

# TEST FLEET MANAGEMENT

Mecel TFM

- on-the-road test support

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# AUTOMOTIVE ENGINEERING

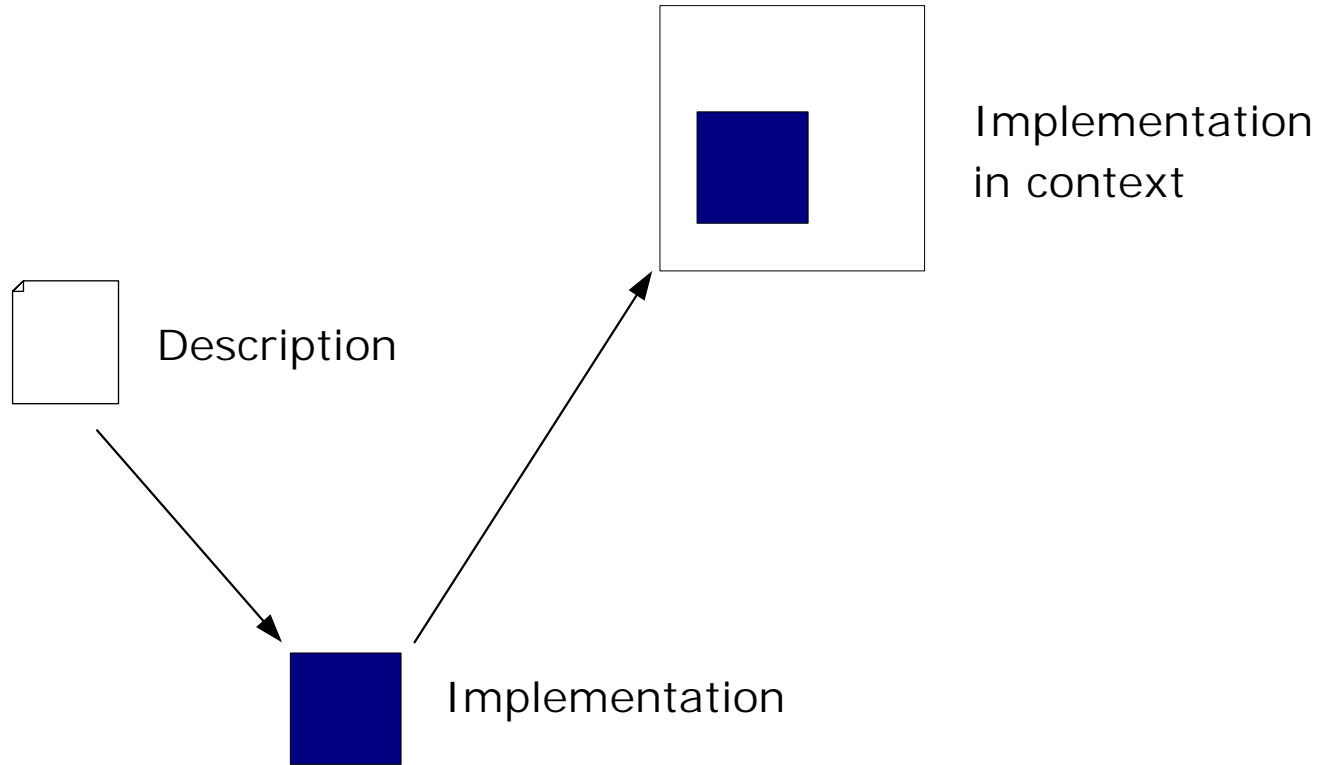
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- + New functionality
- + No increase in cost
- + Shortened time-to-market

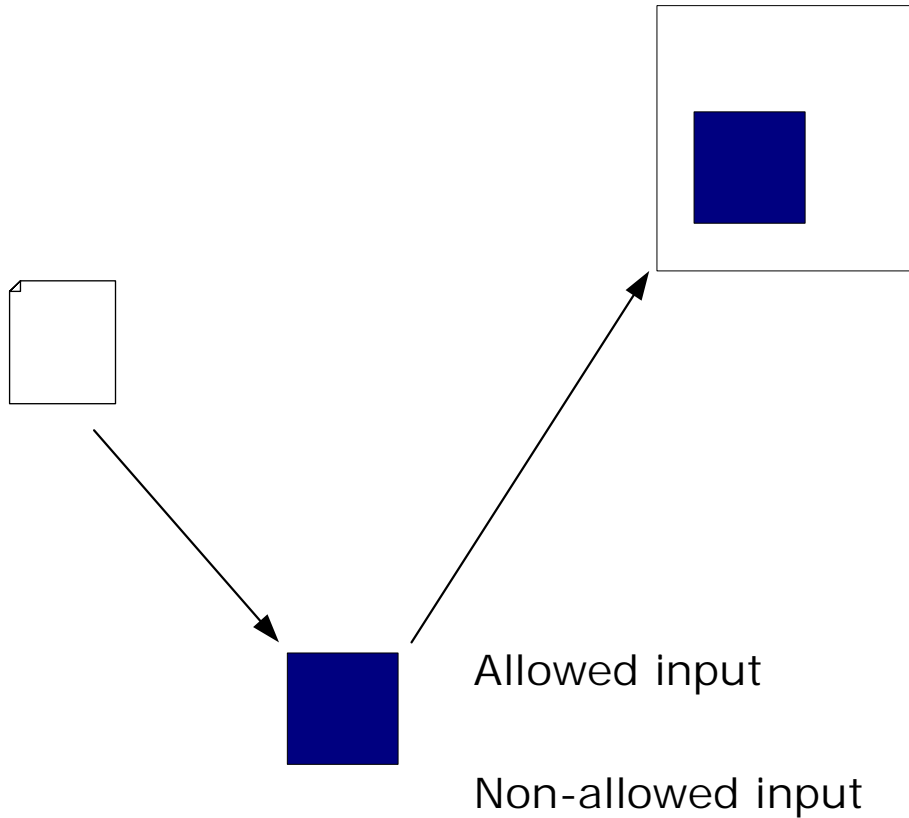
= New technology and complexity is introduced at a rapid pace.

