
OneMind New Generation Presentation



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1. How does OneMindNG Work?



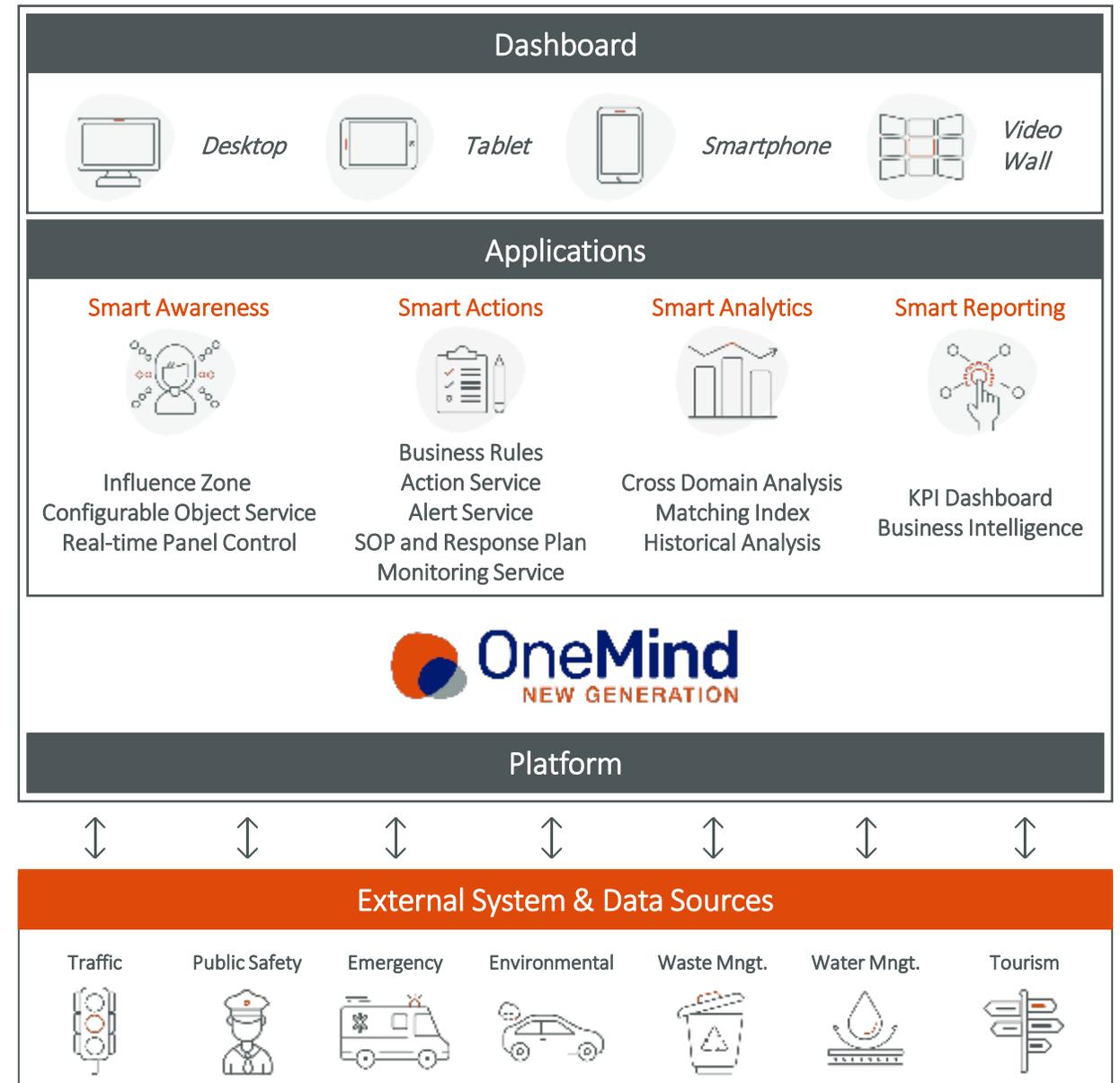
How does OneMind^{NG} work?

