Data Collection and Management

Data Management and Data Processing at the German1-VMC

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Final Event
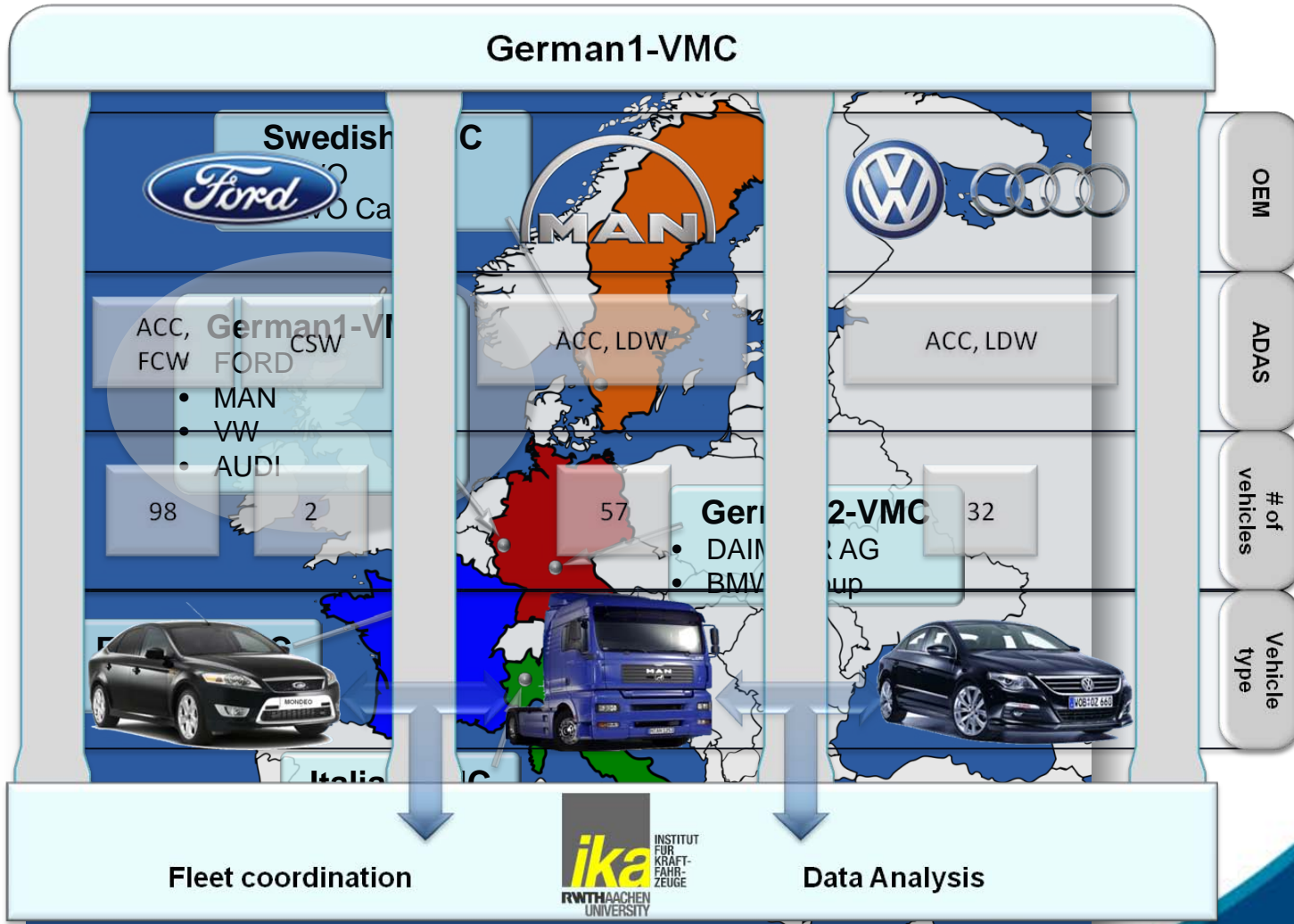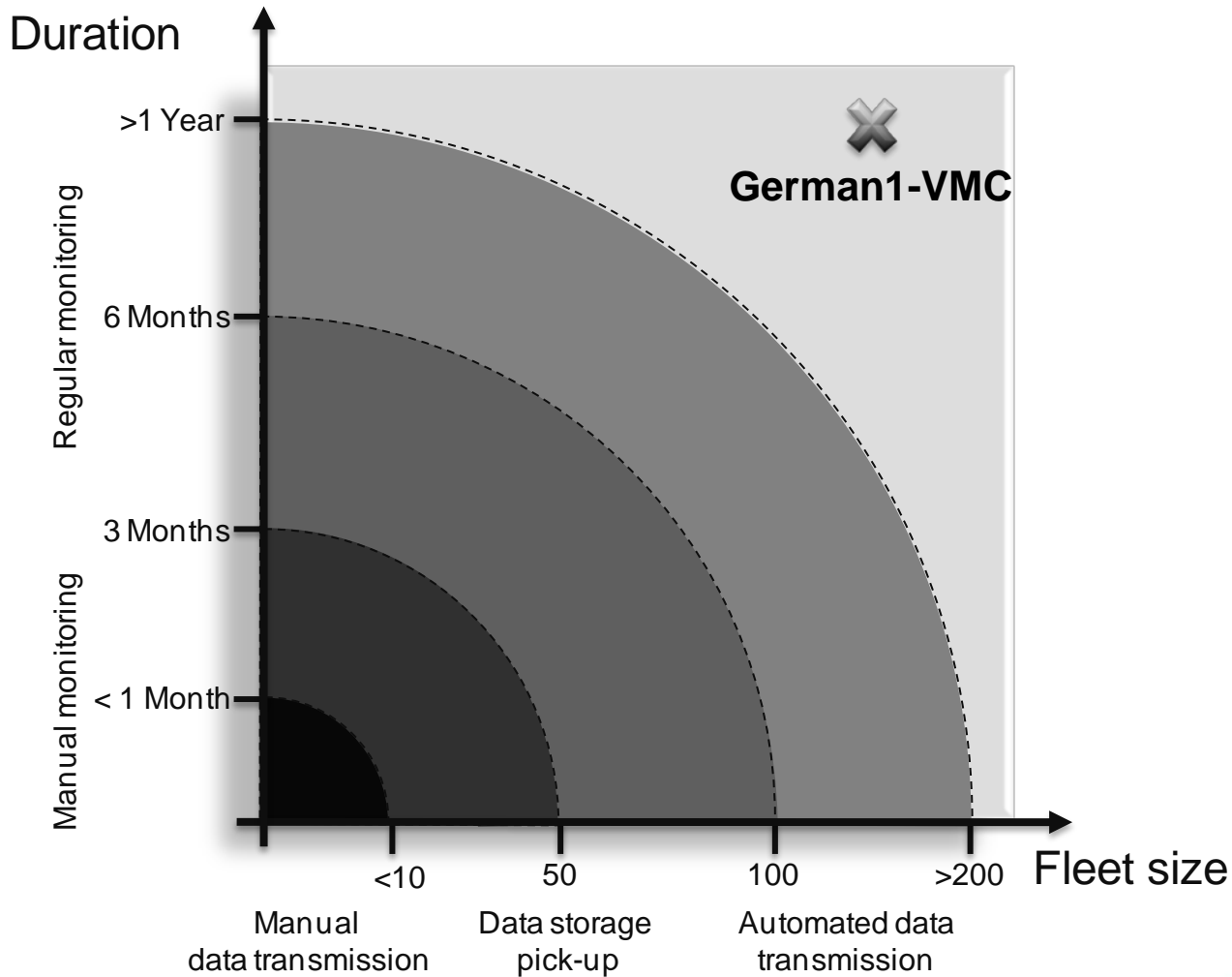26-27 June 2012
Autoworld, Brussels