**Q:** How can the long-term and short-term behaviour of the car be guaranteed?

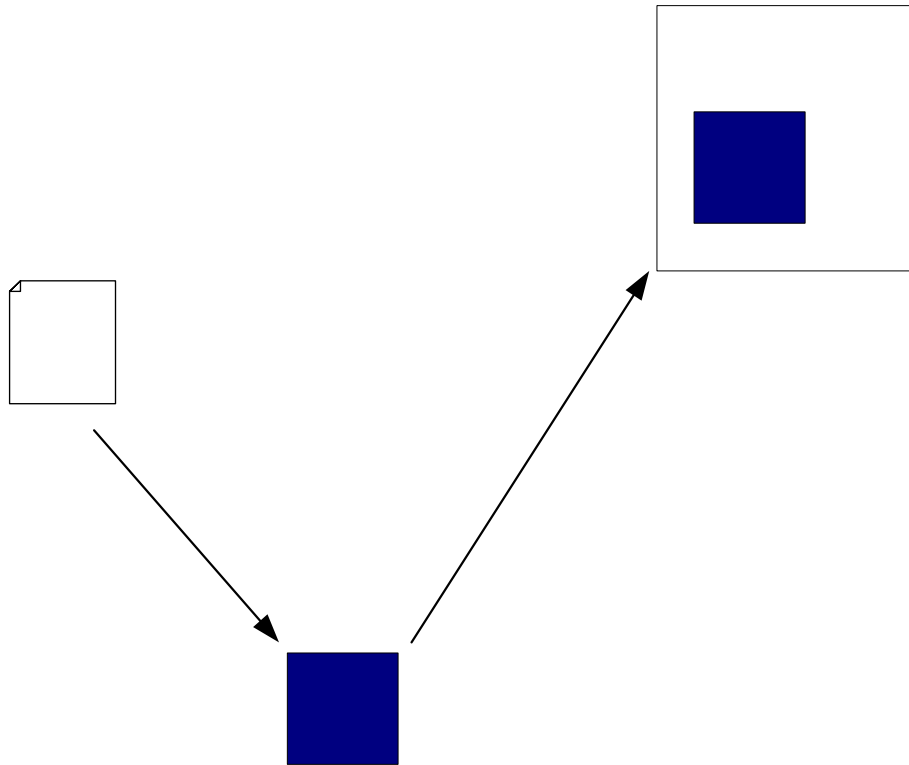
# TEST & VERIFICATION



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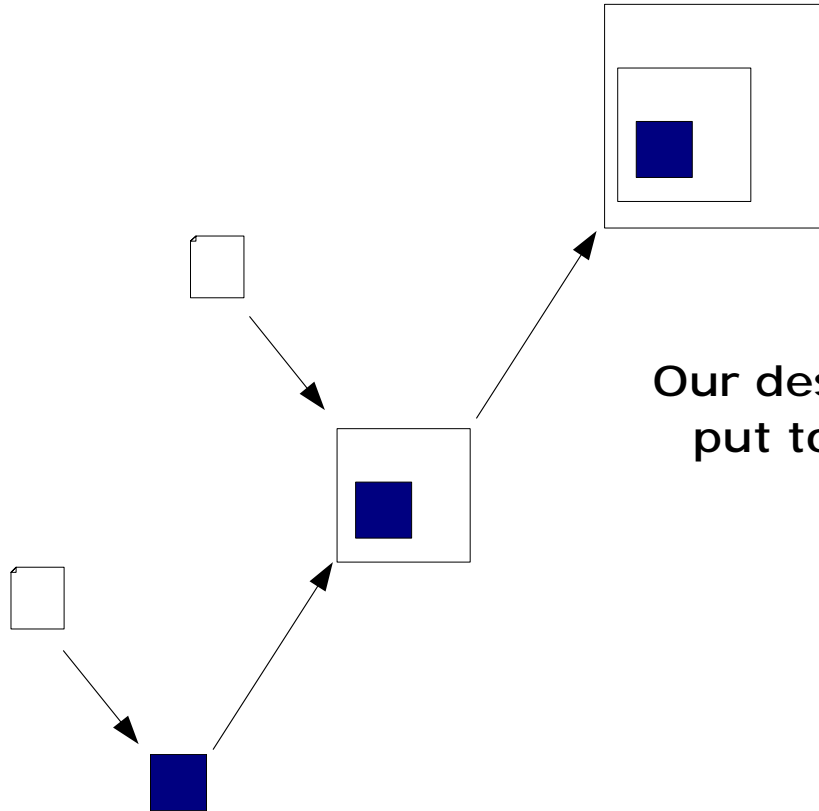


