

euroFOT - European Large-Scale Field Operational Test on In-Vehicle Systems

FOT-net Workshop
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www.eurofot-ip.eu

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FOT

Bringing intelligent vehicles to the road

euroFOT Overview

- Project duration: May 2008 - August 2011
- Coordinator: Ford Research & Advanced Engineering Europe
- 28 partners from 10 different countries:
 - ♂ 9 OEMs
 - ♂ 3 Suppliers
 - ♂ 6 Universities
 - ♂ 4 Research Institutes
 - ♂ 6 Others

euroFOT Objectives

- Apply a common European approach for Field Operational Tests
- Perform multiple coordinated tests of Intelligent Vehicle Systems with **ordinary drivers in real traffic**
- Investigate performance, driver behaviour and user acceptance
- Assess the impacts on safety, efficiency and the environment,

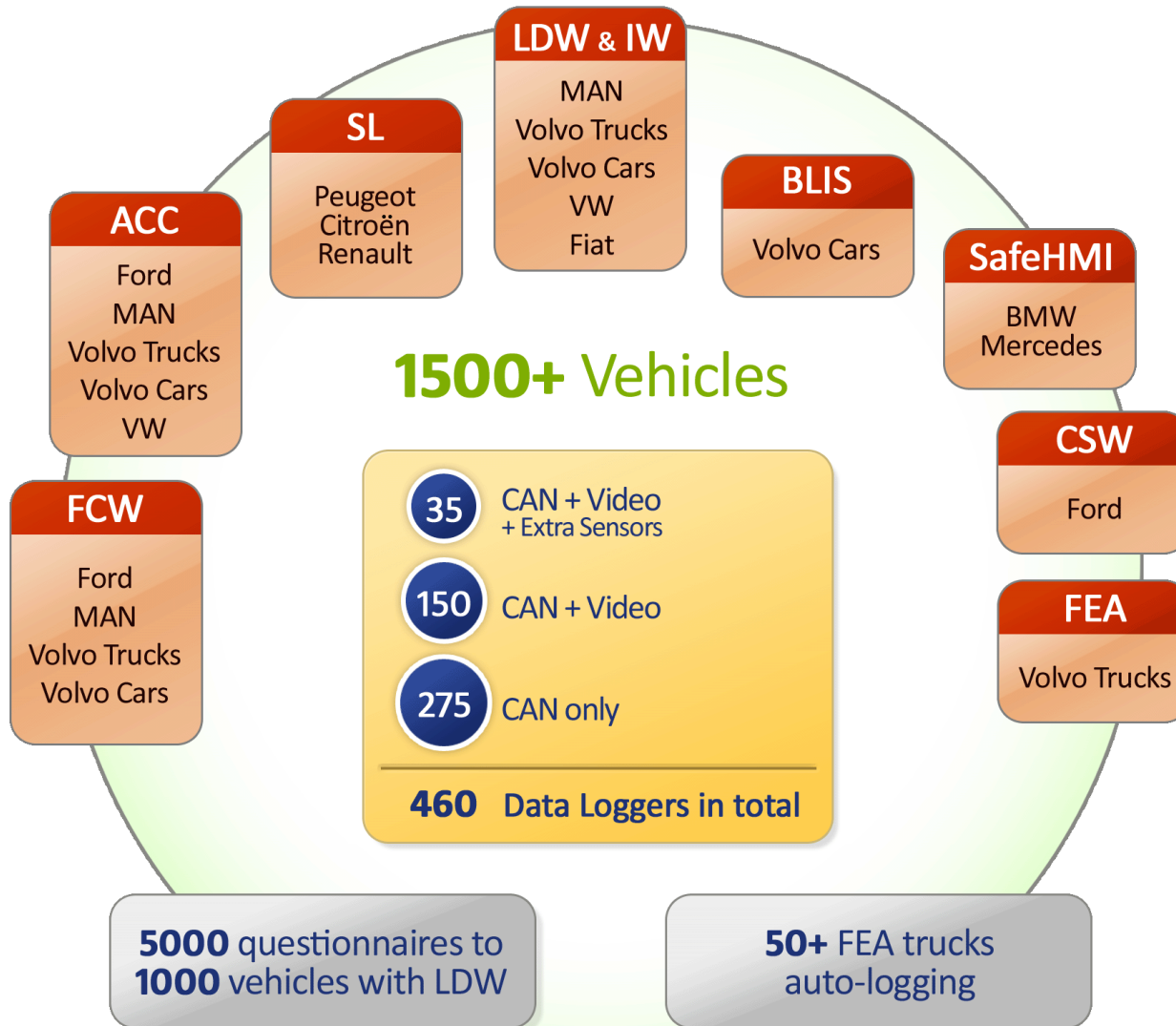
Test Management Centres



Functions

- **Longitudinal control functions**
 - ⊗ **FCW** **Forward Collision Warning**
 - ⊗ **ACC** **Adaptive Cruise Control**
 - ⊗ **SL** **Speed Limiter**
- **Lateral control functions**
 - ⊗ **BLIS** **Blind Spot Information System**
 - ⊗ **LDW** **Lane Departure Warning**
 - ⊗ **IW** **Impairment Warning**
- **Others**
 - ⊗ **CSW** **Curve Speed Warning**
 - ⊗ **FEA** **Fuel Efficiency Advisor**
 - ⊗ **SafeHMI** **Safe Human Machine Interaction**

Functions



VMC/Functions

		FCW	ACC	SL+CC	LDW	BLIS	Safe HMI	CSW	FEA	IW
French VMC				✓						
German VMC	Operation Centre 1	FORD	✓	✓				✓		
		MAN		✓		✓				
		VW		✓		✓				
	Operation Centre 2	BMW					✓			
		DAG					✓			
Italian VMC					✓					
Swedish VMC		VTEC	✓	✓		✓			✓	
		VCC	✓	✓		✓	✓			✓

euroFOT methodological issues

(some of them, so far)

- **Baseline:**
 - Not only
 - “should there be a baseline” and
 - “in what configuration” but also
 - “what actually constitutes a baseline”?
 - For example, should driving with ACC be compared with driving with CC or driving with no system.
.....Depends on driving population as a whole or the individual driver? Implications for participant selection

...more

- Practical and ethical issues of ensuring appropriate baseline:
 - ⌘ If drivers have purchased the vehicle with the system, is it unfeasible to ask them not to switch it on during a baseline
 - ⌘ If their previous vehicle was equipped with the system is it ethical (and safe) to take it away?

And more....

- Length of baseline period required
 - Practical constraints
 - Decision should be taken in synergy with length of "system on" period required:
 - Exposure to infrequent system activations, number of drivers/vehicles available
 - Power analysis required – and multiple systems may require different baseline and experimental time (or distance) periods

I'm looking forward to the
solutions!!!!!!!!!!!!

Volpe power analysis
email maxime

8 Functionalities, 28 Partners, 1500 Vehicles

1 Field Operational Test, 8 Functionalities

28 Partners, 1500 Vehicles, 1 Field Operational Test

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8 Functionalities, 28 Partners, 1500 Vehicles

1 Field Operational Test

