

BlueOperation,

Transforms city and municipal operations into **smart digital**, and offers **centralized and integrated system** management. It realizes the Carbon Net Zero target with new generation sensor and technology applications.

Smart City Solutions

BENEFITS

EFFICIENCY, EASE

- Building and city systems are monitored centrally, preventing data loss, efficiency, and resources in critical systems.
- Less errors, more awareness.
- Optimized environmental conditions.
- Quality-oriented and more efficient operations.
- Optimized energy and resource usage.
- Provides digital tools for Carbon NetZero Targets.

COST

- Unnecessary resource consumption is avoided
- Fewer failures with preventive service maintenance.
- Shortened downtime for the devices.
- More qualified work with optimum resource cost.



Traceability



Efficiency



Availability



Sustainability

BlueOperation interacts with various systems, operations, locations, vehicles, building technologies, and many other systems spread across the city.

- Real-Time Data Collection & Monitoring
- Business Operation Planning and Monitoring
- Asset and Energy Management
- Risk and Audit Management
- Reporting & Analysis

BlueOperation realizes smarter city applications with these functions.



Internet of Things

IoT



Integrated Technologies

iBMS



Digital Service Maintenance

CMMS+



Corporate Asset and Inventories

EAM & APM



Hyper Automation Systems

HAS



PUBLIC BUILDINGS

- Building technology integration software
- Active devices inventory management
- Fault and status monitoring of active devices
- Passive inventory location tracking
- Location services for facility staff
- Inventory and Spare Parts Management
- Generator Fuel Notification and Fuel Orders
- Technical Service Operation Management
- Cleaning Operations Management
- Integration of Security and Technological Systems
- Energy Efficiency and Analytics Solutions



IBMS INTEGRATIONS

 Fire Detection	 CCTV Systems	 Access Control	 Public Announce
 Generators Fuel & Status	 AHUs	 Elevators	 Energy


EXISTING TECHNOLOGIES

- BlueOperation connects to all the technologies used in hospitals, accesses fault conditions, critical level measurements, and all systems-generated data.
- It processes alarm or fault data generated from systems and sensors, communicates with other technologies, triggers processes, informs, and generates automatic work orders.
- While providing instant monitoring access to critical data such as Generator, Water Level, and Room Temperature, it instantly detects, notifies, and converts conditions such as critical level drops into work orders.
- It connects energy systems, controls usage through analyzers, runs optimization scenarios, and significantly reduces carbon footprint emissions.

NEW REQUIREMENTS

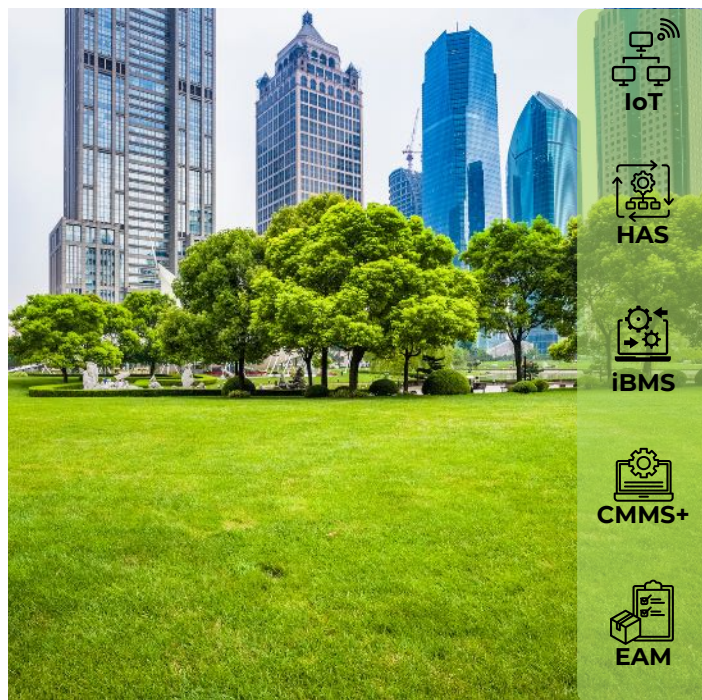
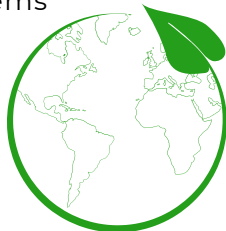
- All passive and active inventories are digitally identified, which enables enterprise-level inventory management.
- With Passive and Active RTLS technologies, real-time location-based tracking, operation management, alarm scenarios, and stock quick counts are performed in seconds.
- It regulates the air conditioning levels of the environment by instantly measuring human density points, air quality, and odor data in the buildings, and contributes to a fresher environment by managing cleaning operations.
- It collects, processes, and reports all values affecting lighting, door, and window open states, air temperature sensors, and energy components.
- BlueOperation collects, manages, analyzes and reports all these operations under a single platform

IOT TECHNOLOGIES

 Digital ID	 Micro Location	 Geo Location	 Movement/ Presence
 Odor Detection	 Air Quality	 Air Temperature	 Door/ Window

PARK, GARDEN & FORESTS

- Centralized system monitoring and management
- Smart lighting and watering systems
- Smart bank(seat) integrations
- Air quality measurement stations
- Soil moisture measurements
- Intelligent fire detection systems
- System cabinet monitoring and management
- Digital inventory recording and management
- Integration with security systems
- Automated work order and digital management



