

ISRAEL HIGH-TECH & INVESTMENT REPORT

A MONTHLY REPORT COVERING NEWS AND INVESTMENT OPPORTUNITIES JOSEPH MORGENSTERN, Publisher
January 2009 Vol. XXIV Issue No.1 You are invited to visit us at our website: <http://ishitech.co.il>

A Year of Discontent

2009 appears to be headed for a year of discontent. The global conomi downturn is having its effect on Israel, as well. Daily reports appear of the firing of personnel.

Israel is the home of research and development for facilities. These have been founded by such companies as IBM, `Intel,, Hewlett Packard and other well known names. These also feel the full force of firing of personnel.

The Israeli high-technology sector is heavily dependent on exports. The decline in international trade is felt as export figures have fallen by nearly two digit figures.

The only bright spots have been the spate of merger and acquisition transactions. Three of them we report upon in this issue.

What then does the future hold? The economic turnaround, when it will come, is dependent on the world's economy. When this returns to some level of stability there is little doubt that Israel will follow suit.

An encouraging development has been the record number of Israelis who have come home.

Also, so far, tourism has not declined significantly.

We look with our inborn optimism to the future. enforced by the knowledge that Israelis show an unusual resilience.

As we write this Israel is in its fifth day of the Gaza Operation. It is our hope that the results will bring an end to the firing of rockets into Israeli territory. 6000 rockets have been fired into Israel in the last five years/

This year we have introduced graphics and are pleased to note that our web site is experincing narly 100,000 clicks a month.

As we end our 23rd ydear if publication we wish all of our readers and frined a Happy, Healthy and Prosperous New Tear.

<http://ishitech.co.il>

A year of discontent

Check Point to buy Nokia's security appliance business

St. Jude buys Israel's MediGuide for \$300 million

Israel Information Technology Report Q4 2008 "Making Connections"

Behavioral screening -- the future of airport security

Stem cell therapy reverses brain birth defects

Thales is making its first significant investment in Israel

Patient photos aid doctors in reading CT scans

Harmonic acquires Scopus Video Networks for \$86 million

Check Point to buy Nokia’s security appliance business

The cellular telecommunication equipment maker Nokia decided to sell its security appliance business as part of a strategy of focusing on the consumer segment. The companies did not disclose the value of the deal. Market estimates are in the tens of millions of dollars. Payment will come out of Check Point’s large reserves of cash and cash equivalents, which amounted to \$1.4 billion at the end of the third quarter.



“This is an exceptional deal,” Shwed said, “the business is good, synergetic, big, and very profitable. At a cautious estimate, the deal will contribute over \$100 million to our revenue in 2009, and will also contribute handsomely to profit.”

Nokia’s security appliance business provides purpose-built security platforms optimized for Check Point firewall, virtual private network (VPN) and unified threat management (UTM) software. About 85% of Fortune 500 companies have bought Nokia’s security platforms. More than 220,000 Nokia appliances have been installed with over 23,000 customers worldwide.

Check Point has a broad range of security gateways, available as software as well as Check Point’s UTM-1 and Power-1 dedicated appliances. More than 700,000 Check Point security gateways have been licensed with over 100,000 customers worldwide. The Check Point customer base includes 100 percent of Fortune 100 and 98 percent of Fortune 500 companies.

The agreement between Check Point and Nokia is expected to close in the first quarter of 2009 subject to regulatory approvals and customary closing conditions.

St. Jude buys Israel’s MediGuide for \$300 million

MediGuide, which has developed an intra-body navigation system that works like GPS, started out as a spin-off from Elbit Systems.

Israeli start-up MediGuide has been bought for \$300 million cash by medical technology and services giant St. Jude Medical (NYSE: STJ).



Under the deal, the acquiring company is taking on MediGuide’s liabilities, to the tune of \$17 million, so that MediGuide’s shareholders will in fact receive \$283 million in cash. This sum will be paid in three installments: \$138 million on the signing of the agreement, \$111 million in November 2009, and up to \$34 million in April 2010.

