New features of TESTEK decelerometer app

Peter Tapak[1], Juraj Matej[2]

[1]Slovak University of Technology in Bratislava, Institute of Automotive Mechatronics

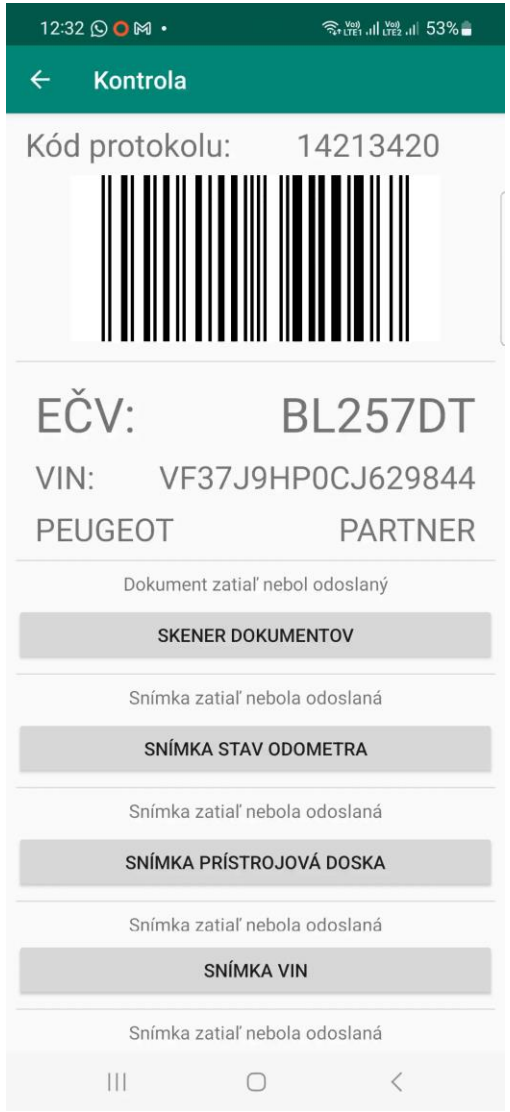
[2]TESTEK, a.s.