OneMindNG is a **hypervisor** for Smart Cities giving access to any expert subsystems at the same time and bringing to the operators a **holistic picture** of how the City is performing in **real-time**, as well as the ability of **solving** City's **incidents**.

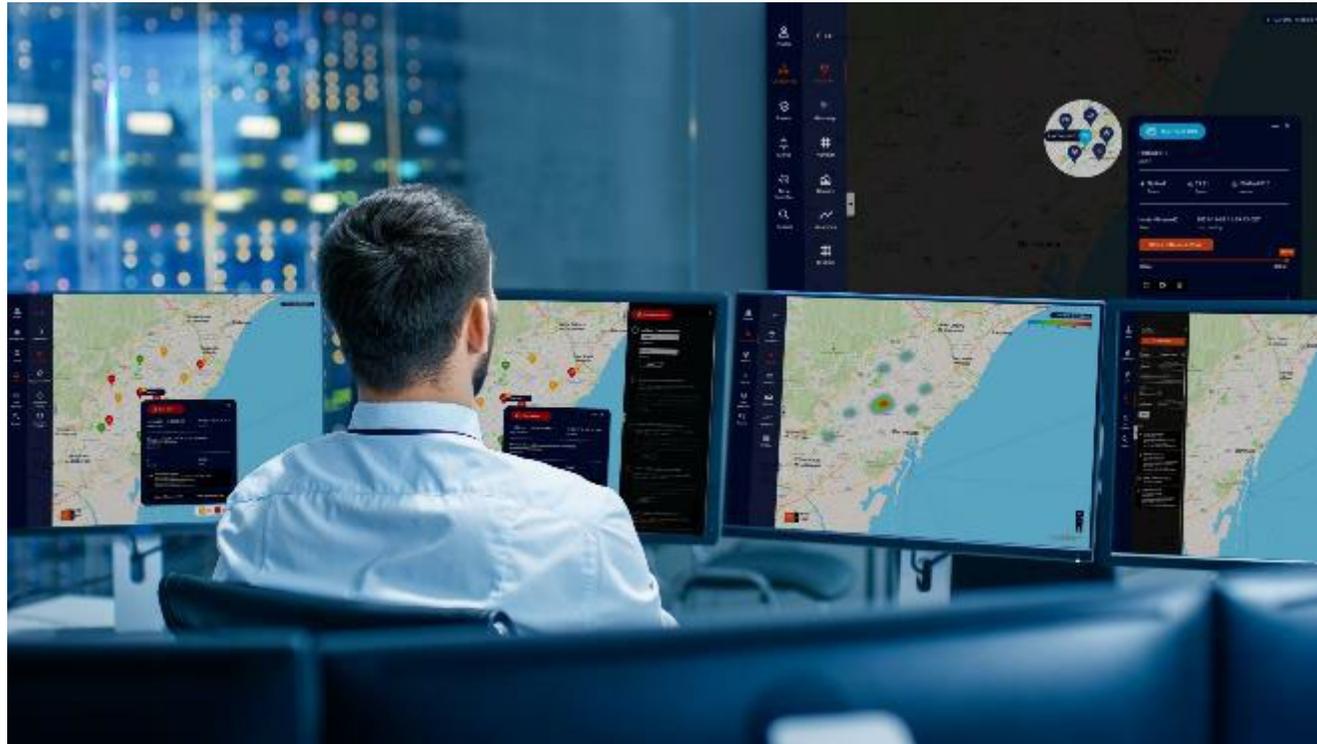
OneMindNG allows creating a **connector layer enabling to ingest information from different type of systems or data sources** hosted across different organizations and departments.

OneMindNG **transforms operational decisions** and reveal insights through **real-time and multi-domain intelligence**.

OneMindNG stores data gathered from all different types of systems **in one single place enabling the cross-data visualization and analytics** through the applications.



OneMind^{NG} - Smart Awareness



C&C Operators

The interface provides a holistic view of all **key information** and real-time indicators in order to increase the awareness and make informed decisions faster.

