



# Energy metering in NSB Persontog

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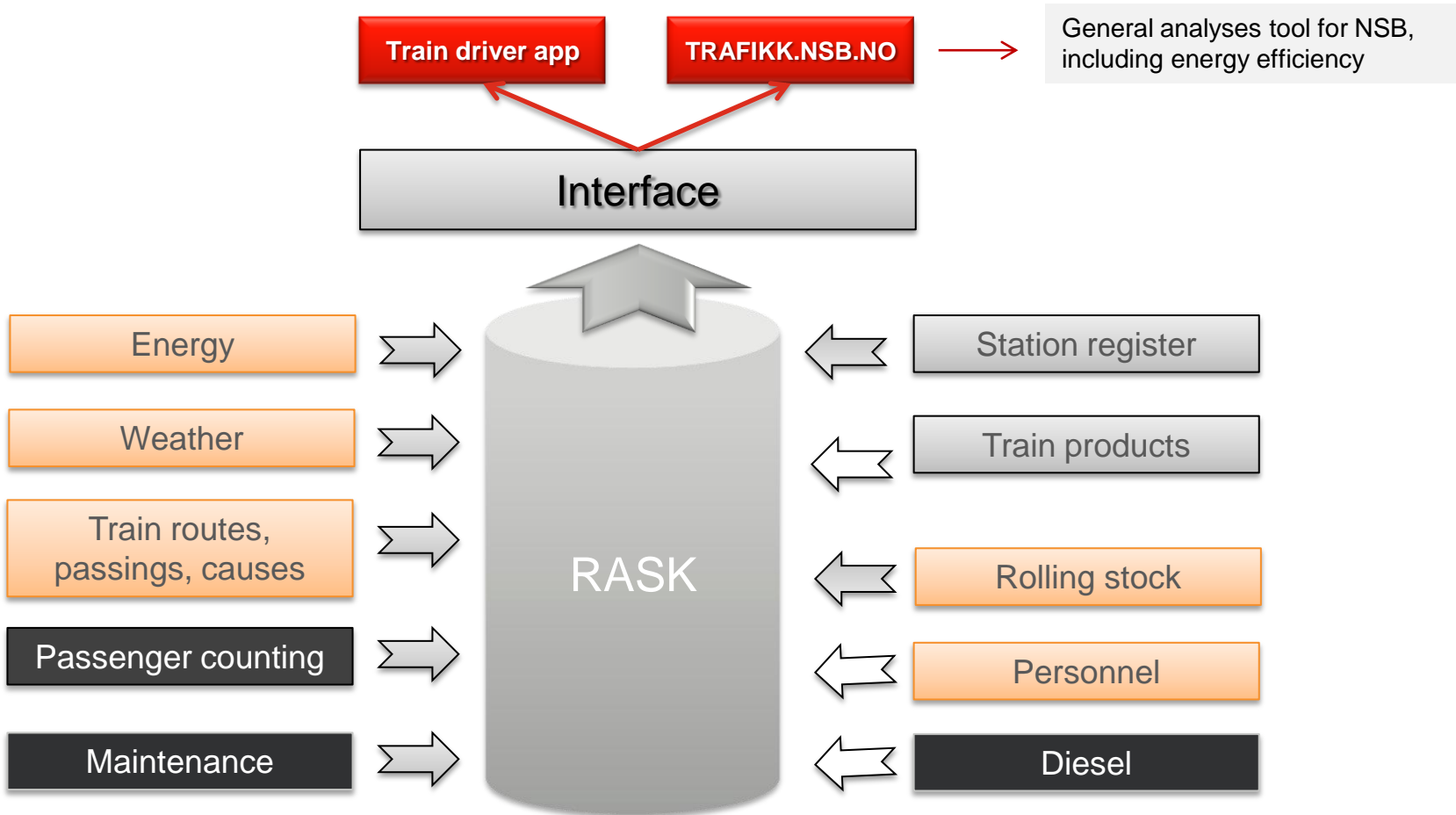


# Electricity metering



- Energy meters in all trains
- Owned by the infrastructure manager (Jernbaneverket)
- Data are sent from the energy meters to ERESS at five minute intervals
- In the case of a defect meter, the energy consumption is estimated through tariffs set by Jernbaneverket

# RASK – A common database



# Diesel metering



- No energy meters
- Diesel consumption is metered at the filling stations



# Responsibility



- Energy meters are owned by Jernbaneverket
- Mantena is responsible for maintenance
- NSB is responsible for taking the trains out of service



# Our challenges



## Data quality and maintenance routines

- Data quality labelling
- Maintenance manuals
- Error reporting