Mobile app - TESTEK

- Photo
- OBD
- OBFCM
- **Scans**
- **Deceleration**
- Cloud

Scans

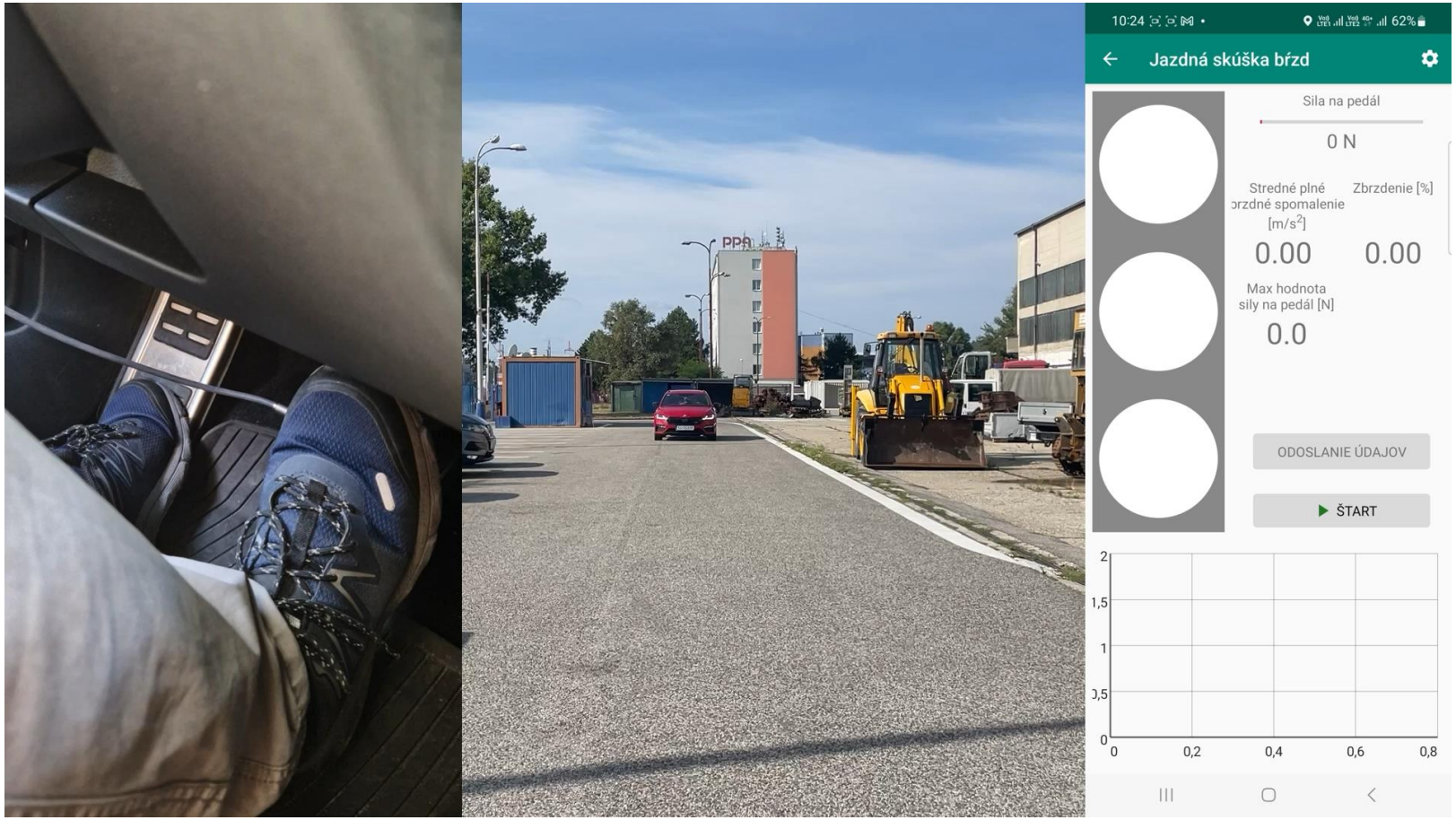
- Scan and transfer to information system
- Various administrative documents indented for archiving
  - Import vehicle
  - Registration of special equipment
  - Other necessary documents