MediGuide was founded in 2000 by Gera Strommer, president and CEO, and Uzi Eichler, vice president technology, as a spin-off from Elbit Systems (Nasdaq: ESLT; TASE: ESLT), which owns 41.3% of the company, and with backing from Israeli venture capital fund Vitalife. Since it was founded, the company has raised \$45 million from a small number of investors, among them Eliezer Fishman’s Fishman Group, Docor International Management, and Elbit Systems. Philips and Boston



Israel High-Tech & Investment Report
Published monthly since January 1985

Publisher and Editor in Chief
.Joseph Morgenstern, B.A. Chem
Technology Review Board
(Prof. S.J. Joel-Cohen, MD, FRCS. FRCOG (1996-2002
.Prof. Hylton Miller, M.B. Ch.B
.Dr. Clive L. Carpel, M.B. Ch.B

Copy Chief
Debbie Mor
Web Master
Marty vonBokel
Graphics Consultant
Daniel Morgenstern
Subscription Inquiries
Tel-. +972-3-5235279 Fax. +972 3-5227799
E-mail: htir_1@netvision.net.il
Annual subscription \$95.- per year, for 11 issues,
Israeli residents add 15.5% VAT
Web Edition and Achives
http://ishitech.co.il

Scientific have also invested in the company.

MediGuide has developed technology and products for minimally invasive navigation and tracking within the human body. Its devices are for use in cardiac procedures and catheterization. The system consists of sensors mounted on a catheter introduced into the body, with the locating done on the basis of the distance of the sensors from several sources of magnetic radiation, with an accuracy of fractions of a millimeter.

The information from the sensors is combined with an image of the interior of the body, in a way that is similar to the way locating using a GPS device works. Since in catheterization or other invasive procedure, the human body undergoes changes, the device measures physiological indications from the body breathing, EKG, and so on and amends the picture accordingly.

Elbit Systems president and CEO Joseph Ackerman said, "We believe the acquisition provides MediGuide an excellent opportunity to continue its growth, while allowing Elbit Systems to focus on its core business areas."

Since its foundation, MediGuide has sought collaboration agreements with large market players. The company now has agreements with Medtronic, Siemens, Asahi Intecc of Japan, Boston Scientific, and Philips. It has yet to make substantial sales.

2008 will certainly be remembered as a good year for MediGuide. In January, the company signed a collaboration agreement concerning its Medical Positioning System (MPS) intra-body navigation products with medical device giant Medtronic (NYSE: MDT). The companies will jointly develop products on the basis of MediGuide's technology. Initially, the joint development will not involve any cash element, but the agreement provides an option for future investment by Medtronic, investment that it seems will now not be required.

When MediGuide's two entrepreneurs were just beginning to formulate the idea and trying to raise money, they approached most of the venture capital firms that invest in healthcare companies. All,

except for Vitalife, gave them the cold shoulder, among other things because the entrepreneurs were inexperienced in the medical field. More than one partner in the local venture capital industry must now be looking back eight years with frustration and regret. It is estimated that MediGuide's investors, particularly the early-stage ones, will see returns of 15-20 times their investments, a huge achievement by any standards, but particularly remarkable in the light of the returns venture capital firms have been making on sales in the past few years.

Israel Information Technology report Q4 2008

The Israeli IT market's recent momentum should be maintained during BMI's 2008-2012 forecast period, despite some macroeconomic challenges. IT spending reached an estimated value of US\$4.4bn in 2007.



BMI projects that the local IT market will grow at a compound annual growth rate (CAGR) of around 7% for the next few years. A key positive for the IT market is that nearly 50% of spending is accounted for by major government and military sector projects, which are unlikely to be affected by a short-term economic slowdown. Indeed the government will likely up its own consumption levels in a bid to prop up the economy.

Due to Israel's exposure to the US economic decline, and a domestic export slowdown, conditions are not as favorable as at the start of last year. Despite this, there should be particular opportunities for IT vendors in the fields of banking and financial services, where spending is being driven by regulatory compliance and reforms. Defense concerns remain at the top of the national agenda, and this is still an important area for IT spending. There are opportunities in both public and private sectors with organizations like Israel Aircraft Industries. Other growth areas such include solutions for the telecom industry, health systems, and CRM.

Government IT initiatives represent an opportunity.

The government is committed to using IT as a tool to achieve key policy goals of reducing poverty and achieving strong, balanced growth. Meanwhile, consumers are also increasing outlay on IT. Computer sales were notably buoyant in 2007, and lower interest rates should provide a support, despite the risk of higher inflation. High Internet penetration and growing broadband penetration remain strong drivers for the retail segment.

Industry Developments Information Technology is viewed as an important policy tool for the Israeli government's 2008-2010 socio-economic policy framework. The National Economic Council recently submitted a policy Agenda to the Government, which specified two main policy tracks of reducing poverty and achieving balanced growth. The first track is expected to emerge as the main priority.

