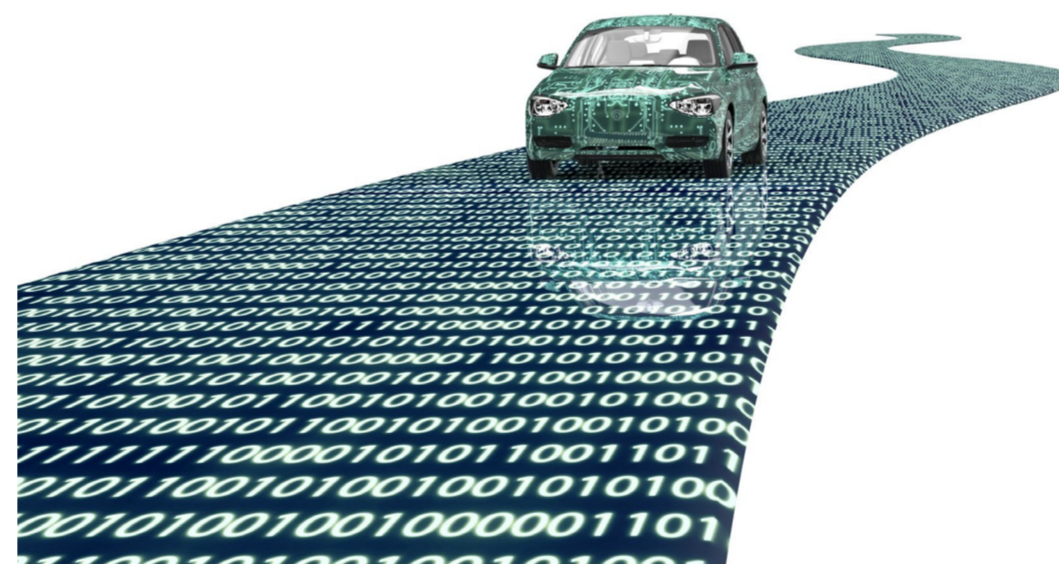


# OPTIVAL TESTING & CERTIFICATION



**OPTIVAL**  
testing & certification

# About us

## Field of services:

### Automotive testing and certification

- Homologation
- Vehicle Safety → ISO 26262 & ISO 21448
- Vehicle Security → ISO 21434 & ECE R155

## Technical team:

- Competence in homologation for vehicle, system and component level,
- Competence in e-mobility,