# TEST & VERIFICATION



Verify design-assumptions  
Find unknown dependencies

# THE CASE FOR "REAL-WORLD TESTING"



Our design-assumptions must be put to test in the "real-world"



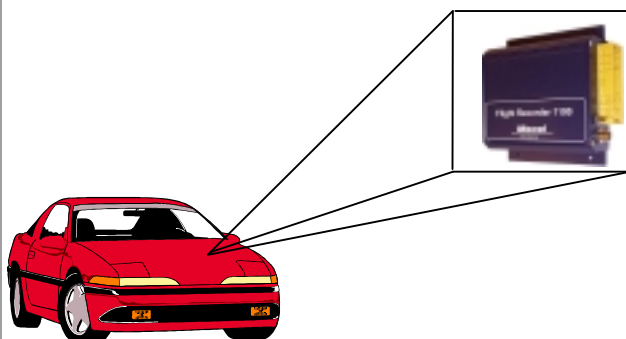
## PURPOSE OF TEST FLEET MANAGEMENT

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- Enable and improve tests, measurements and evaluations
- Simplify the involvement of suppliers
- Help us to make better use of testing resources

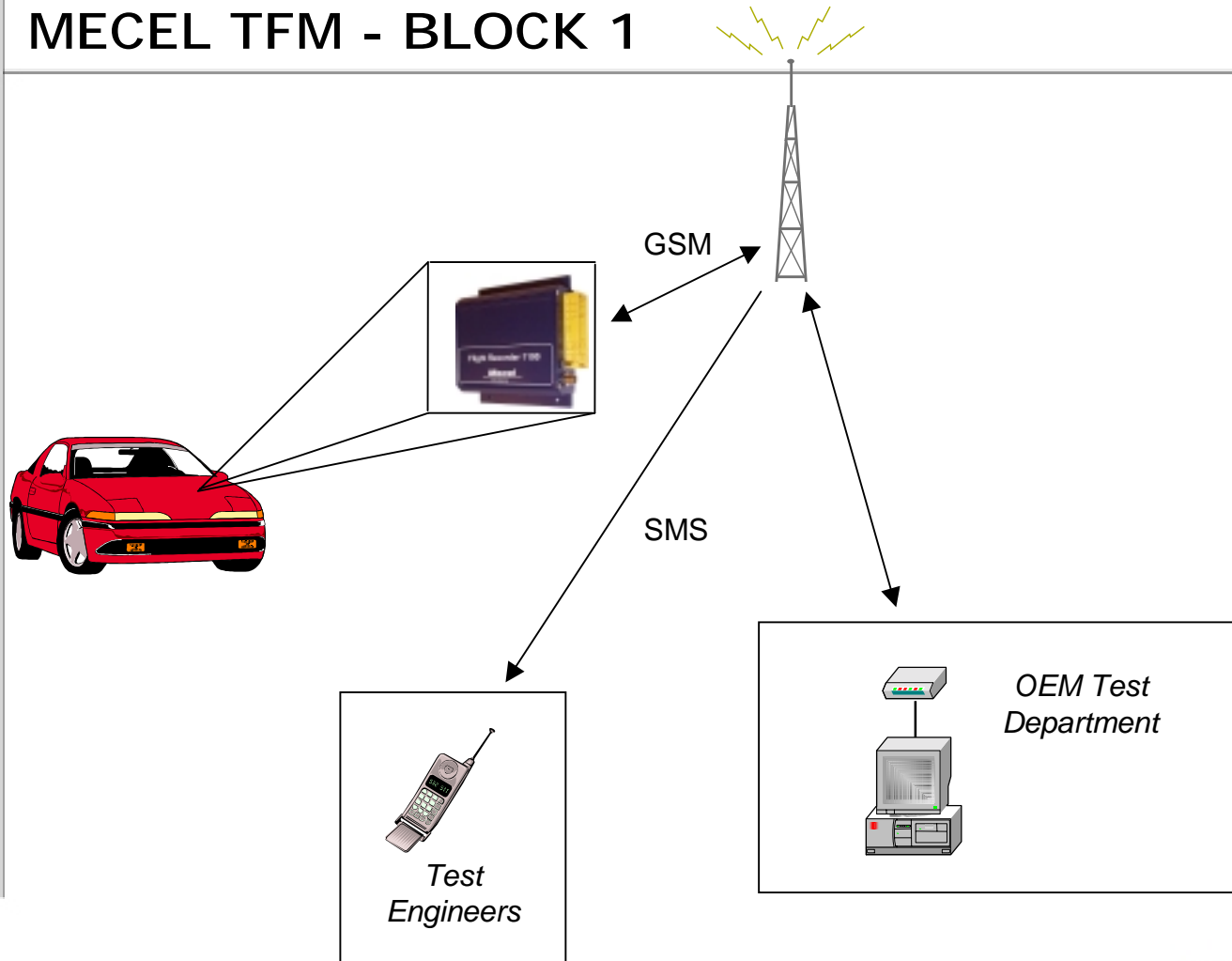
# MECEL TFM - BLOCK 1

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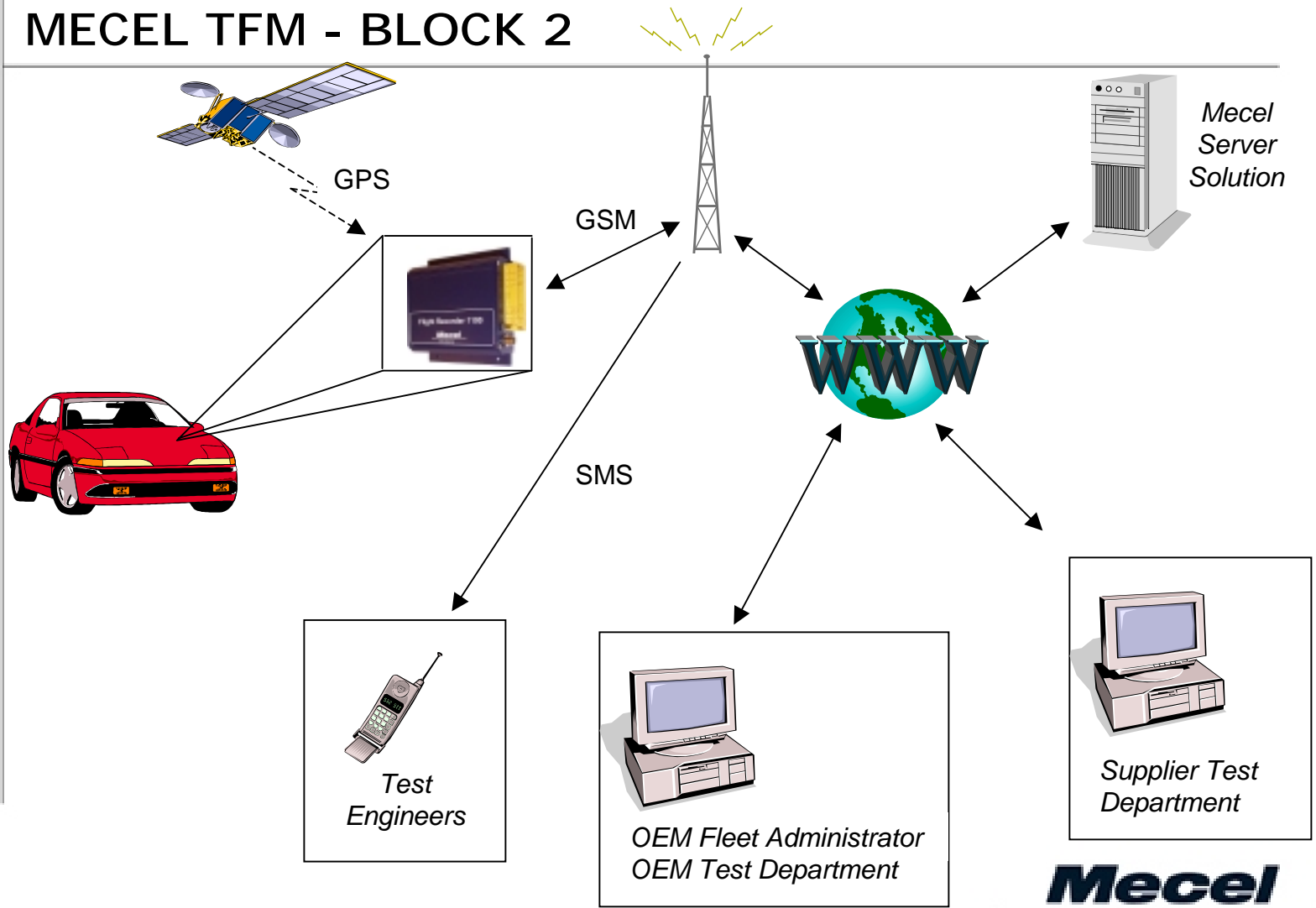
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# MECEL TFM - BLOCK 1



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# MECEL TFM - BLOCK 2

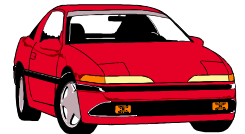


# TFM VISION

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## Three areas

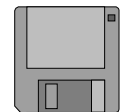
Managing the objects



Performing the tests, the measurements, the evaluations



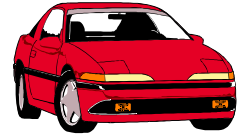
Handling the information



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# TFM - MANAGING THE TEST OBJECTS