www.eurofot-ip.eu

eur8FOT
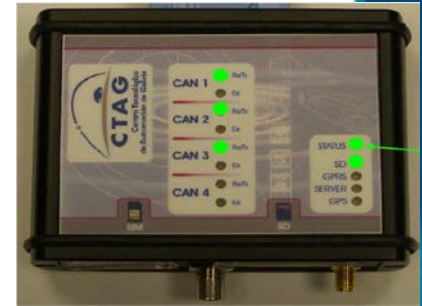Bringing intelligent vehicles to the road

German1-VMC

Complexity of data management

Duration

>1 Year

6 Months

3 Months

< 1 Month

Regular monitoring

Manual monitoring

German1-VMC

<10   50   100   >200   Fleet size

Manual
data transmission
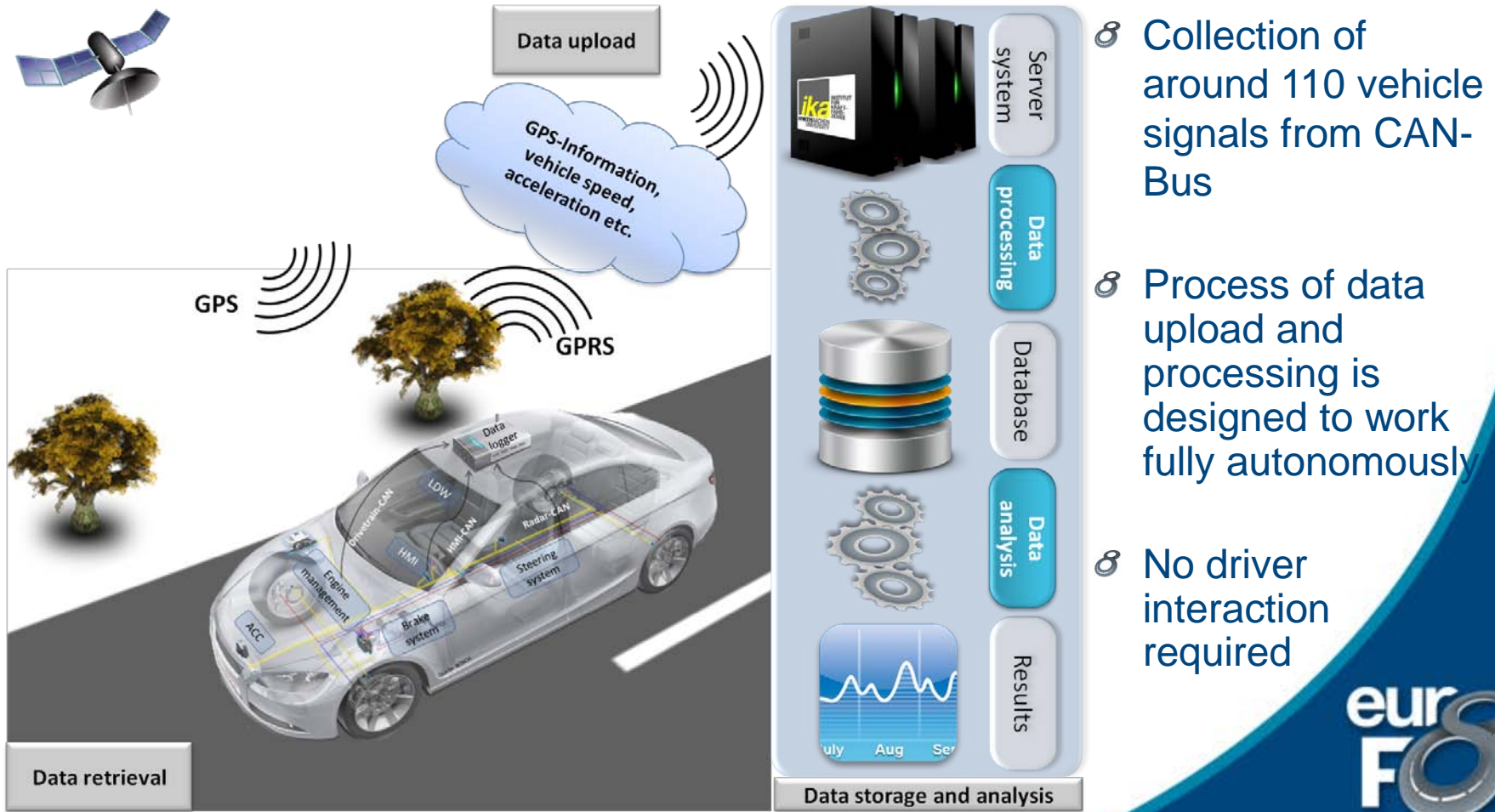
Data storage
pick-up

Automated data
transmission

Data collection

- All customer vehicles were equipped with a data acquisition system (DAS), which enables recording of all relevant signals

- Driver is not involved in any of the data acquisition processes

  ▷ Data upload procedure (upload of data from the DAS to a server system) is performed without any requirements and interactions with regard to the driver