Dostupné video: https://testek.sk/videos/Scans.mp4

Deceleration -Pedal force meter

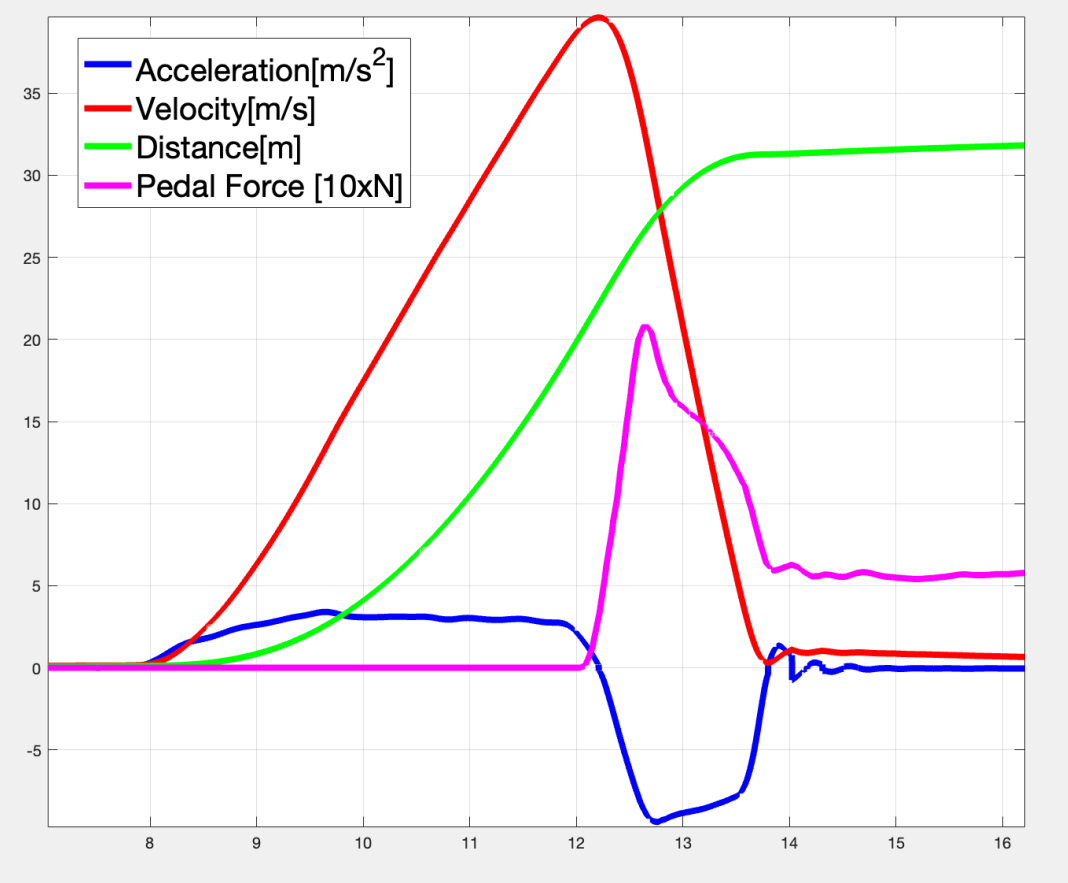
Brake test – force measurement

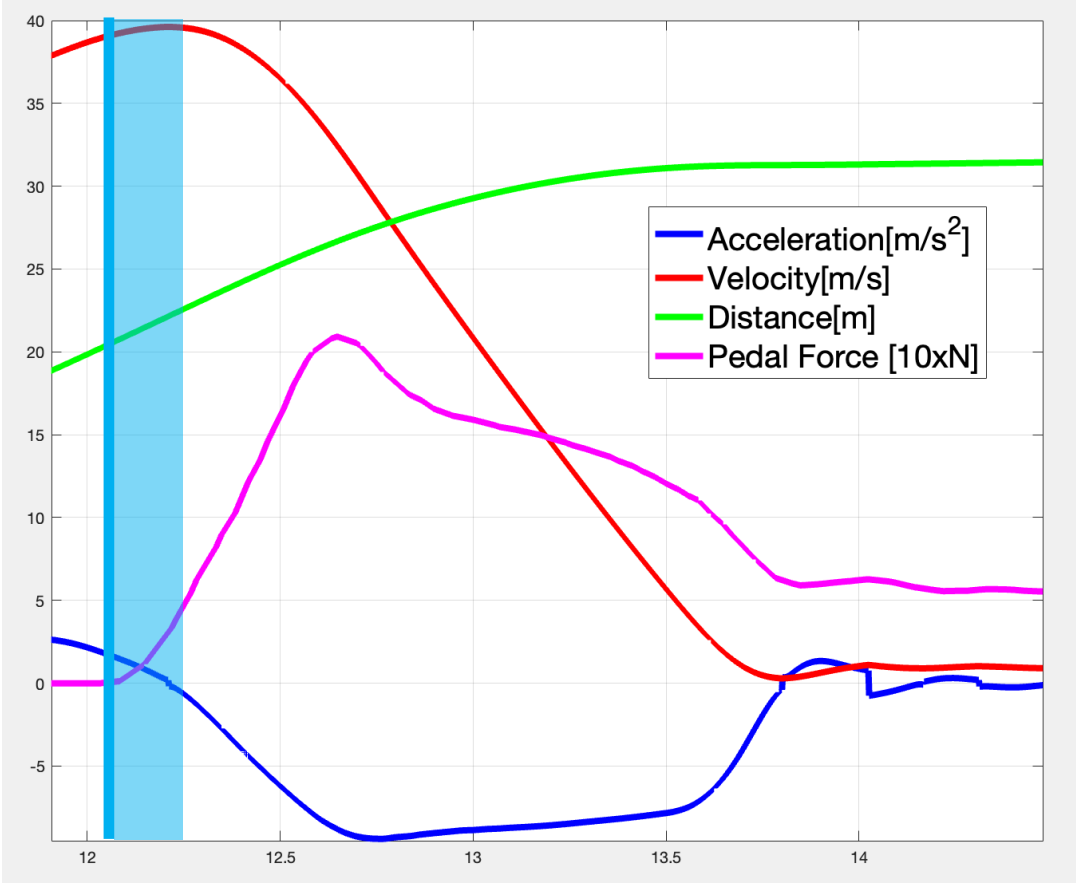


Dostupné video: https://testek.sk/videos/Brake–test–force–measurement.mp4

