ISRAEL EXPORT INSTITUTE

ISRAEL Inspired by *innovation*
Homeland Security Industry

Protecting Our Way of Life

Homeland security and safety represent critical responsibilities governments and civil services are obliged to provide their citizens. While military branches are prepared to meet cross-border threats, civil authorities are responsible for internal security. From the urban centers to open rural areas and the vast ocean space, maintaining public safety, security, enforcing law and order, countering terror and preparing for emergency are clear symbols of the nation's sovereignty. Nations that cannot meet their obligations risk drifting aside, turning uncontrolled areas into no-man's lands, dominated by outlaws, terrorists and pirates.

A decade after 9/11, an event that brought international terrorism to the limelight, the majority of the world's nations are assuming responsibilities in developing the organizations, intelligence means and operational capabilities in fighting terror, mitigating security risks and establishing emergency preparedness protocols. Merging economical growth with technological evolution has contributed to enhanced safety and security of key infrastructure, urban centers, mega-events, aviation, shipping, mass transit and cyberspace.

Global Market Growth

Analysts expect the global spending on homeland security to reach US$344.5 billion in the year 2022, up from 178 billion in 2010, with significant growth segments in aviation security, communications, data and cyber security and counter terrorism. The most dominant market is the U.S., with large growth markets evolving in Brazil, Mexico, Russia, China, India, Vietnam and the Middle East.

HLS - The Israeli Advantage

As a world-leading HLS technology provider, Israel's security is founded on innovative, cutting edge technologies, operationally proven methodologies and comprehensive training and qualification of human resources. The solutions provided by Israeli companies are often customized and balanced to

meet specific customer requirements. These solutions also rely on extensive operational experience in countering terror and management of emergencies, gained through years of cooperation with government agencies. Such capabilities are shared with Israel's allies and partners throughout the world.

The technologies essential to Israel's security have evolved over three generations, addressing a broad spectrum of threats. Today, Israel's security relies mostly on domestically developed, matured and tested capabilities, maintaining high level of security while ensuring quality of life for ordinary citizens. Key technologies developed to support the nation's unique security requirements include explosive detection, forensics, intelligence, telecommunication and network security, biometrics, and cyber security.

Border protection and surveillance, virtual and physical perimeter protection are among the primary fields of expertise of Israeli security exporters. Specialized systems are also offered for the inspection of vehicles and cargo, countering potential terror attacks, jamming of wireless remote controllers of IEDs, as part of more comprehensive explosive ordnance disposal measures, unmanned systems, ballistic armor protection, riot control solutions and non-lethal measures for law enforcement. Communications surveillance and security, information processing and cyber security complete Israel's range of HLS offerings, Addressing all needs at the national level, government agencies and municipal levels.

Homeland Security KeySectors

- Infrastructure & Border Security
- Transportation Security
- Securing the Smart City
- Cyber Security
- Intelligence, Counter-Terror & Law Enforcement
- CBRN Security & Emergency Management

Infrastructure & Border Security

Israeli companies are positioned at the forefront of border and perimeter protection. Israel's sophisticated electronic fencing, covert 'virtual fences' underground sensors and obstacles are used worldwide in border security, preventing human trafficking and smuggling. These obstacles are enhanced by video motion detection, radar, seismic, magnetic and electro-optical sensors increasing probability of detection while minimizing false alarms. Utilized as part of infrastructure protection solutions, these technologies also integrate

a wide range of access controls, tampering sensors, biometrics and video monitoring and analysis systems. At the border check-points advanced systems are screening people, vehicles and cargo, ensuring that open borders do not become security risks. Operational systems are also enhanced by aerostats, autonomous unmanned aerial, ground and maritime vehicles, enabling small forces to control large areas with minimal resources.

Aviation, Maritime & Transportation Security

By far the most dominant sector in terms of homeland security investments, safeguarding modern transportation has become a major concern for developed nations worldwide. Israel's expertise in this field includes building protection and risk mitigation, perimeter security, access control management and surveillance by various means, including radar, imaging and biometric. Integrated control systems offer efficient monitoring in airports, seaports, metropolitan transportation hubs and mass transit systems. Complementing these capabilities are specific solutions from biometric identification systems and e-passports to sensors detecting explosives, and mass-video monitoring and behavioral analysis, applicable for the security of mass transport systems and managing crowds at mega events.

Securing the Smart City

With rapidly growing mega-cities, the 'smart city' embraces modern technologies for improved municipal and medical services, transportation infrastructure,

control and security. By implementing advanced data processing, communications and decision support tools, authorities can better serve and safeguard the population while improving response in case of emergency. Directly supporting law enforcement and traffic management, municipal organizations, first responders and smart–city facilities can improve emergency management and continuity of critical services in the urban domain. Smart–City projects rely extensively on communications, information technology, command and control for monitoring and optimizing asset management. Digital maps and geographical information systems (GIS) are employed to establish a clear situational picture and assist authorities in emergency response situations. Advanced image processing and video analytics are used for vehicle detection, human face recognition, and video motion detection, supporting security and counter terror requirements, enhancing surveillance, and adding new dimensions to safeguarding modern urban life.

