

# RCRS

Research Cluster  
Railway Systems



## A NEW RESEARCH INITIATIVE IN GRAZ IS ON TRACK

March 2021



voestalpine

ONE STEP AHEAD.

SIEMENS

virtual  vehicle



## VISION – MISSION – VALUES

### Vision

- The Research Cluster Railway Systems is a leading and internationally recognized research institution for the entire system railway.

### Mission

- We create a sound understanding of all interactions within the rail system as well as their mapping and replication.
- We increase the competitiveness of the rail system through sustainable overall system optimization.
- We reduce the „time to market“.

### Values



Opportunity



Connected



Fairness



Excellence



Teamwork



Inclusiveness







## GOALS

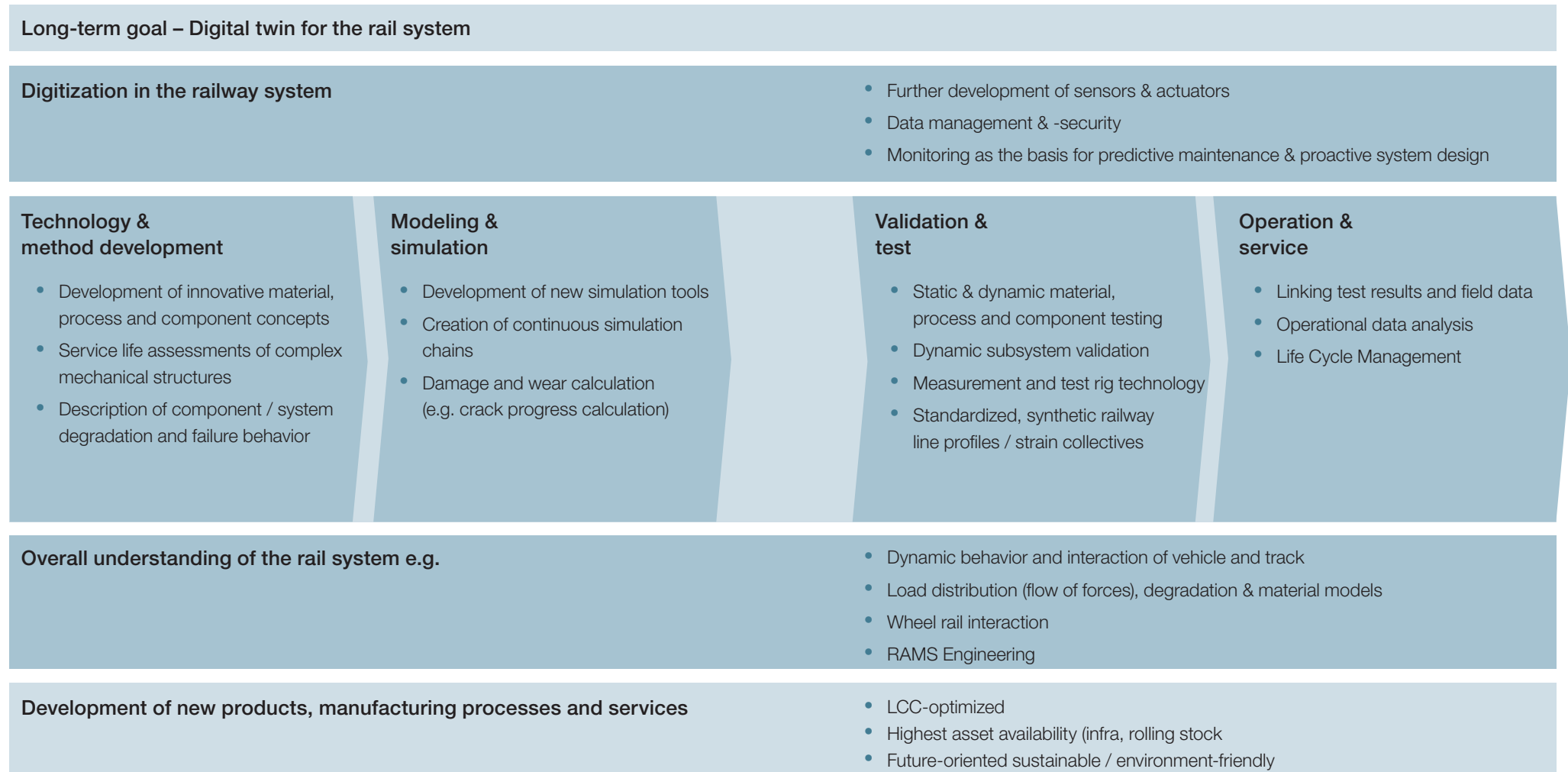
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### Organizational