Brake test – force measurement

Old timers – pedal force meter to measure the delay of the braking effect

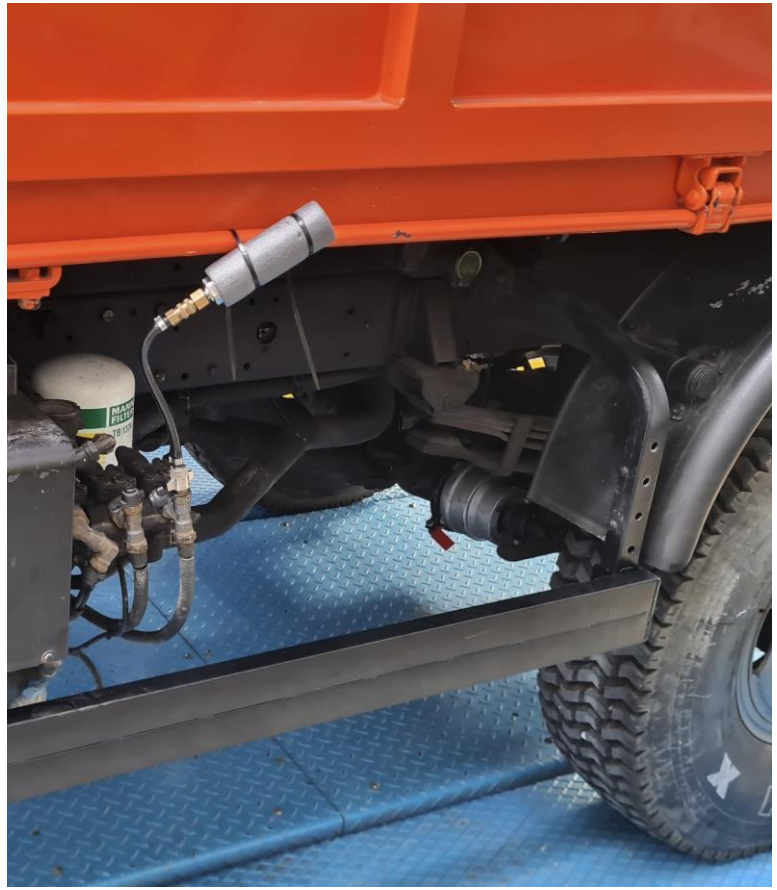




The old-timer brake test project has been performed in cooperation with the vehicle forensic expert company EXPERT GROUP, k.s.

