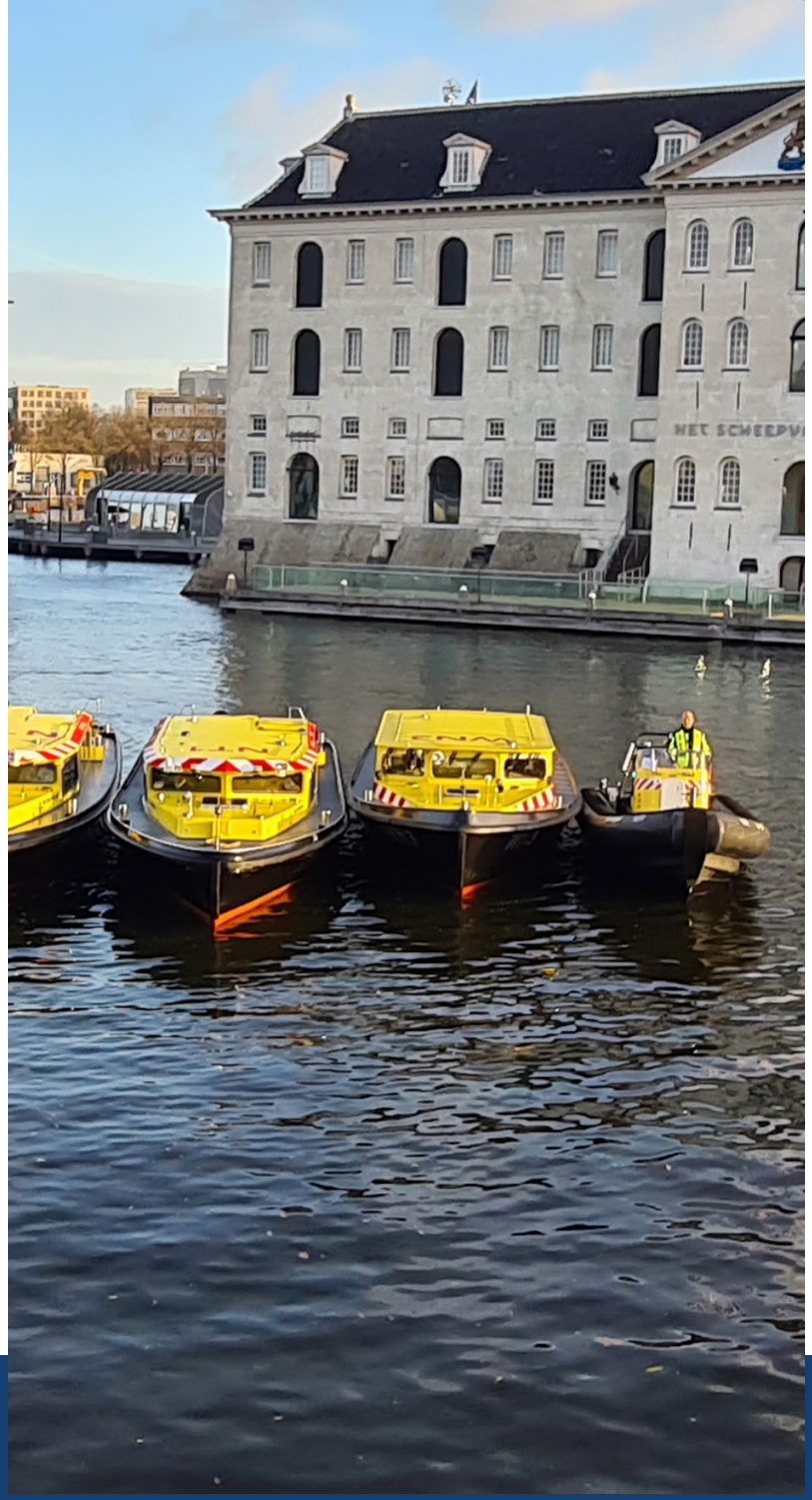
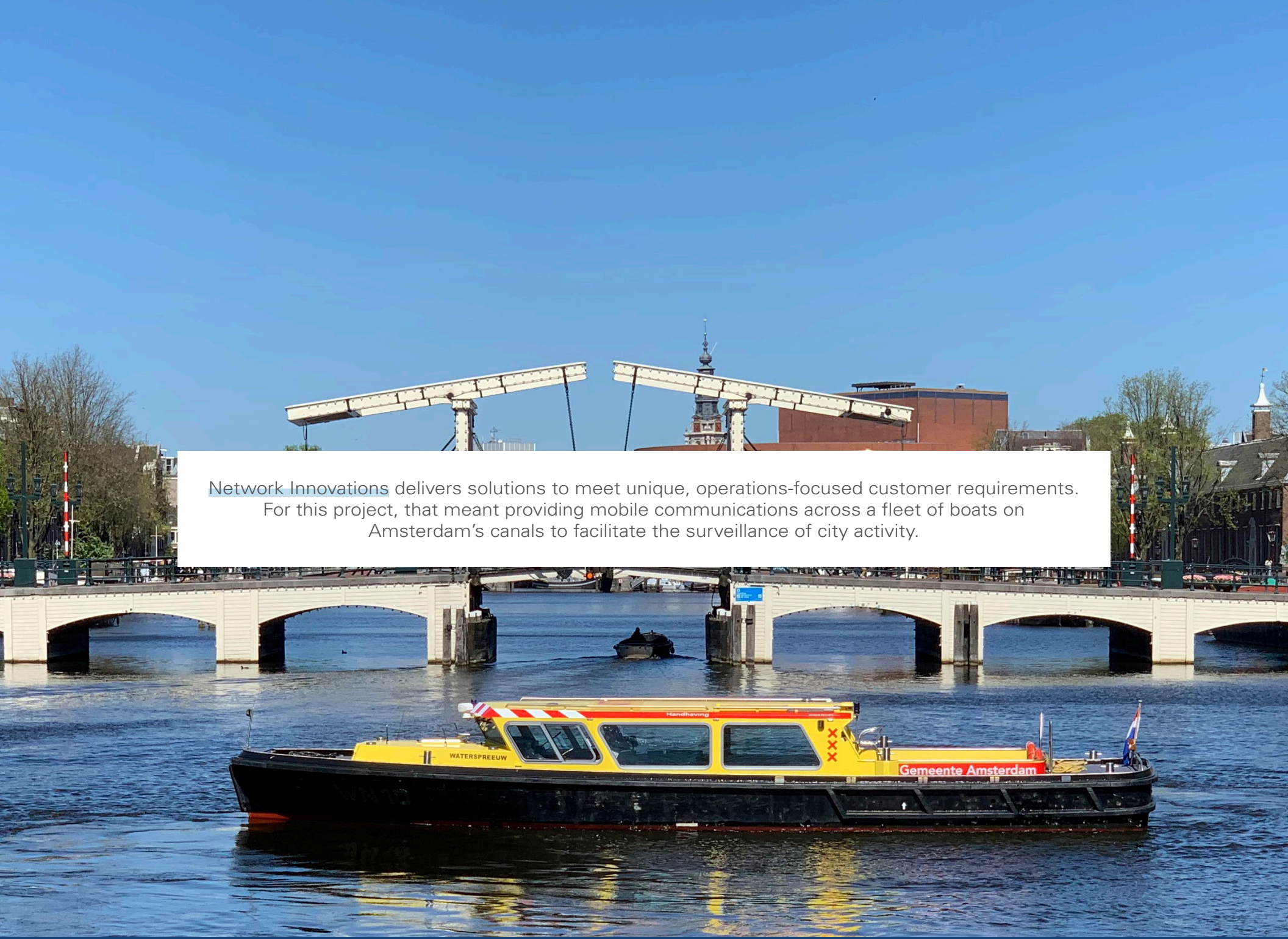
NETWORK INNOVATIONS

