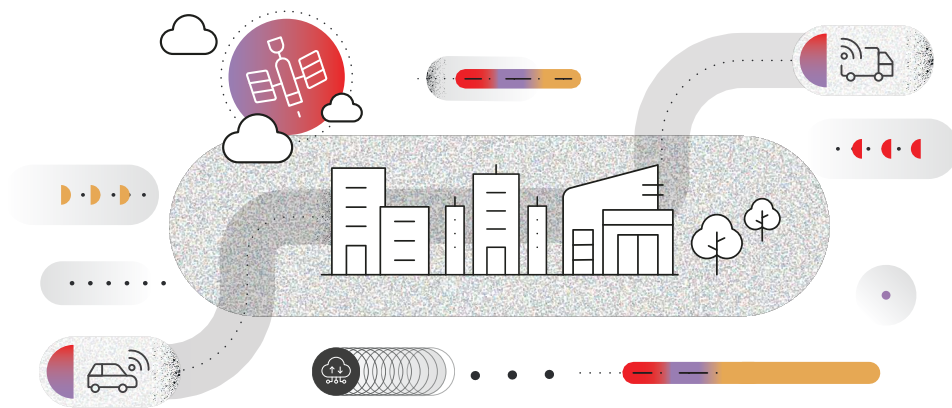# STEP: Unleashing Innovation for Enhanced Road Safety

Breaking Barriers, Saving Lives

Celfocus has been Vodafone's key partner in the development and evolution of **The Safer Transport for Europe Platform (STEP)**, a transformative project to revolutionise **road safety and communication**. Since over 3,500 people fall victim to road traffic incidents every day, the platform stands as a beacon of innovation and collaboration, addressing pressing safety challenges.
With a focus on services like Local Hazard Warning distribution and Vulnerable Road User-related services (VRU), STEP aims to save lives.

CHALLENGE

Understanding the urgency and importance of addressing the critical issues of road safety, Vodafone aimed to develop a platform that openly distributed data across all different types of traffic and transportation domains across Europe. Celfocus played an instrumental role in the design and implementation of the platform, ensuring that STEP is a cutting-edge, robust, and innovative solution, built on open industry standards, to empower stakeholders in the road safety ecosystem.

BENEFITS

STEP was designed to enhance road safety, with a vision to make European roads safe for all. It aims to emerge as a highly visible leader in contributing towards the 2050 target of zero road deaths.
By establishing a secure and reliable communication channel, the platform:

- Supports digital acceleration
- Facilitates the connected vehicle ecosystem
- Contributes to lives saved by optimising traffic flow, reducing accidents, and promoting efficient mobility

Additionally, it showcases a commitment to sustainability, aligning with the global agenda to mitigate CO2 emissions from road transport.

SOLUTION

STEP is founded on a secure and reliable communication channel for V2X (Vehicle-to-Everything) services, leveraging 5G and Edge Cloud technologies. It solves the problem of data fragmentation, acting as a broker and validator of V2X messages in real-time.

The platform provides end-user features such as:
- Hazard warnings
- VRU Assistance
- Road Intersection Assistance
- Infrastructure to Vehicle

It uses state-of-the-art technologies such as 5G, Edge Computing, and AI, to provide:

- Low latency
- Scalability
- High quality
- High reliability
- Secure V2X services through a set of standard SDKs and APIs

STEP is also taking its first steps in Drone communications, aiming for airspace safety, by trying to reduce congestion in busy airspaces as well as helping to organise flight plans.