5G Connected Cranes







Material adicional:

Nota de prensa

Blog Think Big

Vídeo del proyecto

Headline: Strengthening safety in industrial and port traffic.

Description: APM Terminals, together with Telefónica and Mobile World Capital Barcelona, are improving safety in ports by using 5G networks to connect cranes, vehicles and people by merging different advanced communication and location technologies. The aim of the project is to minimize the potential risk of collisions between mobile machinery and fixed elements, vehicles and people in the terminal. This use case, which is based on C-V2X connected car technology and the low latency of 5G communications and edge computing, aims to make APM Terminals Barcelona a safer space for workers, thanks to a system that enables the coordination of port traffic and the implementation of advanced algorithms in the prevention of accident traffic.

Keys: C-V2X technology is positioned as a key element in minimizing the number of accidents produced, as it allows all actors to communicate their precise position in real time, enabling efficient and safe coordination of traffic with minimum latency levels as they are processed at the edge of the network.

Benefits:

- Increase safety in port traffic, reducing the accident rate both between mobile elements and between mobile and fixed elements, such as streetlights.
- Provide a real-time monitoring tool for the terminal that allows immediate and more efficient decision making.

Objectives:

- Adapt connected car technology to industrial environments.
- Include the personnel on foot, providing them with a smartphone application to expand the V2X ecosystem.
- Obtain centimeter-level location accuracy.

Results: 5G together with C-V2X, edge computing and precise location are the key combination to increase safety in port environments, reaching vision 0 (0 accidents, 0 fatalities).