It has been estimated that Israel currently has around 600,000 children living below the poverty line. The gini coefficient is among the highest of any OECD country. A 2007 survey found that only 30% of children living in poverty have Internet or home PC access, as compared with 90% in the top income group. There is also an ethnic dimension to digital inequalities. In order to deal with the digital divide problem, several specific measures have been proposed: As part of its modernization agenda, the government is also pressing ahead with various other strands of its e-government project. Among other initiatives, there has also been spending on computers in healthcare and the nationwide paperless court initiative. The e-government program is leading to increased demand for computers, with the Israeli government reaching a supply agreement last year with Dell and HP.

The top three IT services vendors, Israeli companies Ness Technologies, Matrix, and US giant IBM, have at least one-third of the local market. Israel's domestic IT service giants have strong advantages due to local knowledge and contacts. Despite their global ambitions, Israel remains an important market for these companies and typically accounts for 40-50% of revenues.

Ness Technologies, one of the leading local IT companies, reported a solid financial start to 2008,



with revenues up 36% year-on-year (y-o-y) in the second quarter to a record US\$170.6mn. Meanwhile, fellow Israeli IT giant Matrix reported a 7.5% rise in revenues in Q108 to ILS192.3mn.

Despite the success of several strong local vendors, international players won a share of government tenders.

Microsoft Israel has an annual turnover of around US\$1bn. In 2007, Microsoft sold 450,000 XP and Vista operating systems in Israel, of which 40% were Vista. Microsoft also reported some high profile local wins in 2007 in both public and private sectors. In 2007 Microsoft Israel was also selected by Super-Pharm Israel, the leading drugstore chain in Israel, to roll out a portal.

Computer Sales Computer sales in Israel (including servers and accessories) were estimated at around US\$1.7bn in 2007, up from US\$1.6bn in 2006. The market is expected to grow at a CAGR of 6% over the 2007-2012 forecast period, to around US\$2.2bn by 2012. Computer sales grew strongly in the first three quarters of 2007. Growth is being driven by a generally buoyant economy and are encouraging buoyant retail sales, with as many as 10% of Israelis purchasing a computer in 2007. In 2007 desktop sales were reported to be outstripping those of notebooks by 3:1. This reflects the fact that despite strong growth in demand for notebooks, the desktop sector is still unsaturated. Lower interest rates should help to support consumer demand despite fears of inflation.

Software Spending on software in 2007 was estimated to be US\$886mn, up from US\$772mn in 2006. The packaged software segment is expected to grow at a CAGR of around 8% over the forecast period.

Spending on software is shifting towards the small-medium enterprise (SME) segment. Increased IT budgets indicated increased spending on enterprise solutions in 2007. Areas of opportunity include security solutions, customer relationship management (CRM) solutions, as well as business intelligence management. CRM is a particularly

buoyant segment currently with local IT giant Matrix reporting a number of public and private sector successes in H108. In terms of verticals, the financial sector is important, with other areas to watch including defense and healthcare.

IT Services IT services are projected to be the fastest growing segment of the IT market, driven by financial, government and military sectors. The IT services segment had a value of around US\$1.4bn in 2007, and this is expected to rise to around US\$2.2bn by 2012. A number of major outsourcing deals have highlighted the growing opportunity. Although Israel seemingly possesses many advantages as an outsourcing destination, in particular a technologically literate, linguistically skilled workforce, and low labor costs relative to most developed countries, the country has failed to capitalize on these strengths in the past. However, the government is now actively promoting Israel to multinationals, and Israel is starting to emerge as a location for packaged applications and localization services.

E-Readiness In 2007 Israel had around 4.3mn Internet users, representing a penetration rate of around 59% of the population. Broadband penetration was around 20.8%, or around 1.5mn accounts. The government has announced that it intends to make a big effort to narrow the digital gaps, which manifest themselves across various demographic lines.

“Making Connections”

Top-level research institutions in the UK and Israel will collaborate, thanks to a bold new initiative of Weizmann UK.

The program - entitled “Making Connections” - will bring together scientists from the Weizmann Institute of Science in Israel with their counterparts from the University of Oxford, the University of Cambridge, Imperial College London (ICL) and University College London (UCL).

The timing of the project’s launch is only too significant as it comes amid continuing attempts to impose an academic boycott on Israeli institutions. Indeed, the UCU (UK University and College Union) has just announced that it is ending its academic boycott of Israel.

This is the first time since its inception in 1950 that Weizmann UK has provided grants for such an initiative, which is funded entirely by UK philanthropists.

As soon as the program was launched, it received 29 applications from the Weizman Institute - far more than had been anticipated. Of these, 10 projects were short listed and with the help of Professors Benjamin Chain (UCL), David Kluge (ICL) and Haim Garty (Weizman Institute), five were selected for funding by Weizman UK.