## Administrate the fleet of test cars

- Localisation
- Resource booking
- Usage monitoring

## To prepare for test and evaluation

- Retrieve test object configuration
- Retrieve operational status of the test object
- Change test object configuration



## TFM - PERFORMING THE TESTS

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### To capture and diagnose erroneous behaviour

Sources for error-detection:

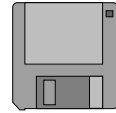
1. The driver
2. Measured properties
3. The diagnostic system

- Notifies the concerned
- Gathers the information

### To evaluate

- User behaviour
- Vehicle systems behaviour

# TFM - HANDLING THE INFORMATION



## To share information

- All information is stored in one place
- The information is accessible regardless of location
- The system administrator controls access right

## To analyse information

- Initial analysis with the TFM system
- In-depth analysis with third part systems

## "Vi Bilägare", nummer 18, 2003

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2003 års upplaga av Vi Bilägares långtest-stall har rullat i mål.

22 000 slitsamma mil är avverkade och ännu en gång tvingas testlaget konstatera att det är krånglande elektronik som ställer till det mesta eländet i moderna bilar.

Mekaniken fungerar och elektroniken faller, skulle man lite elakt kunna säga.

Fenomenet är inte nytt. Det var likadant i fjol och även året dessförinnan.

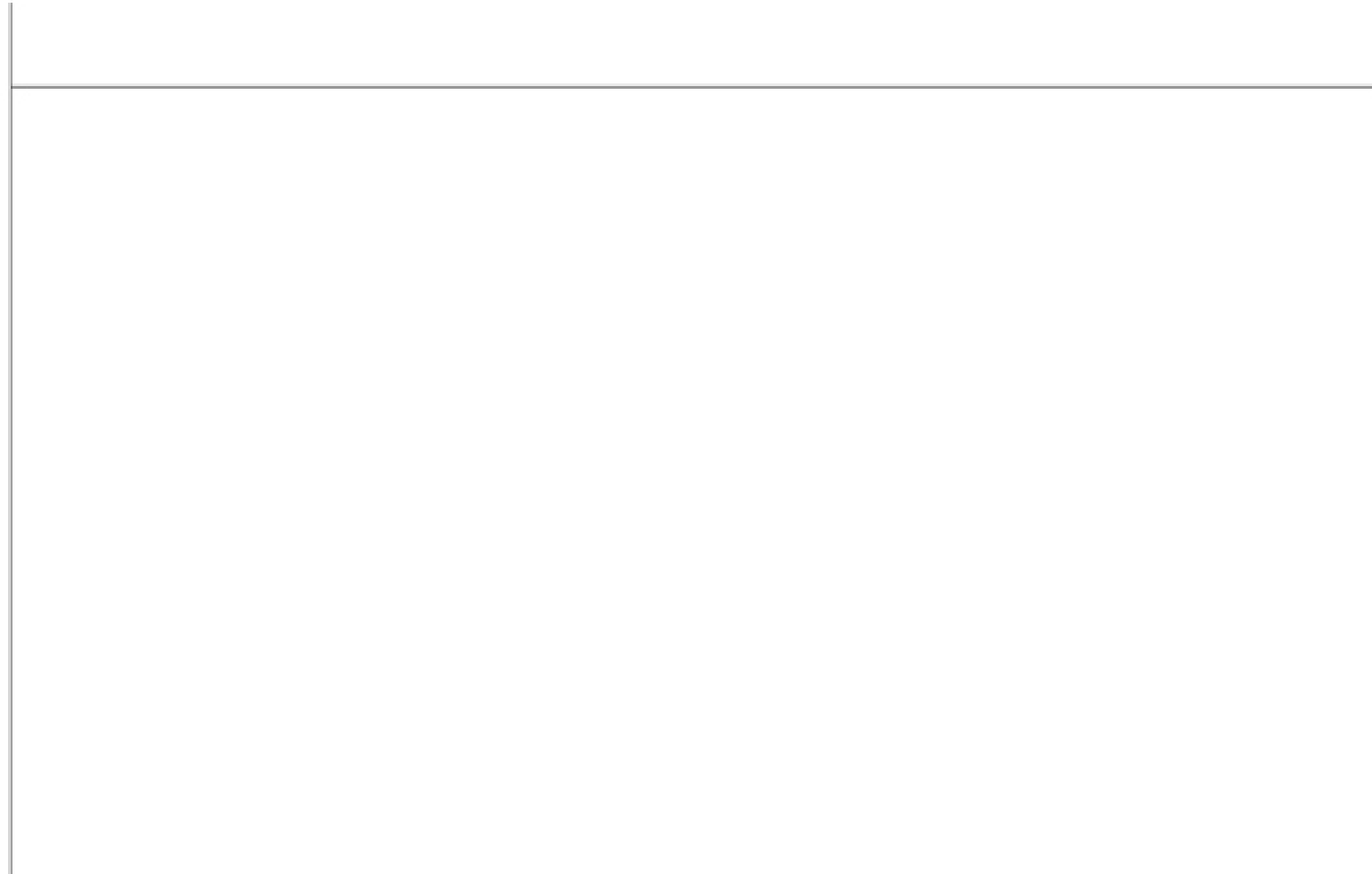
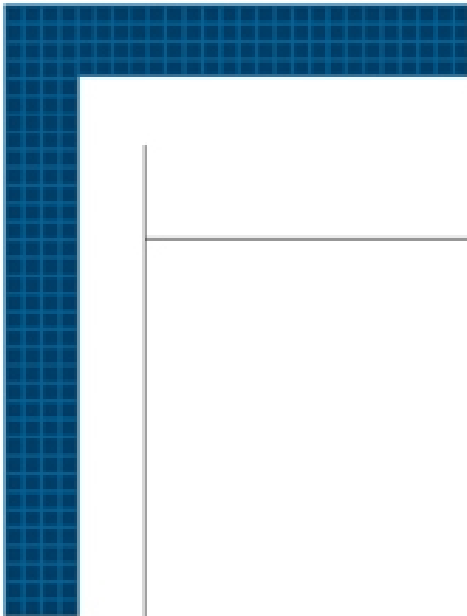
## "Vi Bilägare", nummer 18, 2003

