#### GALAXITE Security Profile Presentation



1.

## Security + Control & Automation



#### GALAXITE security fields of expertise such as:

Integrated critical site protection systems, Safe & Smart Cities, Border Control solution, Campuses and critical assets security, Command and control centers etc. Are complemented by our domination and vast skills in complexed integrative solutions within the Control & Automation Arena

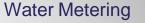


#### Fire Detection & Fighting



SCADA Software Development







#### Parking Systems



#### **Building Management**



#### **Industrial Automation**



## GALAXITE End to End solution

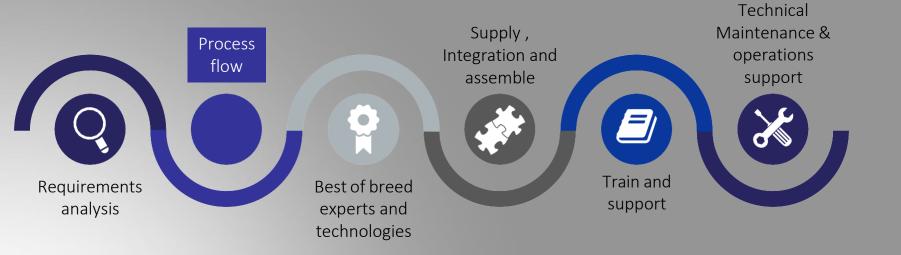
GALAXITE acts as a System Integration expert in the field of Security as well as technology and solution provider

Our team of experts includes: Project management team, Project engineering, Integration team, software engineers, maintenance and support team

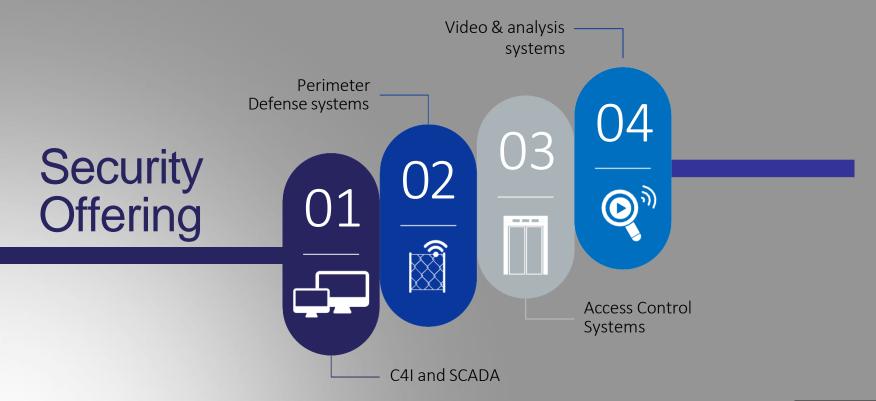




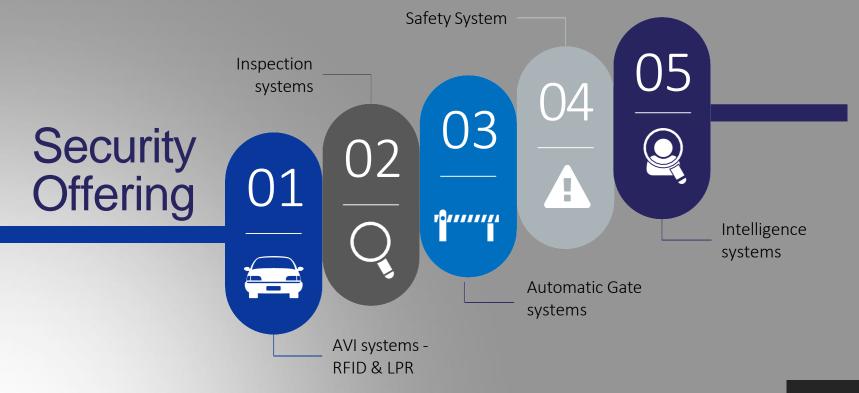
## End To End project scope...















