



# Advanced Architectures Chassis/Traction concept for Future Electric vehicles

**Meeting title**

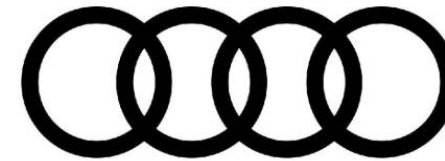
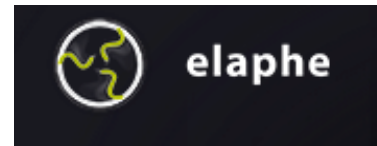
**Date, location**



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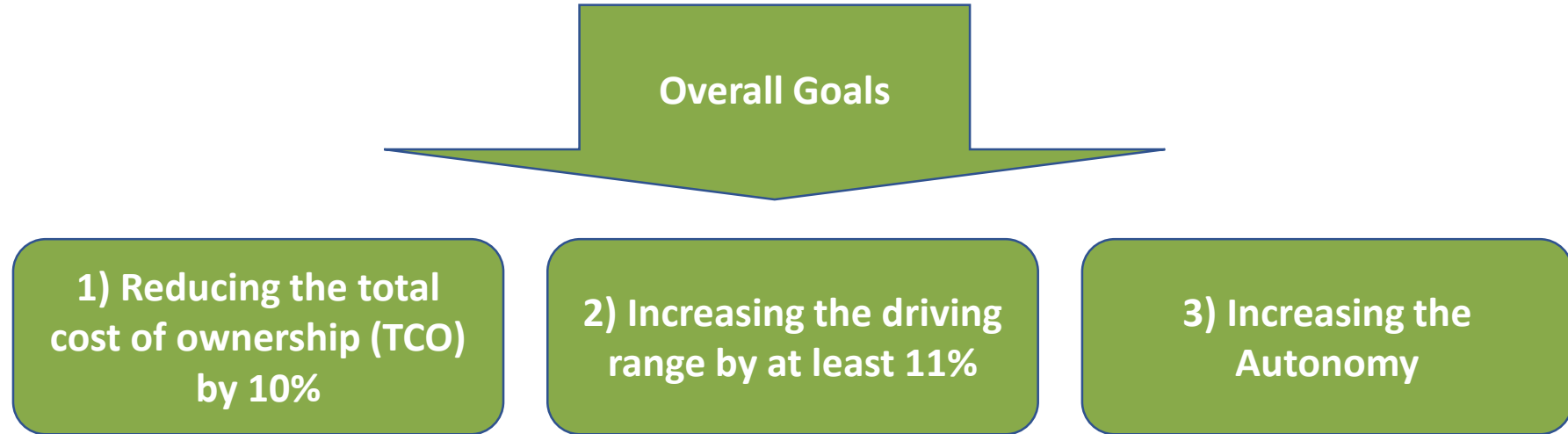
# Consortium



# Project Scope and Objectives

## Project Scope

Development of more efficient E/E control system architecture optimized for 3rd Generation EVs



# Project Scope and Objectives

## Project Objectives

Obj. 1

- Development and optimization of a novel wheel and e-braking concept

Obj. 2

- Development of a centralized computer platform (CCP)

Obj. 3

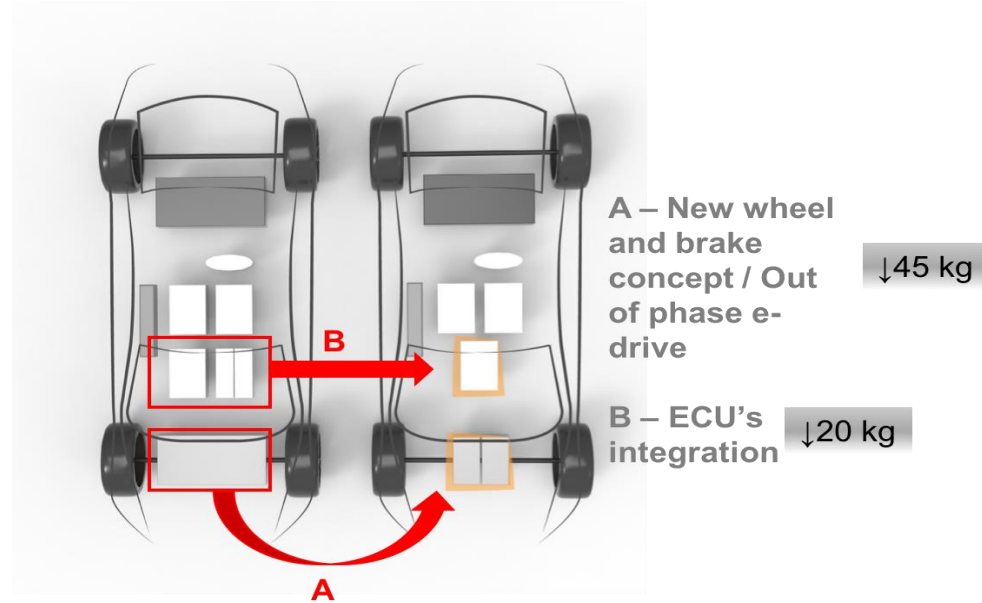
- Development of a novel out of phase control e-drive