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Men lägg också märke till att det finns en bil som klarat sig helt utan elektroniskt trasel. Det är **Volvo XC90**, som även i övrigt klarar sig nästan helt utan anmärkningar.



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Reg.designation

Date  
2003-10-31

Issue  
1

Info.class

Page



## MECEL TFM OFFER

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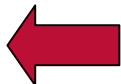
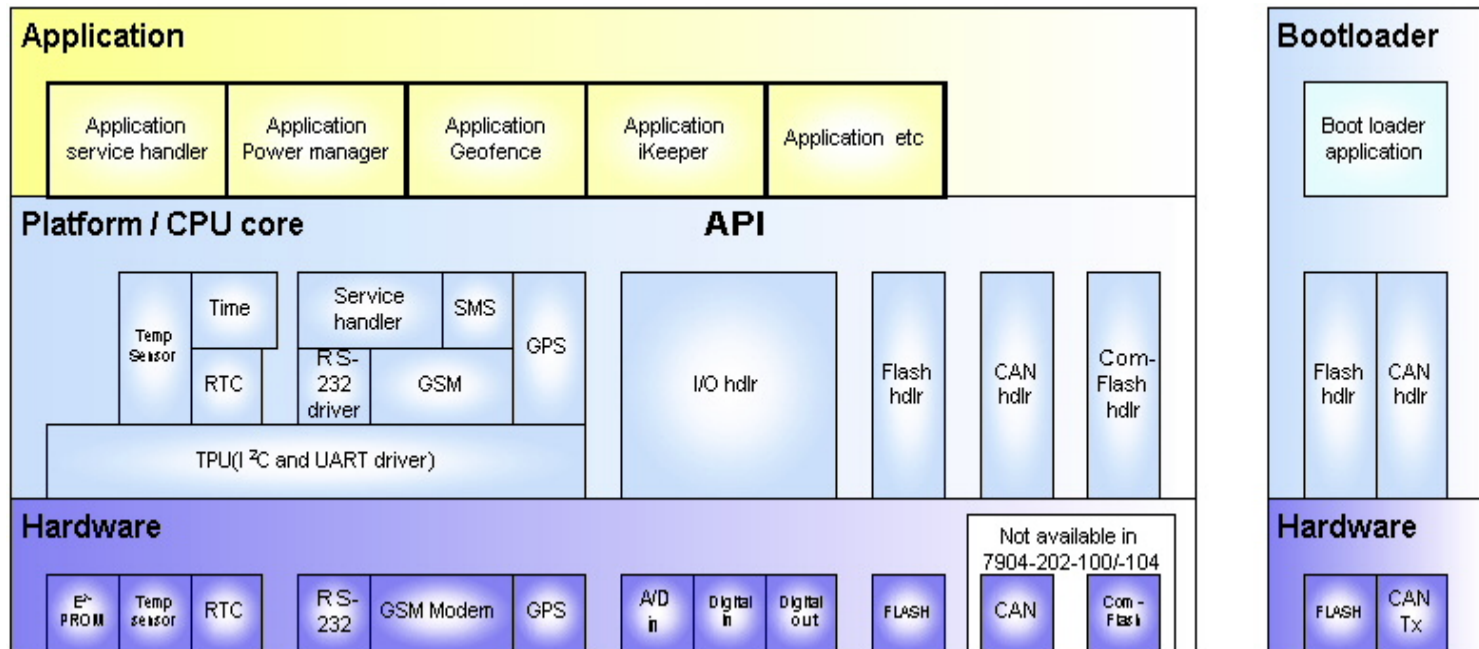
iKeeper is an **existing and working** internet based vehicle management system that logs data and position of vehicles, as well as notifies the concerned about erroneous behaviour.

iKeeper is an ideal entry-level TFM solution, as well as a platform for a full blown TFM system.

