade, Vivaldi, Adcock, DF arrays and more.

b) Commercial Market - MTI offers Omni, flat panel and dish antennas in frequencies from 700MHz up to 80GHz. Main bands are 700MHz, 900MHz, 2.3-2.7GHz, 3.3-3.8GHz, 4-6GHz,10.5GHz, 60-80GHz. Our portfolio covers CPE and BS antennas, PTP and PMP applications. As part of our services we work together with our customers developing and supplying antennas according to their specs including embedded and integrated antennas as part of our customer's solutions.

c) RFID - MTI Wireless Edge develops reader antennas for multiple RFID applications providing Linear and Circular, Wide Band and Narrow Band, Single and Dual polarized antennas for Active and Passive RFID systems. RFID antenna frequencies include 433MHz, 865-870MHz, 902-928MHz, 950-956MHz, 2.4GHz as well as 5.8GHz

In addition MTI Wireless Edge operates an outdoor test range for antenna measurement and one of the world's leading Anechoic chambers supporting tests of up to 90GHz providing services for multiple system integrators and vendors.

4. Could you please name the main customers of MTI Wireless Edge?

In the military and defence market MTI operates worldwide through leading system integrators such as Elbit, Elta, Israel Aerospace Industries, leading European companies such as Indra and others, The US Navy, Harris and other US companies and leading Far East defence research and development companies.

Slim RFID Antennas

In the commercial market some of our leading OEM customers include Ceragon, Radwin, Alvarion, Redline, Aviat and more.

5. Is the company currently investing in a new technology?

MTI Wireless Edge continuously invests in new technologies allowing us to maintain our leadership position in the market as a dynamic and evolving company.

Some of the fields in which MTI has provided new developments in the past few years include:

- Time domain solutions for Ultra Wide Band systems
- High accuracy dish antennas for PTP systems in 60-80GHz
- Wideband phased array Vivaldi antennas
- Slot array antennas in high frequencies

6. What are the next steps and priorities of MTI Wireless Edge?

As part of our ongoing innovation and improvement program MTI Wireless Edge is developing new technologies and applications, improving production processes, enhancing quality and entering into new development projects. As always one of our top priorities is to continue providing high quality cost efficient solutions.

Specifically we are focusing on new technologies and solutions in the 60 – 80GHz bands increasing our product portfolio, enhancing our offering and at the same time improving and optimizing our production process.

7. Is there a specific country or region MTI Wireless Edge is planning to expand in the near future?

Today MTI distributes its solutions worldwide.

MTI Wireless Edge has put a special focus on the Indian market in the past few years. MTI has opened a manufacturing facility in Cochin, India and is working with leading system integrators in order to strengthen our position in the country's growing and high potential market.

Epicos "Industrial Cooperation and Offset Projects"

Epicos "Industrial Cooperation and Offset Projects" provides a unique set of online tools enabling the structure, identification and implementation of comprehensive Offsets programs, through a searchable database. By introducing different offset projects and ideas proposed by local A&D industry it ensures the optimum cost for Prime Contractors and reassures that the priorities of local industry are fully met…

For Further Information Press Here

D38999 - Ethernet filtered connectors for high bandwidth secure military applications

A company specializing in the design and manufacturing of EMP/EMI/RFI filtered connectors and other filtered modules, made to meet specific customer requirements, is proposing the design, development and production of a unique high bandwidth Ethernet filtering solution, targeted at military and homeland security applications. The Ethernet filter to be developed shall meet international protection standards.

For Further Information Contact our ICO Department
Mail at: g-menexis@epicos.com

UDP communication optimization for inter-UAV communications in modern Network Centric Warfare operations

A company excelling in the design and development of advanced real time data exchange solutions for inter-UAV communication requirements, is proposing the installation of a new UDP smart gateway design, providing hard real time and secure data exchange between application machines. The proposed system architecture supports specific requirements including: time-critical and mission-critical applications, limited bandwidth, hot redundancy and deterministic behaviour. The system will fully support the new concepts for advanced Network Centric Warfare (NCW) operations using unmanned platforms.

For Further Information Contact our ICO Department
Mail at: g-menexis@epicos.com

Elbit Systems Awarded Contract to Supply Satellite-on-the-Move Systems for Use by the Canadian Armed Forces

Elbit Systems announced today that it was awarded a contract by Rheinmetall Canada Inc. to provide ELSAT 2100 Satellite-on-the-Move (SOTM) systems for use by the Canadian Armed Forces. The contract value, which is in an amount that is not material to Elbit Systems, will be performed over an 18-month period.

