



Giza 5Th
Systems

Enabling
Digital
Transformation



Case Studies



Smart Mobility



Egypt, North Africa & Levant



Terminal Operating Systems (TOS) for the Alexandria and Dekheila Container Terminals

Project

Terminal Operating Systems for the Alexandria and Dekheila Container Terminals

Client

Alexandria Container and Cargo Handling Company – ACCHC

Project Location

Egypt

Project Description

In partnership with TSB, Giza Systems was to deliver the best-in-breed Terminal Operating Systems (TOS) for the Alexandria and Dekheila Container Terminals

Benefits to Client

- Enabling planning, control and monitoring based on real-time information
- Improving operations and tactical performance
- Increasing capacity of operations
- Streamlining demand and traffic management
- Enhancing strategic viability and digital transformation

Scope

In partnership with Total Soft Bank (TSB) Co., LTD., the project scope covers the supply, installation, and maintenance of the automated Terminal Operating System (TOS) on turnkey base to replace current existing software and hardware at both the Alexandria and Dekheila container terminals.



Luxor Nagaa Hammady Railway Modernization

Project

Luxor Nagaa Hammady
Railway Modernization

Main Contractor

Hyundai Rotem

Sub-Contractor

Orascom Construction

End User

Egyptian Railways

Project Location

Damietta, Egypt

Project Description

Giza Systems won the SCADA
System Implementation as Part
of the Luxor Nagaa Hammady
Railway Modernization Project

Benefits to Client

- Remote control and monitoring of equipment and their status from a central operating room
- Better operational efficiency

Scope

Giza Systems was awarded the project to provide a number of solutions including: main control room, AIS stations, monitoring and control of level crossing, electrical and mechanical equipment status.



Cairo International Airport

Project

Smart Building
Solutions

Client

Cairo International
Airport

Project Location

Cairo, Egypt

Project Description

Giza Systems won the project to implement smart buildings and life safety systems in terminals 1&2, new seasonal flights terminal, and VIP hall.

Benefits to Client

- Optimized performance and efficiency
- Enhanced reliability and comfort
- Time saving
- Enhanced cost effectiveness

Scope

The scope included the implementation of the following:

- Fire alarm
- Voice evacuation
- Fire suppression
- Public address solution
- Background music system



ERI Data Center

Project

Transportation
Technology
Infrastructure
Solutions and Access
Control Solutions

Client

Armored Vehicles
Department, A.F.

Project Location

Egypt

Project Description

Giza Systems was awarded the ERI Data Center project to implement an efficient customized data center.

Benefits to Client

- Enhancing reliability and operational efficiency
- Saving time and cutting cost
- Centralization of a system that improves service and researching

Scope

Complete implementation of ERI Data Center including the following:

- Civil works
- Fire fighting system
- Fire alarm
- Containment of data center
- Lighting solutions
- Low current power
- Network solutions (core switches and access switches)
- HVAC (customized air conditioning with DCIM monitoring solution)
- Access control
- Power solutions
- UPSs
- Passive network
- Security system



Katameya International Airport

Project

Katameya
International Airport
BMS

Client

Katameya
International Airport

Project Location

Cairo, Egypt

Project Description

Giza Systems was awarded the project to implement various Building Management Solutions.

Benefits to Client

- Facilitate the operation and evaluation of the building
- Minimize energy usage and waste
- Significantly reduce operational costs

Scope

The scope included the total integration of:

- Building Management System (BMS)
- HVAC control system



Marsa Alam International Airport

Project

Marsa Alam
International Airport
Life Safety Systems

Client

Marsa Alam
International Airport

Project Location

Marsa Alam, Egypt

Project Description

Giza Systems won the project to implement life and property safety systems.

Benefits to Client

- Protection of life and assets
- Limit asset damage and injury
- Facilitate quick response and effective incident management

Scope

The scope included the implementation of the following:

- Fire alarm systems
- Voice evacuation systems



Sharm El Sheikh International Airport

Project

Sharm El Sheikh International Airport Life Safety Systems

Client

Sharm El Sheikh International Airport

Project Location

Sharm El Sheikh, Egypt

Project Description

Giza Systems won the project to implement life and property safety systems.