CASE STUDY

ENHANCING MOBILE SURVEILLANCE OPERATIONS & NETWORK STABILITY WITH PEPLINK



Meeting Your Mission. With Passion.



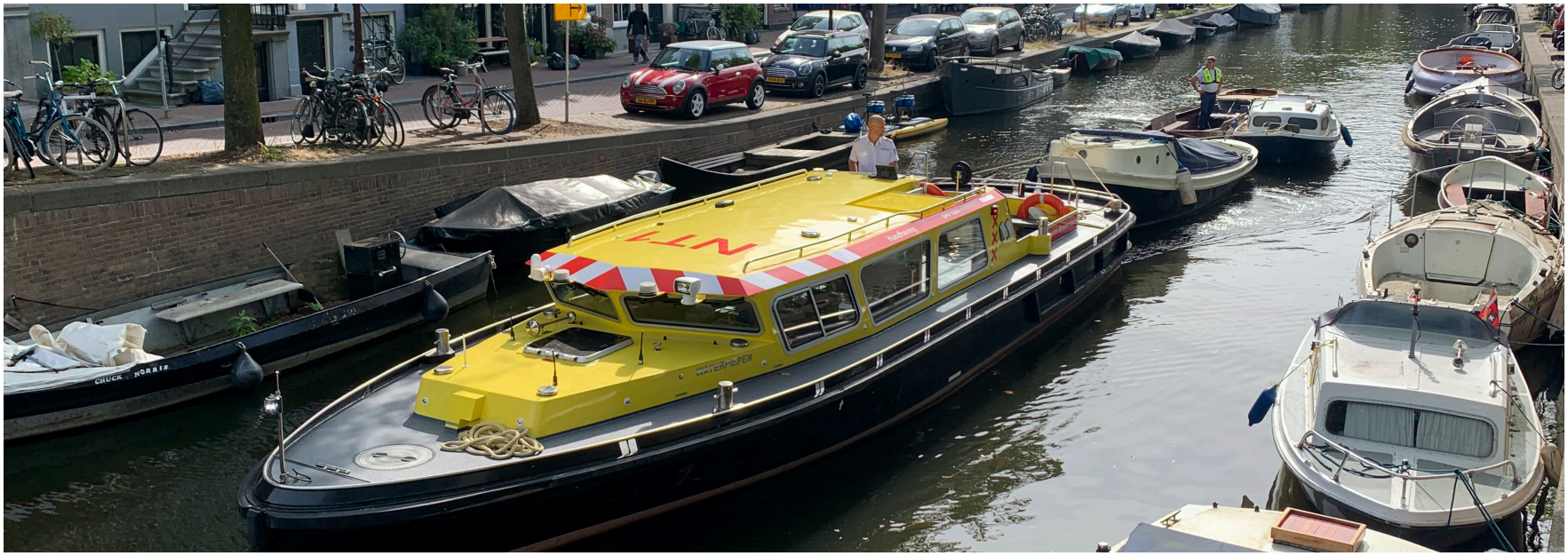
Network Innovations delivers solutions to meet unique, operations-focused customer requirements. For this project, that meant providing mobile communications across a fleet of boats on Amsterdam's canals to facilitate the surveillance of city activity.