## Accreditations:

- ISO 17020 and ISO 17025 from IAS
- ISO 17020 from TURKAK

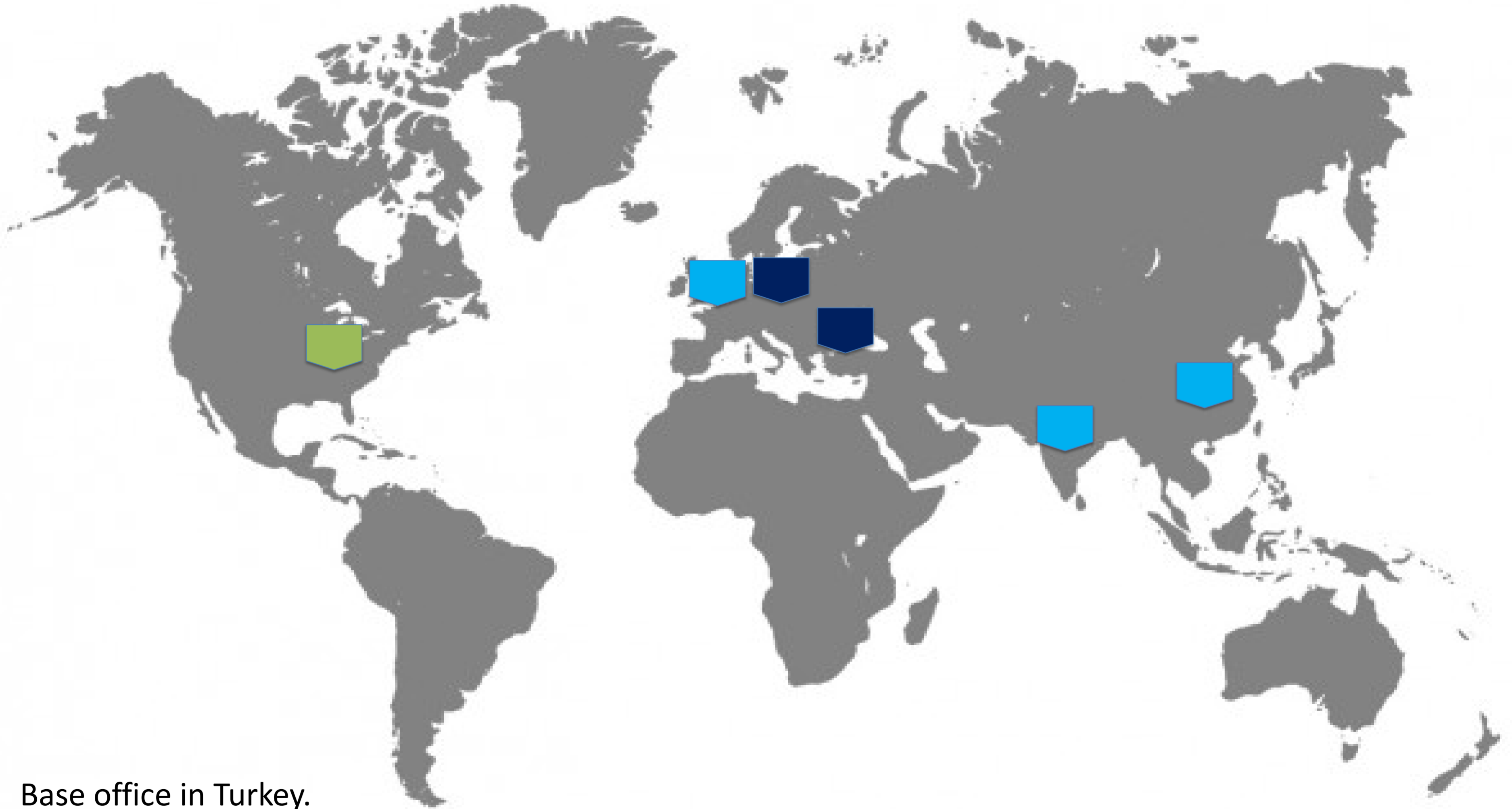


## Designations:

- Irish (NSAI) designation (E24: direct Optival designation)
- Turkish (STB) designation (E37: direct Optival designation)
- Irish (NSAI) designation (e24: in cooperation with **Greenkar, Italy** )
- Dutch (RDW) designation (E4 & e4: in cooperation with **HCS, Netherlands**)



