

# The Mireo – Intelligence on rails



# The vehicles of the Desiro family have been systematically further developed

**SIEMENS**



Mittelrheinbahn  
AM08 SNCB  
ÖBB cityjet  
Raaberbahn

## Desiro ML



Thameslink  
South West Trains  
Moorgate

## Desiro City



Rhein-Ruhr-Express

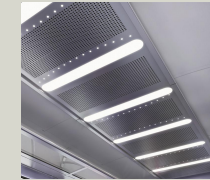
## Desiro HC



Varied capacities  
and lengths



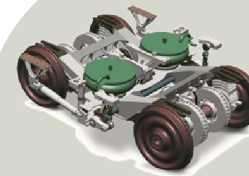
Different  
entry heights



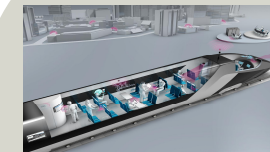
Inner ceiling  
concept



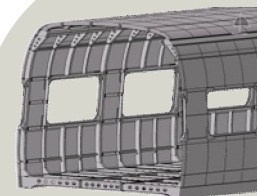
DC Link  
traction concept



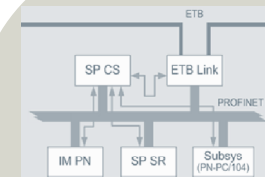
Trailing bogie with  
inside bearings



Always  
Connected!



Weight-optimized  
car bodies



Sibas PN  
vehicle control

Proven expertise meets innovative solutions

# Mireo

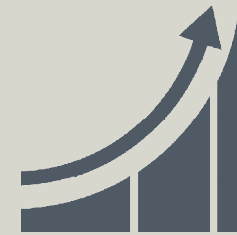
**The new modular system for regional and suburban transportation:**  
the customizable and economically attractive solution for comfortable, premium-class commuter transport.



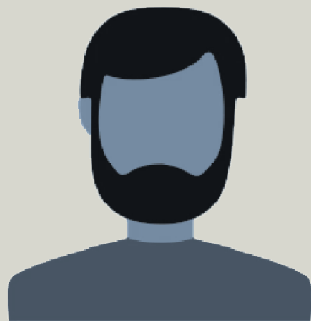
## The Mireo has to satisfy the most diverse demands



**High functionality**



**Greatest benefit**



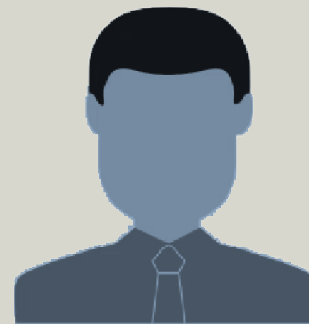
## The Mireo has to satisfy the most diverse demands