Benefits to Client

- Protection of life and assets
- Limitation of asset damage and injury
- Facilitation of quick responses and effective incident management

Scope

The scope included the implementation of the following:

- Fire alarm systems
- Voice evacuation systems



Suez Canal - Shipyard DC System

Project

Suez Canal - Tersana DC System

Client

Suez Canal Authority

Project Location

Suez, Egypt

Project Description

Giza Systems was awarded the project to provide a Tier III uptime data center system (1500 racks) for the Suez Canal Authority.

Benefits to Client

- A secure, controlled environment for core data processing, storage and transmission
- Increased level of uptime
- Increased efficiency of processes
- A step forward in digitalizing the infrastructure of marine transportation in Egypt

Scope

Services

- Support system design, engineering and documentation for the project
- Site acceptance test
- Commissioning and start up for the system

Solutions

- Data Center (containment, cooling and power)
- Data Networking



Suez Canal Signaling State Board (SSB) System

Project

Suez Canal Signaling State Board (SSB) System

Client

Suez Canal Authority

Project Location

Suez, Egypt

Project Description

Giza Systems was awarded the project to provide signaling state board systems to the Suez Canal Authority, and integrating it with the existing meteorological, hydrological and informatics systems.

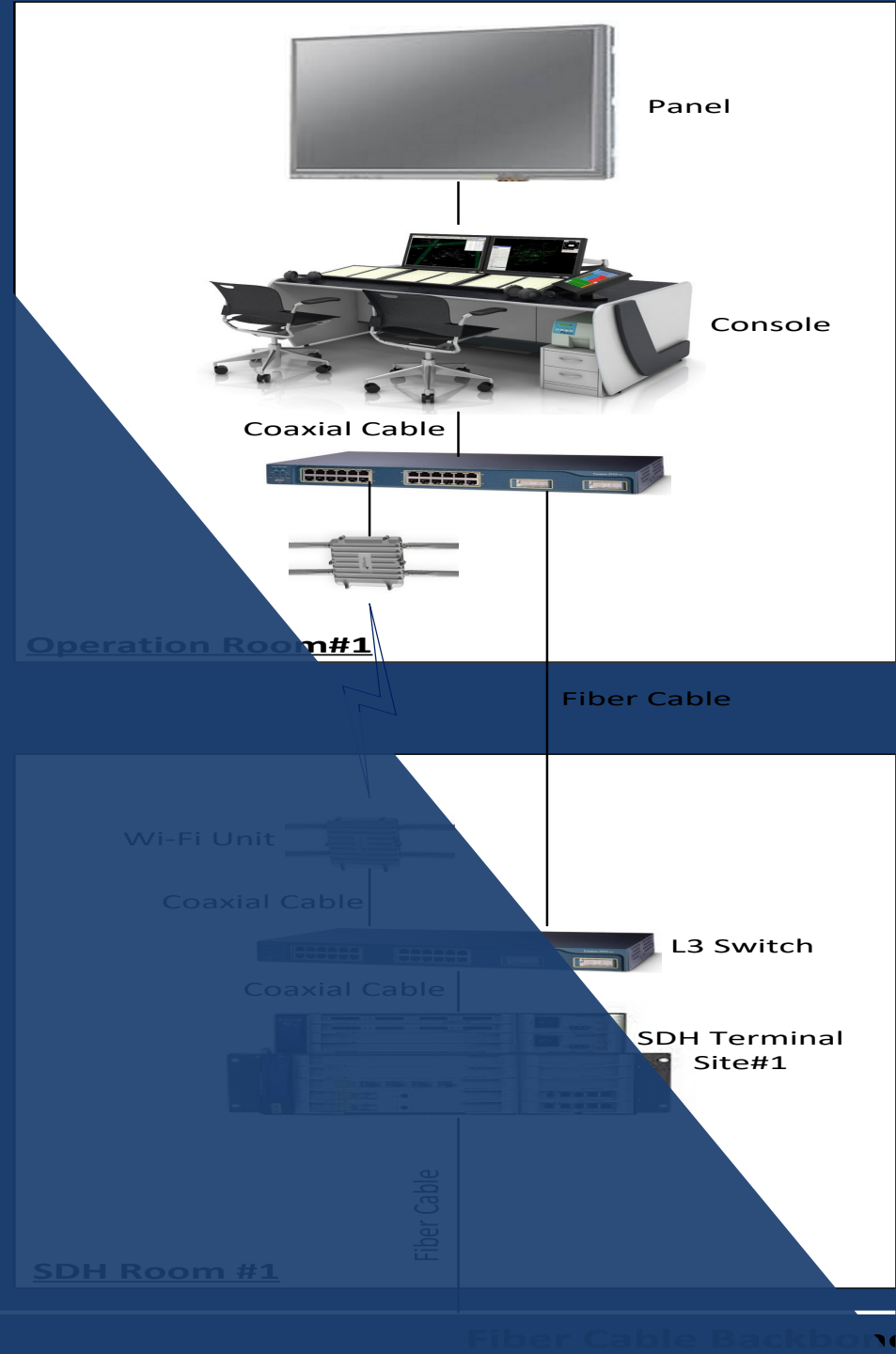
Benefits to Client

- Upgrading the marine transportation infrastructure elements
- Combining structural efficiency with the highest level of navigational safety for the Canal waterway

Scope

- Support system design, engineering and documentation for the project
- Site acceptance test
- Commissioning and start up for the system

Main Control Room



Operation Room#1

Fiber Cable

Wi-Fi Unit

Coaxial Cable

Coaxial Cable

L3 Switch

SDH Terminal Site#1

SDH Room #1

Fiber Cable

Fiber Cable Backbone

Suez Canal Vessel Traffic Management System

Project

Vessel Traffic Management System Project

Client

Suez Canal Authority

Project Location

Suez, Egypt

Project Description

Giza Systems was awarded the project to implement a complex meteorological system that integrates with the Vessel Traffic Management System (VTMS) in the Suez Canal.

Benefits to Client

- Keep track of vessel movements and provide navigational safety
- Equalize the accuracy of navigation in the area
- Efficient use of waterways
- Reduce fuel consumption
- Reduce impact on the environment

Scope

