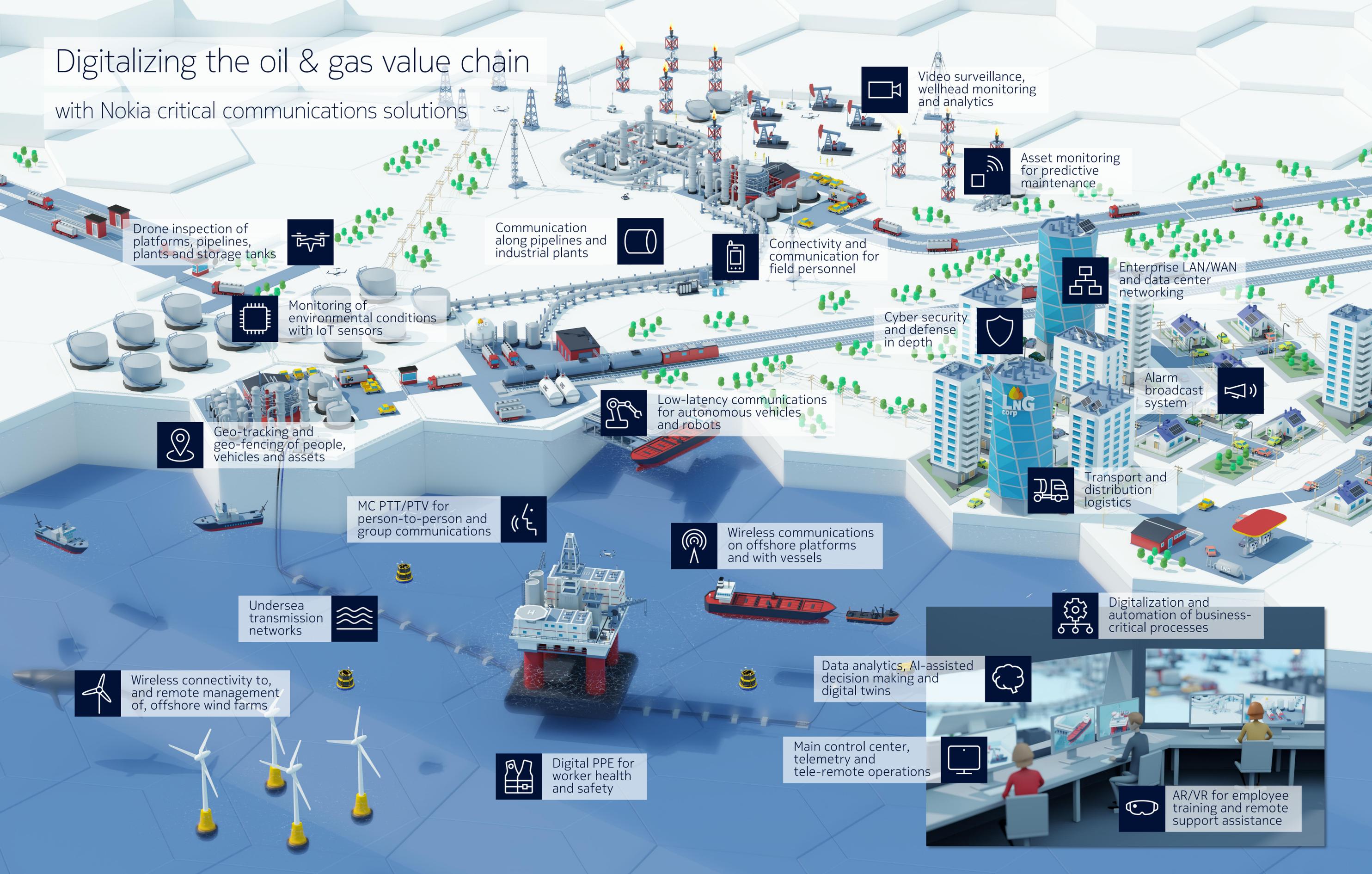


Digitalizing the oil & gas value chain

with Nokia critical communications solutions



Video surveillance, wellhead monitoring and analytics

Asset monitoring for predictive maintenance

Drone inspection of platforms, pipelines, plants and storage tanks

Communication along pipelines and industrial plants

Connectivity and communication for field personnel

Enterprise LAN/WAN and data center networking

Monitoring of environmental conditions with IoT sensors

Cyber security and defense in depth

Geo-tracking and geo-fencing of people, vehicles and assets

Low-latency communications for autonomous vehicles and robots

Alarm broadcast system

MC PTT/PTV for person-to-person and group communications

Wireless communications on offshore platforms and with vessels

Transport and distribution logistics

Undersea transmission networks

Digitalization and automation of business-critical processes

Wireless connectivity to, and remote management of, offshore wind farms

Data analytics, AI-assisted decision making and digital twins

Digital PPE for worker health and safety

Main control center, telemetry and tele-remote operations



AR/VR for employee training and remote support assistance