# Locations

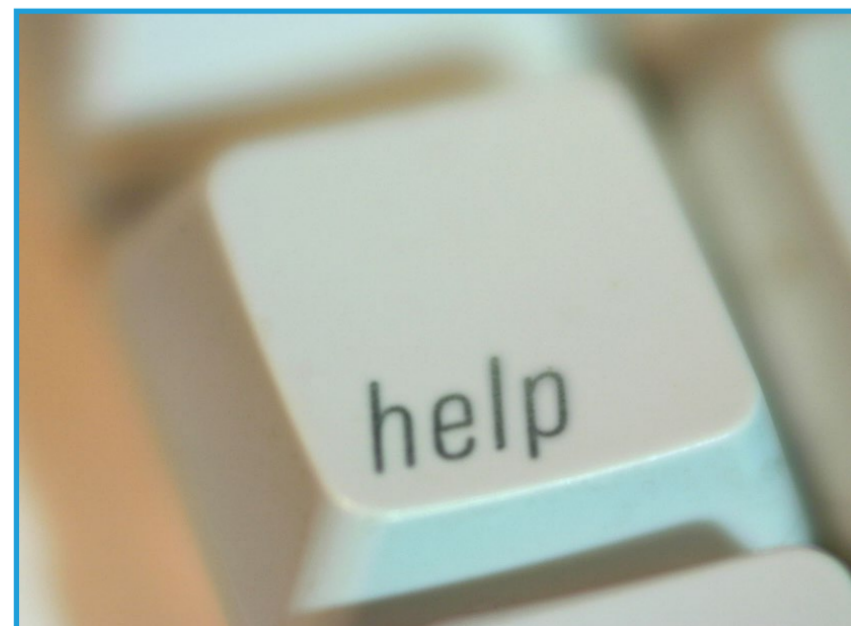


- Base office in Turkey.
- Sales & organization office in Germany.
- Local technical experts in China (Guangzhou, Tianjin), India, Netherlands and Iran.
- Sister company at the US for FMVSS and CMVSS homologations.

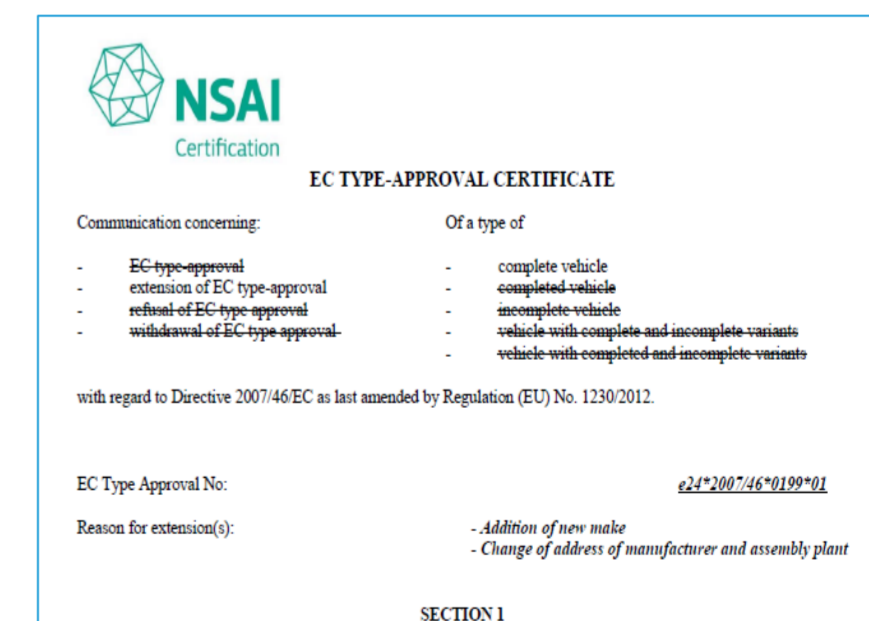
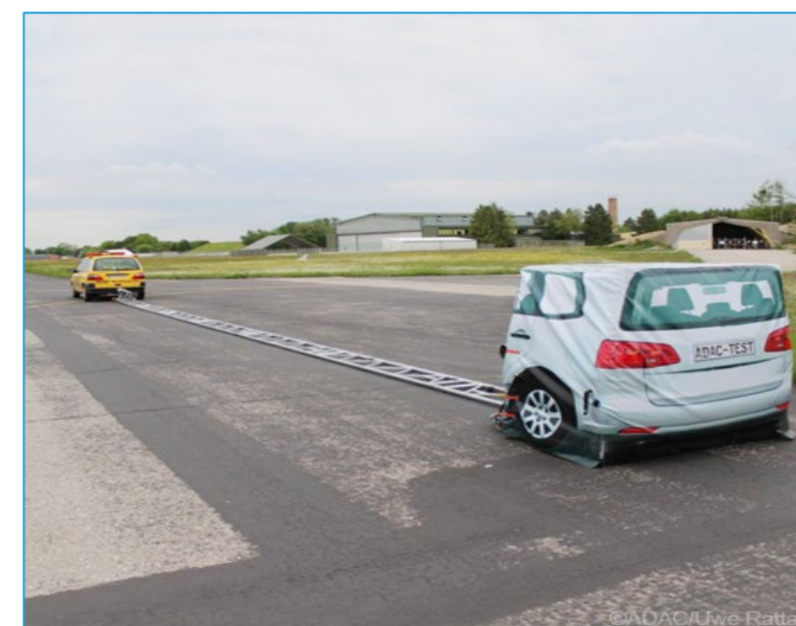
# Services - Homologation