www.expertgroup.sk

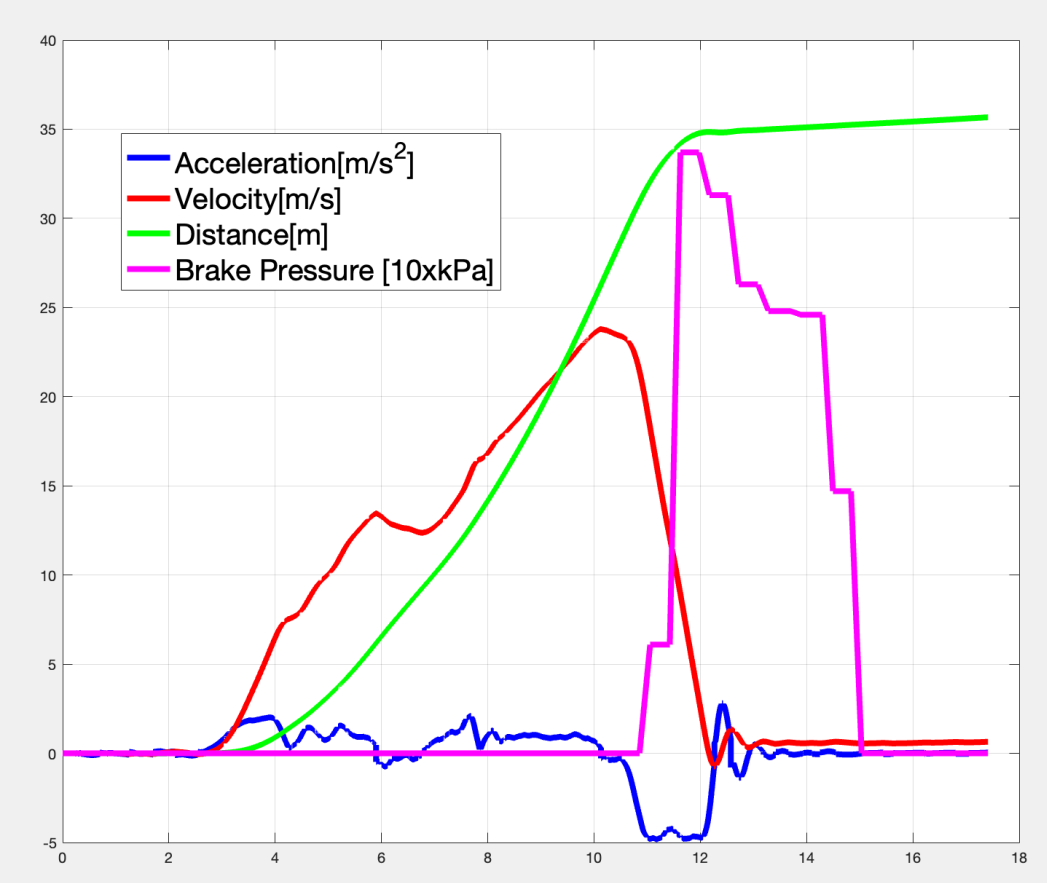
Deceleration-Pressure sensor

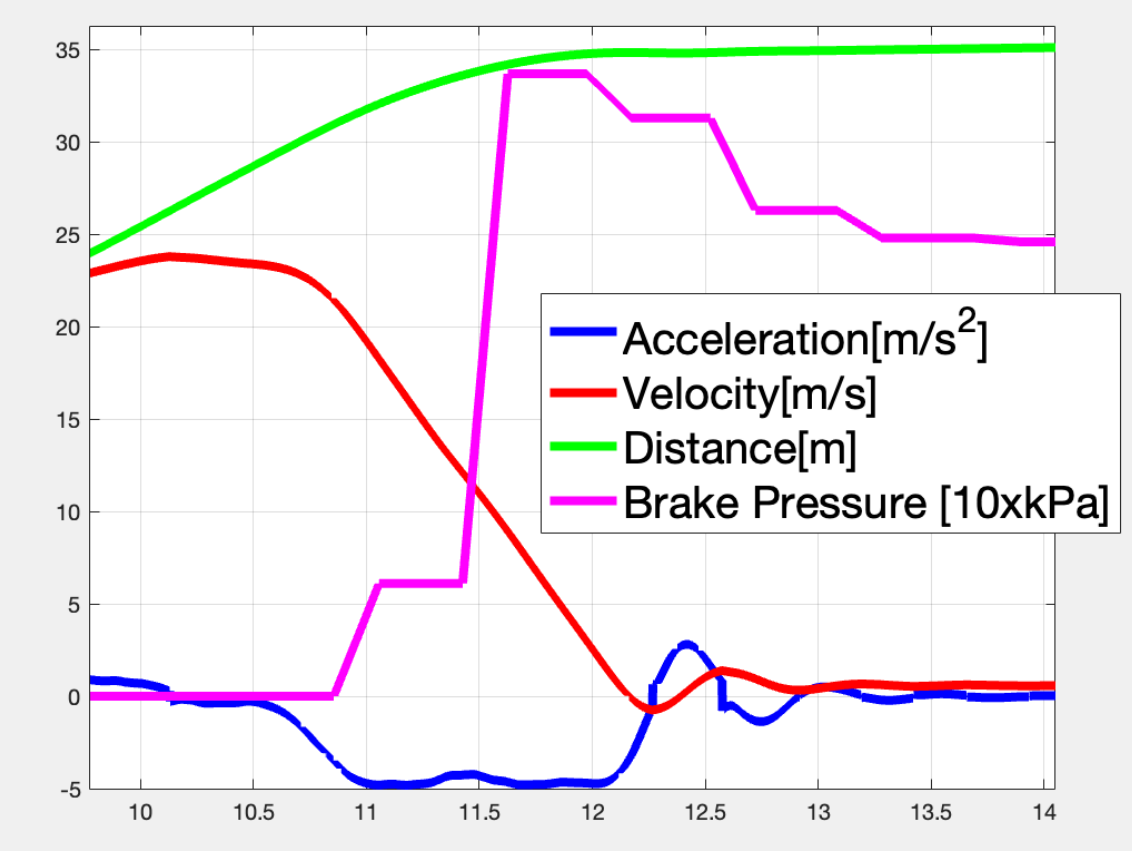


Brake test - Bucher

Dostupné video: https://testek.sk/videos/Brake_test-Bucher.mp4

Brake test - Bucher





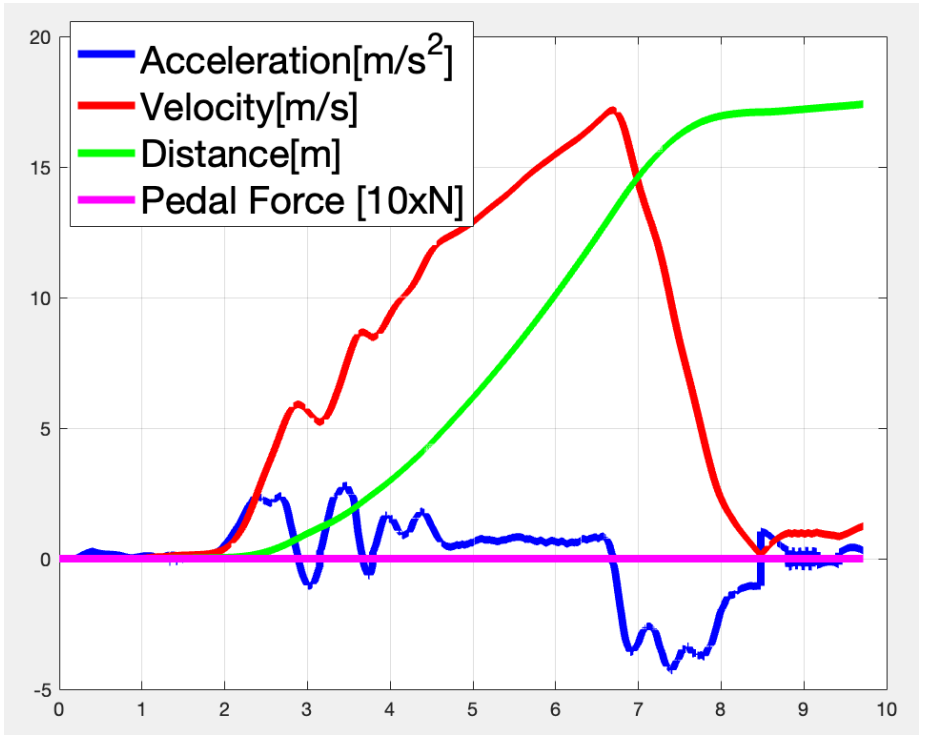
Micromobility - accidents

- Lack of regulation
  - Type approval
  - Safety inspections
- Insurance
- Accidents
- Speed
- Brakes
- Power

Dostupné video: https://testek.sk/videos/Micromobility-accidents.mp4

Micromobility – braking/acceleration

- Not required (recommendation of **Kuratorium für Verkehrssicherheit** (KfV) – an Austrian public organisation to 4m/s2)
- Also power calculations from acceleration (weight of driver and vehicle)
- Top speed (also GPS)



Conclusion

- The mobile application has been used in Slovakia since 2020
  - OBD reading (since 2020)
  - Driving brake test (since 2021)
  - OBFCM reading (since 2023)
  - Scan documents (planned since the end of 2024)
- A modified version of the mobile application has been used in Belgium since 2023
  - OBD reading (since 2023)
  - OBFCM reading (since 2023)
- We are currently preparing a version for another European country
  - OBD reading
  - OBFCM reading
  - Driving brake test with pedal force meter and pressure sensor