Holistic Approach for Driver Role Integration and Automation Allocation for European Mobility Needs

HADRIAN

Duration

42 months (Jan. 2020 – Jun. 2023)

Objective

to increase the safety of automated driving (AD) level transitions by 85 % compared to traditional, non-adaptive human machine interfaces (HMIs), and achieve acceptability of 95%

Methodology

- **19** human participant studies will explore and evaluate fluid HMI concepts and driver monitoring methods in driving simulators and field demonstrations

- Field demonstrations will be performed using the full range from light to larger passenger vehicles and freight vehicles/trucks

- The HADRIAN demonstrators and effectiveness metrics will be translated into guidelines and recommendations for OEMs world-wide for:

  - human-systems integration of safe
  - AD technologies and functionalities

Impact

Safe human-machine interface of highly automated driving functions

Safe and controlled transfer between use cases of different automation levels

Reduction of risks for driver behaviour related incidents

Achievement of the European Transport White Paper "Vision Zero" objective