## Homologation Services

### Training and Consultancy



### Testing and Certification



# Services - Homologation

---

## Training & Consultancy

### ✓ On the basis of organization :

- Introduction to Homologation
- Homologation in Product Development Processes – Basics
- Homologation in Product Development Processes - Technical Content
- Homologation in Manufacturing and Quality Control Processes
- Homologation in Sales Processes
- Homologation in Purchasing Processes
- Homologation in Import & Export Processes

### ✓ On the basis of legislation:

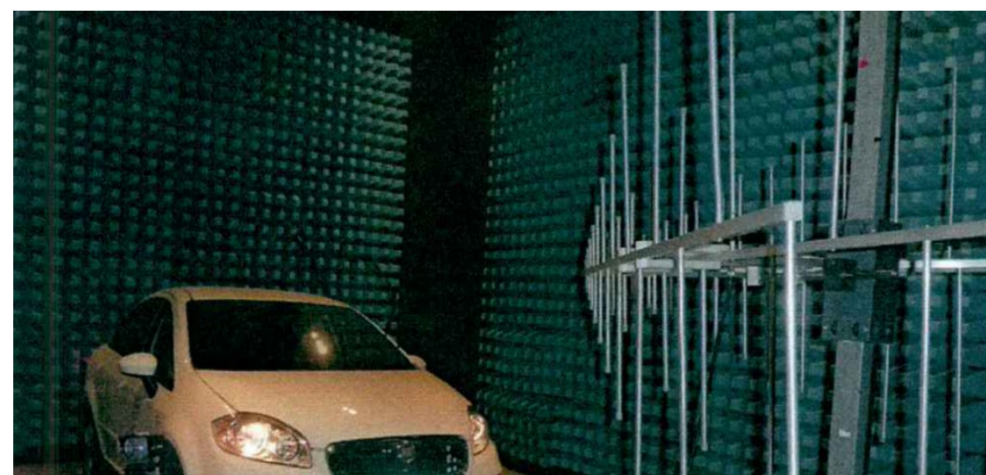
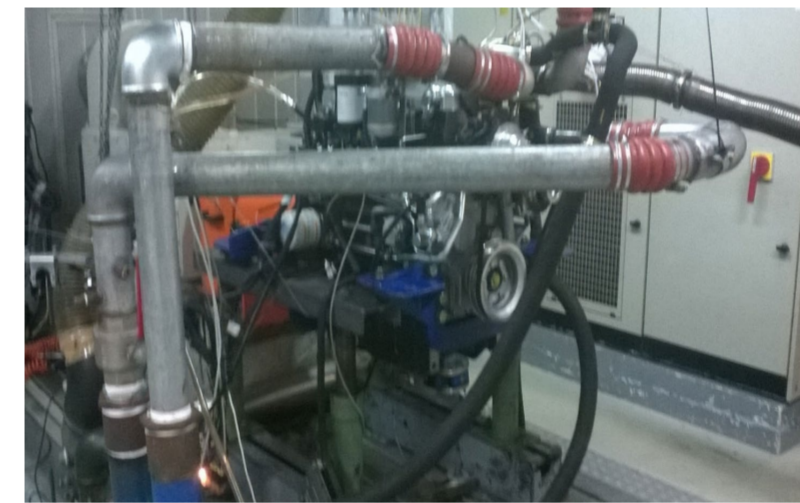
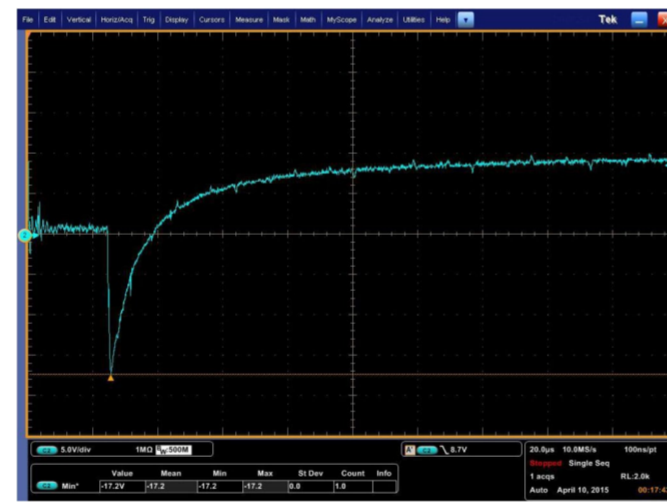
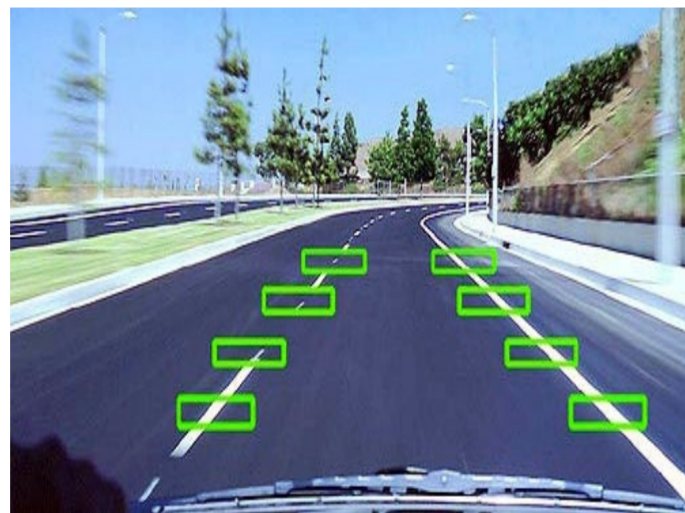
- EC/EU directives/regulations
- UN ECE Regulations