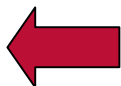
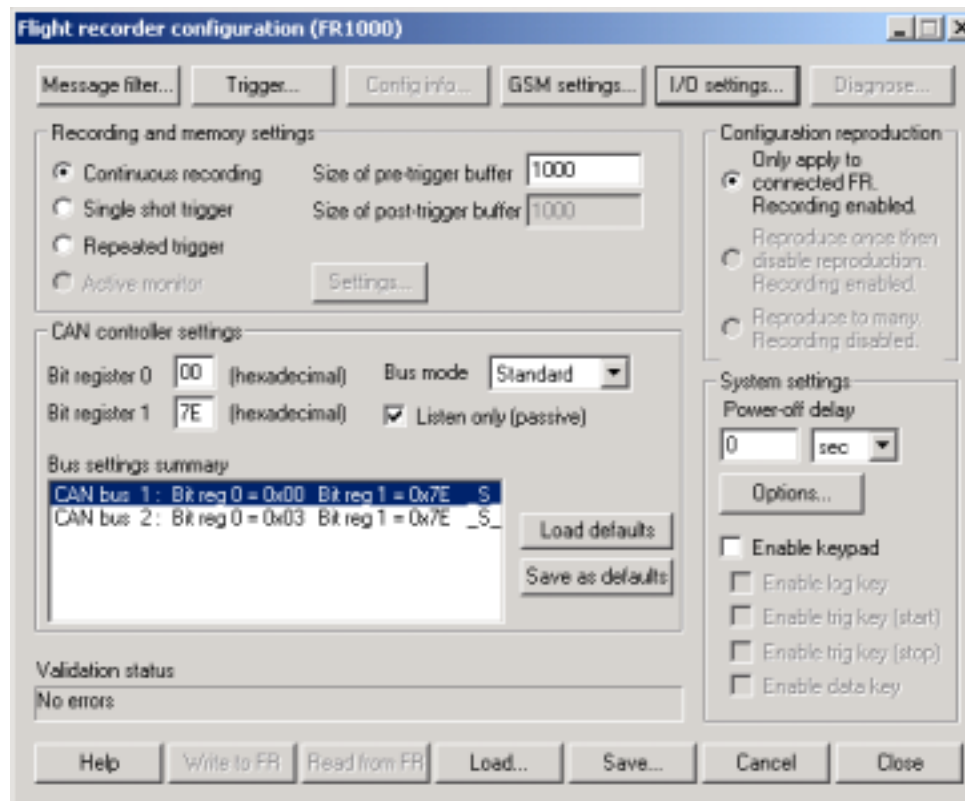
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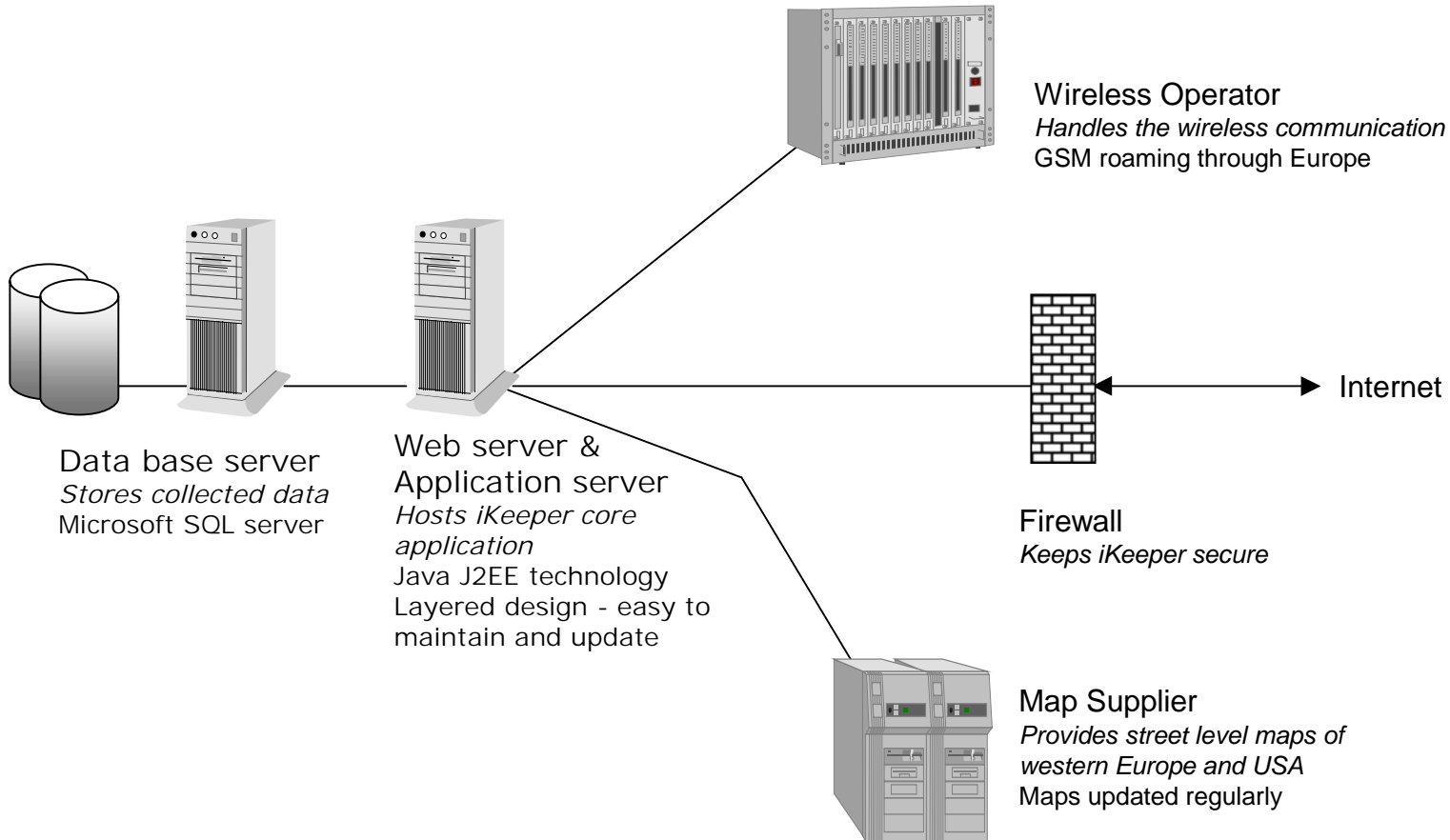
# Hardware/Platform/Application and boot loader