The implementation of sensors to measure and detect meteorological and hydrological changes in the canal. The data is then gathered and analyzed by the Vessel Traffic Management System installed in a central control room and displayed on monitors for navigating vessels. The sensors, installed every 10 km, covered around 190 km along the canal.



Suez Canal Vessel Traffic Management System ...Cont'd

Project

Vessel Traffic Management System Project

Client

Suez Canal Authority

Project Location

Suez, Egypt

Project Description

Giza Systems was awarded the project to implement a complex meteorological system that integrates with the Vessel Traffic Management System (VTMS) in the Suez Canal.

Scope Cont'd

Meteorological sensors

- Installed to detect the variations in pressure, humidity, visibility levels, temperature, and wind speed.

Hydrological sensors

Installed to work on collecting data related to tides, water direction, and current strength.

The scope also included the implementation of a state-of-the-art network integrating:

- Routers
- Switches
- Servers
- Storage
- Wi-Fi
- WiMAX
- Fiber cables
- Workstations
- UPS
- Cabinets
- Racks



Suez Canal Authority Data Network and Security

Project

Suez Canal Authority Data Network and Security

Client

Suez Canal Authority

Project Location

Port Said, Egypt

Project Description

Giza Systems was awarded the project to implement data network and security solutions to the Suez Canal Authority shipyard in Port Said.

Benefits to Client

- Upgrading the shipyard infrastructure elements
- Enhancing operational efficiency
- Optimizing data security
- Cost savings

Scope

Services

- Support system design, engineering and documentation for the project
- Site acceptance test
- Commissioning and start up for the system

Solutions

- IP Cameras Covering the Canal
- VMS Data Networking Switches & Servers
- Wireless Access Points
- Storage Units

KSA

Security System at King Fahd Industrial Port

Project

Security System at King Fahd Industrial Port

Client

Mawani

Project Location

Yanbu, KSA

Project Description

Giza Arabia was selected to Implement a security system at King Fahd Industrial Port in Yanbu.

Benefits to Client

- Developing the port's security system according to best global practices and the requirements of the High Commission for Industrial Security
- Optimizing level of security and safeguarding people and assets
- Managing security vulnerabilities
- Increase efficiency of facilities

Scope

Giza Arabia was awarded this project to establish a security control center, as well as providing CCTV including fixed and mobile cameras and security radars.

The implementation also handles the rehabilitation of security and custom gates with all their components and elements including security fenders, radiation devices and automatic control systems for individuals, vehicles and trucks.