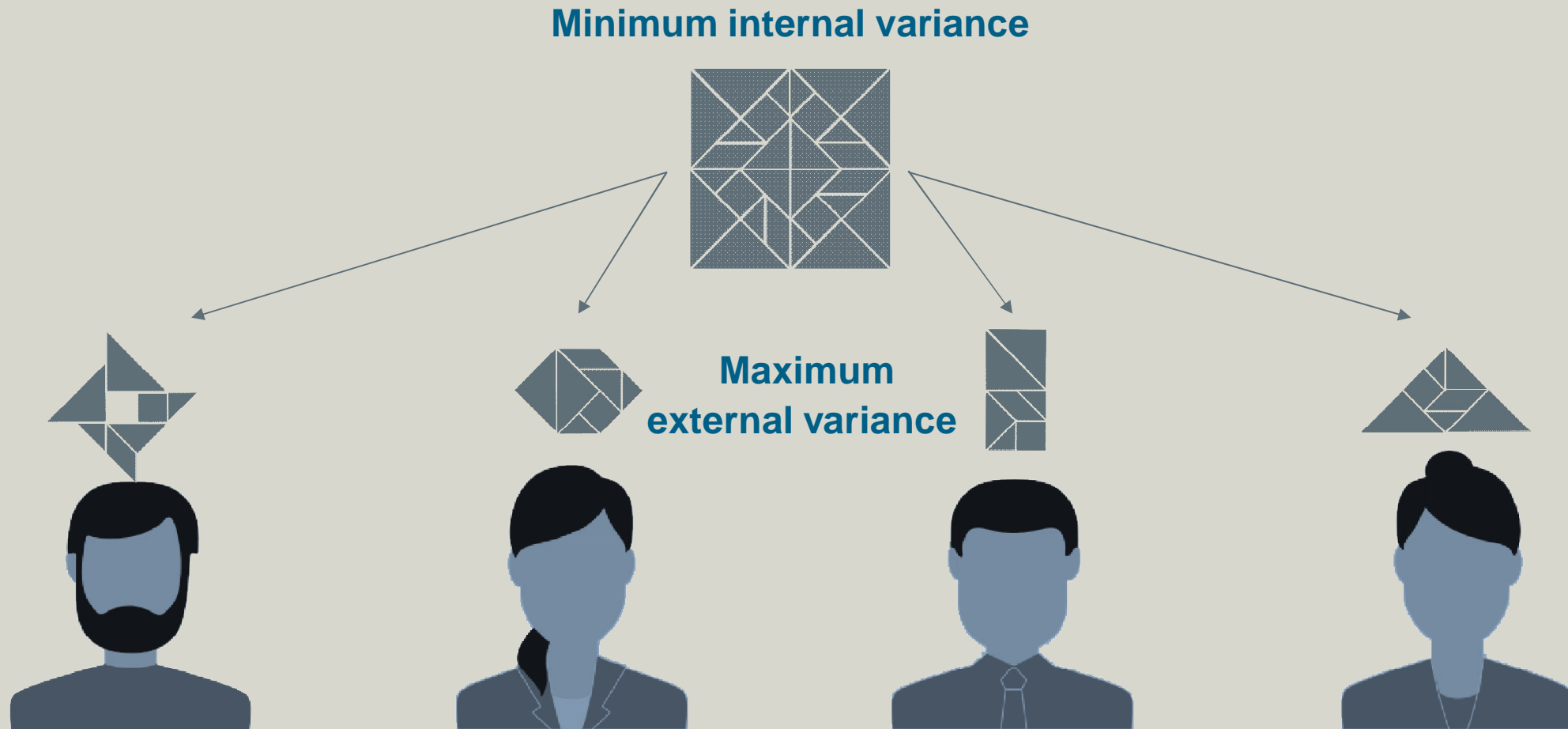
Reduction of  
lifecycle costs



Fast »time to market«



# The Mireo has to satisfy the most diverse demands



## The Mireo concept is based on four components

**Energy efficiency  
down the line**

**Uncompromising  
flexibility**

**Faster into service  
thanks to efficient  
modular system**

**Reduction of lifecycle costs:  
Vehicles, service and  
financing from one hand**



# The philosophy of the modular system – Standardization and multiple use of modules

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**Satisfy customer customization requirements:  
Standardization of basic functions**

**Standard interfaces allow changes  
without extensive construction adjustments**

**Standardization and  
multiple use of modules in  
various projects**



**Variants derived from  
predefined solutions**

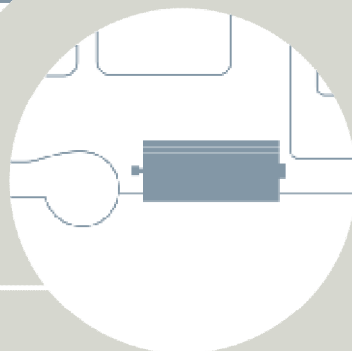
**Independent innovation cycles  
for the different modules**



## Energy efficiency down the line



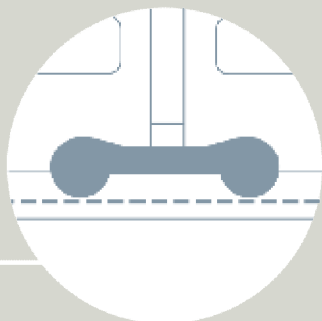
The improved aerodynamics and higher energy efficiency of the components substantially reduce weight and energy consumption.



The high-efficiency transformer and optimal utilization of the ED brakes reduce traction energy consumption.



## Energy efficiency down the line



The trailing bogies with inside bearings and the concept of the long articulated train make a major contribution to saving weight and thus energy.



The car body is a lightweight welded integral aluminum monocoque construction primarily using large extruded profiles.

All components are installed on the vehicle roof or beneath the floor.