- Know what is happening in real time.
- Access full information seamlessly.
- Understand the events using full information available in a unique interface.
- Improve operational efficiency.
- Optimize response time.



OneMind^{NG} - Smart Action



Applications		
• Business Rules	• Action Service	• Alert Service
• SOP & Response Plan	• Monitoring Service	



C&C Operators

OneMindNG **constantly monitors** data feeds and **triggers alerts** based on **business rules** and events. The interface provides a step-by-step **response plan** based on SOP to take action and **address the situation**.

- Standard Operation Procedures are configured in the tool in function of the event.
- The operator interacts with the subsystem connected.
- The platform allows to automatize straight forward actions.



OneMind^{NG} - Smart Analytics



Directors of Operations

A complementary application that adds correlation capabilities to the hypervisor, allowing **comparison of data over time**, trend analytics and current status evaluation based on historical data.

- Run data-driven investigations.
- Measure services performance.
- Analyze behavior and identify anomalies.
- Use evidence-based decision-making.



OneMind^{NG} - Smart Reporting



Decision Makers

A **Business Intelligence (BI) tool** that gathers, stores, access and analyzes corporate data to support decision-making.

- Integrate all data in one single dashboard.
- Define and measure historical and current KPIs.
- Conduct performance and gap analysis.
- Be empowered to conduct data-driven planning.



OneMind^{NG} - Benefits for end users



Shorter Reaction Time

- Interaction with all systems in one view
- Easier incidents qualification / typification
- Quicker dispatch-first response
- Automation



Improve Efficiency

- Procedures (SOPS) compliance
- Automation of tasks
- Guided operators



Increased Control

- Resources monitoring: position, patrolling, routes
- Task /interventions assignation
- Full traceability of all actions



Augmented Intelligence

- Incidents management traceability
- Control room KPIs needs and improvement
- First responders KPIs: How to be ready for tomorrow
- Cross-domain intelligence reports



Better Coordination between all agencies

- Common access to real-time and forensic information
- Access rights according to agencies / profiles
- Easier way to share information
- Generate and publish information for citizens



Future – proof & Agnostic

- Able to integrate any technology, following the latest standards.



2. A unique technology platform to support multiple use cases

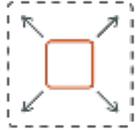


OneMind^{NG} operates in different Domains

OneMindNG can be displayed for virtually any kind of domains needing to connect siloed systems



OneMind^{NG} technology benefits



High Availability & Scalability



Multitenancy Deployment



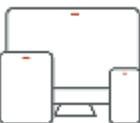
SaaS ready and On-Prem supported



Fully Configurable Front end



Low Code Engine ETL & Automation



Multi-device Frontend



Modular and Plug-ins Analytics



Multilingual and Multicultural (RTL)



Role Based Access Control



Bring your own map



Historical Mode & Time-based Analysis



Vertical Layer Supported



OneMind^{NG} differentiators from the market

- **Agnostic** – integrate any technology, no vendor lock-in
- **Holistic** - one-stop-shop platform for awareness, action, analytics and report
- **Integrate** - with any technologies through Low Code Engine (BMS, Digital Twin, AI, Data Platform...)
- **Quick to deliver** - Deploy in question of weeks, add as many subsystems as needed
- **Future proof** – bring expert functionality and technology
- **Flexible** - scalable and deployable on-prem or on-Cloud
- **Versatile** – configurable to any uses case and any expert domain
- **Low Code Engine Workflow** – ETL, Automation and Action Service
- **Multilanguage**, multicultural, multimap and multidevice platform
- **Configurable** and **Intuitive IU** – fully configurable front end with no code



OneMind^{NG} for urban management



Security

- Reduce **reaction times** in emergencies.
- **Situational awareness**: all the systems in one single view.
- Follow operational procedures (SOPs).
- Critical Infrastructure Monitoring.
- **Prediction** of incidents and best **recommendations** to face the in advance.



