



# Public Transportation – Accessibility for All

**PubTrans4All**  
Public Transportation - Accessibility for All

## Introduction

### Objectives:

The PubTrans4All project is funded under the 7<sup>th</sup> Framework Programme of the European Union and it aims to develop a prototype of a vehicle-based boarding assistance system (BAS) that can be installed into new rail vehicles or retrofitted into existing rail vehicles to improve accessibility for persons with reduced mobility (PRM) – disabled persons, elderly, persons with prams, persons with heavy luggage etc.

Accessibility for rail vehicles is particularly problematic since rail vehicles have a long life cycle (30 years or longer) which means that many currently inaccessible vehicles will remain in good service in future.

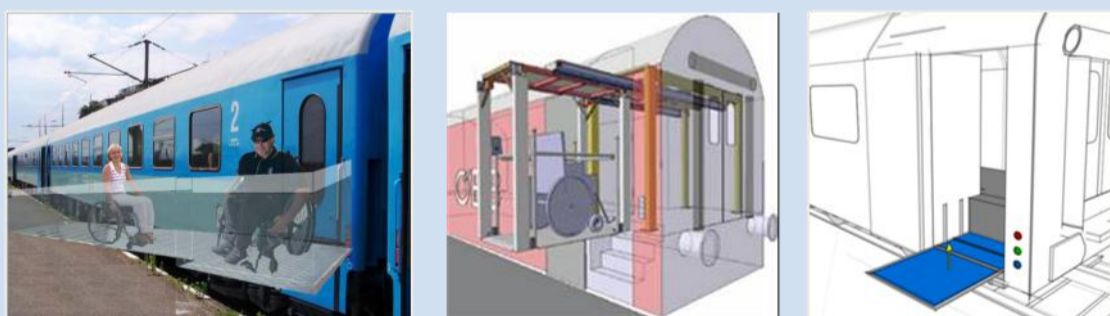
### Project Partner:

- BDZ Passenger Traffic EOOD (Bulgaria)
- Bombardier Transportation GmbH (Germany)
- MAV START (Hungary)
- MBB Palfinger (Germany)
- National Railway Infrastructure Company (Bulgaria)
- ÖBB Austria Federal Railways (Austria)
- Rodlauer Consulting (Austria)
- SBB AG Federal Railways Switzerland (Switzerland)
- Slovenske železnice d.o.o. (Slovenia)
- Siemens AG Österreich (Austria)
- Vienna University of Technology (Austria)
- University of Belgrade (Serbia)
- Verkehrsbetriebe Karlsruhe GmbH (Germany)

## Finding Innovative Solutions

### Student Contest:

Organization of an international student contest to find new ideas and innovative solutions for a new BAS. 38 students from Austria, Hungary, Serbia, Croatia and Bulgaria participated at the contest and submitted their ideas.

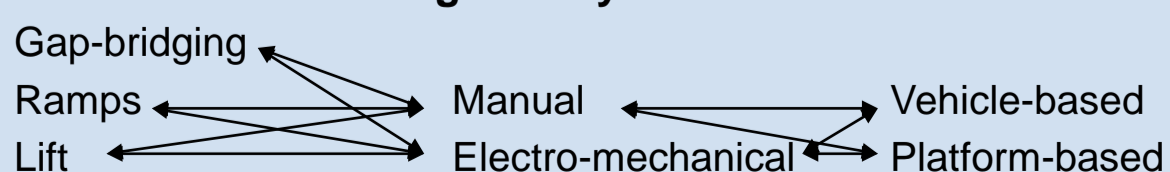


Source: Deliverable 4.2 Vehicle-Based BAS Preliminary Design Recommendations  
<http://www.pubtrans4all.eu/projekt63-dokumente-download.html>

### Requirements, Needs and Expectations of

- Handicap associations
  - Passengers
  - Railway Operators
  - Manufacturers
- were investigated using questionnaires, interviews, etc. in 21 countries.

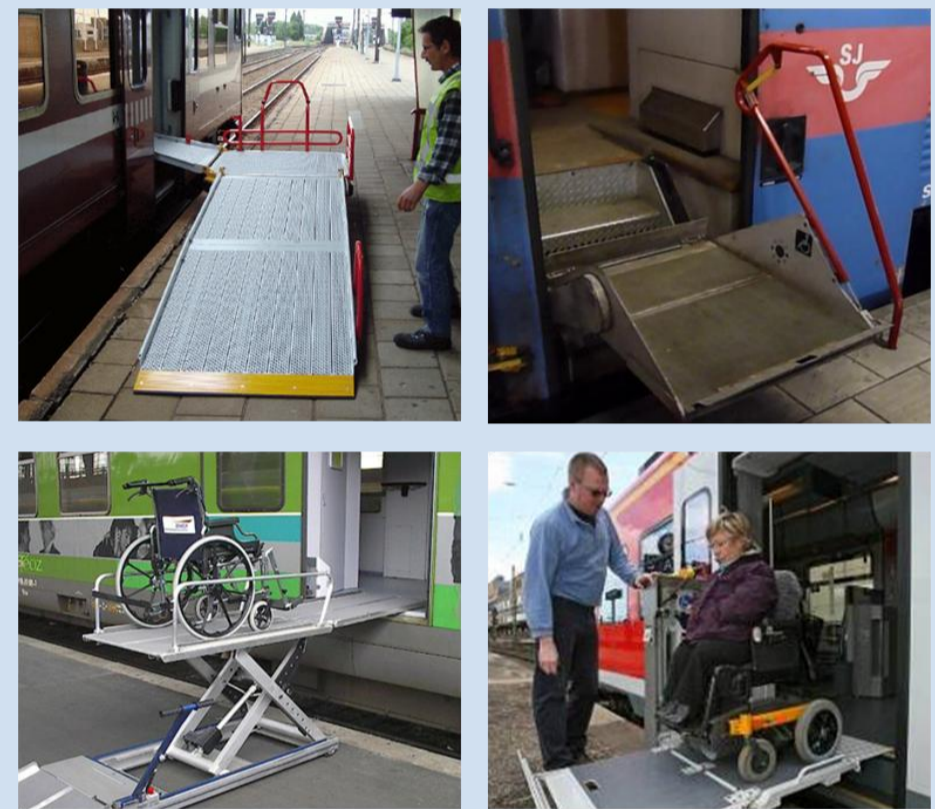
### Evaluation of Existing BAS systems:



## Project Schedule

### Project Milestones:

- Definition of Evaluation Criteria for existing BAS
- Evaluation of existing Boarding Assistance Systems
- Develop Best-practice Recommendations for BAS
- Elaboration of Design Recommendations for new BAS
- Design and Building of new BAS Prototype
- Test new BAS Prototype in Laboratory
- Test new BAS Prototype in Operating Vehicle (UIC-wagon of BDZ)



Source: Deliverable 2.2 Existing Boarding Assistance System Evaluation Matrix Report  
<http://www.pubtrans4all.eu/projekt63-dokumente-download.html>

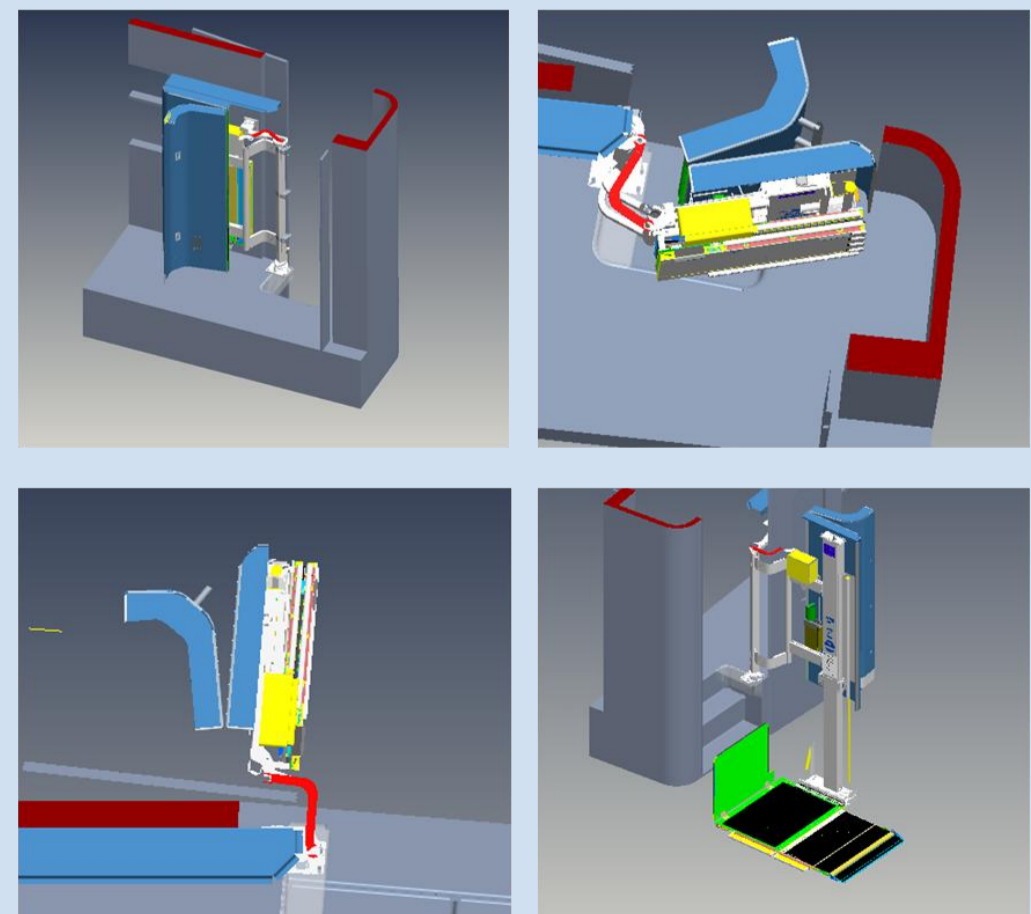
## New BAS Prototype

### UIC Wagon:

As currently no vehicle-based BAS exists for classical UIC-wagons, the consortium decided to develop a BAS for this type of wagon.

### Design Concept of new BAS Prototype:

Installation investigations and technical calculations led to adoption of the swivel lift concept as the best suitable design concept for the very restricted space conditions in classical UIC-wagons.



Source: MBB Palfinger