

# AVL FLEET MONITORING

**Powered by Big Data Analytics** 

## THE CHALLENGE

The validation of mechanical systems, powertrain components and calibration software with global fleet testing is hard to manage and requires enormous effort.

Keeping track of the logistics is for sure not easy. But handling the instrumentation of the vehicles and the amount of data produced during fleet operation is a huge challenge.

Identifying issues and failures as well as extracting knowledge from this data is essential to minimize testing effort and enable an efficient validation process.

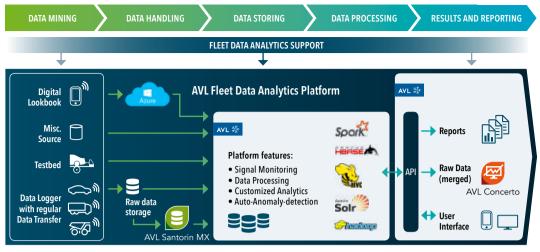
### THE AVL SOLUTION

AVL takes a new and automated approach to fleet management and data post processing.

The fleet data analytics solution provides:

- Powerful, UMTS connected data logger
- Continuous information about the status of the fleet
- Smart anomaly detection and efficient issue tracking
- Automated reports & self-service analytics interface

AVL offers holistic fleet project management with special focus on fleet data analytics. Automated and self-service reports save time and costs in data processing.



Schematic view of AVL's Fleet Data Analytics Platform

# AVL FLEET MONITORING SERVICES

#### 1. Acquiring

- Planning of testing
- Definition of parameters
- Instrumentation and maintenance of vehicles
- Execution of tests
- Data handling, transfer and systematic storage
- Securing data quality

Assessed UUT usage

#### 2. Monitoring & Analytics

- Continuous system monitoring
- Operation parameter overview
- Trend chart analysis over testing time
- Failure detection and monitoring of system errors
- Automated anomaly detection
- Documentation of test fleet status and history
- Post calculation of acquired testing data

#### 3. Reporting

- Online visualisation via web interface for customer
- Fleet status report
- Vehicle status report
- Real-time Reporting available
- Failure occurrence overview
- Failure occurrence prediction
- Engineering support for failure resolution

## AVL FLEET MONITORING REFERENCES



 Number of vehicles
 More than 50

 Target countries
 EU, India, Turkey, China,

> 2 Mio. km

North America, Brazil, Japan



TRUCK (medium and heavy duty)

More than 350 EU, South Africa, Brazil, Japan, India, Mexico > 50 Mio. km



CONSTRUCTION AND AGRICULTURAL (off-road)

More than 20

EU, North America, East Asia

> 15,000 h

## FOR FURTHER INFORMATION PLEASE CONTACT:

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is flexible regarding the data source and due to the powerful computer cluster with an Hadoop eco system it is completely scalable. The reports and the user interface are tailored to the customer needs and provide a regular and objective feedback for every single unit under test in the fleet.