The five winning research programs will focus on brain processes involved in learning and memory, understanding the nature of “dark energy” in the universe, the physical principles that govern the basic processes of living cells, deciphering the molecular events that take place in living cells and the self-assembly of advanced materials.

Lord Mitchell, Chairman of Weizman UK, said: “This is a very important development in international scientific collaboration. Our first five projects deal with some of the most challenging areas at the forefront of modern scientific investigation and we are proud to be leading the way.”



Weizman Institute President Prof. Daniel Zajfman: “Science knows no borders. Scientific ideas and discoveries, whether it be in the short- or long-term, benefit all humankind. Thus it seems only natural that scientists worldwide should focus their efforts collectively in broadening

the boundaries of human knowledge. Our vision is that this pioneering program will develop into a broad, prestigious, bi-national project, akin to existing programs that Israel has developed with the U.S. and Germany. It will be initiated on a competitive basis of quality assessment and will serve scientists from all universities and research institutions in the two countries.

Originally planned to run two programs over a five-year period, initial response suggests a swift increase may be ahead for the Weizman Institute of Science in Rehovot, Israel, which is one of the world’s top-ranking multidisciplinary research institutions.

Noted for its wide-ranging exploration of the natural and exact sciences, the Institute is home to 2,600 scientists, students, technicians and supporting staff. Institute research efforts include the search for new ways of fighting disease and hunger, examining leading questions in mathematics and computer science, probing the physics of matter and the universe, creating novel materials and developing new strategies for protecting the environment.

Behavioral screening -- the future of airport security

Keep your shoes and belts on: Waiting in long airport security lines to pass through metal detectors may soon be a thing of the past.

Security experts say focus is shifting from analyzing the content of carry-ons to analyzing the content of passengers' intentions and emotions.

"We are seeing a needed paradigm shift when it comes to security," says Omer Laviv, CEO of ATHENA GS3, an Israeli-based security company.

"This 'brain-fingerprinting,' or technology which checks for behavioral intent, is much more developed than we think."

Nowhere is the need for cutting-edge security more acute than Israel, which faces constant security threats. For this reason, Israel has become a leader in developing security technology.

Several Israeli-based technology companies are developing detection systems that pick up signs of emotional strain, a psychological red flag that a passenger may intend to commit an act of terror. Speedier and less intrusive than metal detectors, these systems may eventually restore some efficiency to the airplane boarding process.



One firm, WeCU (pronounced "We See You") Technologies, employs a combination of infrared technology, remote sensors and imagers, and flashing of subliminal images, such as a photo of Osama bin Laden. Developers say the combination of these

technologies can detect a person's reaction to certain stimuli by reading body temperature, heart rate and respiration, signals a terrorist unwittingly emits before he plans to commit an attack.

With these technologies, the emphasis is on speed and seamlessness. Ehud Givon, CEO of WeCU, envisions a day when a passenger can breeze through a security checkpoint in 20 to 30 seconds.

Although traditional security profiling can discriminate by race and religion, security experts say behavioral profiling is fairer, more effective and less expensive.

WeCU has received grants from the Transportation Security Administration within the U.S. Department of Homeland Security, which hopes to implement a system to pinpoint internal threats such as airline employees intending terrorist acts.

Once these technologies are in place, a passenger may pass through a security screening without realizing it. For example, passengers could use an automated check-in system or gaze at a screen with departures information without realizing they've just been exposed to the words "Islamic jihad" written in Arabic.

These stimuli, explains Givon, will intrinsically elicit some sort of biometric response -- whether the passenger knows it or not -- that can be picked up by WeCU's strategically placed sensors.

"I believe that we introduce a new layer in security," Givon says. "This is something that couldn't be done in the past: finding the connection between a certain individual and the intent to harm."

The Orwellian-sounding startup has gone further to develop a system that detects a passenger's behavioral intentions by scanning their every step, literally. While walking around certain parts of the airport terminal, a passenger may not realize he has stepped on a "smart carpet" filled with hidden biometric sensors.

The technology is still under development, says Givon, who believes it will be strong enough to

pick up biometric information from a footstep. If a passenger is wearing heavy hiking boots, for example, WeCU will rely on biometric sensors combined with video and thermal biometric imaging to detect malicious intent.

Another option from WeCU is a “smart seat,” or cushion full of hidden biometric sensors that could provide a more detailed read on someone sitting in an airport waiting area, Givon says.