Public Service

- Monitoring and **audit of subcontractors** (streets cleaning, gardens and parks care, civil works...)
- Monitoring **Waste Management** service.
- Control and calculation of **public lighting** efficiency.
- Evaluation of the services offered in response to **citizens demands**.



OneMind^{NG} for environment management



Energy and Water

- **Consumption** analysis and forecasting.
- **Leaks or peaks** detection.
- Monitoring of **efficiency** measures.
- Calculation of **savings** and **carbon footprint**.

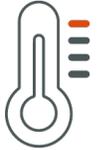


Sustainability

- An integrated view of climatic and environmental variables, indicators, vulnerable zones.
- **Protection** of “green” and “blue” assets.
- **Early warning** of contingencies.
- **Buildings:** monitoring of certifications, renovation, self – consumption.
- Measurement and evolution of **the Carbon Footprint**.
- Analysis and **correlation** of variables: climate, pollution, mobility, health, green areas, energy, water, carbon, waste, etc.



OneMind^{NG} for health and climate management



Climate Resilience

- Monitoring of **vulnerable areas**.
- **Early warning** of extreme weather events.
- Response and evacuation plans. **Disaster** management.
- Critical infrastructure **protection**.



Health

- Monitoring and improvement of **health metrics**.
- **Early detection** of pandemic outbreaks.
- **Planned response** (SOPs) to health events, such as emergencies, infectious outbreaks, high hospital occupancy, extreme weather, etc.
- **Correlation** of health metrics with other city indicators: climate, pollution, green areas, mobility, water quality, energy consumption, etc.



OneMind^{NG} for mobility



Mobility

- Monitoring of traffic and **number** of vehicles by type.
- **Early detection** of anomalies and traffic jumps.
- Monitoring of **fleet electrification**.
- Vehicle control by areas and **low emission zones**.
- **Faster reaction** to incidents.
- Monitoring the use of **carsharing** and similar options.
- Calculation of the associated **carbon footprint**.
- Monitoring of **EV recharging** point: use and protection.



Public Transportation

- Follow-up of route and schedule **compliance**.
- Analysis and **forecasting** of demand for optimization.
- **Electrification** monitoring and impact.
- Fleet **consumption and carbon footprint**.



OneMind^{NG} for tourism and urban planning



Tourism

- Monitoring and analysis of tourist behavior.
- **Avoiding queues** at attractions and monuments.
- Monitoring the degree of visitor satisfaction.
- Real-time **occupancy** and tourism offer metrics.
- Demand and seasonality **forecasting**.
- **Planning** for more attractive commercial and leisure offering.



Urban Planning

- **Optimization** of public transportation supply.
- **Leisure / tourism** focused on the desired type of demand.
- Reduction of **vulnerable** and critical areas.
- More **green areas**, more used, safer, more versatile.
- Implementation of **energy and water efficiency** solutions.
- **Fleet and infrastructure electrification**.
- Reduction of **pollution** sources. Better **health**.
- More **local supply** and less mobility.



