

# Emma

## Embedded Middleware in Mobility Applications

### The challenge

In the Networked Society not only people, but also increasingly smarter devices are sharing information, knowledge and services anytime anywhere. Embedded systems are at the centre of this move, since networks are not any longer linking just people but also smart objects. This is posing serious challenges, particularly in applications which are mission critical, like transport. It becomes urgent to open new prospects in the field of embedded middleware for cooperating wireless objects in order to hide the complexity of the underlying infrastructure while providing open interfaces to third parties. It is necessary to foster cost-efficient ambient intelligence systems with optimal performance, high confidence, reduced time to market and faster deployment.

### EMMA Objectives

- Building a middleware platform and a development environment facilitating the design and implementation of embedded software for cooperative sensing objects.
- **Lab testing this middleware on a number of sensors to be used as pilot wireless cooperative objects (WICOS).**
- Including other cooperating objects as part of the definition of a cooperating object itself, so that it is shown how these objects can combine their sensors in a hierarchical way and are, therefore, able to create arbitrarily complex structures.
- **Validating EMMA WICOS in a number of applications.**
- To feed the project results into the relevant standards, particularly in those of the automotive industry.



### Participants



TRW



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