Obj. 4

- Development of novel positive and negative torque vectoring

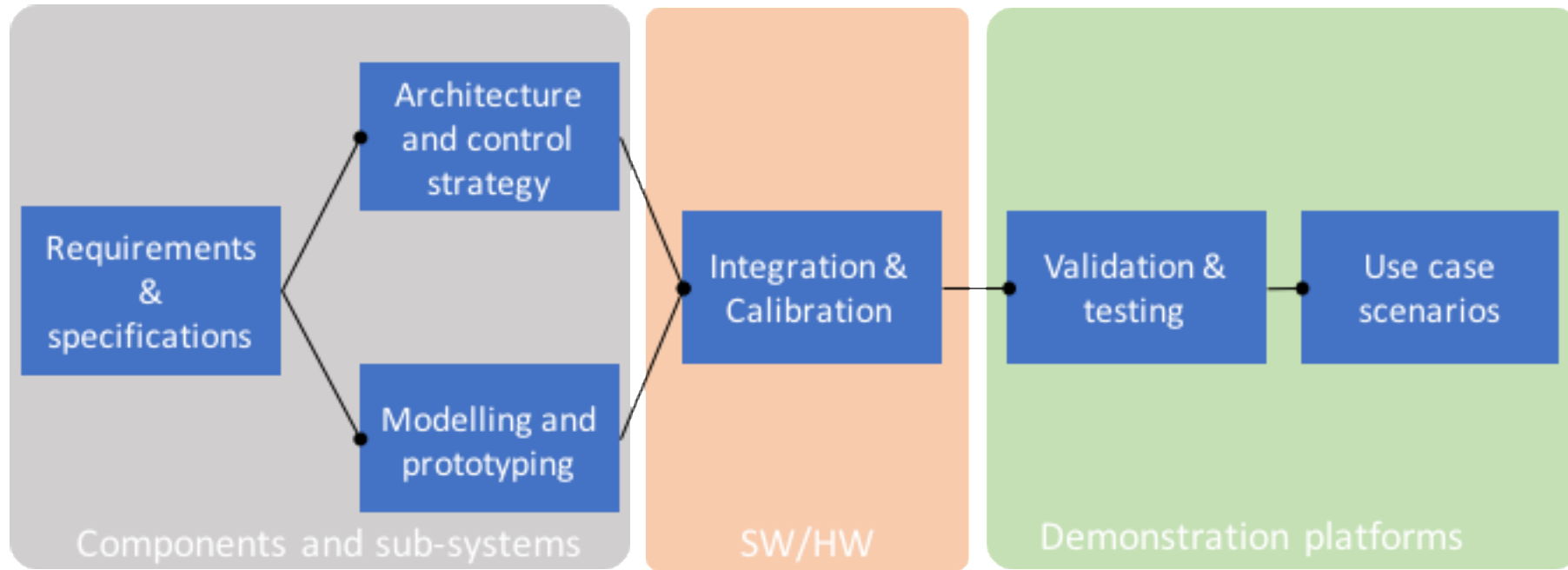
# Project Scope and Objectives

## Project Objectives

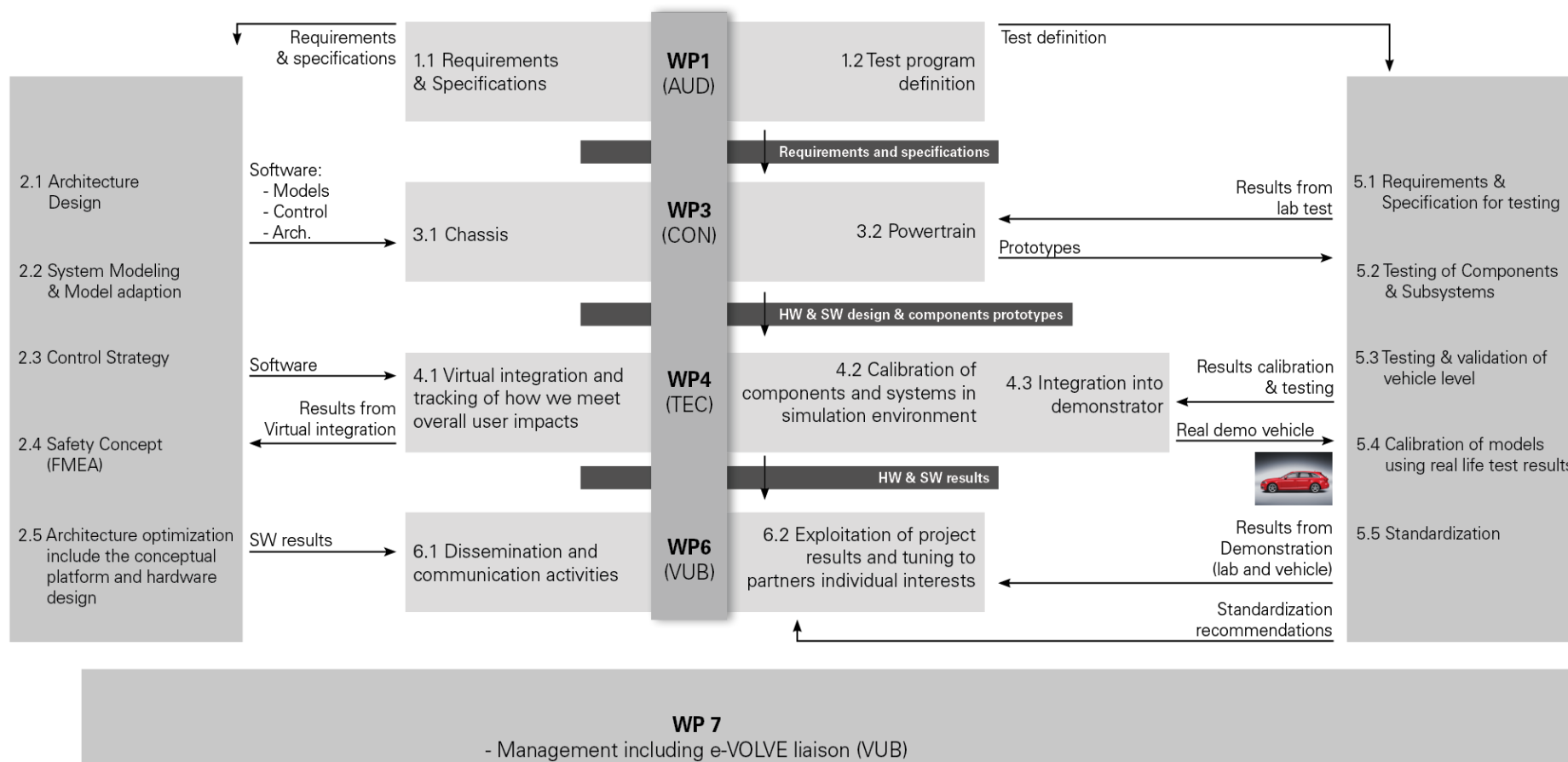


New E/E architecture with the CCP

# Project approach



# Project approach



# ACHILES in E-VOLVE Virtual Cluster

- Driver user-friendliness
- Thermal management of vehicle cabin and interiors
- Battery thermal management
- Infrastructure and adaption
- Passengers comfort
- Affordability
- Range
- Cloud connectivity

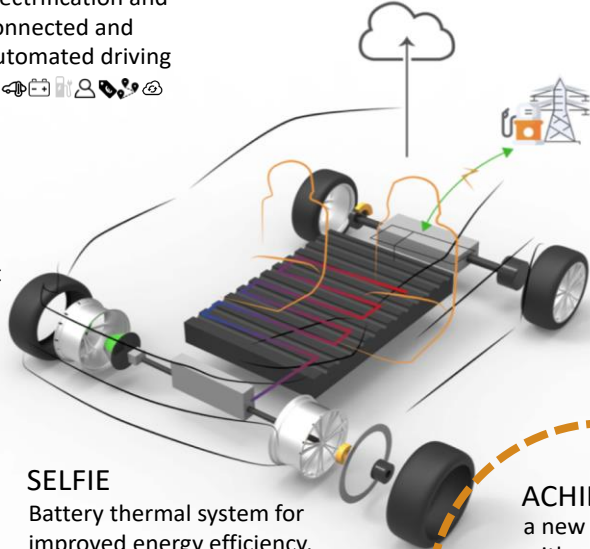
**EVC1000**  
Drivetrain electrification and connected and automated driving

**CEVOLVER**  
Holistic system between the VCU & OEM services in the cloud

**BOXER**  
Modular, flexible, and bi-directional combined traction and charging power electronics

**Sys2Wheel**  
Novel in-wheel motor system and suspension concept for reducing weight and increase the driving range, handling and responsiveness

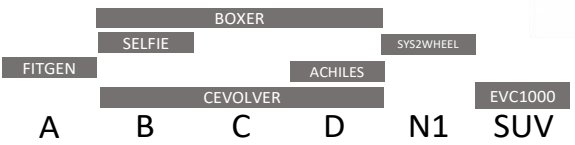
**FITGEN**  
Functionally integrated e-axle ready for mass market of the third generation electric vehicles



**SELFIE**  
Battery thermal system for improved energy efficiency, enhanced autonomy and reduced costs

**ACHILES**  
a new architecture with enhanced braking strategy and motion control dynamics

Segment coverage of demo vehicles





# Thank you for your attention

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