While the technology sound like something from a James Bond flick or even “A Clockwork Orange,” Givon insists that passengers will not find the techniques intrusive. “We don’t want you to feel that you are being interrogated,” he says.

Givon is negotiating contracts with airports worldwide and believes his company’s technology may be implemented as soon as 2010.

Nemesysco, another Israeli-based technology company, believes the key to a person’s emotions and intentions lies in their voice. The company’s patented LVA, or Layered Voice Analysis, technology can pick up verbal cues from a passenger who may pose a threat.

Unlike a polygraph test, which checks for lies, Nemesysco’s systems work as an “emotion detector,” says Nemesysco CEO Amir Liberman. In other words, it’s not what passengers say, but how they say it.

Nemesysco’s devices use a series of patented signal-processing algorithms that can differentiate between a “normal” voice and a “stressed” voice. If emotional stress is detected, officials can determine if the passenger should be taken aside for further questioning.

The system works on the premise that all voices have a certain frequency, and any deviation of that baseline frequency can indicate stress.

Liberman says it takes approximately five to 10 seconds for their system to capture a “normal” voice in casual conversation, which establishes a baseline. Their system then measures changes

from the baseline voice that signify an increase in stress, excitement, anticipation, hesitation or other emotions that can indicate a potential terrorism threat.

A computer processes the voice patterns and then flashes words such as “high risk,” “medium risk,” “excited” and “highly stressed.” Through his system, Liberman says, he “can see what’s going on in your brain.”

Versions of Nemesysco’s system already have been successfully tested at Moscow Domodedovo International Airport, where officials used it to target criminals and drug traffickers. A version was recently implemented at another major international airport which Liberman declined to identify.

Layered Voice Analysis also has been used to test for insurance fraud and on the TV program “Big Brother Australia.”

Layered Voice Analysis has limitations, including the inability to trace the vocal patterns of a person with a speech impediment. But the system is more effective than current security measures, claims Liberman, who believes a terrorist currently can pass through airport security with explosive material “that can take down any plane.”

In fact, many experts express little confidence in the current state of airport security.

Philip Baum, London-based editor of Aviation Security International magazine, says would-be terrorists could easily slip through security checkpoints, even with new regulations that check for liquids.

“The archaic system of an X-ray machine and metal detector cannot pick up other potential threats posed by passengers,” Baum says. “I can have a ceramic weapon or chemical weapons and walk through an archway metal detector and it won’t be picked up. Yet we have huge faith in these metal detectors that can only pick up one substance.”

Laviv, whose consulting firm focuses on securing mass transportation systems, is equally skeptical.

“It is possible today to hijack an aircraft using only five or six able-bodied passengers who are well-trained in Kung Fu fighting,” he says. “There is no technology in place in airports to detect a threat like that.

“The question is, should our desire be to look for each and every threat agent, rather than focus our efforts on identifying the [violent] intention of the passenger?”

Gaza Teacher Fights Blackouts In The Strip With Israel-Made Solar Panel

Since Hamas took control of Gaza in the summer of 2007, Israeli citizens have been battered with rocket attacks in Shderot, and more recently Ashkelon. Some media outlets call Israel's interference with fuel transfers across to Gaza “a siege” but for Israelis it is just a matter of survival. Looking beyond politics and focusing on solutions for today, a Gaza teacher has adopted Israeli solar energy technology to power his home during the latest blackout, according to Maan News.

Not long ago, we reported on Palestinian taxi drivers souping up their engines to run on falafel oil; the latest is that a Gaza teacher, Mahmoud Shahin, is using solar panels to generate electricity. There have been weeks of rolling blackouts, the newspaper reports, and the 59 year-old Shahin, a chemistry teacher from the town of Jabaliya, in the northern Gaza Strip, has turned to solar power.

He'd purchased the panels eight years ago from a Palestinian who'd imported them from Israel. Only recently had Shahin obtained the electrical conductors he needed to start generating electricity for his house.

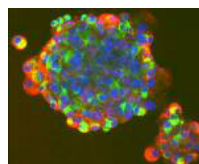
Gaza's only power plant was shut down on November 13 when Israel blocked deliveries of European-funded fuel. Reports say that about 70% of Gaza's 1.5 million residents are without electricity. This Green Prophet says that if Europe wants to help Gaza help itself, solar power technology should be funded and adopted widely throughout the Strip.

Gaza teacher has dreams of lighting all the hospitals in Gaza with solar power. The power cuts have

affected the most basic functions of hospitals. Gaza's major hospitals use generators during the blackouts, but the total closure means that fuel and spare parts are scarce.

