



47<sup>TH</sup> ASECAP STUDY & INFORMATION DAYS



# *C-Roads Italy: first steps towards the deployment of C-ITS technologies*

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**Brennerautobahn AG**

*Costa Navarino, Messinia, Greece – 29-31 May 2019*

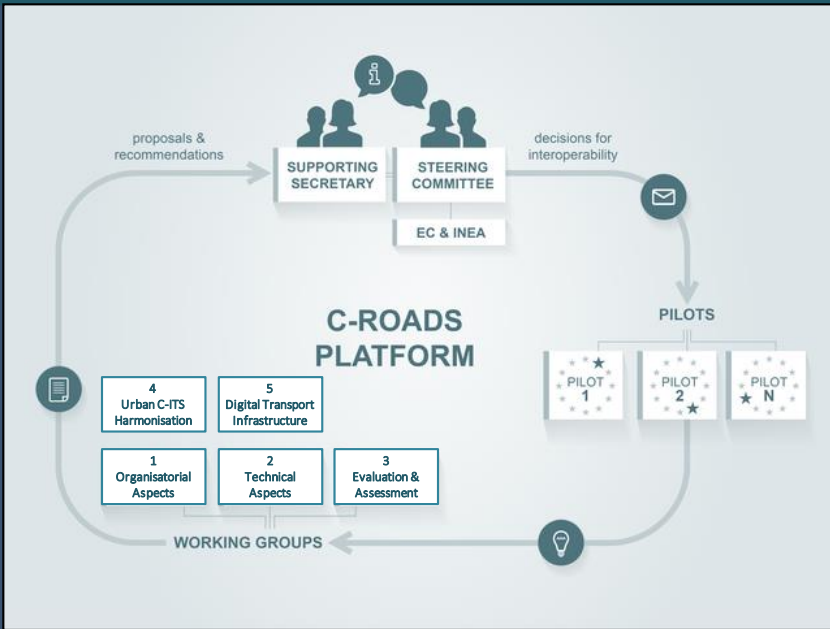


Implementation of Day-1 services (V2X communication) in real-traffic conditions to evaluate the real impact on **safety**, traffic efficiency and environment

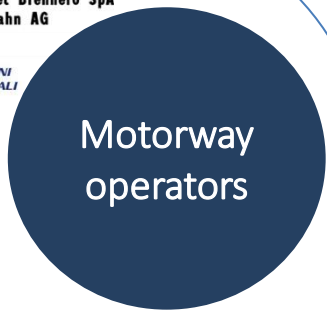
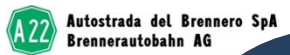
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31.12.2020

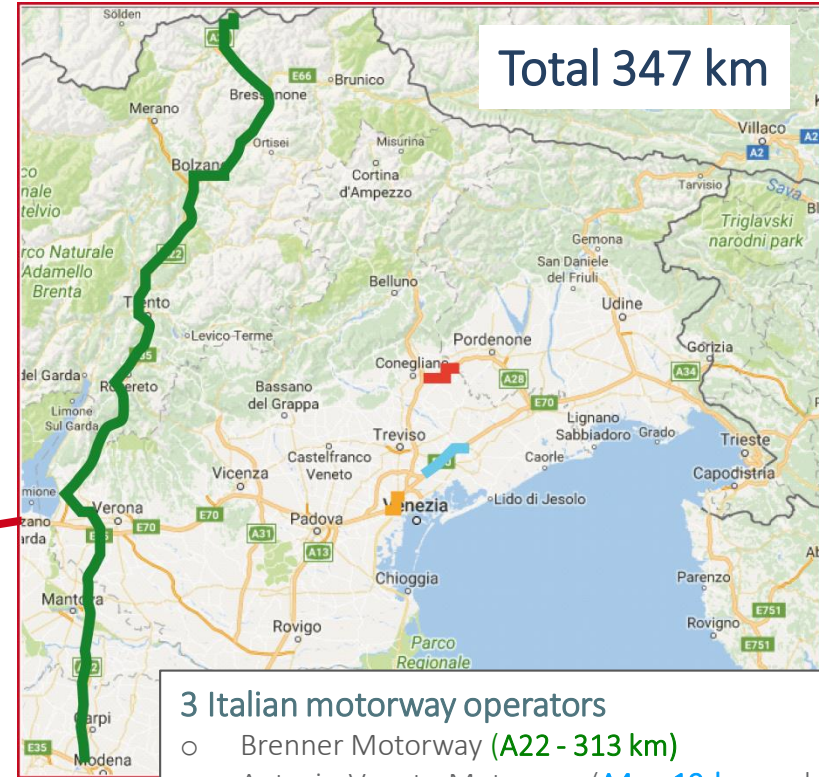
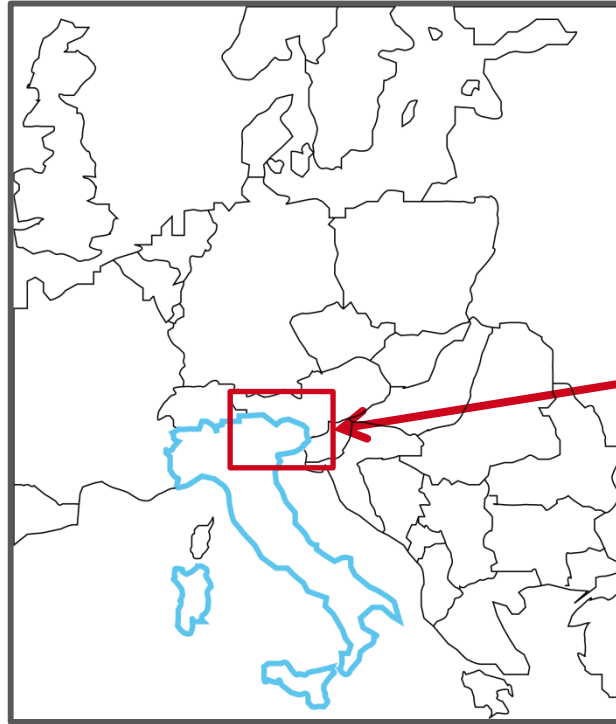


