Trustable architectures with acceptable residual risk for the electric, connected and automated cars

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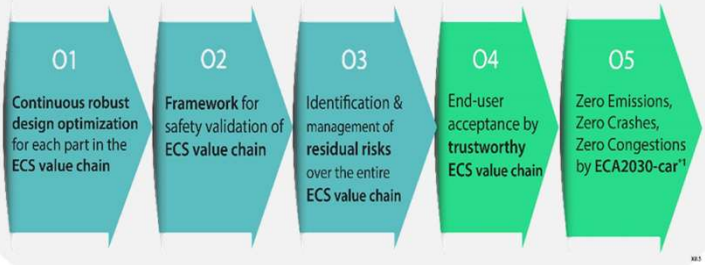
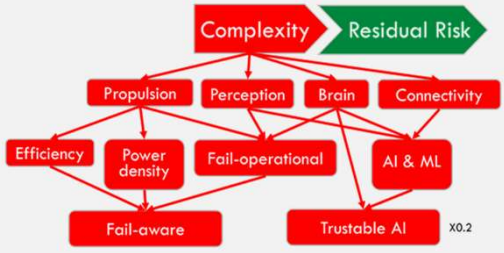
The overall goals of ArchitectECA2030 are

- **Manage failure modes, uncertainties, and failure probabilities** propagating through the **entire ECA vehicle stack** to **support hazard identification, risk analysis, and sufficient risk mitigation**.
- **Develop a widely agreed homologation framework** comprised of **harmonised methods, tools, and processes** able to handle dynamic requirements to ultimately design safe, secure, and reliable ECA vehicle **with a well-defined, quantified, and acceptable residual risk** across all ECS levels.
- **Propose, align and develop a concept for an in-vehicle monitoring device (MonDev),** which is able to indicate and measure the health status and possible degradations of the functional electronics and electronic systems
- **Bring together the representative stakeholders** from ECS industry, standardization and certification bodies (Europe, US, Asia), governments, test field operators, and academia in tight interaction with the **lighthouse initiative Mobility.E and its LIASE** group to influence emerging standards, validation and homologation procedures for ECA vehicles.





Complexity of Subsystem & System integration of propulsion, perception, brain, and connectivity. Fail-awareness (ArchitectECA2030's MonDev) and trustable AI (ArchitectECA2030's perception supply chain) are key elements to build reliable ECA vehicles.

Short Name: ArchitectECA2030
Duration: 01/07/2020- 30/06/2023
Total Costs: ~ € 13,6 Mio.
Consortium: 20 partners from 8 Countries
Coordinator: Infineon Technologies AG

Rijksdienst voor Ondernemend Nederland
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ECSEL Joint Undertaking