THE CHALLENGE

The Municipality of Amsterdam uses electric surveillance boats for various purposes, including law enforcement, safety, and environmental monitoring – in and around the city's canals. Those on board require a reliable connection to access the internet, communicate with headquarters, or notify police should an emergency arise.

Many wireless communication technologies, including Wi-Fi and cellular networks, rely on a clear line of sight between the transmitter (e.g., a cell tower) and the receiver (e.g., a smartphone). While patrolling Amsterdam's canals the vessels are below ground level, obstructing the line of sight and network stability.

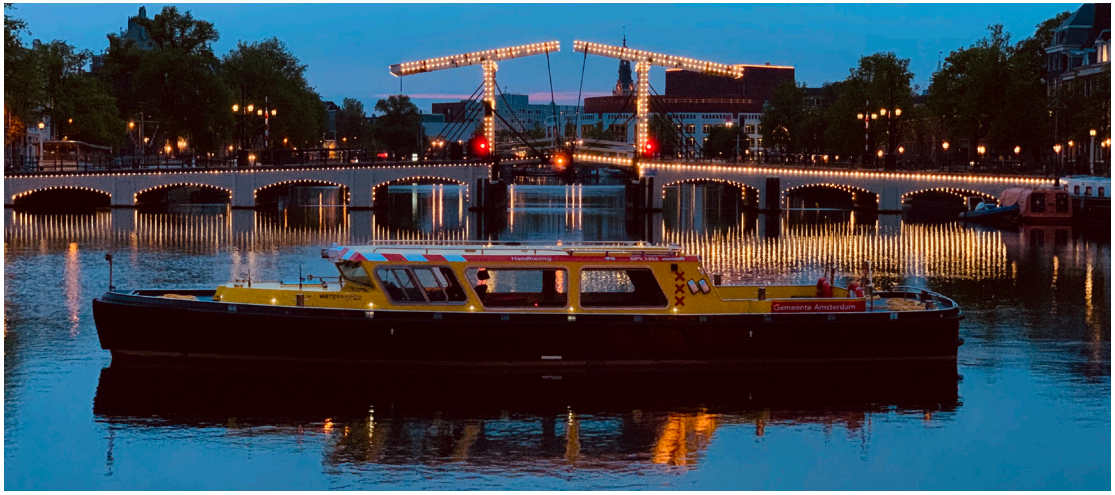
Using telephones with 4G/5G capabilities quickly proved as an inefficient way of communicating, with teams onboard suffering data outages and dark spots with no connection at all.



THE SOLUTION

Network Innovations went on to source dual cellular MAX HD2 MBX 5G routers with the help of Peplink distributor, Frontier BV.

Acting as a mobile communications powerhouse on each vessel, the routers provide speed, reliability, and coverage by combining the best of 5G and LTE. Additionally, the built-in mobility antennas and IP68 enclosure allow for optimal positioning to obtain the best cellular reception.



> "With the Peplink routers in place for a stable and resilient network, our client's problem was completely solved. The Peplink routers support multiple cellular connections using different carriers and technologies. This redundancy has helped ensure that those on board the vessels can connect to the nearest and strongest available cellular tower to maintain a reliable connection, even when dealing with obstructions and line-of-sight issues." **Leon-Marc Roefs, Account Manager of Government and Defence at Network Innovations**

While a few of the vessels were still in the latter phases of construction, the team collaborated closely with the boat engineers to guarantee a smooth installation process.

THE IMPACT

The solution provides great advantages to the Municipality of Amsterdam:

- **Elimination of communication blind spots on-the-move**
- **Bandwidth bonding and seamless failover**
- **Unified support for each stage of implementation and maintenance**

With installations on multiple vessels, they can make use of Peplink's cloud-based management platform, InControl 2, to remotely monitor network activity and manage the fleet. This in itself saves manpower and provides ultimate visibility.

With an enhanced communications capacity, those on board can confidently connect and are better equipped for the exchange of key information between teams and personnel.