- DAS is a small and compact unit that can easily be integrated in the vehicle

  ▷ No modifications on the customer vehicles needed

- DAS is equipped with a GPRS module

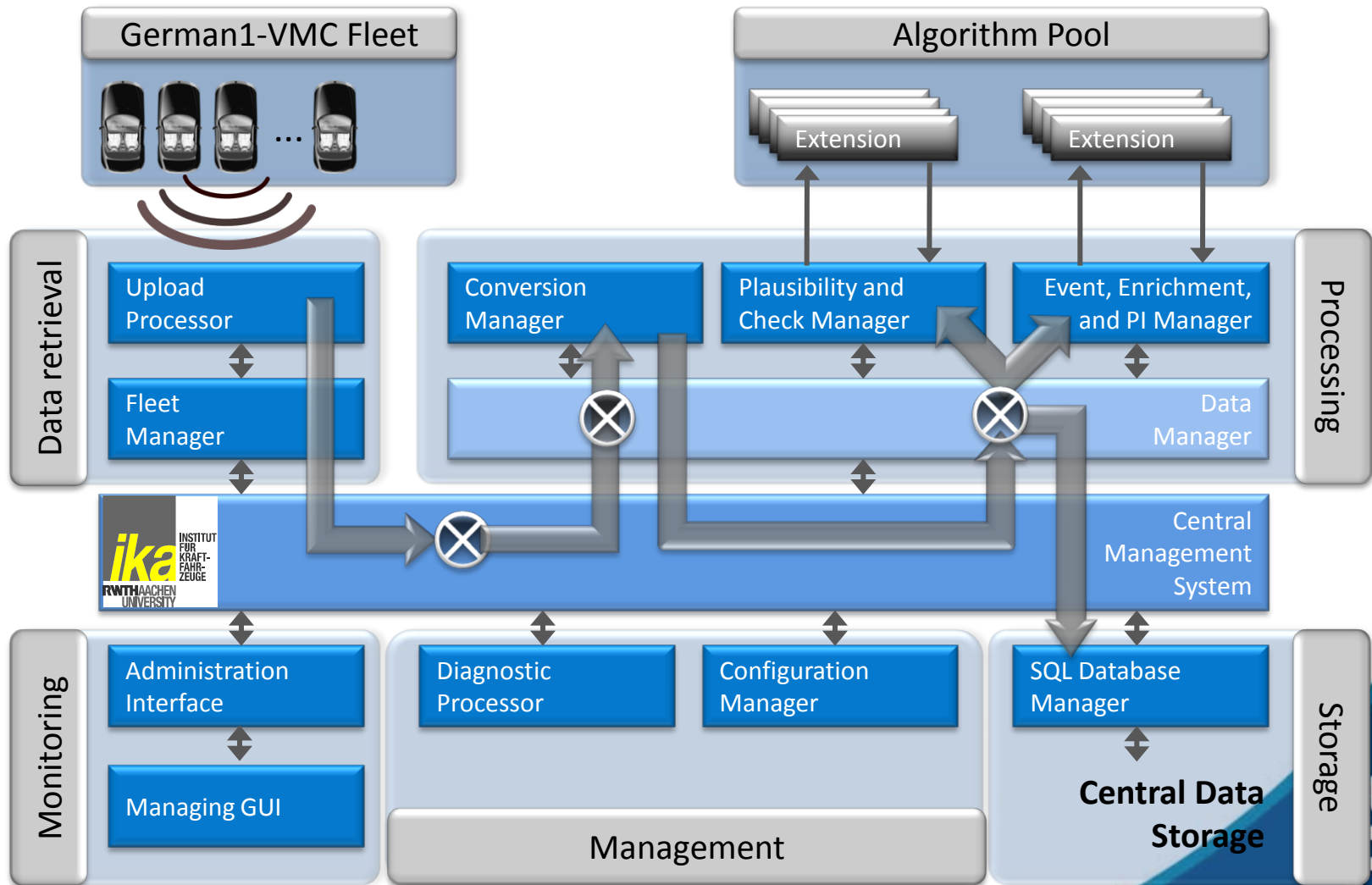 ▷ Wireless upload of collected data to centralised server

Data upload

- Collection of around 110 vehicle signals from CAN-Bus

- Process of data upload and processing is designed to work fully autonomously

- No driver interaction required

Required infrastructure

German1-VMC Fleet

Algorithm Pool

Extension

Extension

Data retrieval

Upload Processor

Fleet Manager

Processing

Conversion Manager

Plausibility and Check Manager

Event, Enrichment, and PI Manager

Data Manager

Central Management System

Monitoring

Administration Interface

Managing GUI

Diagnostic Processor

Configuration Manager

SQL Database Manager

Management

Storage

Central Data Storage

ika INSTITUT FÜR KRAFT-FAHR-ZEUGE RWTH AACHEN UNIVERSITY

Monitoring - Fleetmanager

Some things will never change…

8 Functionalities, 28 Partners, 1000 Vehicles

1 Field Operational Test, **8 Functionalities**

28 Partners, 1000 Vehicles, 1 Field Operational Test

8 Functionalities, **28 Partners**, 1000 Vehicles

1 Field Operational Test, 8 Functionalities

28 Partners, **1000 Vehicles**, 1 Field Operational Test

8 Functionalities, 28 Partners, 1000 Vehicles

1 Field Operational Test

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