The ELSAT 2100 SOTM system allows high data rate broadband capabilities at a cost effective price. It can be installed on a variety of platforms and is unique in its low profile and small footprint. As part of this new solution, Elbit Systems offers a compact low profile SOTM antenna system that provides broadband communication in Ku, X and Ka frequency bands anywhere, anytime, while using military and commercial satellites, including the United States Department of Defense (DoD) Wideband Global SATCOM (WGS) satellites network which is accessible to only a few companies in the world.

Yehuda (Udi) Vered, General Manager of Elbit Systems Land and C4I Division, commented: "The SOTM contract is an important milestone in our satellite communication activity. The Canadian Armed Forces are technologically advanced and innovative, and I trust that additional customers will follow and select our systems. The modern battlefield requires very reliable, high data rate capabilities to be provided to numerous users simultaneously and in often adverse weather conditions. Our SOTM communication solution meets these rigorous requirements".

About Elbit Systems

Elbit Systems Ltd. is an international defense electronics company engaged in a wide range of programs throughout the world. The Company, which includes Elbit Systems and its subsidiaries, operates in the areas of aerospace, land and naval systems, command, control, communications, computers, intelligence surveillance and reconnaissance ("C4ISR"), unmanned aircraft systems ("UAS"), advanced electro-optics, electro-optic space systems, EW suites, signal intelligence ("SIGINT") systems, data links and communications systems and radios. The Company also focuses on the upgrading of existing military platforms, developing new technologies for defense, homeland security and commercial aviation applications and providing a range of support services, including training and simulation systems.

For additional information, visit: www.elbitsystems.com

Or Contact:
Joseph Gaspar, Executive VP & CFO
Tel: +972-4-8316663
j.gaspar@elbitsystems.com

Dalia Rosen, VP, Head of Corporate Communications
Tel: +972-4-8316784
dalia.rosen@elbitsystems.com
Elbit Systems Ltd.

IR Contact:

Ehud Helft
Kenny Green
CCG Investor Relations
Tel: 1-646-201-9246
elbitsystems@ccgisrael.com

A KATANA model, IAI's Unmanned Marine System, is presented at Euronaval

Source: Israel Aerospace Industries' (IAI)

Israel Aerospace Industries' (IAI) will exhibit "KATANA," its new unmanned combat marine system for homeland security (HLS) applications, at this year's Euronaval International Naval Defense and Maritime Exhibition, to be held in Paris from October 27-31. (IAI stand C39-B32)

The KATANA unmanned surface vessel (USV) supports a wide range of applications for HLS and the protection of exclusive economic zones, including - harbor security, patrol of shallow coastal and territorial waters, surface and electronic warfare and offshore platform protection (plus oil rigs, pipelines, and more).

The KATANA, as a multifunction vessel, is compatible with IAI's various systems and supports a totally integrated solution. This features unmanned capabilities which provide a response for the entire range of naval applications and revolutionizes maritime operations.

The system's dual operational mode allows for fully autonomous capabilities, controlled via an advanced command and control station, as well as for a manned combat operational mode. Based on a proven operational implementation of a USV system, the KATANA allows for the execution of a wide variety of missions. It can provide an early-warning situation picture, classifying, identifying and tracking targets - including those far away, and eventually intercepting them if required.

KATANA's features include autonomous navigation, collision avoidance, advanced control system and more. The vessel is equipped with various payloads (including electro-optical), communication systems, radio (Line of Site, LOS, or NLOS), radar and weapon systems. The systems' modular design allows for configuration adjustments and operational flexibility, as well as for adaptation to customer's requirements and needs.

The KATANA joins IAI's family of unmanned systems in air, space, land and sea, enhancing customers' operational capabilities with entirely interoperable solutions.

For further information, please contact:

Eliana Fishler; Senior VP Communications; 972-3-935-8509, 972-54-434-2040;

efishler@iai.co.il

or Click Here

Epicos Newsroom

Poland says will boost its eastern military capacity

Poland plans to increase its number of troops in the country's east amid tension with Russia over the conflict in neighbouring Ukraine, Defence Minister Tomasz Siemoniak said Tuesday.

"We'd like to reinforce our units in Poland's east," which borders Ukraine, he told Polish public radio.

He added that it was "too early" to go into detail about exact numbers.

"It's a plan to be implemented across many years. We expect the first effects to be seen in 2017," he said, explaining that the beefed-up security was in reaction to the crisis next door.