### ✓ On the basis of market:

- EU,
- UN countries,
- Turkey,
- FMVSS: United States, CMVSS: Canada,
- GSO: Gulf Countries,
- ...

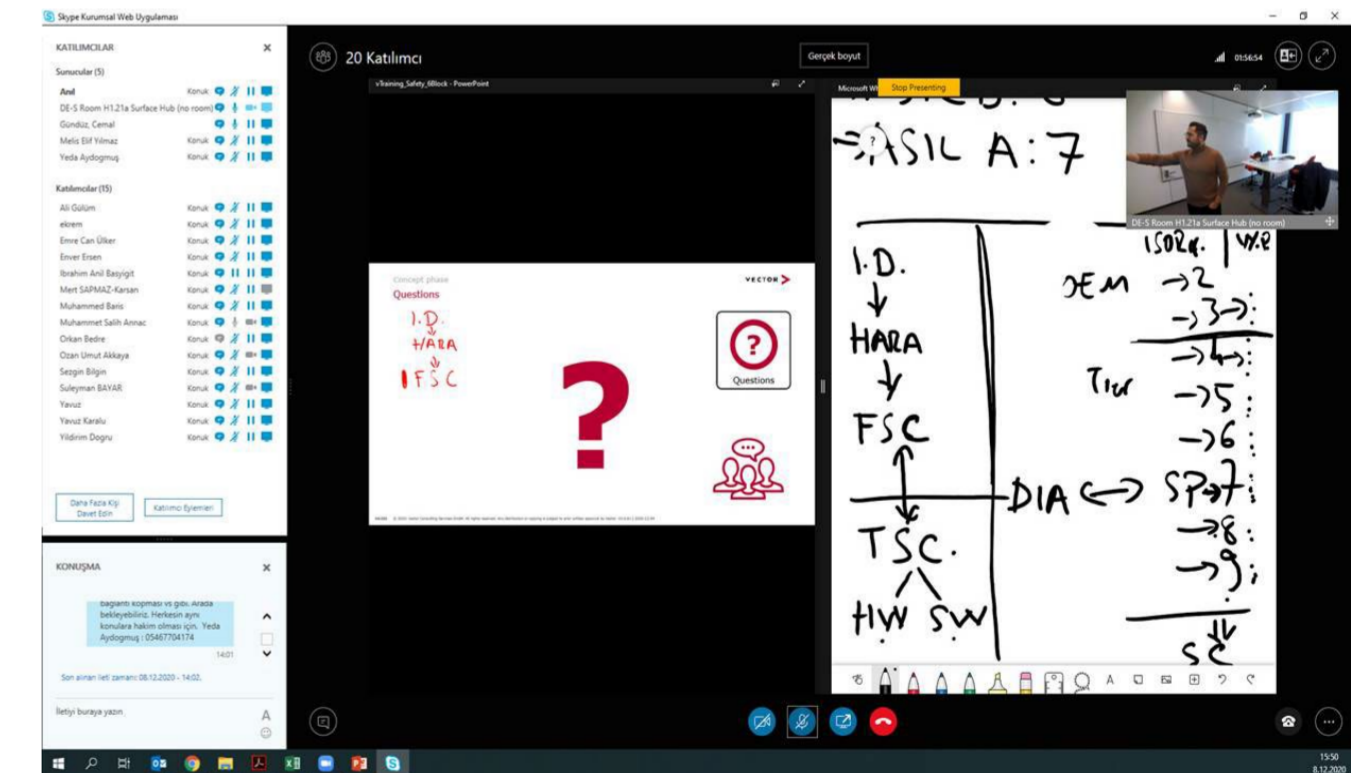
# Services – Homologation Tests

- ✓ Optival testing facilities for type approval and conformity of production (CoP) tests
- ✓ Laboratory network in Turkey, Europe, China and India,
- ✓ Support for simulation,
- ✓ Project management through FLOW,
- ✓ FLOW customer interface



# Services – Vehicle Safety

- ✓ ISO 26262: Automotive Functional Safety
- ✓ ISO 21448: Safety of the Intended Functionality
  - ✓ Organization of on-site/public trainings & personnel certification
  - ✓ Consultancy services for complex electronic systems
  - ✓ Safety assessment & audit
  - ✓ Certification



# Services – Vehicle Security

---

- ✓ ISO 21434 Automotive Cybersecurity Engineering
- ✓ UN ECE Regulation no. 155 Cybersecurity & Cybersecurity Management System
  - ✓ Organization of on-site/public trainings & personnel certification
  - ✓ Consultancy services for complex electronic systems
  - ✓ Safety assessment & audit
  - ✓ Certification

