



## The ACTUATE partners

The ACTUATE consortium consists of five advanced European public transport operators from **Salzburg** (Salzburg AG, Austria), **Brno** (DPMB, Czech Republic), **Parma** (TEP S.p.A, Italy), **Leipzig** (LVB, Germany), and **Eberswalde** (BBG, Germany) who already operate electric vehicles, as well as **LAB** bus driving school in Leipzig, the Belgian bus manufacturer **Van Hool** and **trolley:motion**, the international action group to promote e-bus systems with zero emission (Austria). The project is coordinated by **Rupprecht Consult** GmbH (Germany).



**Obus SLB**  
Ein Service der Salzburg AG

**TEP**  
S.p.A.

**DPMB**  
Dopravní podnik města Brna a.s.



Barnimer Busgesellschaft  
**BBG**



**VAN HOOL**

**t:m trolley:motion**

**RUPPRECHT CONSULT**  
Forschung & Beratung GmbH

## Advanced Training and Education for Safe Eco-driving of Clean Vehicles



[www.actuate-ecodriving.eu](http://www.actuate-ecodriving.eu)







## ACTUATE – a project to optimise driving performance for reduced energy consumption

Studies show that eco-driving has the potential to make bus and tram fleets safer and more energy efficient. The ACTUATE project will **develop and apply advanced training and education services** for eco-driving of clean vehicles in the public transport sector.

By supporting the introduction of eco-driving trainings, ACTUATE can further **exploit the energy-saving potential of clean vehicles** such as trams, hybrid buses, trolleybuses or e-buses equipped with supercapacitors, further promoting their take-up. ACTUATE's trainings will complement existing eco-driving forces that primarily focus on diesel-powered vehicles.

The project lays a particular **focus on drivers** as the pivotal element for better driving performance and energy saving. Encouragement campaigns will ensure that the drivers continue to apply the instructions provided in the trainings in the long term.



## The project outputs

If entire electric bus and tram fleets can be made more energy efficient through driver training, several thousand euros and vast quantities of energy can be saved per vehicle per year. This also means **reducing air pollution and CO<sub>2</sub>** emissions in our cities, and an even bigger environmental advantage for clean public transport vehicles over comparable diesel vehicles and private cars.

ACTUATE will:

- **demonstrate the energy saving potential** due to capacity building in energy-efficient driving of clean vehicles
- define minimum criteria and standards for eco-driving and integrate these into basic and continuing education at public transport operator organisations as well as into future qualification frameworks for professional drivers
- **work towards improved driving behaviour** and motivation of public transport drivers to drive their clean vehicle in a more eco-friendly way
- integrate eco-driving information per electric vehicle type into the clean vehicle portal of the European Commission

All outputs and results of the project – such as minimum training criteria, learning outcomes and training material for eco-driving – will help other public transport providers to train their own drivers in a tried and tested manner.



## Eco-driving



Eco-driving is driving that optimises energy use and contributes significantly to emission reduction as promoted by the European Commission. Identifying and reducing inefficient driving habits (e.g. harsh braking, hard accelerating) and energy-wasting manoeuvres (e.g. idling) has the potential to **reduce** both **operating costs** and **emissions** as well as to increase passenger safety.

While the potential of eco-driving for private cars and diesel buses is well understood, eco-driving for electric fleets in the public transport sector is not yet widely known or practiced.

## How can you benefit from ACTUATE?



ACTUATE will provide a range of information material on training and promotion campaigns for eco-driving considering the special requirements of clean bus and tram fleets.

This includes:

- dedicated **driver training concepts** for trams, hybrid buses, trolleybuses or e-buses equipped with supercapacitors,
- a **starter kit** and free **e-learning courses** for eco-driving for the four defined types of electric vehicles as well as
- **golden rules** for eco-driving

In addition, ACTUATE will publicise its evaluation results for energy savings and effects on driving performance generated solely through trainings (before and after comparisons).

Anyone is welcome to benefit from ACTUATE's concepts for more eco-friendly driving. Sign up for the ACTUATE **e-newsletter** at the project website, [www.actuate-ecodriving.eu](http://www.actuate-ecodriving.eu), and do not miss the release of our publications and findings!



## Contact:

**Project Coordinator**  
Rupprecht Consult GmbH

**Wolfgang Backhaus**  
[w.backhaus@rupprecht-consult.eu](mailto:w.backhaus@rupprecht-consult.eu)  
+49-221-606055-19

[www.rupprecht-consult.eu](http://www.rupprecht-consult.eu)

