

European
**Global Navigation
Satellite Systems
Agency**

eCall

UN ICG

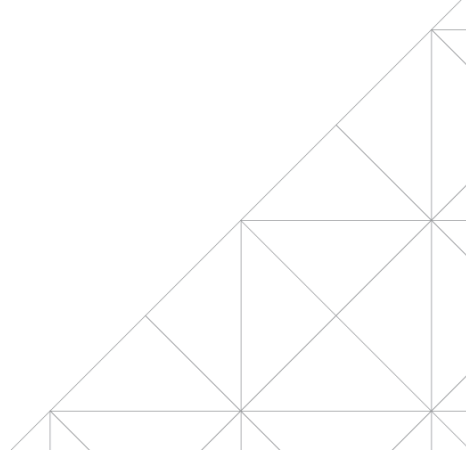
Dominic HAYES

5 November 2018, Xi'an, China

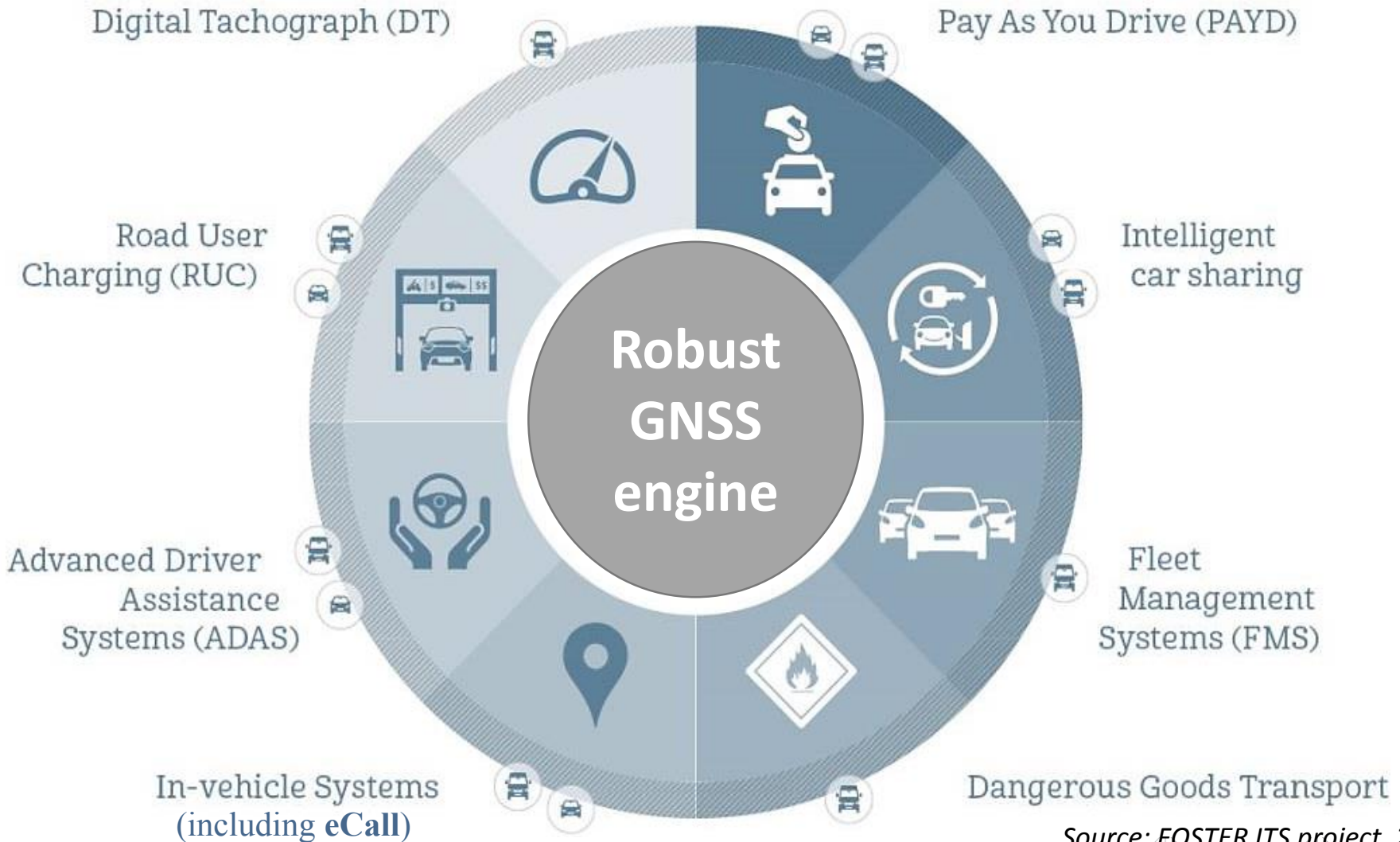


GALILEO **EGNOS**

NAVIGATION SOLUTIONS
POWERED BY EUROPE



Robust GNSS can provide location to multiple road applications



Source: FOSTER ITS project, 2016

Regulations in Europe are accelerating GNSS adoption in specific road applications



- **eCall** system will send an emergency call to 112 in case of accident, including precise location, accelerating assistance to drivers
- **Digital tachographs** will facilitate registration of starting-ending time of the journey
- **Dangerous goods tracking:** robust positioning requirements uptake in EU Member States
- **Road User Charging** GNSS supports toll operators in charging levies in compliance with the European Electronic Tolling System Directive

Woman survives six days in Arizona desert after car crash



Rancher and highway workers found the badly-injured woman when they were chasing a cow



▲ The woman's car plunged down a ravine and landed in a tree, near Wickenburg Arizona. Photograph: AP

A 53-year-old woman survived six days in the [Arizona](#) desert on grass and water after crashing her car, before being rescued by a rancher and highway



The car plunged about 50 feet (15m) down a ravine, “landing in a mesquite tree, where it remained suspended above the ground,” DPS reported.

Seriously injured from the crash, the woman remained in the car for several days before climbing out and trying to walk to a nearby railway line for help, the DPS reported. She made it 500 yards (457m) before collapsing in a dry river bed.

On 18 October, rancher Dave Morales, 30, and a road maintenance crew were working to corral a cow on US Highway 60 when they noticed a break in the fence near the road.

They saw the mangled car below, and when they climbed down, found footprints leading from the vehicle.

They followed the tracks and discovered the severely dehydrated woman, her eyes swollen, wearing a T-shirt, shorts and flip flops, suffering from broken ribs, a dislocated shoulder and a head injury, Morales told a local NBC affiliate.

