

# Validate an Electric Drivetrain

## Background

- A high degree of innovation leads to new types of reliability risks
- Batteries and power electronics are sensitive to driving and charging conditions
- Overload protection of electrics avoids accelerated testing
- Conventional validation (like for e.g. combustion engines) is not useful

## Customer benefit

- Comprehensive risk management
- Focus on innovation induced risks
- Systematic Risk Mitigation
- Transfer of development knowledge to risk focused fleet supervision



## Requirement

- Design a compact generic Validation program from scratch
- Consideration of customer behaviours and drivetrain variants
- Upfront evaluation of electric drivetrain behaviour

## Solution: Uptime LOCATE™

- Identification of Reliability Risks
- Focus on innovative and E/E specific issues
- Generation of reference load cycles
- Set-up of an ensemble of Validation Tests
- Optimization of risk reduction and reliability growth