Joint initiative of European Member States and road operators for testing and implementing C-ITS services in light of cross-border harmonisation and interoperability



North Italy Communications S.r.l.

# LOCATION OF THE ACTION



C-Roads Italy pilots will be mainly carried out along the Brenner motorway

Cross-border tests with Austria are planned by 2020

Day-1 SERVICES	Road Works Warning	Closure of part of a lane, whole lane or several lanes	OK
		Alert planned road works - mobile	<i>planned</i>
	Hazardous Location Notification	Accident Zone	OK
		Traffic Jam Ahead	OK
		Stationary Vehicle	OK
		Weather Condition Warning	OK
		Temporarily Slippery Road	OK
		Animal or Person on the Road	OK
		Obstacle on the Road	OK
	In-Vehicle Signage	Dynamic Speed Limit Information	OK
		Embedded VMS «Free Text»	OK
		Other Signage Information	OK



TRUCK  
PLATOONING



HIGHWAY  
CHAUFFEUR

**IVECO**



## Truck Platooning concept

Two or more trucks travelling with reduced gap at cruising speed, taking advantage of **drag reduction** and **reducing road impact**

# Highway Chauffeur concept

Automated function, in which vehicles autonomously perform both the **side control** (lane) and the **longitudinal control** (speed, acceleration) in a motorway scenario