Shahin points out that solar power “is not a new idea” and that he didn't invent a thing, but implemented a modern technology that is already available. A man close to our own green heart.

Stem cell therapy reverses brain birth defects



Scientists at the Hebrew University of Jerusalem have succeeded in reversing brain birth defects in animal models, using stem cells to replace defective brain cells.

The work of Prof. Joseph Yanai and his associates at the Hebrew University-Hadassah Medical School was presented at the Tel Aviv Stem Cells Conference last spring and is expected to be presented and published next year at the seventh annual meeting of the International Society for Stem Cell Research in Barcelona, Spain.

Involved in the project with Prof. Yanai are Prof. Tamir Ben-Hur, head of the Department of Neurology at the Hebrew University-Hadassah Medical School, and his group, as well as Prof. Ted Slotkin at Duke University in North Carolina, where Prof. Yanai is an adjunct professor.

Neural and behavioral birth defects, such as learning disabilities, are particularly difficult to treat, compared to defects with known cause factors such as Parkinson's or Alzheimer's disease, because the prenatal teratogen - the substances that cause the abnormalities -- act diffusely in the fetal brain, resulting in multiple defects.

Prof. Yanai and his associates were able to overcome this obstacle in laboratory tests with mice by using mouse embryonic neural stem cells. These cells migrate in the brain, search for the deficiency that caused the defect, and then differentiate into becoming the cells needed to repair the damage. Generally speaking, stem cells may develop into any type of cell in the body, however at a certain point they begin to commit to a general function,

such as neural stem cells, destined to play a role in the brain/ nervous system. At more advanced developmental stages, the neural stem cells take on an even more specific role as neural or glial (supporting) cells within the brain/ nervous system.

In the researchers' animal model, they were able to reverse learning deficits in the offspring of pregnant mice who were exposed to organophosphate (a pesticide) and heroin. This was done by direct neural stem cell transplantation into the brains of the offspring. The recovery was almost one hundred percent, as proved in behavioral tests in which the treated animals improved to normal behavior and learning scores after the transplantation. On the molecular level, brain chemistry of the treated animals was also restored to normal.

The researchers went one step further. Puzzled by the stem cells' ability to work even in those cases where most of them died out in the host brain, the scientists went on to discover that the neural stem cells succeed before they die in inducing the host brain itself to produce large number of stem cells which repair the damage. This discovery, finally settling a major question in stem cell research, evoked great interest and was published earlier this year in one of the leading journals in the field, *Molecular Psychiatry*.

The scientists are now in the midst of developing procedures for the least invasive method for administering the neural stem cells, which is probably via blood vessels, thus making the therapy practical and clinically feasible.

Normally, stem cells are derived from individuals genetically different from the patient to be transplanted, and therefore the efficacy of the treatment suffers from immunological rejection. For this reason, another important avenue of the ongoing study, toward the same goals, will be to eliminate the immunological rejection of the transplant, which will become possible by taking cells from the patient's own body -- from a place where they are easily obtained -- by manipulating them to return to their stem cell phase of development, and then transplanting them into the patient's brain via the blood stream. One important advantage of this approach will be to eliminate the controversial

ethical issues involved in the use of embryo stem cells.

Thales is making its first significant investment in Israel

The electronics, information systems, and medical equipment company will buy 50.1% of the share capital of CMT Medical Technologies Ltd. (EuroNext: CMD) at a price of €5.65 per share.

The transaction values CMT at €21.5 million.

CMT develops medical imaging systems. Its current market value is €8.7 million, so that the deal represents a premium of more than 100%.

Yokneam-based CMT develops and markets advanced digital X-ray imaging systems. It also operates a subsidiary in the US, CMT Medical Technologies Inc., which markets its products there.

President and CEO Amit Meridor head CMT.

Magal's systems to protect utility sites in Europe
Magal's computerized security system will be installed at dozens of facilities.

Computerized security system developer Magal Security Systems Ltd. (Nasdaq: MAGS; TASE: MAGS) has signed contracts to provide intrusion detection systems at dozens of utility facilities in Eastern Europe.

The company reported that it recently signed approximately \$5 million of contracts to supply and install the systems at utility facilities located in Eastern Europe. The systems will be supplied and installed during 2008 and 2009.

The turnkey project includes Magal's DTR-2000 Taut Wire Intrusion Detection System, combined with a dual technology motion sensor (passive infrared and microwave), integrated by a control unit.

