



The French institute of science and technology for transport, development and networks

Living Labs in Europe: state of play & outlook to the future

From pilot projects to large scale C-ITS deployment in Bordeaux and New Aquitaine Region

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Projects and Place



Piloting Cooperative Services for Deployment













Use cases

		Prioring Cooperation Benicos for Designment	CO-GISTICS	Projet Scoop	The Difference
Infrastructure to Vehicle (I2V)	GLOSA	ITS-G5	3G		ITS-G5 / 3G
	Energy Efficiency Information Service	ITS-G5			ITS-G5 / 3G
	Road Hazard Warning	ITS-G5		ITS-G5 / 3G	ITS-G5 / 3G
	Road-works Warning				ITS-G5
	Parking / Fuel+ElecPOI				3G
Vehicle to Vehicle (V2V)	Emergency Vehicle Approaching	ITS-G5			ITS-G5
	Road-works Warning			ITS-G5	ITS-G5
	Emergency Break			ITS-G5	
Vehicle to Infrastructure (V2I)	Road Hazard Warning			ITS-G5	
	Probe Data Collection			ITS-G5 / 3G	
Security				Yes	





Results from Compass4D

For trucks: 7 trucks, 4400 km, 124 hours

	BASE LINE	USING COMPASS 4D SYSTEM	COMPARISON
total Travel time	Mean = 133.2 s Sigma = 69.4 s	Mean = 91.09 s Sigma = 21.62 s	Mean total travel time : - 30 %
Stop count before event	Mean = 1 stop Sigma = 1.7 stops	Mean =0.7 stop Sigma = 0.5 stop	- 30%
Cumulated Stop Duration before event	Mean = 33.5 s Sigma = 33.3 s	Mean = 19.94 s Sigma = 17.29 s	Mean <u>cumulated</u> stop duration : - 40%
Mean Speed	Mean = 21.3 km/h Sigma = 10.7 km/h	Mean = 25.88 km/h Sigma = 7.09 km/h	Mean speed: + 21 %
Mean Consumption	Mean = 11.6 I/100km Sigma = 4.1 I/100km	Mean = 9.59 V100km Sigma = 1.65 V100km	Mean consumption : - 17 %





Operations results in Bordeaux

- Simulations for the GLOSA and Green wave use cases have shown that energy consumption saving can reach up to 10% depending on the number of stops undergone by the vehicles and the penetration rate of equipped vehicles
- On site evaluation results show that:
 - for light vehicles, there is a minimal change in the average speed and duration reasonably substantial saving in both the number of stops, emissions and the efficiency (~10%)
 - for heavy vehicles, there is no substantial change neither duration (less than 5% reduction) nor in average speed, while a ~10% reduction in fuel consumption





Next steps

5 Strategics Topics

One Region: Nouvelle Aquitaine







Merci

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