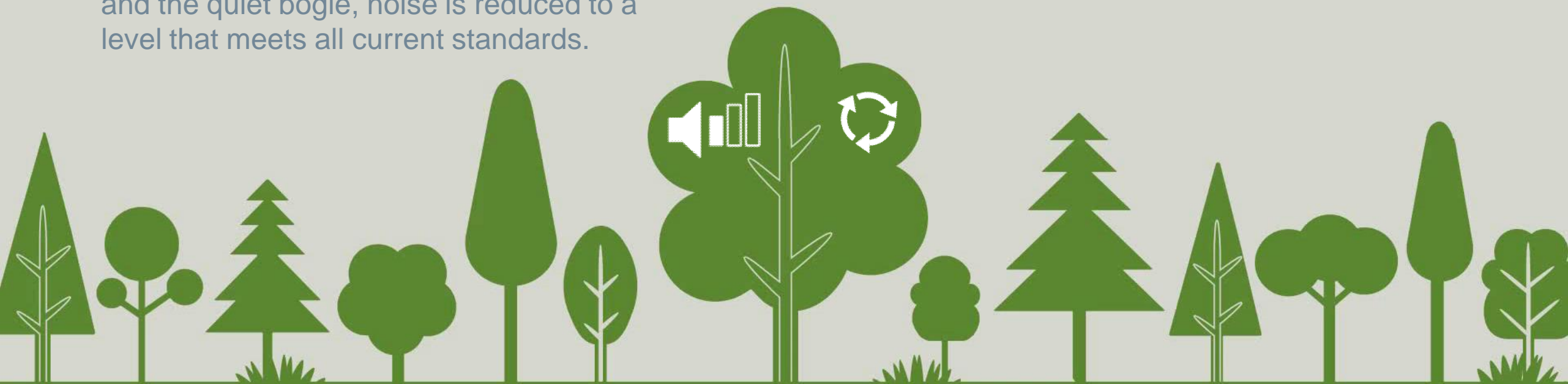
## Mireo – the environmentally friendly concept

### Noise

With the help of the new aerodynamic design and the quiet bogie, noise is reduced to a level that meets all current standards.

### Recycling

The use of specially selected materials guarantees a recycling quota of 95 percent.



## Mireo – the environmentally friendly concept

### Energy consumption

The lightweight construction, energy-efficient components and an intelligent board management system reduce energy consumption by 25 percent and the driver assistant system contributes a further 30 percent saving in energy.



