

# Worldsensing succeeds in Grand Paris Metro Project with a Kerlink LoRaWAN™ solution

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Worldsensing, a Barcelona-based Internet of Things (IoT) and operational intelligence technology provider, needed to create an edge-based, connected computing infrastructure to support tunnel construction for the Grand Paris Metro construction project. Worldsensing's technology required low-power connectivity on nodes placed 20 meters underground in subterranean Parisian tunnels. So Worldsensing turned to Kerlink for



**Company name:** Worldsensing  
**Headquarters:** Barcelona, Spain  
**Year founded:** 2008  
**Employees:** 80  
**Industry sector:** Technology, services and engineering support

LoRaWAN™ gateways and support services. With Kerlink's help, Worldsensing created a low-touch, high quality solution that would last at least 8 years, well beyond the Grand Paris Metro completion date in 2022.

## Worldsensing pioneers with its IoT solutions

The Grand Paris Metro project is one of the largest, urban, public transportation projects of the 21st century. According to the Société du Grand Paris, the project will culminate in a new metro for the capital of France, providing connections to developing neighborhoods, 3 major Parisian airports, business districts and research centers. The Grand Paris Express will serve 165,000 companies and transport 2 million commuters daily, creating vast new opportunities for economic development.

Worldsensing provides smart cities and industrial customers with tools to understand the performance of distributed infrastructure, improve efficiency and make predictions. By using industrial IoT communications technology, Worldsensing needed to create nodes for the Paris Metro project that could gather data from sensors installed deep in metro tunnels. These critical sensors would measure tunnel structural data including changes in incline and positioning, load, structural strain and structural deformation. The safety of construction workers and the citizens of Paris can be enhanced through carefully aggregated and analyzed real-time data from these sensors. Worldsensing needed a communications infrastructure and services partner that could supply a high quality, reliable, wireless solution that would also minimize node power consumption, as the node batteries needed to last through the year 2022.



## Kerlink provides the answer with a LPWAN IoT solution

So Worldsensing turned to Kerlink to provide a solution with a set of gateways and support services. The combination of [Kerlink Wirnet™ Stations](#) and network design support was the right set of hardware and services to power Worldsensing's four hundred [Loadsensing](#) nodes. "Our solution for the Grand Paris Metro project needed end-to-end quality and monitoring, from sensor

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*Mr. Juan Perez  
Loadsensing Product Manager,  
Worldsensing*

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to node to gateway. Kerlink's LoRaWAN™ Wirnet™ Stations filled an important gap for us," stated Mr. Juan Perez, Worldsensing's Loadsensing Product Manager. The technology solution from Kerlink would support longevity and safety requirements of the nodes, provide deep indoor coverage and offer bi-directional node communication for remote maintenance, diagnostics and software and firmware updates.

"Kerlink's design and attention to detail made interactions with Kerlink exceptional," described Mr. Perez. Worldsensing believes that IoT solutions will continue to drive its business growth. In the future, Worldsensing is looking at additional LoRaWAN™-powered solutions for other applications including above-ground bridge repair, construction site monitoring, mine monitoring, smart parking and asset management. Worldsensing knows that having accurate, real-time smart city construction and monitoring data helps services companies meet timelines, lower costs and maximize personal safety of workers and citizens.