ADVANCED APPLICATIONS



System Cabinets



Energy Analysis



Smart Lighting



Security Systems



Soil Moisture Measurements



Smart Watering



Fire Detection and Notification



Air Status Measurement

CARBON FOOTPRINT



Measure



Reductions



Offset

SMART SYSTEMS

- BlueOperation offers smart system applications in parks, gardens, and all wooded areas in the city. These systems are monitored and managed from the center.
- Data is generated with smart technologies and sensors from parks and gardens. The alarms are immediately notified to the authorities.
- Lighting and water systems are smartened and transformed into fully autonomous processes. Unnecessary consumptions are being prevented.
- Weather conditions and quality are measured. All parameters such as rain, wind, fire, and pollution are generated and connected. Smart scenario and notification processes are operated.
- Status information such as indoor conditions of the system cabins, in-cabin floods, device malfunctions, and cabinet door status are detected, automatic work orders are generated for authorized personnel and service companies, and operations are monitored.



BlueOperation offers the most suitable digital environment for measuring and reducing the carbon footprint process.

PUBLIC TRANSPORTATION & STATIONS

- Centralized system monitoring and management.
- Smart station lighting monitoring & management.
- Vehicle location tracking and applications.
- In-vehicle people density measurements.
- Vehicle fault monitoring and notification scenarios.
- System cabinet monitoring and management.
- Digital inventory records and management.
- Integration with security systems.
- Automated work order and digital management.
- Citizen request and feedback services.

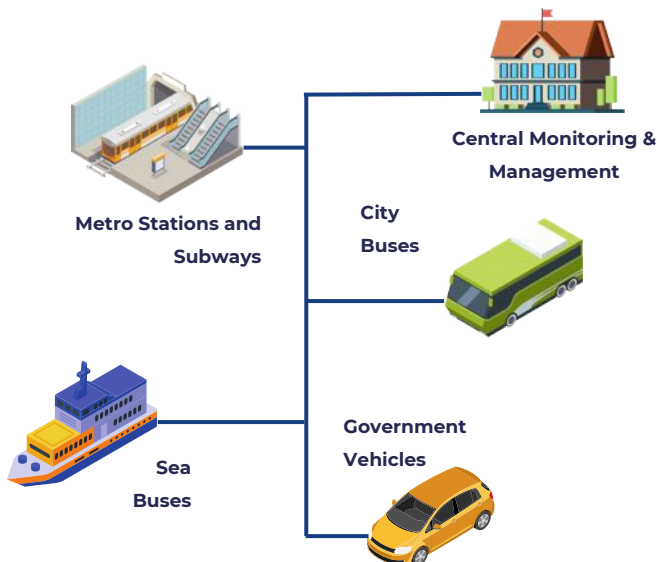


ADVANCED APPLICATIONS

 Fire Detection	 Camera Systems	 Access Control	 Public Announce
 Generator Fuel & Status	 Energy Analysis	 Digital IP	 Geo Location

SMART SYSTEMS

- BlueOperation connects to all technologies in the stations and accesses conditions, critical level measurements, and all data generated from the systems.
- Alarms or faults from the systems and sensors are processed and communicated with other technologies. Based on processes, automatic work orders are generated.
- BlueOperation connects energy systems, controls usage, runs optimization scenarios and significantly reduces carbon footprint emissions.
- With fleet tracking, it accesses information such as location, breakdown, and status of all mission vehicles and organizes services
- All passive and active inventories are digitally identified, enabling inventory management at the corporate level.
- With the feedback collection center, feedback from all citizens is automatically transmitted to the relevant departments.



With its advanced architecture, BlueOperation manages transportation and city operations from a single center and provides advanced services to all citizens.

CITY-WIDE

- Centralized software to manage technology and operations in governmental buildings.
- Centralized software that monitors and manages parks and gardens with smart systems.
- Digital solutions at points such as subway stations and bus stops.
- Remote monitoring of all system cabinets in the city, fault detection, and service work orders.
- Monitoring of city lighting, fault detection, and work orders.
- Citizen demand and feedback services.
- City-wide air quality stations.
- City-wide noise pollution measurements.
- Forest fire detection systems.
- Carbon emission reduction solutions.



DIGITAL SOLUTIONS



Park & Gardens



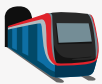
City Lighting



Security Syst. Integrations



System Cabinets



Public Transport



Air Quality



Zero Carbon Solution



Citizen Feedback

SMART CITIES

- BlueOperation provides the platform for designing and implementing digital and smart city applications that comply with the regulations.
- It positions wireless sensors and technologies throughout the city. It communicates with all IoT technologies, collects the data and analyzes it, then transmits it to the center.
- BlueOperation brings together all systems that need to be integrated with a distributed architecture.
- It offers the opportunity to digitize the workflow processes required by managers. It passes the necessary action outputs through artificial intelligence-supported filters and offers smart management.
- It directs service maintenance to the relevant places in case of need. Then, analyzes and reports the performance values of external companies providing service maintenance.



Government Personnel



Government Inventories



Vendor Management



Active Device Management



Spare Part Management



Smart Scenarios



Location Services



Digital Operations Management



Notification Services



Schedule & Planning



Digital Library



Audit Teams



LoRaWAN



Modbus

ASHRAE BACnet