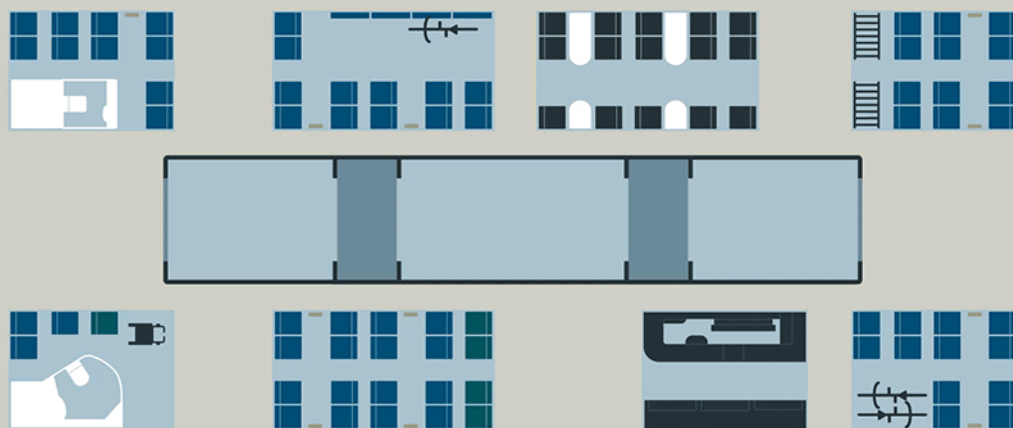


## Uncompromising flexibility

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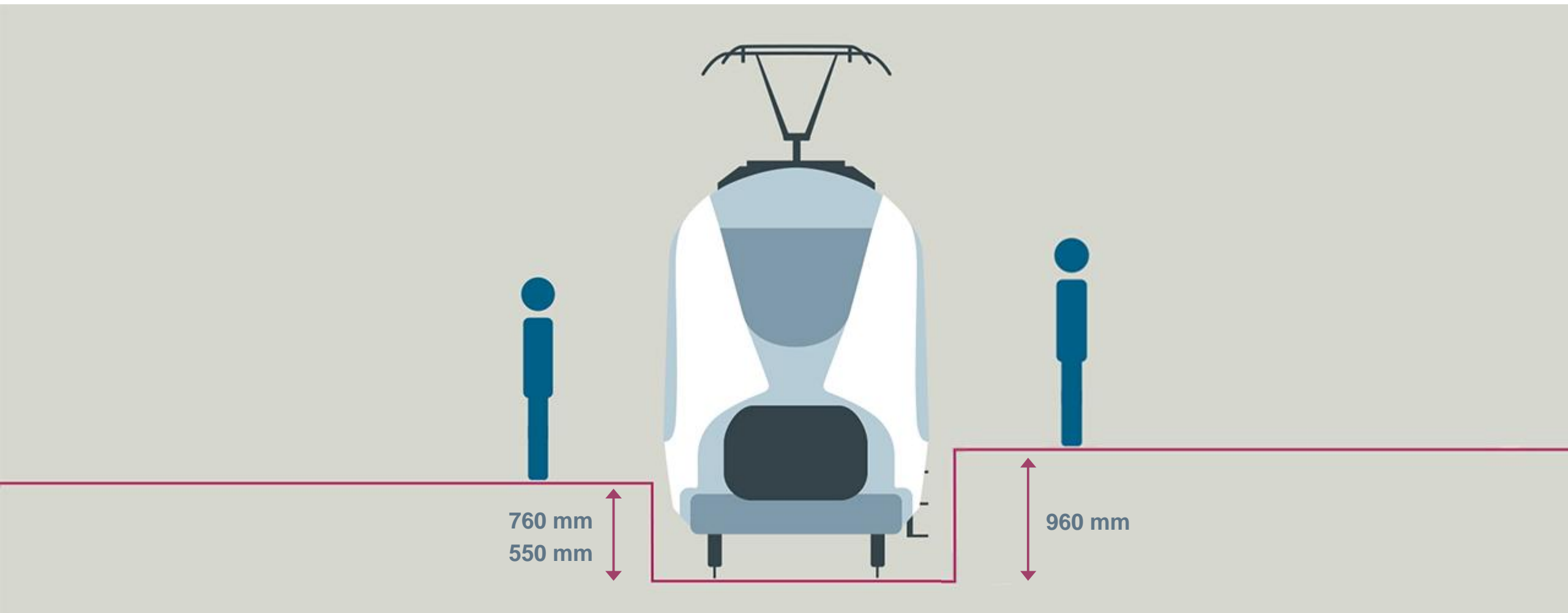
## Uncompromising flexibility thanks to »empty bodies«



### The interior belongs to the passengers!

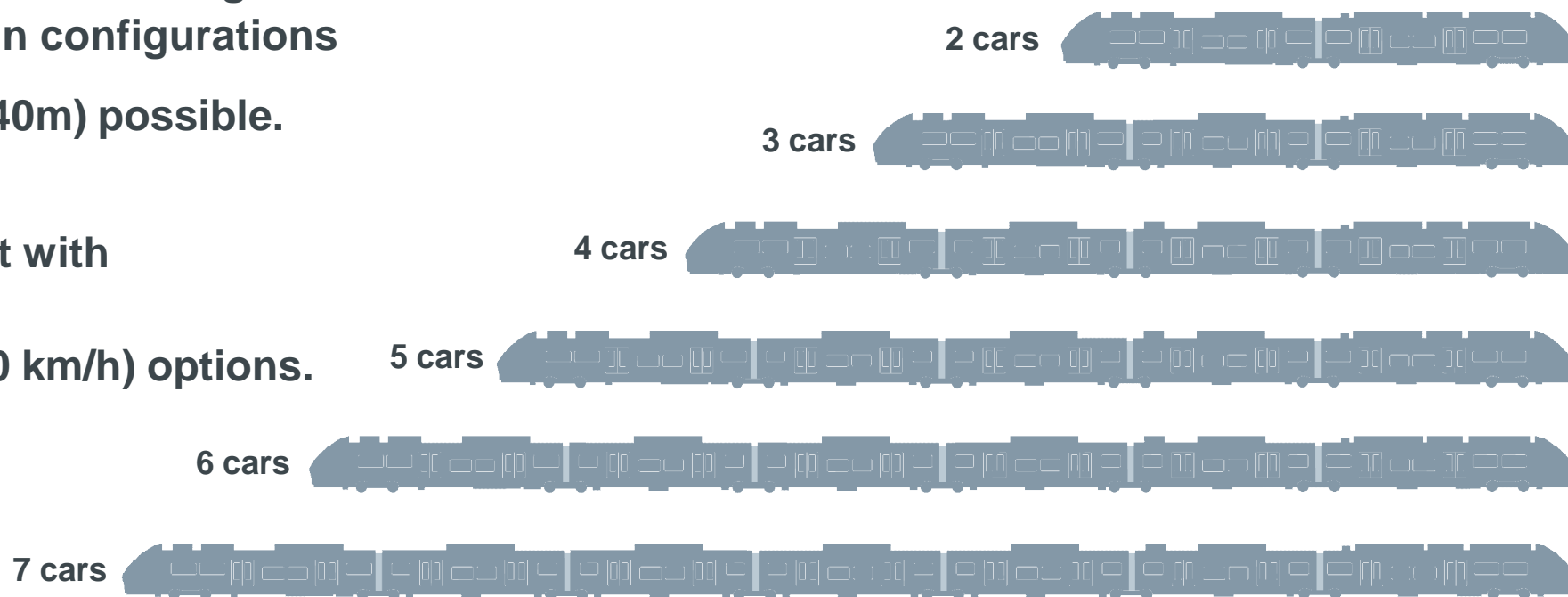
- Maximum flexibility of interior design
- Simple convertability of interior space
- Optimally designed for cleaning
- Usable interior area is fully available for passengers
- Maximum capacity through more seats at same train length