Cyber Security

Since the creation of cyberspace and the internet Israeli
security experts and scientists have posit
country at the forefront of cyber defense, de
everything from the basic building blocks of n
security, data encryption and information prote
to integrated systems monitoring content a
activities, alerting of suspected criminal or terro
activities online. Advanced simulation syst
are also enabling rapid response in the event
cyber attacks. The Israeli government has rec
established a national cyber center, with the g
to coordinate the research, development, legis
and preparedness among the academy, priv
public sector, to enhance the protection and m
vulnerability of the country's commercial, in
public sector to hacking, cyber crime and cyber attacks.

Counter Terror, Intelligence & Law Enforcement

At the leading edge of defense, tactical teams benefit from a comprehensive array of personal gear including highly configurable combat webbing, helmets, bulletproof vests, inserts and vehicle armoring offering high level of protection. Dedicated suits, jammers and robotics are offered for bomb disposal. Tactical

teams also rely on non-lethal and lethal weapons, forced entry and breaching equipment and other assault measures. Popular accessories including visible and covert illuminators, weapon sights and sensors facilitating rapid and effective target acquisition, discrimination of targets behind corners or under cover, and sniper detection systems. Comprehensive training equipment and services are also available, to develop and maintain the human skills in operating such systems.

Supporting intelligence collection, dissemination and decision-making, Israeli companies provide cutting edge technologies for intelligence collection, command, control and communications. Other tools are designed for the legal and national authorities, to conduct lawful interception, network surveillance and investigation in cyberspace.

Emergency Management & CBRN Protection

Effective Preparedness, Response and Recovery (PRR) are critical aspects of emergency management, for saving lives, containing and minimizing the damage. Emergency management has been the responsibility of Israel's homeland security authorities, assisted by locally developed solutions. Among these are information and decision support systems assisting emergency forces in prioritizing operations in the effected area. Communications systems enable rapid establishment of ad-hoc networking services.

Chemical, Biological and Radiological, Nuclear explosive (CBRNE) sensors, are used to monitor hazardous materials in the affected areas while defensive systems providing adequate protection to civil population and first responders. Israel is one of few world-leading suppliers of collective and individual CBRNE protection, for personnel, vehicles, shelters, medical teams and mobile facilities. The country also offers radiological monitoring and detection systems.

Specialized vehicles, including remotely operated vehicles (ROV) and aircraft are available to carry out missions in hazardous and CBRNE contaminated areas. Israel also maintains a Center for Counter CBRN Terrorism, offering risk assessment,

the development of guidelines, and training for emergency services and first responders. Remotely operated and unmanned systems enable safe and effective response to emergency in hazardous environment typical of CBRNE and other hazardous materials (HAZMAT.(

International Cooperation

As an emerging area, HLS opens opportunities for cooperation, where companies open to share and collaborate can prosper. Israeli solutions are often incorporated in larger systems, as 'Other Equipment Manufacturer' (OEM) systems. Companies often employ an open approach to partnering with local or international providers. As prime contractors, they integrate complete systems while as subcontractors, providing products, applications, and services to ensure that the client receives an optimal, affordable, and usable solution. Israeli companies work closely with leading security integrators worldwide, including 3M, Boeing, Embraer, Finmeccanica, G4S, Honeywell, IBM, Lockheed Martin, Northrop Grumman, Raytheon, SAIC, Safran, Siemens, Thales, Tyco among many others.

Global Presence

Israeli companies are involved in security projects worldwide, as prime contractors or partners. Israeli security services and technologies were involved in securing major sports, entertainment, and mega–public events worldwide, including the Olympic Games in Atlanta and Athens, African Cup of Nations and the Pan–American games in Rio. Israeli security systems protect some of the major symbols of western civilization, including Buckingham Palace, the Vatican, and the Eiffel Tower. These systems also secure the largest aviation hubs and seaports in the world, including JFK (New York City), Heathrow (London), and Changi (Singapore) airports. Furthermore, Israeli trainers support some of the finest police and counter–terror units around the globe.

Aerospace, Defense & HLS Department

Your gateway to Israel's Security Industry
The Aerospace, Defense & HLS Department of The Israel's Export & International Cooperation Institute represents over 350 exporting companies in the homeland security arena. By providing a wide range of export–oriented services to Israeli companies, and complementary services to the international business community, the institute helps to build successful joint ventures, strategic alliances, and trade partnerships.

The Israel Export & International Cooperation Institute

a non-profit organization supported by the government of Israel and the private sector, facilitates business ties, joint ventures and strategic alliances between overseas and Israeli companies.

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