## Security Verticals

Critical facilities Campus

Refineries Water Communication

#### Courts Government High-tech

Borders

#### Safe Cities

Transportatic Marine ports Airports Railway Depots

#### National systems Cyber protection Control centers Intelligence



## **Project expertise and Technologies**

Security Projects

Turn-Key security projects

Ports & Airports

Smart cities

Command centers

Critical facilities

Borders

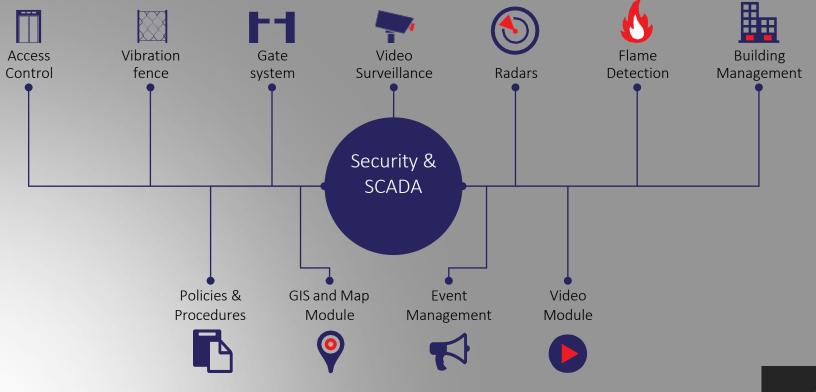


Command & Control platform (Pulse)
Electronic fence systems (GM security)
Gate technology for marine ports (Harmony GateWay)
Vehicle Access control system (View Park)
Border Control (Fast Pass)
Parking Systems (Fast Park)

Unified access control (Total Access)



## **Our C&C Solution**





#### Adaptive Response



Video Management

**GIS** Visualization

## Security modules



## **GALAXITE** innovative Platform

- Adaptive and integrative platform
- Smart GUI and unique control tools
- End to End seamless integration of control, safety, BMS and any other system to the security command & control platform
- Designed for durability and anti hacking (approved by Israel authorities)
- Versatile system topology and architecture
- Build in redundant and backup tools
- Multi site support
- Easy to Design, Build, Modify, Maintain
- Fast 3<sup>rd</sup> party integrations, hundreds of existing gateways





## **Cooperating with Local integrators**

GALAXITE believes in strong cooperation with Local system integrators and engineering companies, here are our vision for successful cooperation

- Sharing design stage with our local partner
- Using partners technical and operational skills and strength
- Training our partner on C4I platform, enabling him sufficient capabilities on project process, modification and maintenance
- Building shared scope of work that utilizes local advantages in engineering, procurement and support



Our Multi Layer Perimeter Defense (MLPD)

GALAXITE MLPD is based on risk assessment and cost effective design And may comprise the integration of the following state of the art components, Seamlessly integrated into our Pulse command and control platform



Smart electronic fence system



Radar & Laser systems



Buried detection systems



Video analysis





## Perimeter Security -V-Alert







Pure electronic – No moving parts



Independent alarm per sensor









## Perimeter Security -V-Alert







Adjustable settings for each sensor



Fast installation & operation



Easy settings & C4I interface







#### Perimeter Security -V-Alert



#### V-Alert references

- Authorized by all security and intelligence organization in Israel
- Installations on Israel Borders
- Installations on Israeli Security agency (Shabak)
- Installations on Israeli Mossad
- Installations on water facilities (Mekorot)
- Installations on electric plants (IEC, private, solar)
- Settlements and communities
- Oil and Gas facilities
- Communication sites
- Shelters and Bunkers
- Towers and Pylons





## Perimeter Security -Lasers



Fixed / Rotating Laser screens

Up to 300 M range of detection

**Pin-Point detection** 

Increasing physical fence Height and width

360<sup>o</sup> Laser screen for fixed or temporary area closure

Integration with V-Alert perimeter system and Pulse C4I







#### Perimeter Security -Short Range Radars



#### Short Range Radars

Security of non-fenced areas or creating extra geographic coverage

Range of 250m of vehicle and 170m of man detection

Drown detection

No Moving parts

All weather proof

Target range and velocity calculation

Integration with V-Alert perimeter system and Pulse C4I





Perimeter Security -Buried Sensors



#### **Buried sensors**

Buried RF cables for intrusion detection

- Detects disturbances between transmitted and received radio frequencies
- Non fenced applications
- Pre-alerts
- Detection in natural environment
- Few meters wide virtual obstacle

#### Seismic sensors

- Digging and intrusion detection
- Detection range according to soil types

Integration with Pulse C4I





#### Perimeter Security -Day/Night Video analysis



Day/Night video analysis

Analysis of video stream from CCD and Thermal cameras For penetration detection, creation of pre-alerts, detection of people access to restricted sensitive areas. Other algorithms may be in use as well:

Directional Line crossing

Loitering

Abundant objects

People and vehicle count

Crowd detection

Integration Pulse C4I





#### Perimeter Security – Surveillance Balloons



Surveillance Balloon

High performance balloons for all weather surveillance

- Up to 10 KM Day/Night surveillance radius
- Aerostat Diameter 22.5 ft.
- Wind Limit 40 knots
- Operating Altitude (AGL) Up to 1,000 feet
- Endurance Up to 72 hours-
- Turn Around Time 20 min
- Payload Max Weight 11kg
- Temperature Resistance -35° to 60°



## Additional GALAXITE security solutions and technologies





## Our technology - Gate automation

#### 

The innovative HARMONY GATEWAY handles incoming and outgoing port traffic in a completely automated, "pass-through" mode that is faster, more efficient and more reliable than ever before. Combines perfectly enhanced security with efficient operation and productivity

#### 

HARMONY GATEWAY is a combination of advanced automation hardware and state-ofthe-art software. It provides a comprehensive solution for ports to effectively manage increasing traffic flow and enhanced security, while improving port productivity and operation efficiency

#### CARTE OF THE ART

Technologies included use of RFID, OCR/LPR, Damage Inspection, biometric identification, Radioactive inspection, barriers, Anti terror bollards, weight bridges, video systems, electronic signs, all connected through redundant communication network



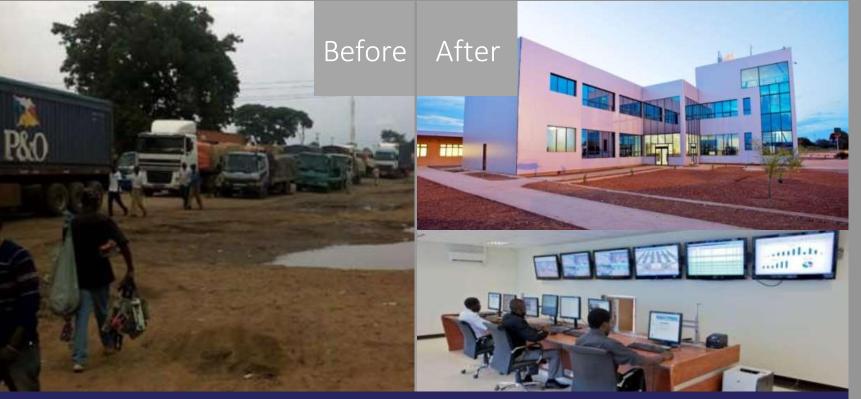
#### Fast Pass – Border control

Total system for control, monitor and fee collection of truck and vehicle border crossing.

- Fee collection for border crossing
- Vehicle/Truck classification and identification
- Pre- payments by transportation companies

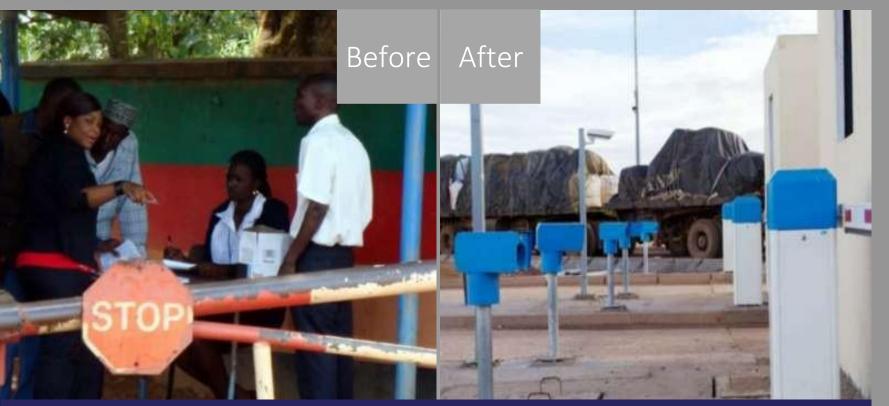
- Cash payments upon crossing
- Inspection and monitoring
- Integration of security systems in the border
- Video systems, PA, Access control, etc.





#### Fast Pass – Border control





## Fast Pass – Border control



#### Parking systems Our Solution





## **Total Access**



#### Advanced Access Control systems including:

- Multi site access control system
- Combination with Alarm systems
- Integrated modules

- Visitors management
- Enrollment module
- Reports and statistics



#### The system enables the integration with:

- Gates and turnstiles
- **Biometric readers**
- Magnetic / Prox readers

- **RFID** readers
- Smart cards







Case studies critical facilities



## Energy plants security systems



We designed a multi layer security solution for critical facilities such as Oil & Gas plants and reservoirs, power plants, communication site etc.