## Flexible operations through variable entry heights



## Flexible operations through variable traction concepts

- Flexible capacity adjustments through various car body lengths and train configurations
- 2- to 7-car trains (~ 50-140m) possible.
- Scalable traction concept with ECO, Midi and Speedy (maximum speed 140/160 km/h) options.





## Bogies for Eco, Midi and Speedy

Eco



**0.65 m/s<sup>2</sup>**

Midi



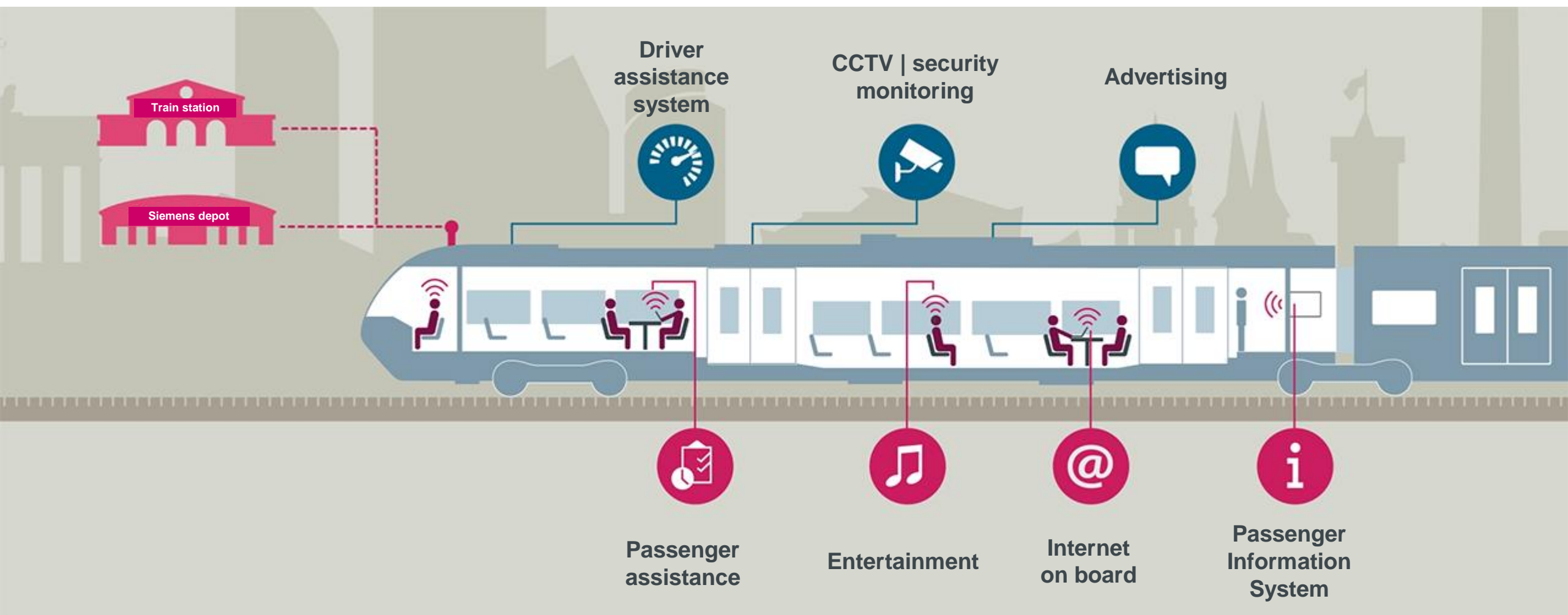
**1 m/s<sup>2</sup>**

Speedy

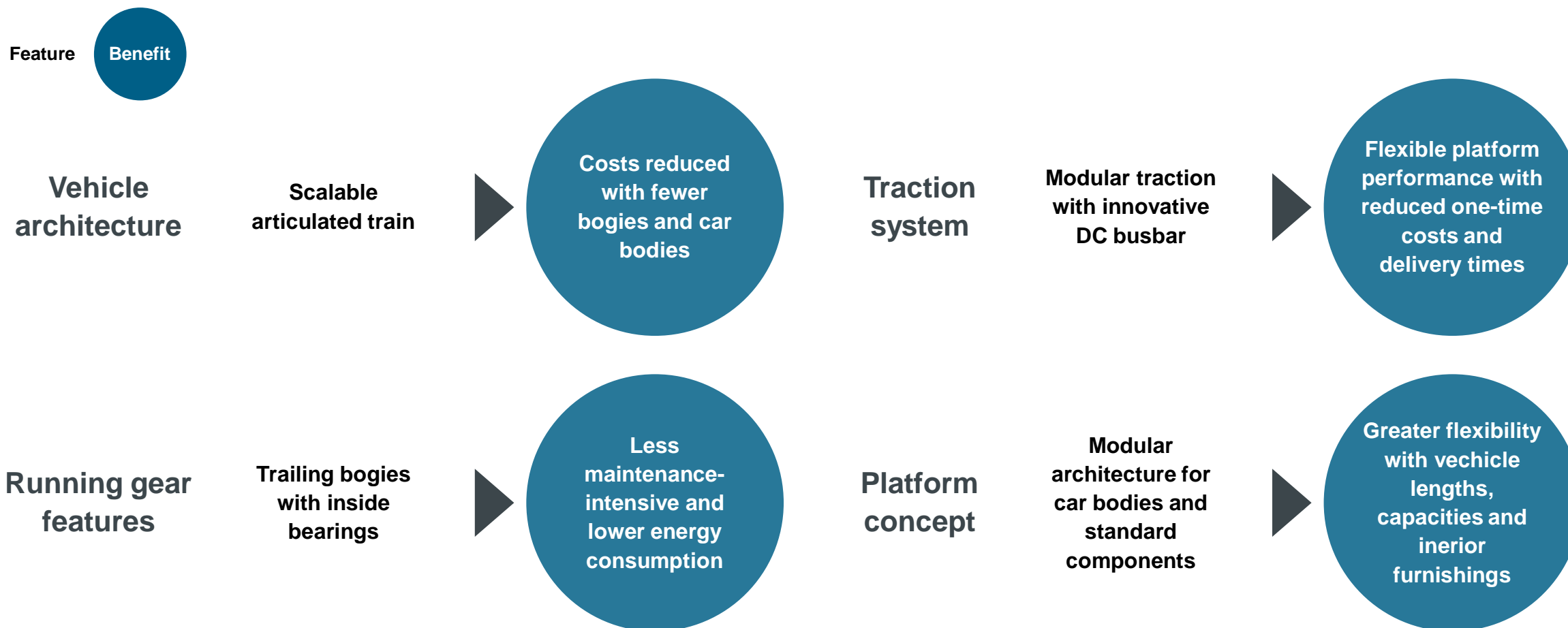


**1.2 m/s<sup>2</sup>**

# Service for seamless mobility – »Always connected«



# Overview of the Mireo features and benefits



A sleek, silver Siemens Mireo high-speed train is shown in motion, traveling along a track. The train has a modern, aerodynamic design with large windows and a teal accent line. The background is blurred, suggesting speed.

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*Ingenuity for life*

**Thank you for your  
kind attention.**