Jazan Port

Project

SCADA System for Jazan Port

Client

Jazan Port

Project Location

Kingdom of Saudi Arabia

Project Description

Giza Systems was awarded the project for the implementation of SCADA System in Jazan Port using a minimal shutdown period. Harsh climate and the war in Yemen were the main challenges faced on site.

Benefits to Client

- Monitor and control of entire network from a centralized state-of-the-art control room
- Facilitate monitoring and maintenance of fire alarms and network trips
- Leverage the transport and logistics sector in the country

Scope

Engineering and commissioning of SCADA solutions for a medium voltage network in the port.



Riyadh Airport

Project

Supervisory Control and Data Acquisition (SCADA) Solution

Client

Saudi Ministry of Housing

Project Location

Riyadh, KSA

Project Description

Giza Arabia was awarded the project for the implementation of SCADA systems in partnership with Schneider.

Benefits to Client

- Provide a reliable control system for irrigation and potable water networks
- Enhance the systems' performance
- Significant reductions in time, effort and cost of integration for the site operations

Scope

The scope entailed the supply, design, engineering, procurement, installation, training, testing, commissioning, and start-up of the SCADA system, involving two SCADA servers and Schneider Hot Standby PLC.





West, East & Central Africa

Eldoret International Airport

Project

Fire Detection and Suppression Systems at Eldoret International Airport

Client

Kenya Civil Aviation Authority

Project Location

Kenya

Project Description

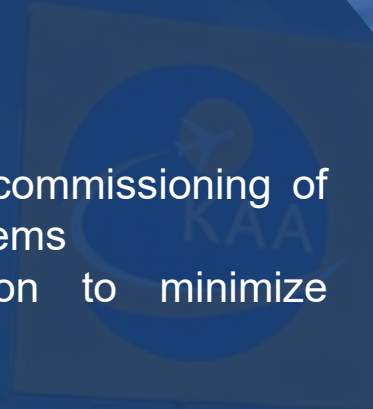
Giza Systems was commissioned to install Fire Detection and Suppression Systems at Eldoret International Airport.

Benefits to Client

- Ensure the safety of passengers, cargo and infrastructure

Scope

- Supply, delivery, installation, and commissioning of fire detection and suppression systems
- Provision of automatic protection to minimize chances of data loss

A large blue sign for Eldoret International Airport. The sign reads 'Eldoret International Airport' in white text. Below it, in smaller text, it says 'Management: Kenya Airports Authority'. The sign is mounted on a white base and is set against a background of trees and a cloudy sky.