Magal CEO Izhar Dekel said, "We have been active in Eastern Europe for a number of years and we believe that these orders confirm our reputation in this region and the satisfaction of our

current customers with our security products and solutions. We see great potential in this emerging sensitive utility facilities market segment, which is now experiencing an increased demand for site protection and surveillance.”

Dekel tendered his resignation in November, and will step down in about five months.

Yehud-based Magal develops and markets computerized security systems, which automatically detect, locate and identify the nature of unauthorized intrusions. It also supplies video monitoring services through US subsidiary Smart Interactive Systems, Inc.

Patient photos aid doctors in reading CT scans

Government officials and HP Israel CEO Yehoshua Bakula signed an agreement to bring the cards to Israel.

After nearly ten years of wrangling, tenders, lawsuits, and mud-slinging, the saga of the tender for smart ID cards has reached its end. In an impressive ceremony worthy of a project which became so complicated, representatives of the Ministries of the Interior and Finance signed a contract with HP Israel CEO Yehoshua Bakula to bring the smart ID cards to Israel.

The project is worth about NIS 270 million. It will take three years, and will include 5 million ID cards. As part of the project, HP will set up a plant in Caesarea that will employ 30 workers.

The smart ID cards has been a long-standing vision in Israel. It is a plastic card with an embedded electronic chip, and on the chip. The chip will hold the details of the holder. The details will allow identification through various public computer systems. The card will also be ready for biometric identification.

Using the card, Israeli citizens will be able to access government services, to identify themselves to authorities through verification and identification (electronic signatures), to pay taxes, to renew drivers licenses, and other actions.

The estimated price of each card is NIS 46, 1 shekel higher than the Ministry of Interior estimate, while HP’s base estimate was NIS 64.

An Israeli study found that adding photos of patients’ faces to their medical files made radiologists more meticulous when looking at their X-rays. They reported more details and said they felt more empathy for patients who were otherwise strangers.

Adding patients’ photos is a simple, low-tech way to reap rewards for both doctors and their patients, the researchers concluded.

Several experts not involved in the study agreed, although James Thrall, chairman of the American College of Radiology’s board of chancellors, said making it common practice in the U.S. could be problematic because of privacy laws.

Also, the benefits of including photos might disappear when the novelty of the practice wore off, said Dr. Thrall, a Massachusetts General Hospital radiologist. Still, he said it merits more research.

The study involved 15 radiologists at Shaare Zedek Medical Center in Jerusalem and 318 patients who agreed to be photographed before undergoing CT scans. The color photos appeared automatically when the doctors opened the patients’ computer files.

The study’s focus wasn’t on the ailment the scans were meant to evaluate, but rather on incidental findings that often show up on CT images, such as kidney cysts in patients scanned for suspected appendicitis. Doctors reported these extra findings in 81 scans when the photos were included.

Three months later, the doctors unknowingly viewed the same 81 scans, but without patients’ photos. This time, the doctors failed to report 80% of the incidental findings.

“We look but we don’t always report” these incidental findings, particularly if they are considered unlikely to affect the patients’ outcome, said study co-author

Irith Hadas-Halpern, a radiologist at the Jerusalem hospital.

Still, they often are things patients would want to know about or that could affect them down the road, she said. The patients' photographs made doctors look more carefully and report more detailed information on these findings.

Also, all 15 radiologists reported that the photographs made them feel much more empathy toward the patients.

"Once you see that this is a human being .. the attitude changes," Dr. Hadas-Halpern said. "You see this is a young woman, an old suffering man. It adds something."

Dr. Hadas-Halpern said it would be particularly beneficial to radiologists involved in outsourced telemedicine. These doctors often interpret computerized scans sent from time zones away, literally far removed from the patients.

The study was being released Tuesday at the Radiological Society of North America meeting in Chicago. Yonatan Turner, a radiology resident, hatched the study idea as a way to make the job less impersonal.

Joan Anzia, a Northwestern Memorial Hospital psychiatrist, said adding photos is "simple and ingenious."

"Feeling more connected with the patient and actually working a little harder totally makes sense from what we understand about the way the brain works in terms of facial recognition and attachment," Dr. Anzia said.

>From early infancy, she explained, the brain is programmed to respond to faces, and that response is the beginning of an emotional attachment. Eric Stern, a University of Washington radiologist, said the study was important "because technology has absolutely dehumanized the patient."

Dr. Stern said he saw a rare example of patients' photos accompanying radiology files when he

reviewed chest X-rays of Southeast Asian immigrants as part of a tuberculosis control program. Photos were included for identifying purposes because many patients had similar last names, Stern said.