Our solution includes Pulse command and control platform that control & monitor multi layer security system integrating our Unique V-Alert system for fence protection, video analytics systems or radars as an external layer, vehicle, personnel, visitors access control and inspection systems, other systems for internal sensitive areas within the facility, etc.



Over 30 solar plants, power plants and other critical facilities have been installed by us in the last 2 years.



## Oil & Gas facilities - security systems

Eilat Ashkelon pipe line company Multi site perimeter security

Security Protection for 10 sites – Storage facilities and pumping stations

More than 25 KM of perimeter security

Over 400 cameras for Content analytics detection Control of Motorized strategic Surveillance Cameras

IP redundant Network with Analysis encoders

Video Command & Control system



## Oil & Gas facility safety systems



#### Tanks integrative fire system

We implement a unique system for fire detection for 30 fuel tanks with floating roof, with tank diameter of 60 to 80 meters

The site is protected by 130 Unique Triple IR (IR3) Detectors. The detectors are located on the Tanks Floating Roofs, (4 to 5 units per tank)

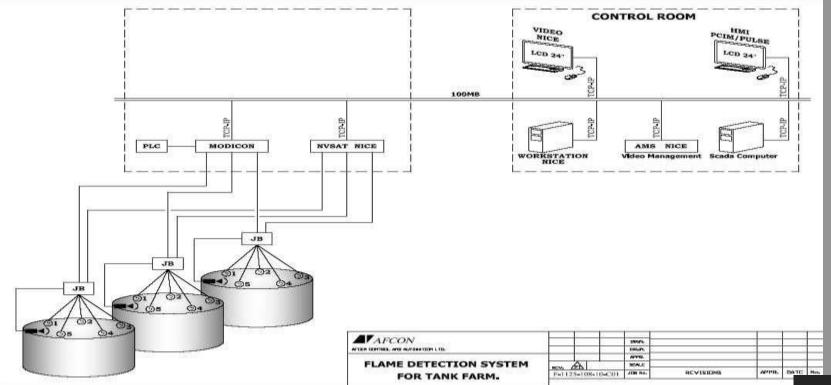
The detectors overlook the entire floating roof area, monitoring the occurrence of flames caused by fugitive fuel vapors. In order to get absolute detection and avoid false alarms, we have installed ach tank with Explosion proof PTZ camera, the cameras is integrated with the flame detectors by PLC's all connected to our Pulse SCADA system

All cameras are connected to NVR system also integrated to our Pulse platform

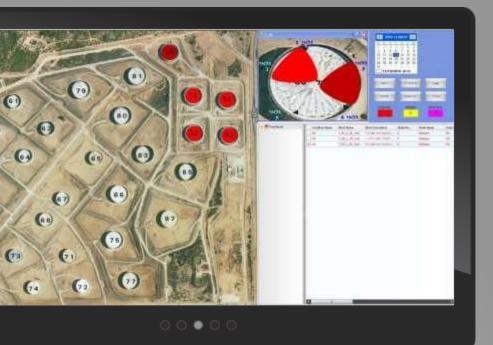




## Storage facilities - System configuration







## **Storage facilities**

The main C&C screen with Event Manager





## Ashdod gate technology system

The extensive project enables to dramatic improve the operational process of the port while increasing the security procedures.



We have designed and supply the Ashdod port gate automation project that includes our advanced Harmony gateway software and integrates successfully ten's of security and inspection gates with the Port TOS (terminal operating system).

systems & interfaces

LPR/OCR Portals for Trucks & Containers ID

Damage inspection & Archiving module

RFID systems for drivers ID

Biometrics systems for driver ID verification

Un-Manned pedestals

Anti terror Gates & Barriers

Video monitoring & Recording

Radioactive cargo and vehicle inspection

Vehicle screening

LED information systems

Intercom & PA





# Safe & smart cities

Our solution for Safe & Smart City is based on our GIS command and control platform that enables control & monitoring of security sub systems such as Video, analytics, radars and sensors, vehicle location systems, LPR's, public alarm points, etc. as well as municipal parking, enforcement, gas/water/electricity metering, traffic, etc. we have awarded contactor of the Israeli Ministry of Public Security (MOPS) and performing 35 safe city projects in Israel.







#### Arena Stadium Jerusalem



#### New Jerusalem basketball stadium 12,000 seats

- C&CFire & Safety
  - PA

- Video surveillance & Analytics
- Communication

- Access control
- Mass access control
- Ticketing system and billing





## THANK YOU