EGNSS use in eCall is saving lives enabling better emergency services

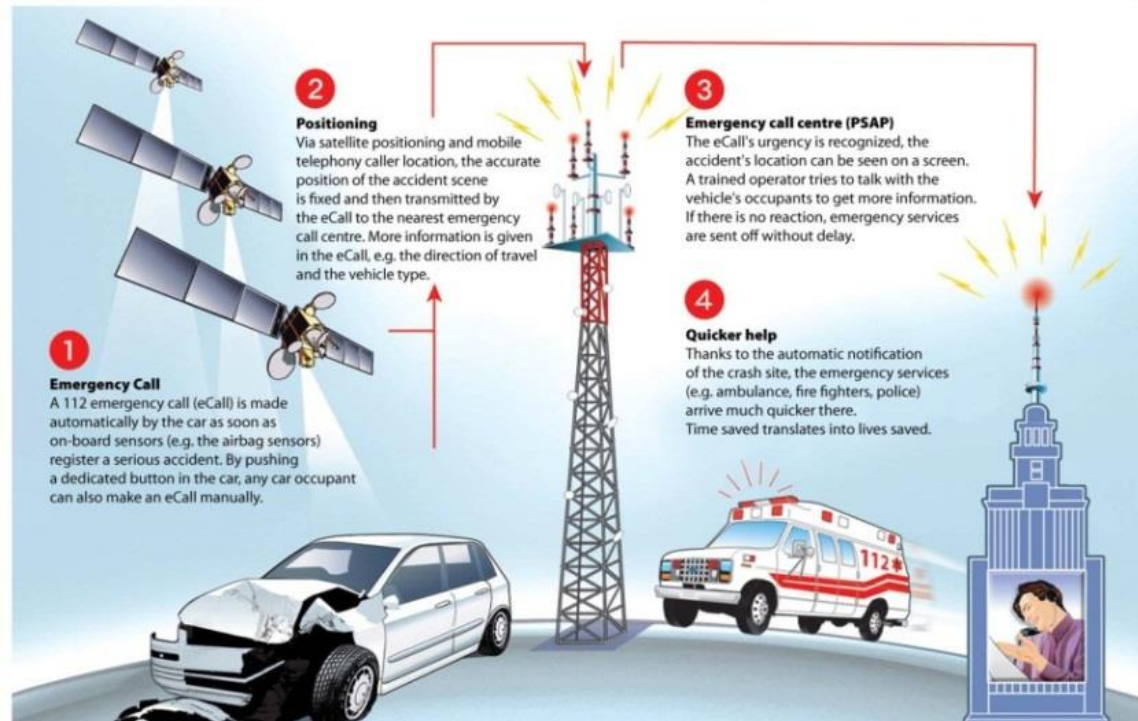


*The system enables cars to respond to a crash by contacting the emergency services and wirelessly send airbag and impact sensor information, along with **satellite positioning co-ordinates***



GOOD POSITION TO SAVE LIVES

- ✓ **Entered into force as of 31 March 2018**
- ✓ **By 2020, EGNOS/GALILEO enabled in 40 million cars and vans sold in Europe**



European Commission Delegated Regulation (EU) 2017/79

eCall sends an automatic emergency call to 112 in case of an accident, to accelerate emergency assistance to drivers

GSA/EC assessed the GNSS compatibility to facilitate the eCall type approval



- GSA announced campaign conducted in cooperation with the European Commission's Joint Research Centre (JRC)
- Full range of tests specified under Annex VI of European Commission Delegated Regulation (EU) 2017/79

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GSA-JRC test campaign:

- Specific assessment of:
 - Positioning accuracy under different conditions
 - Time-to-first-fix
 - GNSS receiver sensitivity
 - Re-acquisition performance following signal outages
- eCall device manufacturers were invited to participate and assess their devices' capability to support the reception and processing of EGNSS signals
- Tests held at the JRC's facilities in Ispra, Italy

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GSA/JRC jointly published a document of guidelines for eCall test implementation

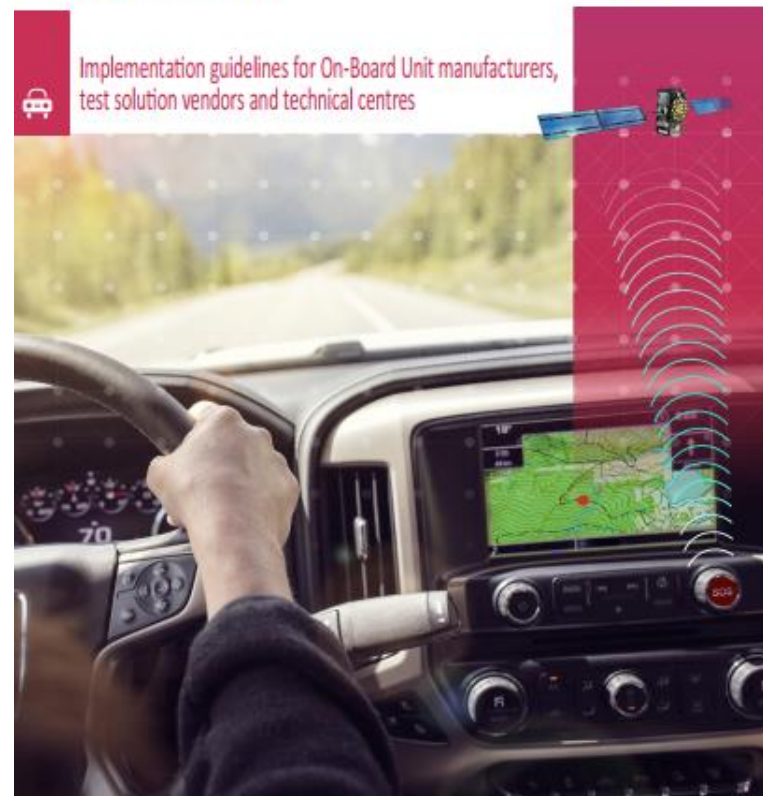


To facilitate the designated Technical Centres with:

- ***Test scenarios generation***
- ***KPIs computation***

Available at: www.gsa.europa.eu

EGNOS/GALILEO ECALL CONFORMANCE TESTING
IN EU COMMISSION DELEGATED
REGULATION 2017/79

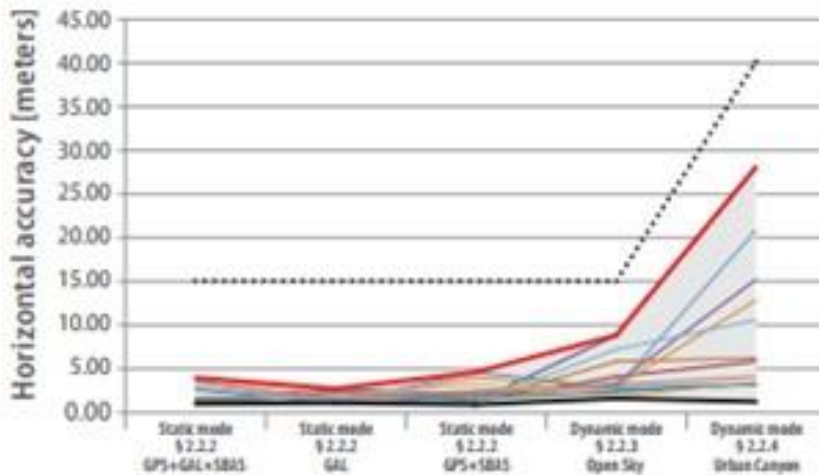


Main findings of the eCall test campaign

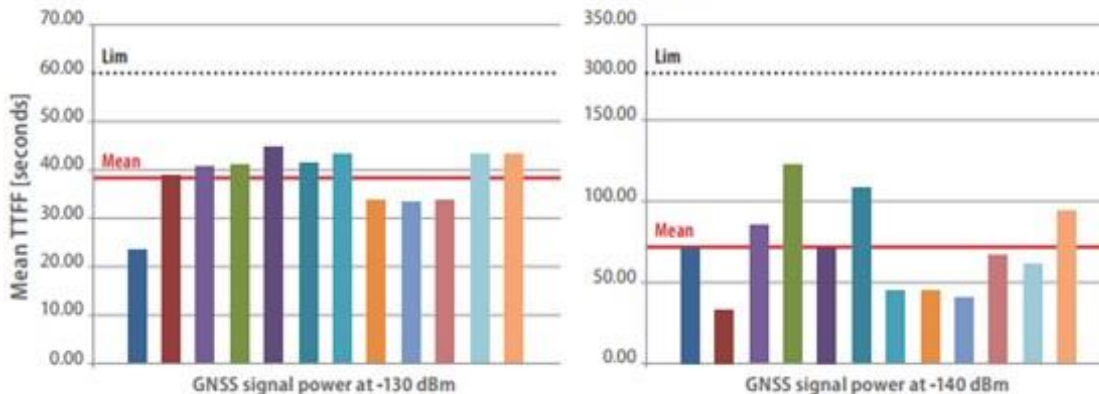


GNSS User Technology Report | Issue 2, 2018

eCall Horizontal Positioning Accuracy



eCall cold start TTFF



- ✓ **13 eCall products** by key automotive suppliers were fully tested
- ✓ Multiple scenarios (Static/kinematic, open sky/urban, etc.)
- ✓ **Fully compatible** with both Galileo and EGNOS (and GPS)

Linking space to user needs



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