- Interdisciplinary research cluster in the field of rail vehicle technology, rail infrastructure and rail operations with a focus on overall synergy potentials
- Bundling of technical expertise on railway available in the area of Graz University of Technology in the faculties mechanical engineering, civil engineering in combination with the departments computer science / information technology / measurement technology and the Virtual Vehicle Research GmbH
- Realization of future-oriented research in the areas of vehicle technology, rail infrastructure and operations management using the technological possibilities of digital transformation
- Interdisciplinary training platform for the next generation of engineers for the rail technology of tomorrow
- Accredited testing, inspection and simulation facilities for the validation compliant with rail specific standards and specifications

## GOALS

### Technical

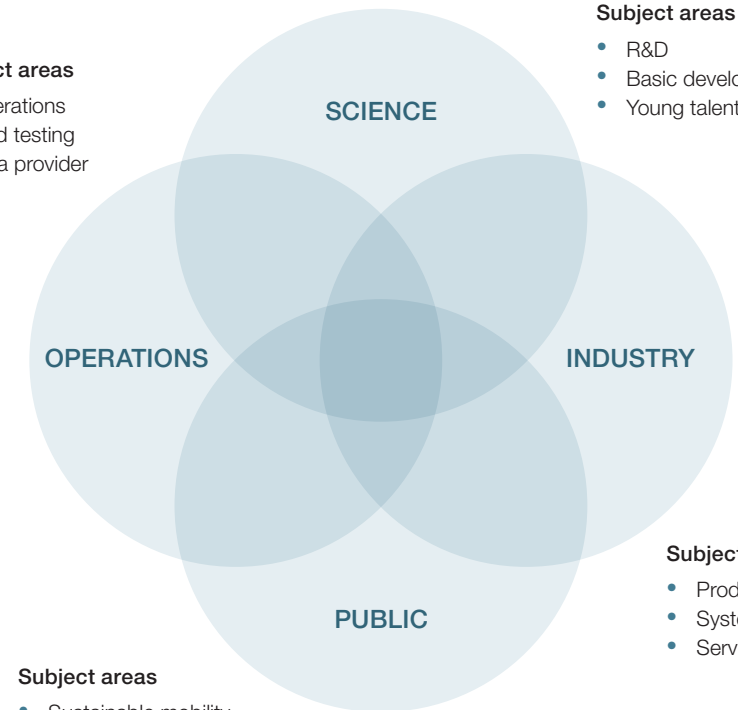




## PHILOSOPHY OF COLLABORATION

### Subject areas

- Operations
- Field testing
- Data provider



### Subject areas

- R&D
- Basic development
- Young talent training

### Subject areas

- Products
- Systems
- Services

### Subject areas

- Sustainable mobility
- Funding
- Norms & Standards

## STRUCTURE & GOVERNANCE



1. **International Scientific Advisory Board (annually)**  
 5 international experts  
 (TU München, Politecnico Milano, KTH Stockholm, Deutsche Bahn, ÖBB)  
 > Advisory body
2. **RCRS Steering Board (bi-annually)**  
 1 company representative of ÖBB, Siemens, voestalpine & virtual vehicle each,  
 1 representative of the university rectorate, 1 dean  
 > Coordination and resolution of the annual research program
3. **RCRS Project Board (approx. monthly)**  
 All involved professors (+ career positions) of the involved institutes,  
 project managers, participating researchers and company representatives as  
 required  
 > Coordination of ongoing activities, partly in parallel sub-teams

## CONTACT

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### **Contact Person TU Graz**

Univ.-Prof. DI Dr. Horst BISCHOF, Vice Rector for Research (Overall coordination)

### **Contact Person Virtual Vehicle Research GmbH**

Dr. Jost BERNASCH (CEO)

### **Contact Person ÖBB-Infrastruktur AG**

DI Dr. Michael WALTER (Route management and facility development)

### **Contact Person SIEMENS Mobility GmbH**

DI Dr. Stefan ERLACH (Vice President Bogies)

### **Contact Person voestalpine Railway Systems**

DI Dr. Jochen HOLZFEIND, EMBA (Chief Technology Officer)

Medieninhaber: Research Cluster Railway Systems, Graz  
picture source: voestalpine Railway Systems