With a population of 38 million, central Europe's largest country had already said last year it would spend 33 billion euros ($42 billion) over a decade to upgrade its army.

But Warsaw sped up the plan after Russia annexed Ukraine's Crimean peninsula in March and gave backing to pro-Moscow separatist rebels fighting in Ukraine's east.

Last week, Siemoniak began a tour of garrisons in eastern Poland with a visit to the city of Siedlce, whose troops he said were neglected and required additional investment.

"So this will be a whole series of measures concerning the units in Poland's east," he said.

Poland, a NATO member, has an army numbering 80,000 troops and 20,000 reservists.

Source: 2014 AFP, Agence France-Presse (AFP)

US agrees deal to buy 43 more F-35 fighters: Pentagon

The Pentagon will buy another 43 F-35 fighter jets worth roughly $4 billion from aerospace giant Lockheed Martin, officials said Tuesday, four months after it was briefly grounded following an engine fire.

Although final details have to be worked out, the "handshake agreement" will mean the price of each plane will drop slightly within America's most expensive weapons program, said Kyra Hawn, spokeswoman for the Joint Strike Fighter office.

The price per aircraft will be "approximately 3.6 percent lower than the previous contract," Hawn said. That would put the price of the plane at roughly around $100 million, according to some estimates, though the cost varies for each of the three variants of the jet.

The radar-evading F-35 has been portrayed as the future backbone of the military's fighter fleet, supposed to preserve US dominance in the skies. But the program has struggled with technical problems, budget overruns and repeated delays.

The latest headache came in June when a mysterious engine fire led commanders to ground the fleet briefly until the problem could be resolved. As a result, officials had to cancel plans to send the F-35 to fly at Britain's prestigious Farnborough air show in July because of safety precautions.

Technicians are now carrying out repairs in the test fleet to ensure the plane's engines are sound, according to Pentagon officials.

The latest deal calls for manufacturing an additional 29 jets for the United States, as well as the first two F-35s for Israel and the first four of the aircraft for Japan. In addition, the agreement will deliver two F-35s each for Italy and Norway and four fighters for Britain.

There are three versions of the aircraft, a standard model for the US Air Force, one designed for short take-off and vertical landings for the US Marine Corps and another outfitted to land on an aircraft carrier for the Navy. Despite being years behind schedule, the F-35 enjoys strong support in Congress, and contractor Lockheed Martin has spread the work for the plane across 45 US states.

The Pentagon plans to spend $391.2 billion on a total of 2,443 aircraft.

When taking into account the cost of flying and maintaining the F-35 over the course of its life, the program could cost more than a trillion dollars, according to the Government Accountability Office.

Source: 2014 AFP, Agence France-Presse (AFP)

Israel to buy second batch of US F-35 fighters: media

Israel and the United States have agreed the sale of a second batch of Lockheed Martin F-35 stealth fighters to the Jewish state, Israeli media reported Tuesday.

Haaretz newspaper said the deal, concluded by US Defence Secretary Chuck Hagel and his Israeli counterpart, Moshe Yaalon, was for "at least 20" of the planes.

The Israeli defence ministry did not immediately respond to AFP's request for confirmation.

The Jerusalem Post said Israel signed a $2.75 billion (2.17 billion euro) deal in 2012 to buy a squadron of 19 F-35s from Lockheed Martin and received Pentagon approval to purchase an additional 75.

Both papers said delivery of the initial order should start by the end of 2016 and be completed by 2018.

The first planes of the second squadron should start arriving in 2019, they said.

The Post said that the two defence ministers finalised the new purchase "in recent days."

The men met last week in Washington to a backdrop of fresh tensions between the two allies over Israeli criticism of US foreign policy, Israeli announcements of settlement expansion and remarks by US Secretary of State John Kerry linking the growth of militant Islam to Israel's decades-long conflict with the Palestinians.

Israeli company Elbit Systems is taking part in the manufacture of hi-tech helmets for F-35 pilots and state-owned Israel Military Industries manufactures aircraft parts.

The planes, which comes in conventional, vertical takeoff and aircraft carrier versions, have been hit by production delays and cost overruns.

Designed to replace fighters in the US Air Force, Navy and Marines and supported by a consortium of eight countries, the programme is the most expensive in US military history with a price tag of $395.7 billion.

