

# A COMPREHENSIVE ROADMAP FOR LEVEL 4/5 CONNECTED AND AUTOMATED DRIVING IN EUROPE

Carolin Zachäus, Jörg Dubbert, Benjamin Wilsch, and Gereon Meyer\*

VDI|VDE|IT

VDI/VDE Innovation + Technik GmbH  
Steinplatz 1, 10623 Berlin, Germany

\*gereon.meyer@vdivde-it.de

## ABSTRACT

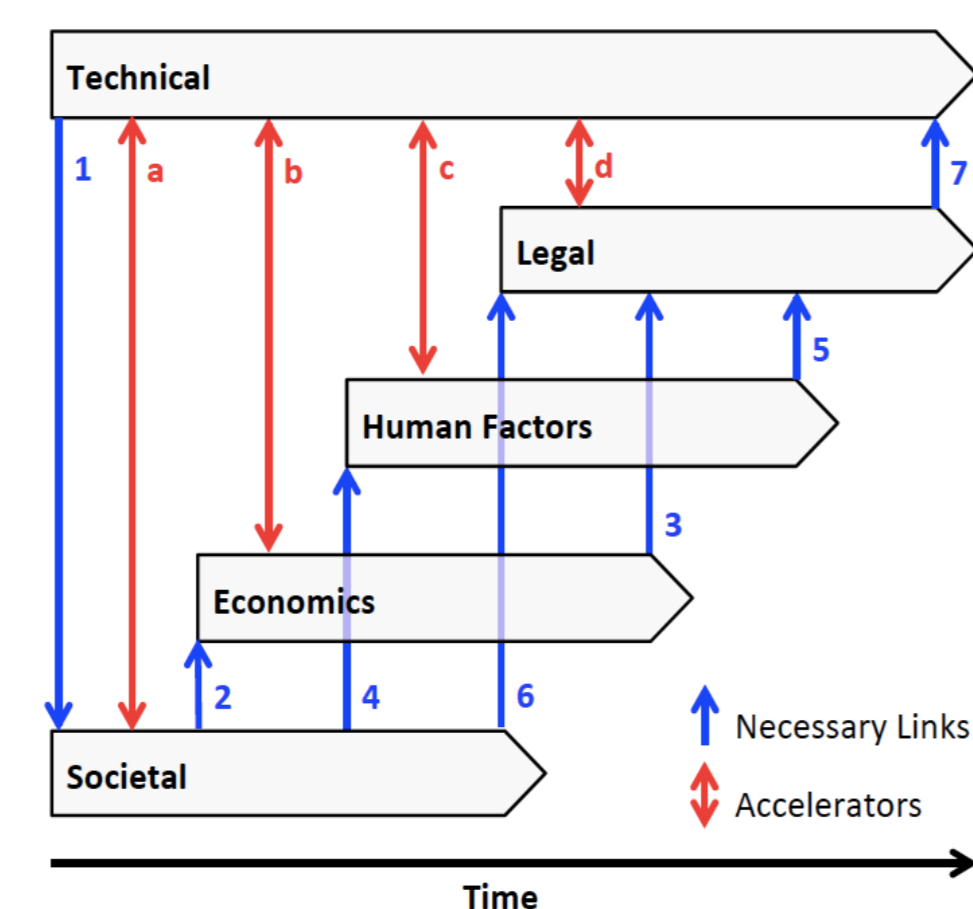
The EU-funded Coordination and Support Action *Safe and Connected Automation in Road Transport* (SCOUT) has established a comprehensive and structured roadmap for accelerated innovation in high degree automated driving, i.e. SAE levels 4 and 5. Based on stakeholder consultations, the state of the art was determined, and a future vision for connected and automated driving was formulated for a number of use cases. To close the gap between state of the art and vision, action plans were developed, and opportunities to leapfrog hurdles were highlighted.