# Cross-border tests with Austria

both for Truck Platooning and Highway Chauffeur

“seamless driving” → interoperability

Tests with ITS-G5 and 4G LTE connection

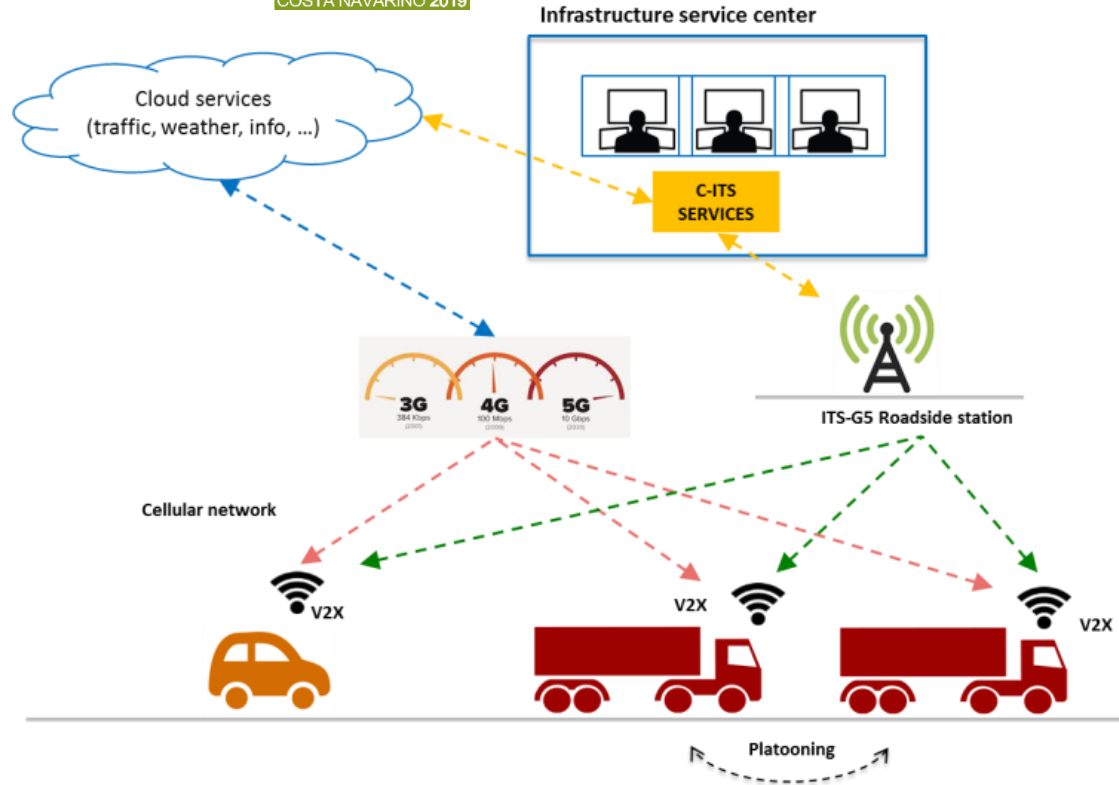


# Expected benefits

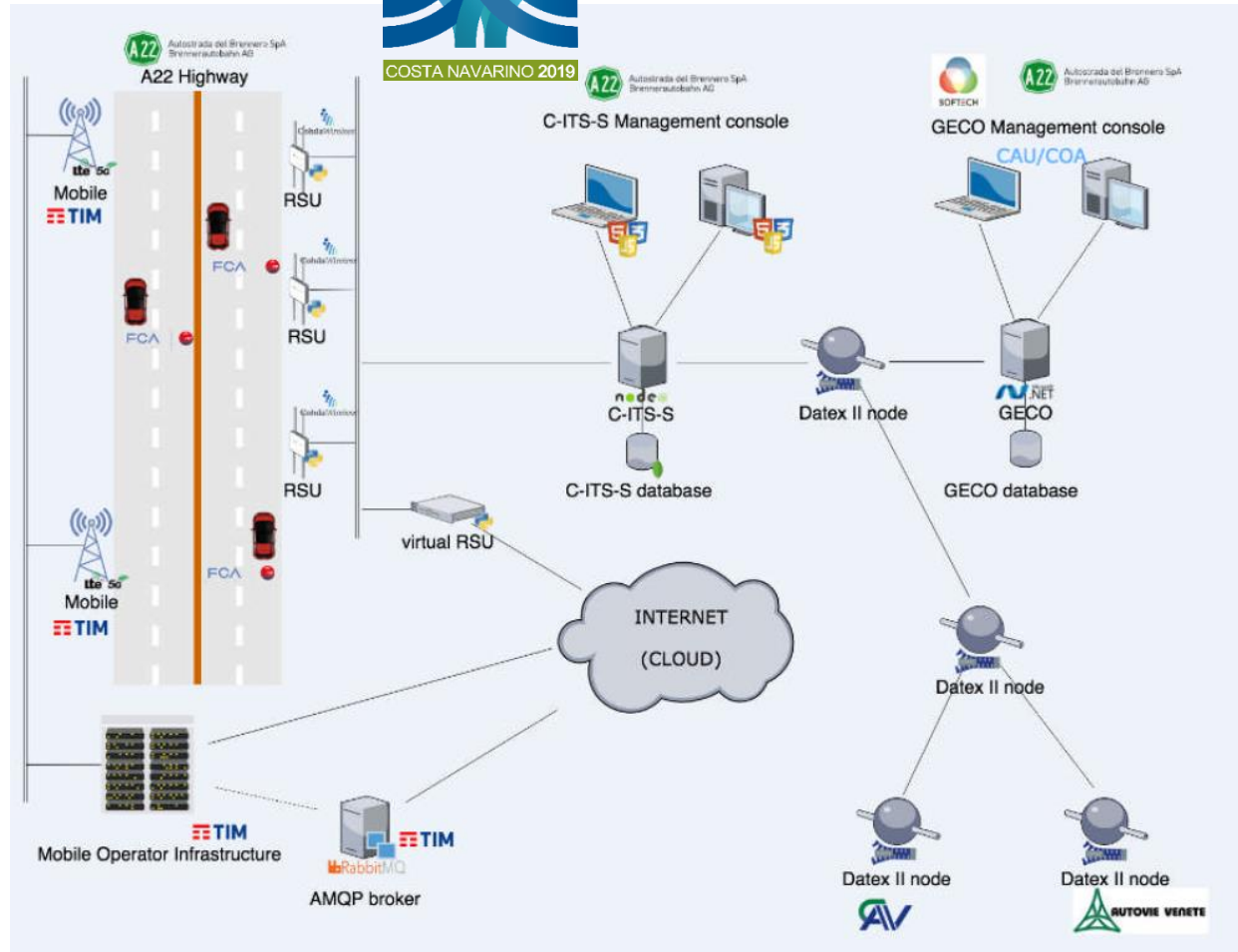
- V2I communication system development based on ITS-G5 technology and on cellular technology
- C-ITS services integration with platoon technology
- Platooning impact evaluation, with a specific focus on Safety
- Evaluate the interaction with Highway Chauffeur functions
- Collect elements for Platooning technology real life deployment