Source: 2014 AFP, Agence France-Presse (AFP)

UK to confirm first F-35 orders 'within weeks'

Britain on Tuesday announced an agreement in principle with US manufacturer Lockheed Martin for an order for the first of 14 F-35B combat jets, with a formal contract expected "within weeks".

The four Lightning II stealth combat aircraft will operate from both of the Royal Navy's new aircraft carriers and Royal Air Force land bases, with another 10 due to be ordered over the next five years.

The first batch is expected to be delivered in 2016 and will take up station in 2018.

"Today's announcement is a major step forward," said Defence Secretary, Michael Fallon.

"The Lightning II will equip the Royal Navy and the Royal Air Force with a highly advanced multi-role stealth combat aircraft," he said.

The planes feature short take off and vertical landing (STOVL) and the latest stealth and intelligence surveillance, target acquisition and reconnaissance (ISTAR) technology.

The British government has long planned to provide its air and naval forces with F-35Bs but has been undecided on how many to buy.

British industrial giants BAE Systems and Rolls-Royce have played a major role in developing the jet, the Pentagon's most expensive ever programme.

Britain already has three F-35s, based in the US, and has ordered a fourth jet, but only for testing and evaluation purposes.

The F-35 should have appeared at this year's Farnborough International Airshow near London, but was grounded by technical problems and could not cross the Atlantic.

Source: 2014 AFP, Agence France-Presse (AFP)

DCNS signs cooperation agreement with Airbus Defence and Space for the development of TANAN ship-based UAS

As part of the 2014 Euronaval exhibition, Airbus Defence and Space and DCNS signed a cooperation agreement on Tuesday 28 October 2014 in Paris to develop a ship-based helicopter UAS capability. This technological partnership will help to speed up the market release of the TANAN vertical take-off and landing (VTOL) tactical helicopter UAS, as it takes into account the naval sector's requirements and the aircraft's efficient integration onto all types of armed vessels from the outset.

The work the two companies are doing will enable the TANAN UAS to be integrated into the ship's combat system. This includes the definition of its mission system and the improvement of situational assessment thanks to the data received from the various sensors on board TANAN. The work likewise encompasses the physical integration of TANAN onto the ship, including the positioning and compatibility of the antenna system, the landing deck, the harpoon and grid, the docking and securing of the UAS in the hangar, as well as the related support.

Airbus Defence and Space will produce the entire certified unmanned aerial system, the vehicle with its payloads, the datalink and the UAS control station.

DCNS will carry out the integration of the UAS on the ship and into its combat system, from the definition of the required functions and the interfaces with the combat system, to the production of corresponding UAS modules that will enable operations to be controlled via the ship's command, to the on-board installation and implementation procedures.

Airbus Defence and Space has been developing UAS for over 30 years for a wide range of civil and military applications, from the heavier Euro Hawk HALE and the Harfang MALE to the Tracker, DVF 2000 and Copter 4 mini-UAS, all the way up to the Atlante and TANAN tactical UAS and the Zephyr high-altitude pseudo-satellite.

DCNS is currently the only prime contractor for military vessels that is now able to offer a solution that is entirely in the hands of the commander and that enables central operations to deploy surveillance or armed UAS. Thanks to major ongoing investment in research and development in this area, DCNS is
continuing with the trail-blazing work it began more than ten years ago, when it first aspired to integrate tactical UAS onto its entire range of vessels, from off-shore patrol vessels to highly armed frigates.

"This agreement underscores the high level of expertise associated with our TANAN programme as well as our desire to provide the naval market with a perfectly matched system, in collaboration withour partner DCNS," stated Jean-Marc Nasr, COO of Airbus Defence and Space SAS.

"DCNS will be the only company to offer both its current and prospective customers an integrated solution for operating a UAS that can be armed from on board a combat ship. In partnership with Airbus, DCNS offers reliable, functional and perfectly integrated solutions for naval combat platforms and systems," said Pierre Legros, President of Surface Naval Systems at DCNS.

TANAN is a helicopter UAS with a maximum take-off weight of 350 kilogrammes, and is designed for maritime operations. Its characteristics, including extensive detection and identification capabilities, make it a considerable asset for surface vessels. It is thus suited to highly intense missions and combating asymmetrical threats alike. Flexible and versatile, with a powerful tried-and-tested diesel engine and state-of-the-art equipment, TANAN is a perfect addition to ship-based helicopters. By integrating UAS onto combat ships, the latter's detection range and ability to accurately identify threats can be increased, while simultaneously ensuring operational availability. www.dcnsgroup.com

Source: Epicos, DCNS