Ports

We deploy a complete connectivity solution meeting all port requirements to enhance management for the benefit of the authorities, workers and clients.

More connectivity means better decisions for your port. Our end-to-end connectivity solutions will grant you full fixed and/or mobile coverage across your entirety of your facilities.

Our Private Network delivers capacity and coverage across business-critical areas of operation and provides real-time feedback to improve operational decision-making and problem-solving as well as enabling high end IoT solutions.

We make autonomous assets and remote controlled units possible through our reliable, high bandwidth connectivity taking your business to the next level.

Keeping port personnel connected continuously is one of our priorities. This includes anything from video streaming by fixed/in-vehicle cameras to protecting workers in hazardous areas.

Cellnex provides a high level of expertise in network deployment, operation & maintenance, all combined with our capacity of working as a neutral network operator grants us the power to provide a unique solution to your port needs.

A private, dedicated network assures data security, removes the capacity and contention issues of WiFl and mobile networks, and delivers round the clock connectivity.







Our network allows port authorities to access, manage and protect an ever-expanding volume of data. As your SPoC, Cellnex delivers full infrastructure management end-to-end for your port.

Delivering digital transformation, innovation and competitive advantage

Robotics

Undertaking hazardous

tasks, boosting productivity, maximising efficiency

Mission-critical communications Remote-control Control and monitoring of Guaranteed, always-on connectivity to Terminal Operating System (TOS) container cranes and vehicles Increase safety **Location tracking** Remove humans from dangerous Efficiently and automatically areas with Augmented Reality manage truck queues to speed (AR), Virtual Reality (VR) and loading/unloading Digital Twin **Environmental sensors Logistics control** Asset and infrastructure insights to reduce emissions and improve Analyse marine air and water quality cargo and dockside freight for

Video surveillance

Aerial and marine drones for

inspections and measurements

security and

streamlined

operations

Features and Benefits of our Private Network



- Purpose-built 4G/5G network delivering the coverage and capacity you need, where you need it
- Low-latency, high bandwidth connectivity guarantees always-on performance, eliminates outages and assures operational continuity
- Secure and private, restricting access from outside and delivers data protection and compliance as standard
- Offers opportunities to deploy automation, Al or robotics to increase efficiency, streamline operations and reduce cost
- Delivers the ability to track and monitor assets and employees to increase site and worker safety
- Managed by a single, experienced partner to cut through the complexity, deliver a bespoke solution and eliminate investment risk

Why Cellnex?

Cellnex is unique in our ability to offer flexible financial models that allow you to set up our solutions as a service, adapting to your financial needs.

With Cellnex, you also have the chance to create additional revenue streams. This means port operators can use the network capacity to become micro-operators – inviting port partners into a secure Private Network ecosystem and charging for the services.

References

Our solution is designed to meet all types of port connectivity requirements.

PORT



Powering the port ecosystem with a costeffective 5G ready digitalization





Enabling advanced IoT applications for the port ecosystem with massive data transferring and a private LTE Network

KALMAR



Building intelligent cargo handling solutions through connected R&D High capacity, low latency and secure connectivity.

STEVECO



Connectivity for real time HD video camera surveillance of moving container cranes



KEMIN SATAMA

Provide a smooth evolution from a Private LTE to a 5G SA Private Wireless Solution to ensure support R+D advanced developments on smart factory and test cranes.

KONECRANES'



GRONINGEN SEAPORTS



Private Mobile (LTE/4G) Network deployment for IoT applications including drone surveillance and a Smart Brain platform.





Full Mobile coverage for commercial customers in both terminals ensuring the best possible experience for the port clients and visitors.