49th ASECAP DAYS Decarbonizing Road Infrastructure : Challenges, Perspectives and Actions in Tough Economy





Hotel Marriott Grand Place, Brussels 24 – 25 November 2022



BRUSSELS **2022**

App SOS Autoestradas – more than an app

Jorge Lopes APCAP

The problem

Low use of traditional SOS motorway call boxes for emergencies

Network fragmentation with multiple operators

Ecall system connected with car manufactures

<u>Game changer</u>: Emerging sensing and HMI features on smartphones







How does it work

Main features:

Automatic network geolocation $f(lat, long) \rightarrow (road, pk, direction, stretch, operator)$

Single button interface

Direct emergency call to operator

Minimum set of data transmission (Ecall format) Open source standards approach





Open free backend as a service for third party apps and customer-oriented services:

- Geolocation services
- Road operator endpoints
- MSD gateway



Improving customer safety is the goal



ASECAP DAYS

Open architecture for automatic integration with smartphone features, in-vehicle sensors or personal devices

- Voice control
- Crash detection
- Smart sensors
- Emergency beacons



Every second counts





Geolocation accuracy (< 5m long error; 90% direction)

Speed of communications (voice and data)

Usability



App vs App