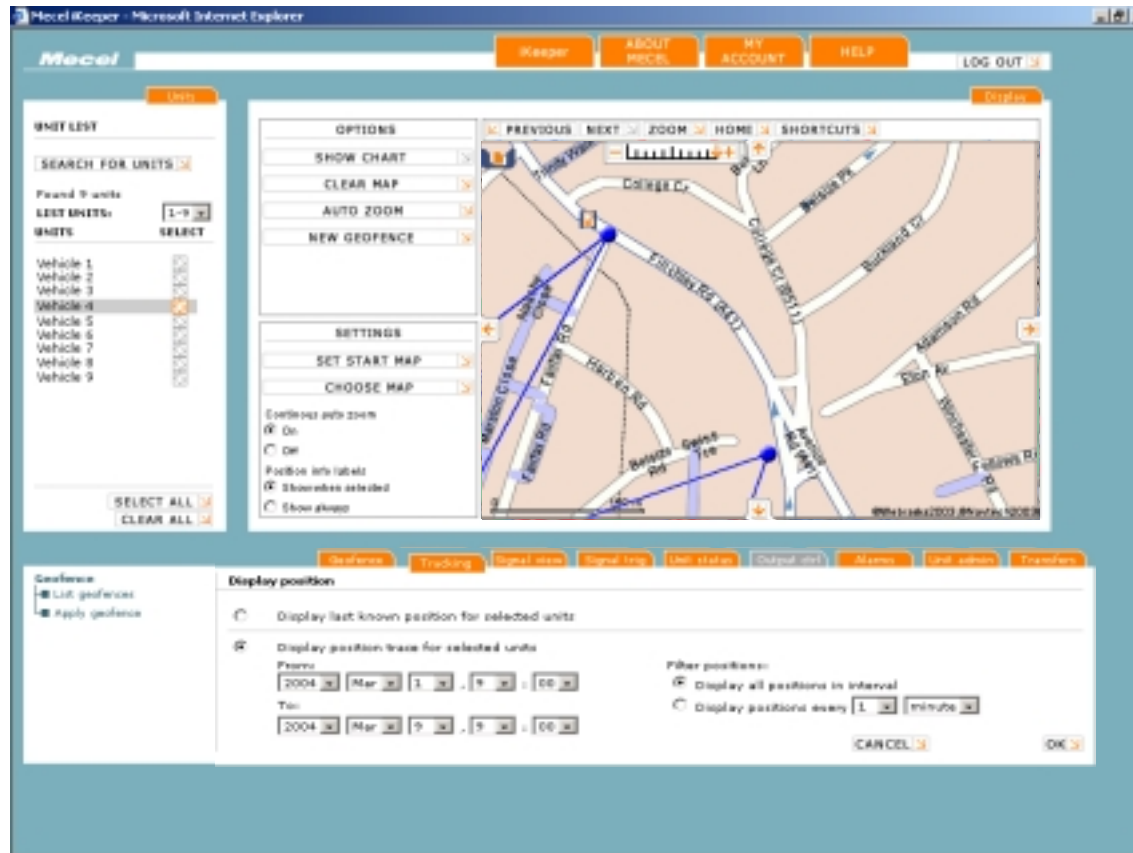
# PC SOFTWARE



# iKeeper Service Centre



# iKeeper - Web Application Screenshots



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# iKeeper - Web Application Screenshots

