

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement





## Main Idea

NewControl develops and delivers virtualized platforms for each vehicular sub-system essential to autonomous operation at SAE Level 3+. Each of these unifies the critical components required to realize a specific function – perception, cognition, control – through vertical integration within an adaptive (not rigid) architectural framework. The resulting virtual platforms effectively deliver specific functionalities as services to the vehicular platform, abstracting internal implementation, enabling portability to different application domains, and facilitating modular development of automation that is guaranteed as safe by design.

## Goals



Increase the accuracy and robustness of algorithms, E/E architectures for adaptive perception.



Increase performance, power, reliability, and reduce cost of the on-board computing platforms used for perception, cognition and control.



Achieve certifiability of adaptive algorithms for safety-critical control functions.



Develop a generalized hardware abstraction layer for efficient, adaptive fail-operational control of propulsion systems across vehicular platforms.



Competitive advantage to European industry.



Increase user acceptance of automated control functions.

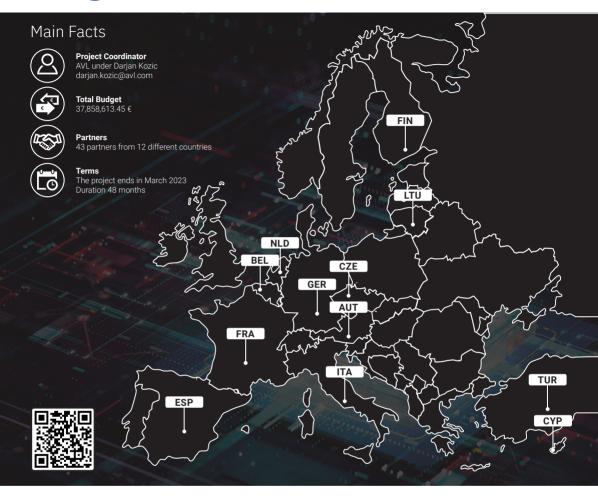
## Holistic virtualized platforms enabling mobility as a service

Multi-domain application



This project has received funding from the





## **Project Partners**































































OKMETIC



















**T**UDelft