Eldoret International
Airport
Management: Kenya Airports Authority

Jomo Kenyatta International Airport

Project

Integrated Smart Building Solutions

Client

Kenya Civil Aviation Authority

Project Location

Nairobi, Kenya

Project Description

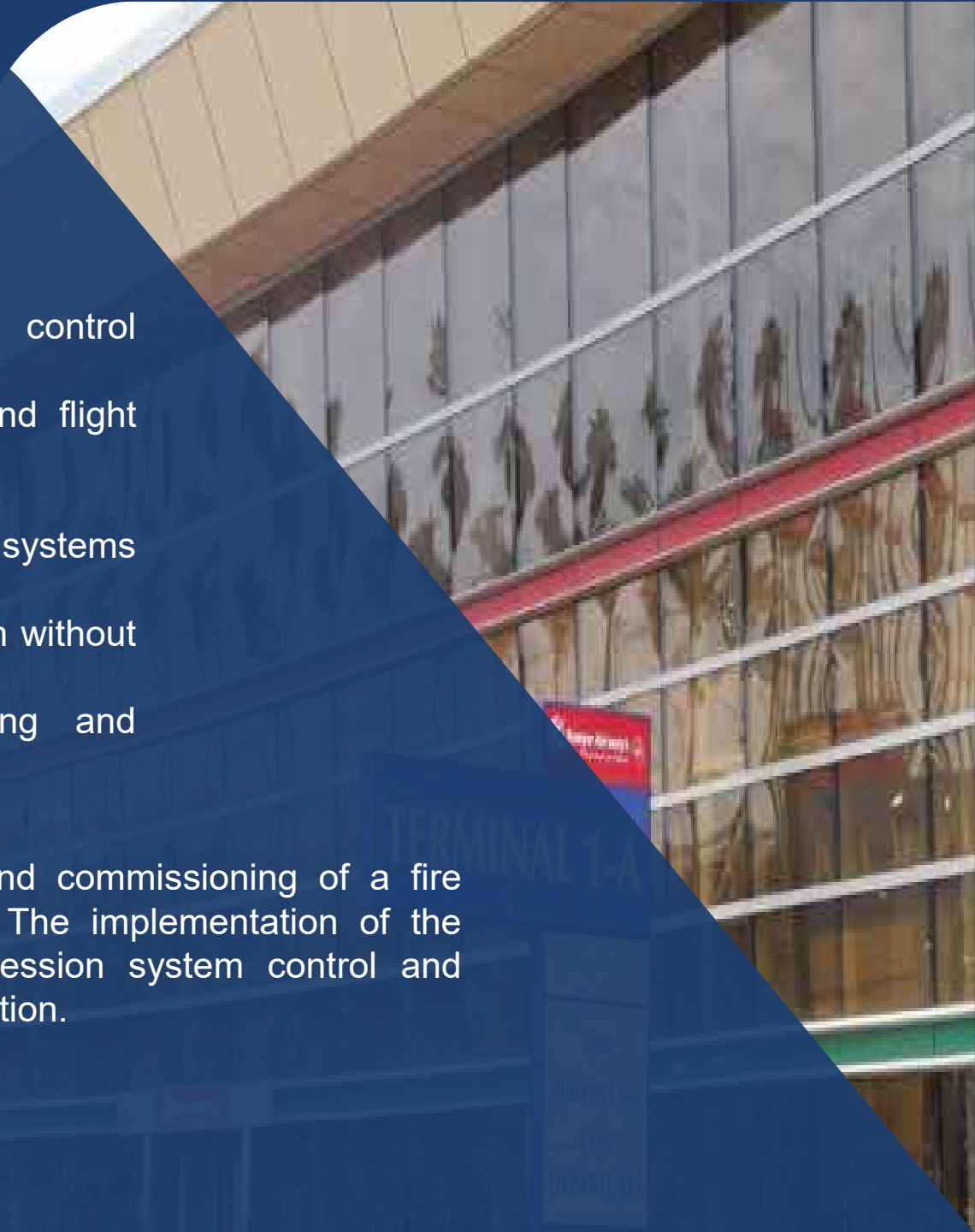
Giza Systems was awarded the project for the installation of Fire Suppression Systems in the server room of the control tower at Jomo Kenyatta International Airport in partnership with Kidde Fire Systems.

Benefits to Client

- Protect massive investments in control equipment
- Secure highly sensitive navigation and flight data
- Optimize operational efficiencies
- Enhance the reliability of navigation systems installed in the control tower
- Guarantee the continuity of the system without interruption
- Ensure better continuous monitoring and recording of flights

Scope

The scope comprised the installation and commissioning of a fire suppression system with foam FM200. The implementation of the project aimed at automating fire suppression system control and extinguishing fires without human intervention.



Julius Nyerere Airport

Project

Julius Nyerere Airport,
Phase 1

Client

CSI Electrical Ltd.

Project Location

Dar es Salaam, Tanzania

Project Description

Giza Systems Tanzania was contracted to perform the supply and installation of fire alarm and public address systems for Dar es Salaam International Airport (Julius Nyerere).

Benefits to Client

- Enhanced efficiency
- Protection of life and assets
- Minimized asset damage and injury
- Facilitated quick responses and effective incident management

Scope

The design, supply, installation, and commissioning of fire alarms and public address systems for terminal 3.





Thank You!

Giza Systems, a leading digital transformation enabler and systems integrator in the MEA region, designs and deploys industry-specific technology solutions for asset-intensive industries such as the Telecoms, Utilities, Oil & Gas, Smart Mobility and other market sectors. Giza Systems helps its clients streamline their operations and businesses through their portfolio of solutions, managed services, and consultancy practice. Giza Systems' team of 2400+ professionals are spread throughout the region with anchor offices in Cairo, Riyadh, Dubai, Doha, Nairobi, Dar es Salaam, Kampala and New Jersey, allowing the Company to service an ever-increasing client base in over 40 countries. For more information, please visit <http://www.gizasystems.com>.