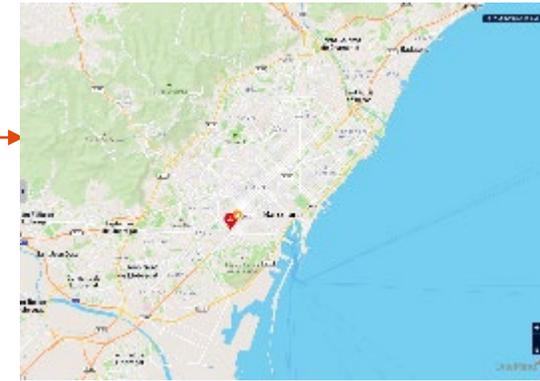


Efficient Response Execution Use Case

- Monitoring.
- Response Plan.
- Alert Service.
- Influence Zone

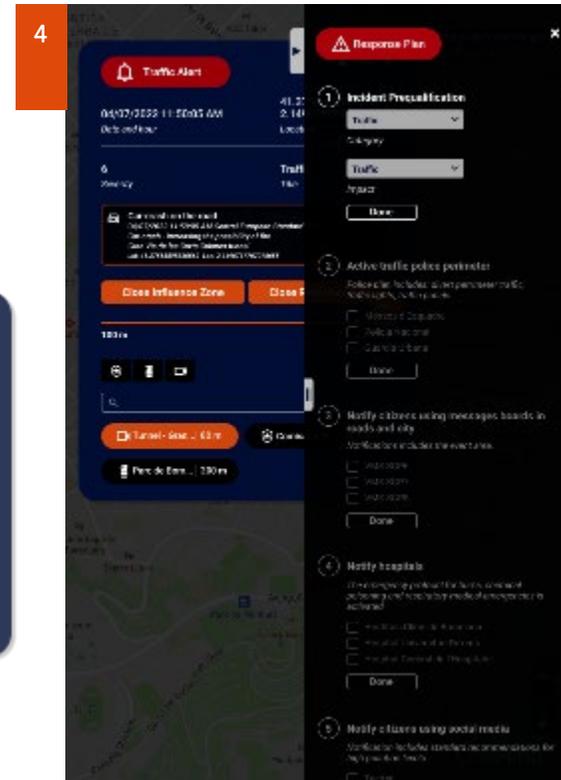


1 Traffic OneMindNG closely monitors mobility status across the City.

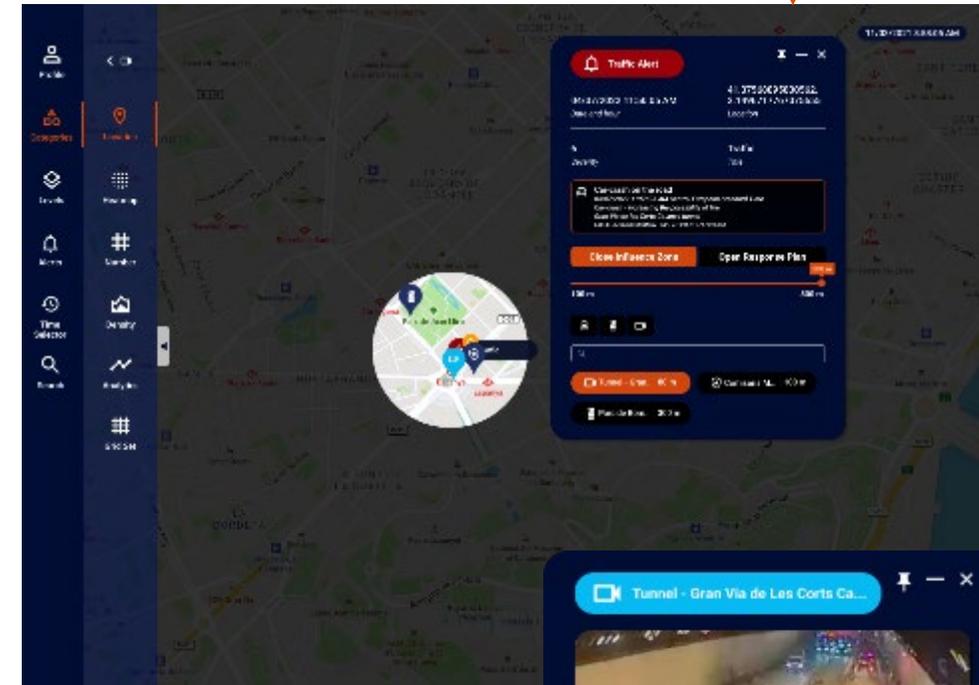


2 Sudden low service level at Gran Via de les Corts Catalanes pulls attention of the operator. At the same time, an alert from incidents informs about a car-crash on the road.

Information at a district level helps to locate and coordinate the resources Operator uses OneMindNg to follow the Response Plan which establish for each event a step-by-step action plan to ensure that the correct procedure is followed.