## ROADMAPS



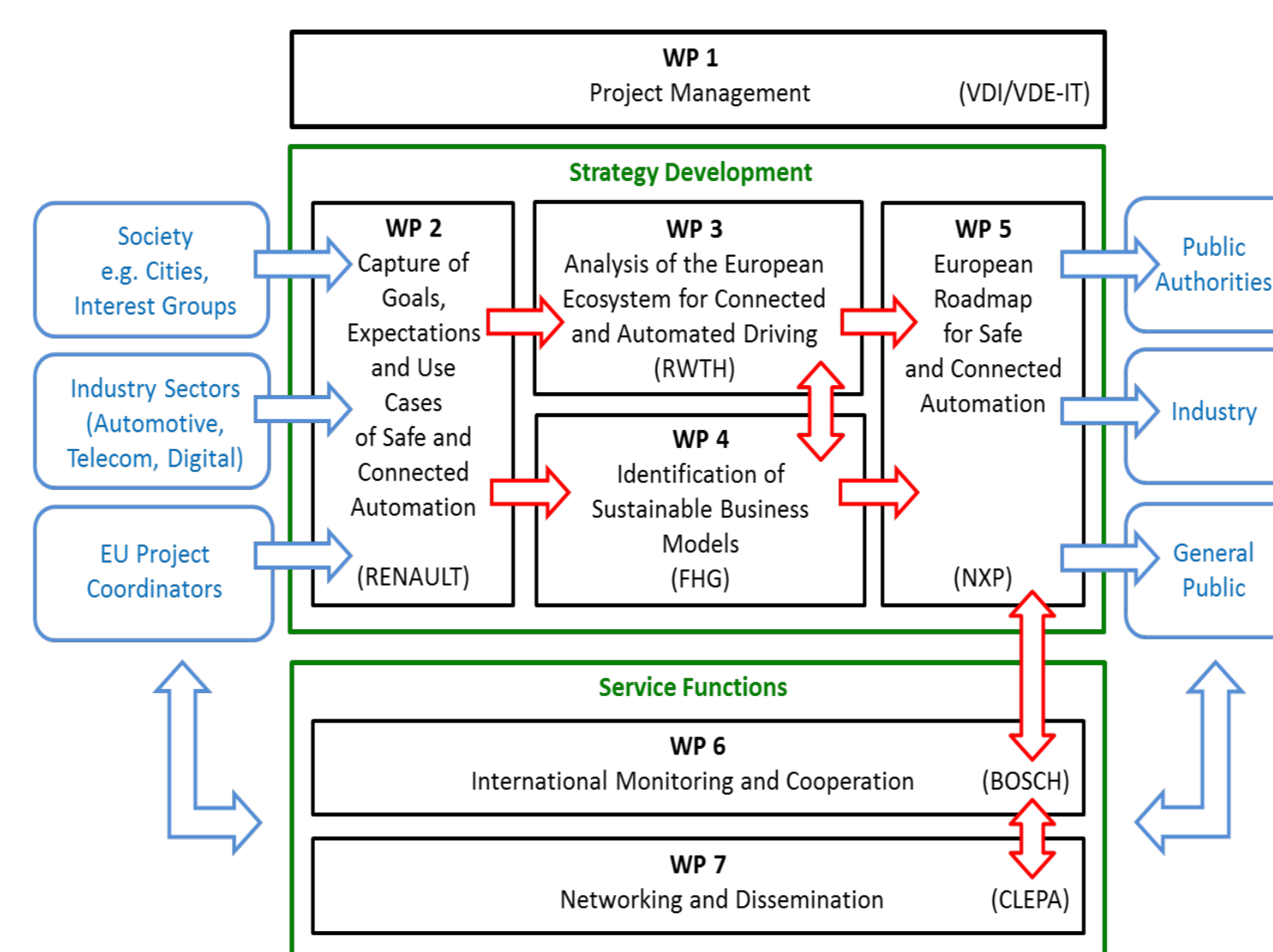
## APPROACH



- Story map showing gaps between SoA and vision
- Gaps in technical, social, economic, human factors, and legal aspects covered by action plan
- Links between actions highlighted, and actions aligned on the time scale
- Problem: Outcomes lacking coherence and interlinks creating a “Gordian knot”
- Solution: Roadmaps need to be distinct for use cases, and focused on goals and milestones
- Impact: Innovation can be accelerated by agile shortcuts anticipating hurdles and roadblocks

## PROJECT

### Coordination and Support Action “Safe and Connected Automation in Road Transport” (SCOUT)



Partners: VDI/VDE-IT, Renault, FCA, BMW, Bosch, NXP, Telecom Italia, NEC, RWTH, Fraunhofer, CLEPA, Sernauto  
Duration: July 2016 – June 2018  
Funding Agency: European Commission, DG CNECT  
Grant No. 713843

## PUBLICATIONS



- D. Will, L. Eckstein, S. von Bargaen, T. Taefi, R. Galbas, State of the Art Analysis for Connected and Automated Driving within the SCOUT project. ITS World Congress 2017.
- G. Meyer, European Roadmaps, Programs, and Projects for Innovation in Connected and Automated Road Transport. In: Road Vehicle Automation 5, ed. by G. Meyer / S. Beiker, Springer 2018.
- J. Dubbert, B. Wilsch, G. Meyer, Roadmap for Accelerated Innovation in Level 4/5 Connected and Automated Driving. In: Advanced Microsystems for Automotive Applications, ed. by J. Dubbert, B. Müller, G. Meyer, Springer 2018.