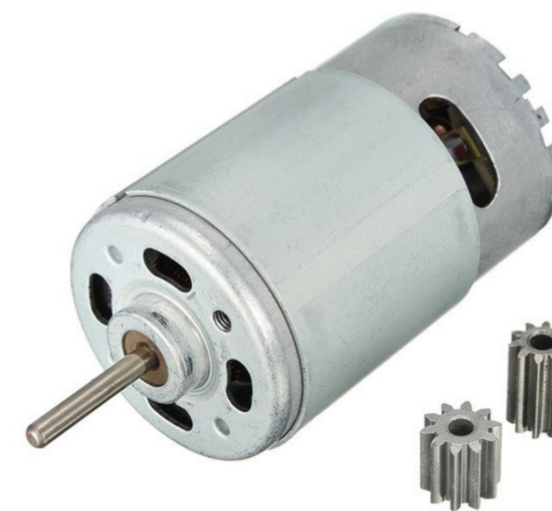
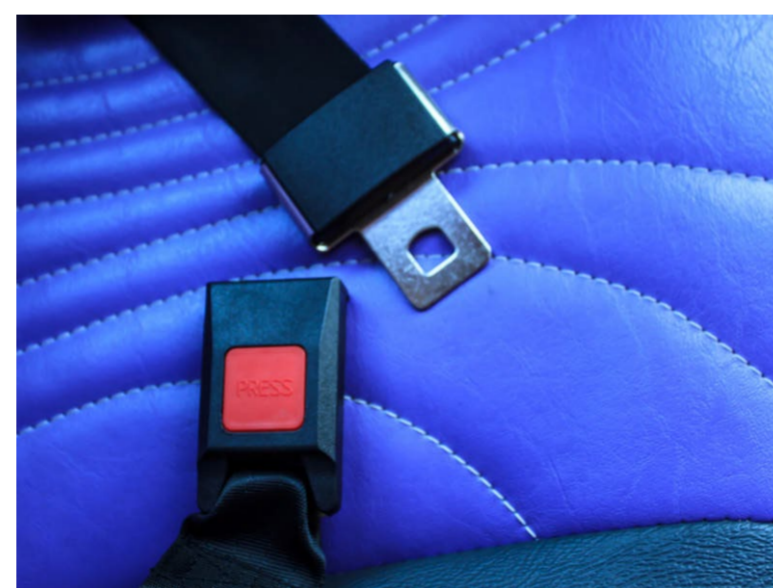
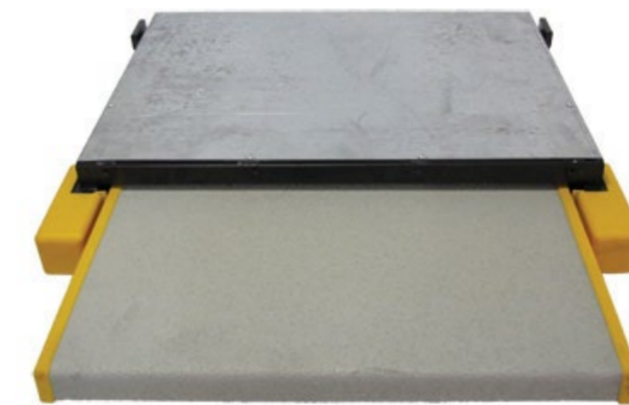




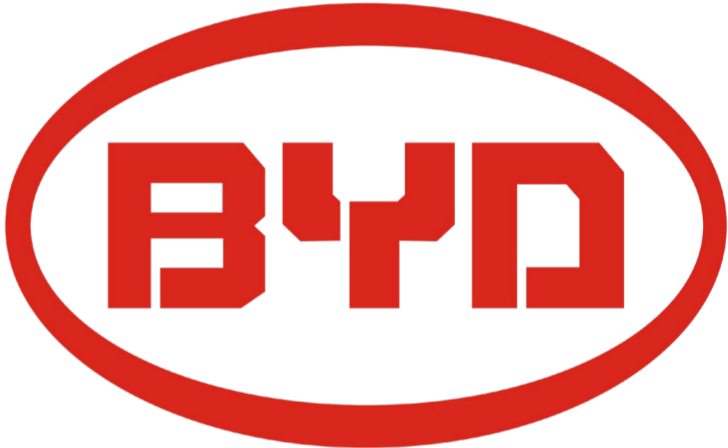
# References – OEM Homologation



# References – Component Homologation



# References – Component Homologation



THANK YOU

---

**OPTIVAL**  
testing & certification

---