# C-Roads Italy: Project architecture



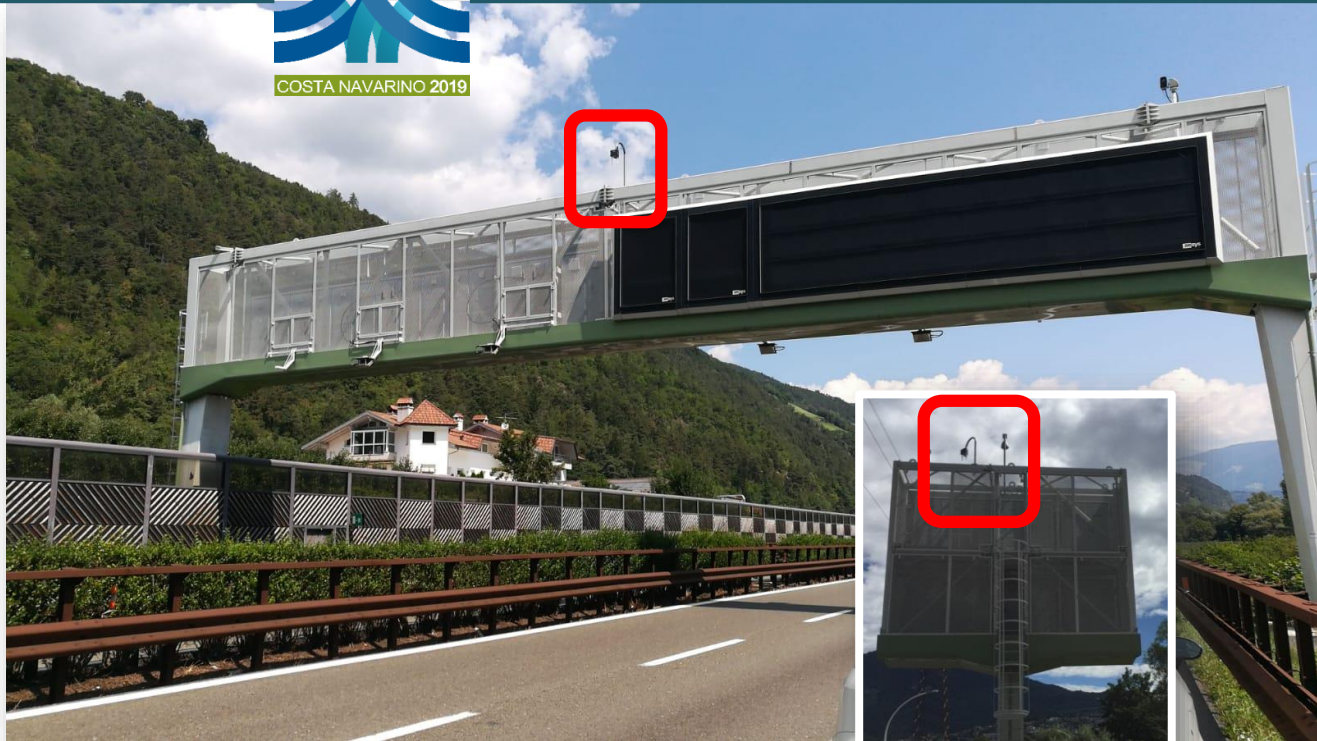
  
 ITS-G5  
 +  
  
 Cellular  
 Communication



HYBRID COMMUNICATION

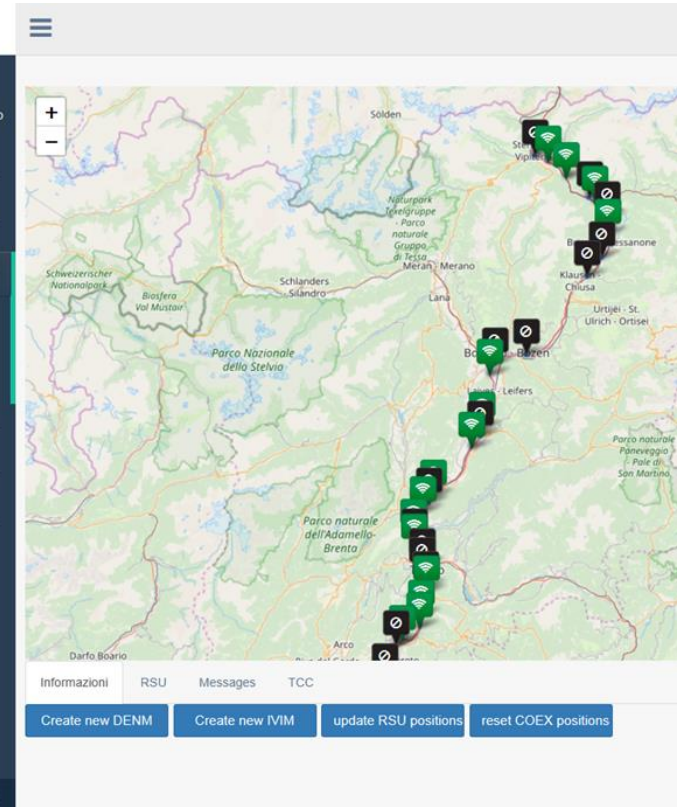
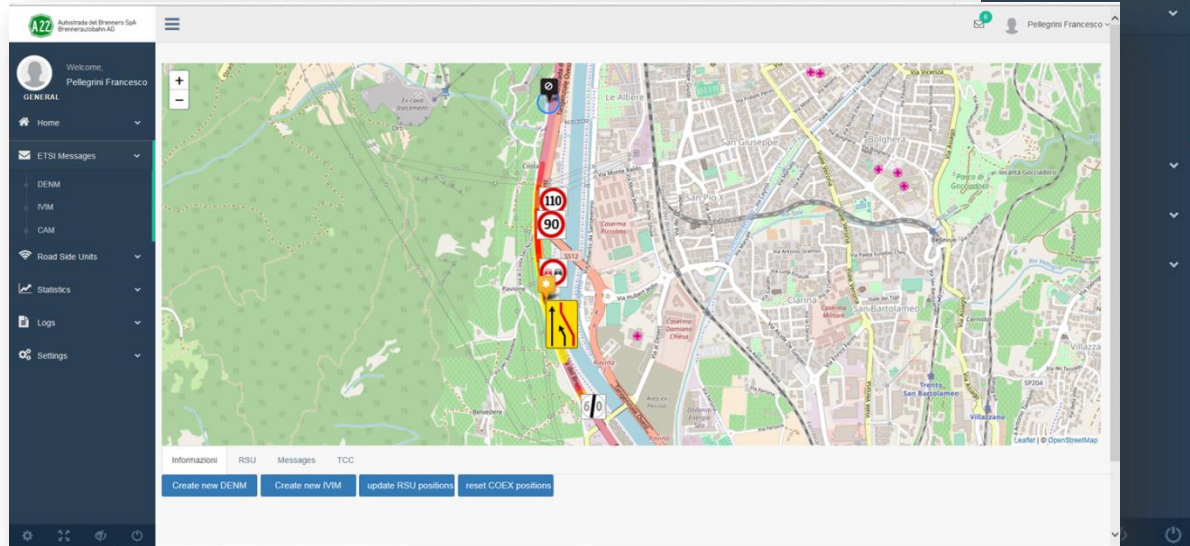
# State of the art

53 RSUs INSTALLED  
AND CONNECTED



# State of the art

## SOFTWARE FOR THE MANAGEMENT OF EVENTS OPERATIONAL





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*Thank you for your attention!*

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