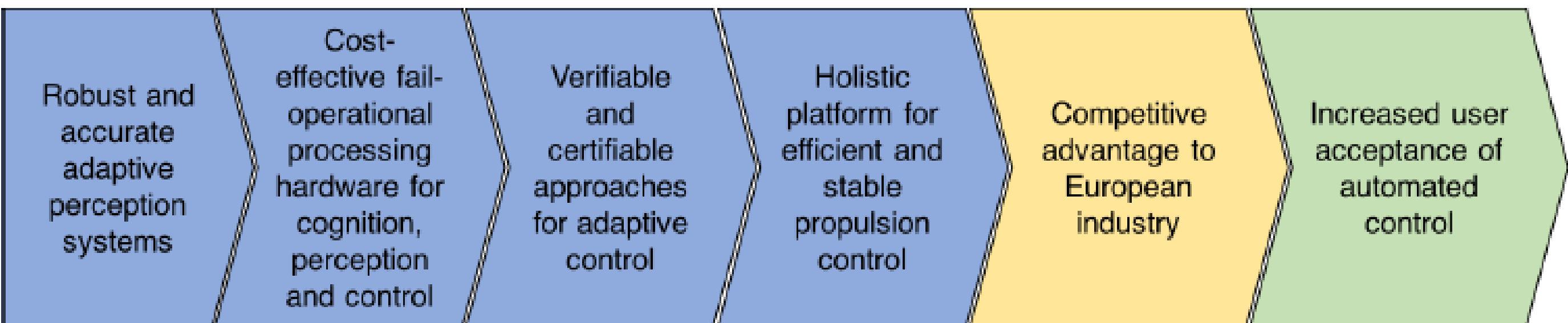




Objectives

NewControl will deliver fail-operational holistic virtualized platforms for vehicular subsystems that are critical to automated driving (SAE Levels 3+), enabling mobility-as-a-service for next generation highly automated vehicles.

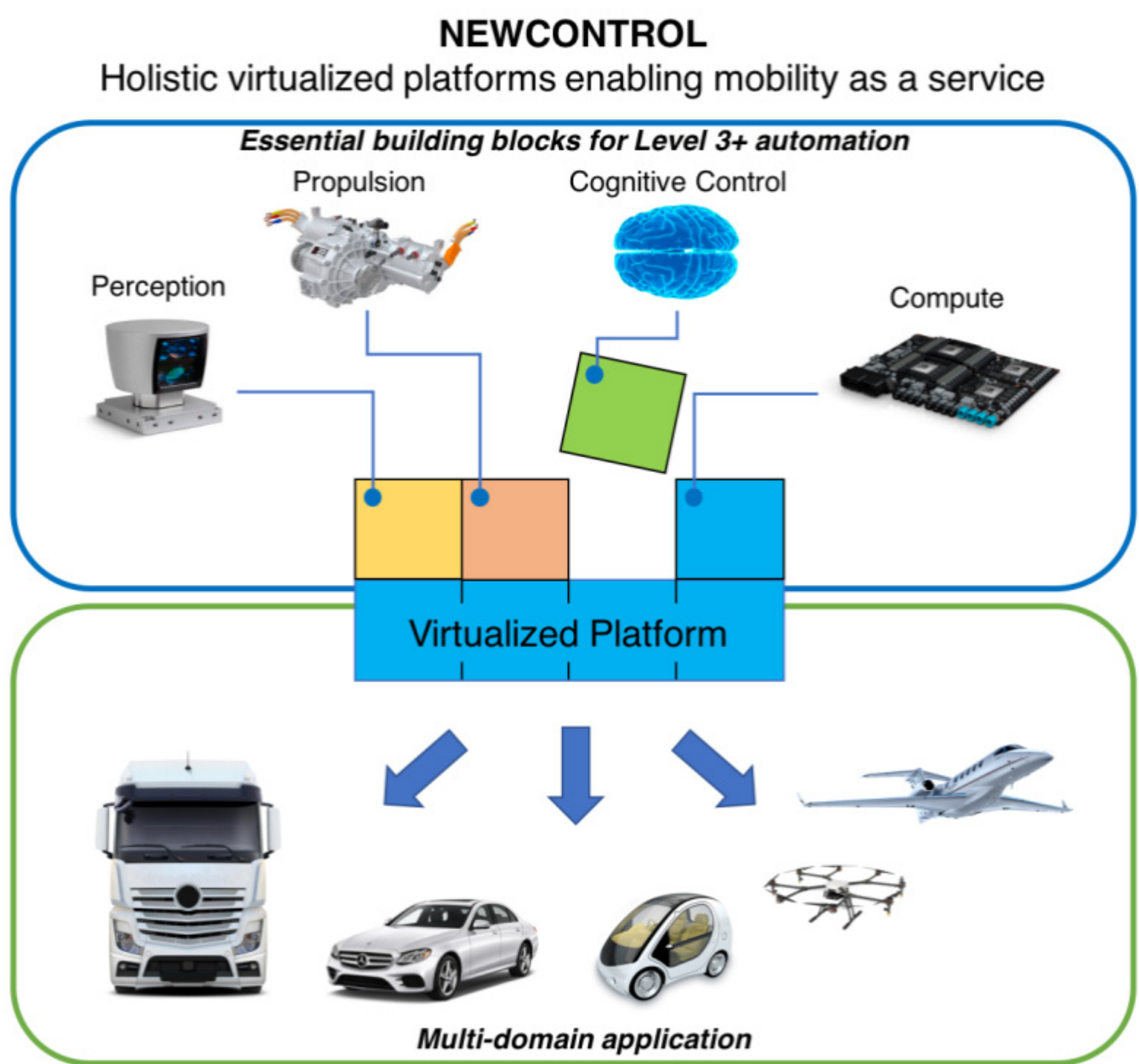
- Increase the accuracy and robustness of algorithms, E/E architectures for adaptive perception
- Increase performance, power, reliability, and reduce cost of the on-board computing platforms used for perception, cognition and control
- Achieve certifiability of adaptive algorithms for safety-critical 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



Causal chain for NewControl's objectives

Technical Innovation

NewControl will develop and deliver 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.



Germany INFINEON TECHNOLOGIES AG FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWAND TEN FORSCHUNG E.V. NXP SEMICONDUCTORS GERMANY GMBH TECHNISCHE UNIVERSITAET MUENCHEN AVIONTEK GMBH	UNIVERSITA DEGLI STUDI DI MODENA E REGGIO EMILIA DANISI ENGINEERING SRL 4S-SISTEMI SICURI E SOSTENIBILI SRL	Belgium XENOMATIX VRIJE UNIVERSITEIT BRUSSEL BIFAST
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Participating organisations 43	
Number of countries 12	