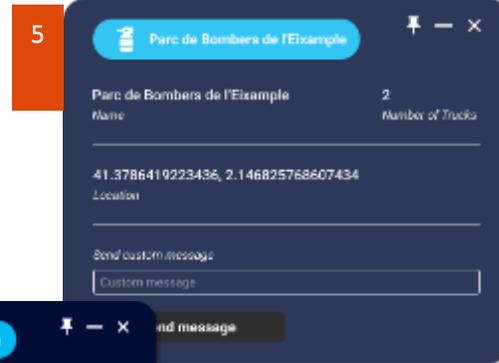


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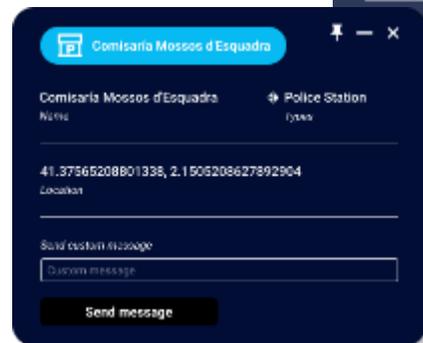


3 At the C&C, operators investigate to look for surrounding information to make better decisions to mitigate the impact of this incident.

Police and Firefighter are asked to move into places to create a perimeter, divert the traffic and address the situation, hospitals are advised, and citizens are informed.



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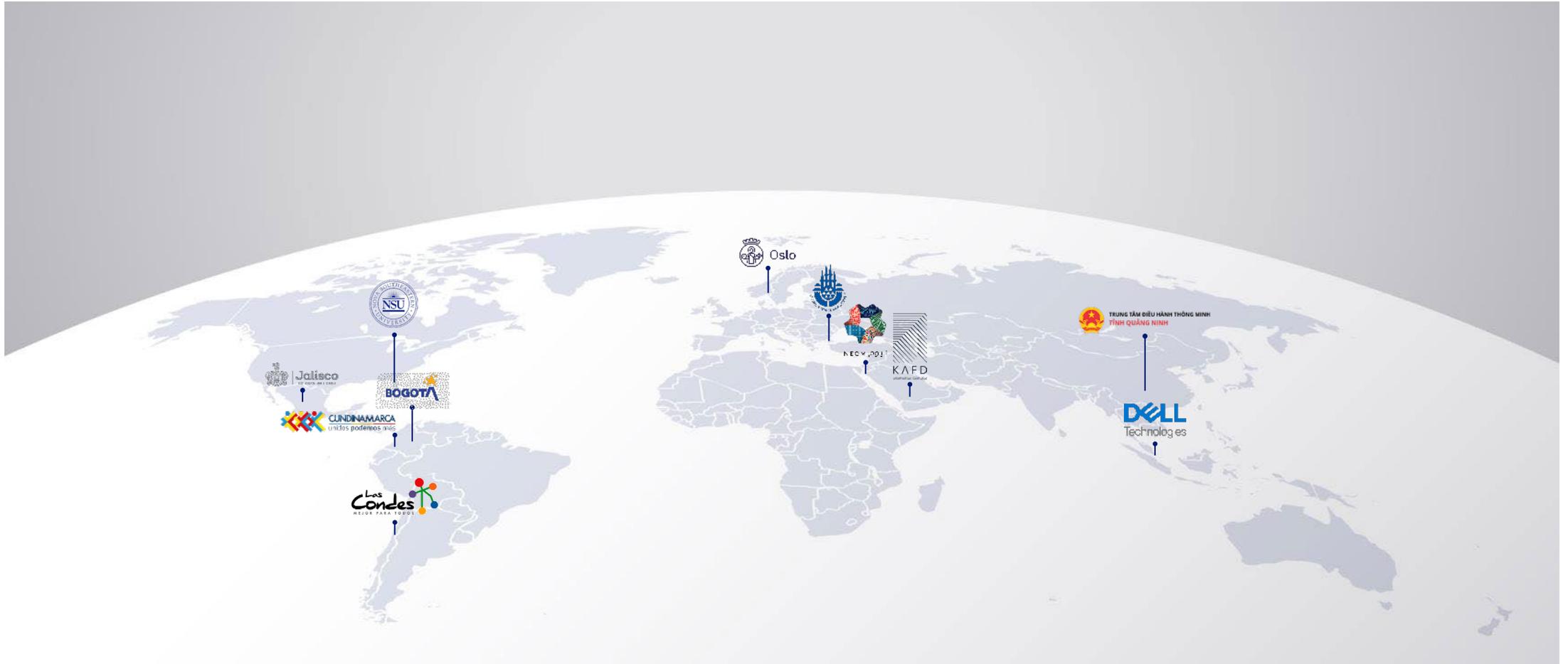
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Situation has come to normal. Citizens have been advised, engaged to collaborate and updated at every moment.