"I found it to be an unexpected pleasure to be able to put a face to the X-ray," he said.

Dr. Stern said there could be drawbacks to using patients' photos if something about their appearance -- race or an angry demeanor, for example - - triggered radiologists' biases. But he said the benefits of potentially increasing empathy would far outweigh potential biases.

Israel has emerged as a world leader in high technology and is considered the next "Silicon Valley" or the "Silicon Wadi".

Israel boasts the highest per capita ratio of scientists and engineers in the world with approximately 13.5 engineers per 1,000 residents. More than 25 percent of the Israeli work force is employed in technical professions and Israel ranks first in the world in its amount of scientific publications per capita.

Israel is home to thousands of high-tech companies and technological incubators sponsored by the Office of the Chief Scientist, which are located in or around more than twenty Israeli cities and towns. Technology giants such as Microsoft, IBM, Motorola, Intel, Cisco, 3Com, HP, Sun and many others have substantial development facilities in Israel. Israel is second only to the United States (in absolute terms) in the number of start-up technology companies and third after Canada in the number of publicly traded companies on NASDAQ.

Today, Israel is known to be the largest non-US beneficiary of US-based venture capital and private equity investments. Israel is also considered a "cellular hub" with some of the most advanced technology oriented cellular operators in the world and a cellular penetration rate of over 85%. Multinational cellular infrastructure and handset manufacturers utilize this unique market as a testing center for advanced cellular and telecom technologies.

Harmonic acquires Scopus Video Networks for \$86 million

The US company will pay a 46% premium on the market value of Scopus, which is headquartered in Rosh Ha'ayin. Harmonic Inc. (Nasdaq: HLIT) today announced the signing of an agreement to acquire Scopus Video Networks Ltd. (Nasdaq: SCOP) a global provider of digital video networking solutions, for \$86 million. The acquisition will extend Harmonic's worldwide customer base and strengthen its market and technology leadership, particularly in international video broadcast, contribution and distribution markets.

Under the terms of the definitive agreement, which has been approved by the Board of Directors of both companies, Harmonic will pay \$5.62 in cash for each outstanding share of Scopus, representing a premium of 46% over the market value, and an enterprise value of approximately \$51 million, net of Scopus' cash and short-term investments. The proposed acquisition is subject to customary conditions, regulatory approvals and the approval of Scopus' shareholders, and is expected to close in the latter part of the first quarter of 2009. Harmonic has received voting agreements supporting the proposed acquisition from shareholders representing approximately 50% of Scopus' outstanding shares.

Harmonic expects to realize cost synergies upon full integration of Scopus of \$8-10 million on an annualized basis, making the transaction accretive to Harmonic's non-GAAP earnings in 2009, exclusive of the amortization of intangibles and non-recurring charges such as restructuring and transaction costs. Harmonic will determine the appropriate purchase accounting for the transaction at closing and, accordingly, cannot reasonably estimate the impact on GAAP earnings at this time.

For the first nine months of 2008, Scopus, which is

headquartered in Rosh Ha'ayin, reported revenues of \$55.4 million, an increase of 35% over the comparable period of 2007. Approximately 79% of these revenues were outside the US, with no single customer representing more than 10% of total revenues. Scopus has about 300 employees worldwide.

Harmonic's president & CEO Patrick Harshman said, "This acquisition extends Harmonic's diversification strategy, providing us an expanded international sales force and customer base, particularly in video broadcast, contribution and distribution markets, as well as complementary video processing technology and expanded research and development capability. Like Harmonic, Scopus has strong gross margins and a proven track record of innovation and growth. By combining our two companies, we see significant opportunities for product, sales and cost synergies."



Scopus' shareholders, and is expected to close in the latter part of the first quarter of 2009. Harmonic has received voting agreements supporting the proposed acquisition from shareholders representing approximately 50% of Scopus' outstanding shares.



Please enroll me as a subscriber to the Israel High-Tech & Investment Report. I understand that if not satisfied, I may cancel my subscription at any time and receive a refund of the unexpired portion. I enclose a check for \$95 (or the Israeli shekel equivalent and 15.5% v.a.t.) and am sending it to POB 33633, Tel-Aviv 61336. I am providing you with my name, title, mailing address, e-mail, telephone and fax numbers.

The Israel High-Tech & Investment Report is a monthly report dealing with news, developments and investment opportunities in the universe of Israeli technology and business. While effort is made to ensure the contents' accuracy, it is not guaranteed. Reports about public companies are not intended as promotion of shares, nor should they be construed as such.