

# Automation in Freight Transport and Logistics – Austrian Perspective

**Julia Elsinger/Sarah Bittner-Krautsack**

Federal Ministry for Climate Action, Environment,  
Energy, Mobility, Innovation and Technology

**Geneva, 19.10.2022**

## Automated mobility action package (2019-22)

### Automated mobility should...

- be used in a way that is efficient and brings benefit to the transport system
- strengthen Austria's international competitiveness
- add to livable public spaces and a sustainable and climate-friendly mobility system

# All Weather Autonomous Real logistics operations and Demonstrations (AWARD) (2021-2023)

## Contributing to

- a quicker deployment of **innovative connected** and **automated freight transport** solutions
- a **safety and efficiency increase of freight operations** of individual trucks or fleets in confined areas and in mixed traffic (hub to hub) through **innovative connected and automated driving systems**

## Leading to

- the uptake of **new business models**
- a **total cost reduction** of operations, logistics and supply chain

→ improved competitiveness of European transport and logistics industry

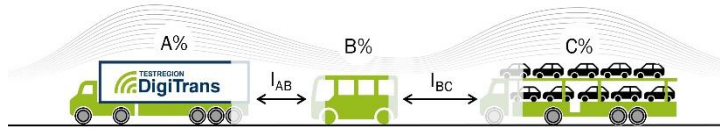




## SHared automation Operating models for Worldwide adoption (SHOW) (2020-2023)

- aims to support the **migration path** towards **effective sustainable urban transport** through **technical solutions, business models** and priority scenarios for impact assessment
- deploying **shared, connected** and **electrified** fleets of automated vehicles amongst others in **logistics as a service (LaaS)**

## DigiTrans



- **test region** for automated and connected driving in Upper Austria (innovation lab)
- **use cases** are
  - **transferring control** for transport vehicles from **manual driving** to **automated driving**
  - analyzing transshipment processes for **transferring** loads from **transport vehicles** onto **special purpose vehicles** for operations near business premises
  - **automated routing** of special vehicles within **business premises demand-oriented** use of automated solutions for **city logistics**



Sources: DigiTrans GmbH

## AT Highlights (funded cooperative R&D projects)

**Connecting Austria** – finding pre-requisites for the formation, implementation and disbanding of (semi-) autonomous truck convoys

**PRODIGY** – optimizing today's processes at the interface between road and terminal using digitisation and new (distributed ledger) technologies

**Hub.connect** – building foundations for consistent connectivity and interoperability of automated vehicles and infrastructures in cross-border transport chains

**Road2Rail** – AI-based assistance and autonomy systems for loading processes

## Digital Automatic Coupling (DAC)

AT supports on national level cooperative R&D projects towards DAC, among them

- **TARO** (Towards Automated Railway Operation)
- **DACIO** (Digital Automated Coupling in Infrastructure Operations)

DAC promises to

- Increase **capacity, productivity, quality** of rail freight system
- Increase **safety for workers**
- **Enable digitalisation** of rail freight transport to meet **modal shift targets** for climate neutral mobility

# Thank you for your attention!

**DI (FH) Sarah Bittner-Krautsack MBA**

Federal Ministry for Climate Action, Environment, Energy, Mobility,  
Innovation and Technology

Directorate general III – Innovation and Technology

III 4 - Mobility and Transport Technologies

[sarah.bittner-krautsack@bmk.gv.at](mailto:sarah.bittner-krautsack@bmk.gv.at)

Draft of presentation slides prepared by Austria Tech