3. OneMindNG Success cases in different industries



OneMind^{NG} deployment in the World



NEOM: delivering the CCC hypervisor of the city

Collaboration between OBS, DELL Technologies and OneMind New Generation

NEOM is a planned cross-border city in the Tabuk Province of north-western **Saudi Arabia**. It will incorporate smart city and also function as a tourist destination.

NEOM is currently the **biggest Smart City project worldwide with an overall estimated budget \$500 Billion**.

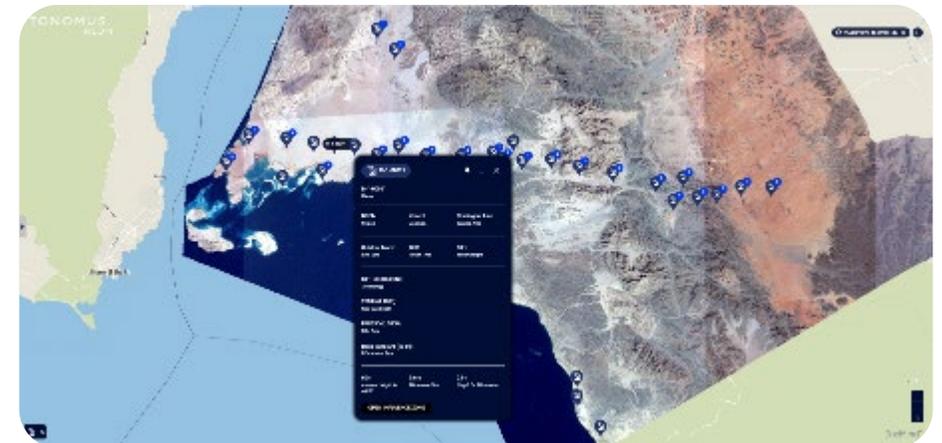
OneMindNG is deployed as the Hypervisor of all systems operating NEOM's city with a wide range of use cases and industry integration such as transport, energy, water, tourism, city experience...

This project is **delivered**.

OneMind New Generation is expecting to provide an on-going **delivery over the next 5 years** to culminate the integrations as operating systems go live.



نيوم, NEOM



Smart City Success Story: Las Condes, Chile



Urban Monitoring Center

Problem

Las Condes is one of the few municipalities in the World pioneering the deployment of thousand of multiple IoT sensors. Although they have successfully developed the deployment of all these Smart Subsystems in recent years to become a reference in Latin America, the municipality lacked a system capable of concentrating the information to process it and manage the city in real time in a holistic manner, while analyzing it to create additional intelligence.

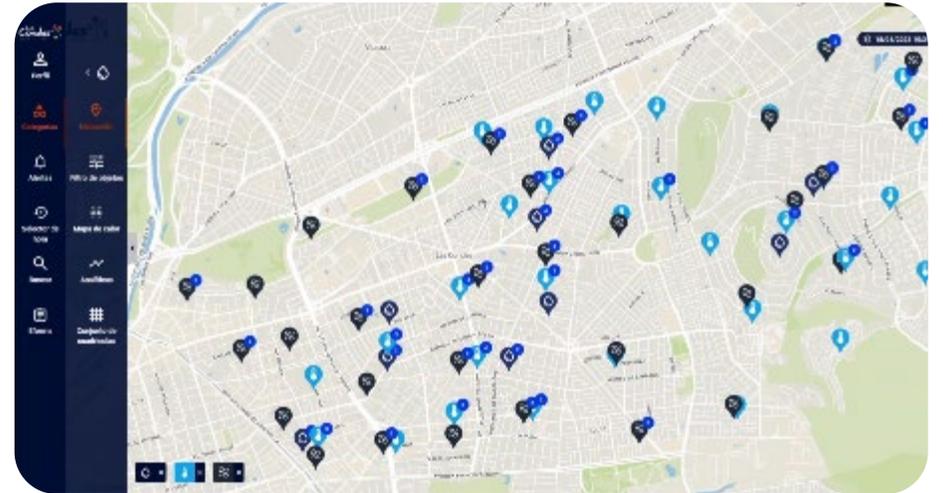
Solution

OneMindNG is integrating into a single platform thousands of IoT sensors to measure and manage pollution, temperature, noise, traffic, parking, variable messaging panels, intelligent public lighting, traffic lights; plus hundreds of CCTV cameras with analytics; plus GPS devices positioning, garbage trucks, Security patrols or the electro-mobility fleet; plus the map of incidents and civil works in the municipality.

By using one interface, operators can make decisions based on real-time data; manage incidents following procedures; geo-locate staff, assets and incidents; analyze and correlate this information, leaving it ready to use A.I.

Benefits

- Manage City operations in real time.
- Improve mobility, security and service of first responders.
- Foster cross-departmental collaboration
- Understand behavior of the city.
- Improve Citizen Experience.
- Reduce congestion and pollution



Smart City Success Story: KAFD, Saudi Arabia

Smart City Platform

Problem

The King Abdullah Financial District (KAFD) is one of the Kingdom of Saudi Arabia's most ambitious projects. A 160 ha (1.6 km²) site being developed to contain the new heart of the Kingdom and a global center of commerce and finance. KAFD is now positioned as a world-class, integrated mixed-use destination which will be a flagship project for KSA and a key destination where people can truly live, work and play. KAFD is set to play a major role in the growth and diversification of the economy, as well as contributing to establishing a vibrant society that can enjoy first-class leisure, retail, and hospitality facilities.

KAFD seeks to transform district operations through integrated and intelligent management of buildings, security and other infrastructure.

Solution

OneMindNG is becoming the District Command and Control Center by integrating the Integrated Build Management System (IBMS), the Centralized Security System (CSS), The Integrated Transport System (ITS), GIS and digital twin visualization, Enterprise Systems, Visitor / Resident / Corporate Apps, or KAFD Revenue Intelligence.

Benefits

- Operational efficiency savings, notably through reduced buildings management cost.
- A world class customer experience for visitors, residents, and tenants, providing seamless digital access to KAFD services.
- Additional revenue by driving increased expenditure of existing visitors / residents and attracting new ones to the district.
- Collection and analysis of data to tailor the KAFD offering and drive further operational improvements.



Smart City Success Story: NSU, Florida



Digital Cities AI Living Lab

Problem

Digital transformation in cities, counties, and communities should result in the betterment of the standards of living for citizens in the transformed communities. It is instrumental for communities to have the ability to be exposed to, be able to envision, and / or test Digital Cities / Spaces strategies before their actual deployment.

In this sense, the Universities play a main role, both in their efforts to train new professionals, and in the necessary support for the public and private sectors as centers of research and innovation. For this, NSU's Alan B. Levan Center of Innovation has developed a plan to create a "Digital Cities AI Living Lab".

Solution

OneMindNG deployment is delivering the following smart Living Lab objectives:

- Outdoor Air Quality (Smart Environmental Sensors).
- Outdoor Community Activity people metrics
- Water Quality Reservoir Monitoring.
- Intelligence Traffic Management.
- VisionZero Pedestrian Safety.
- Sustainable Carbon Zero Building Operations System.
- Integration Approach for Other systems.
- To encourage community participation.

Benefits

- A real test environment that allows improving Campus operations.
- An open tool for learning the latest state-of-the-art Smart technologies..
- Making the Living Lab attractive to local and foreign entrepreneurs.
- Good practices for the county and neighboring municipalities.



Thank you

