

# DAIMLER TRUCK

## Daimler Buses

# Keynote Digital Operational Excellence via Telematics

Philip Janouch

Sales & Product Management Digital Services

Daimler Buses



OMNIPLUS

BUSSTORE

# Daimler Truck & Buses vision

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**LEADING  
SUSTAINABLE  
TRANSPORTATION**

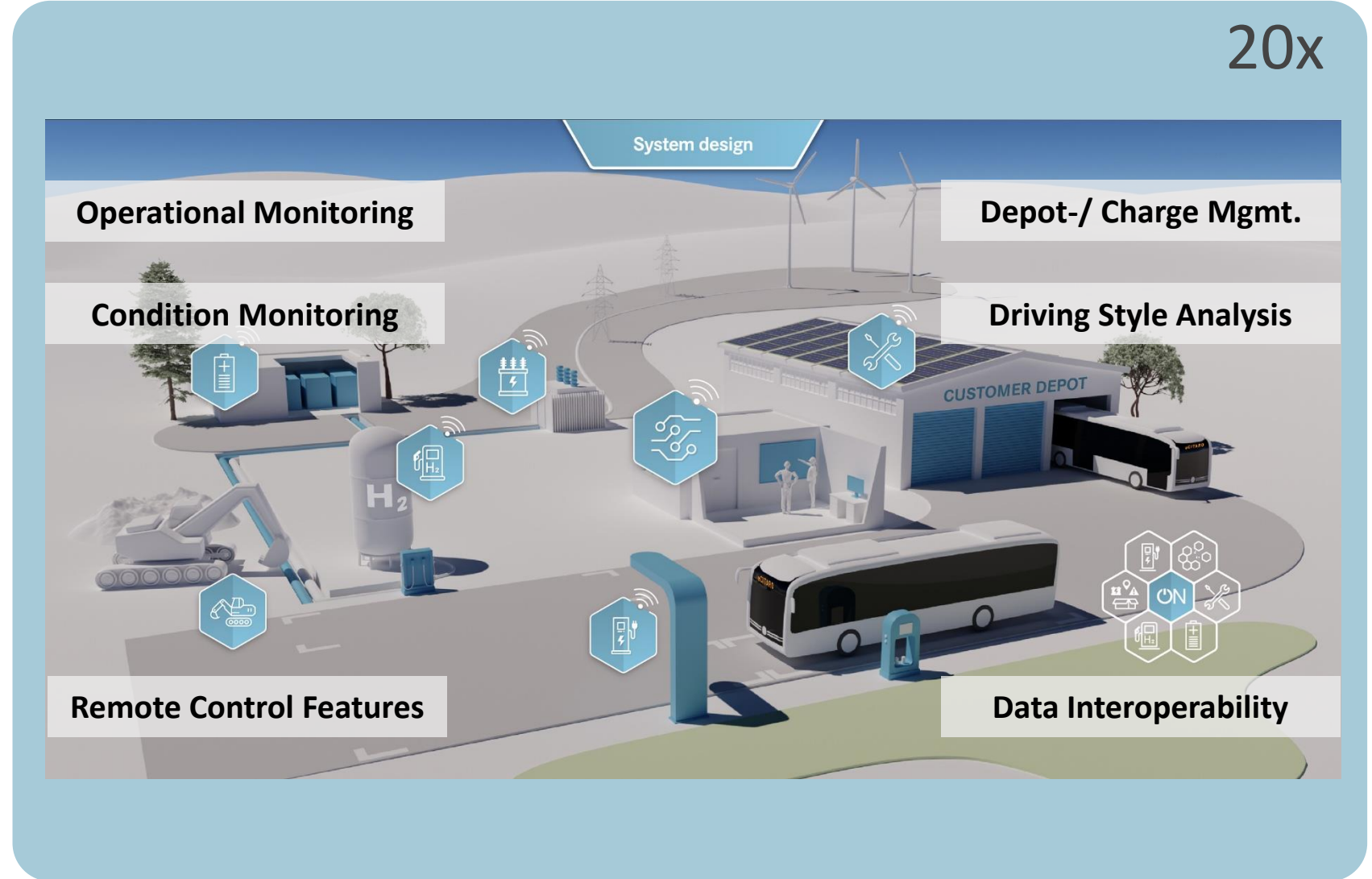


# Daimler Buses brands have a long and proud history, but now we're moving to fully connected ecosystems

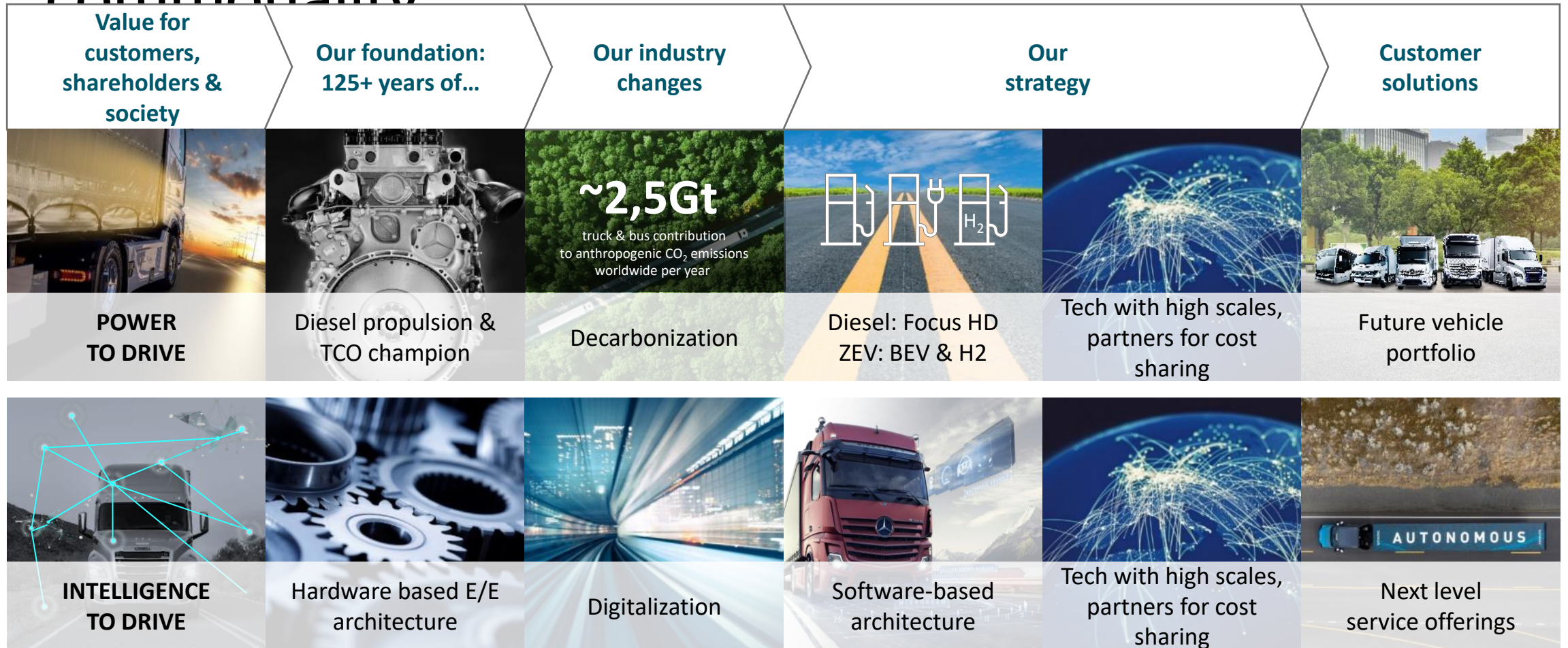
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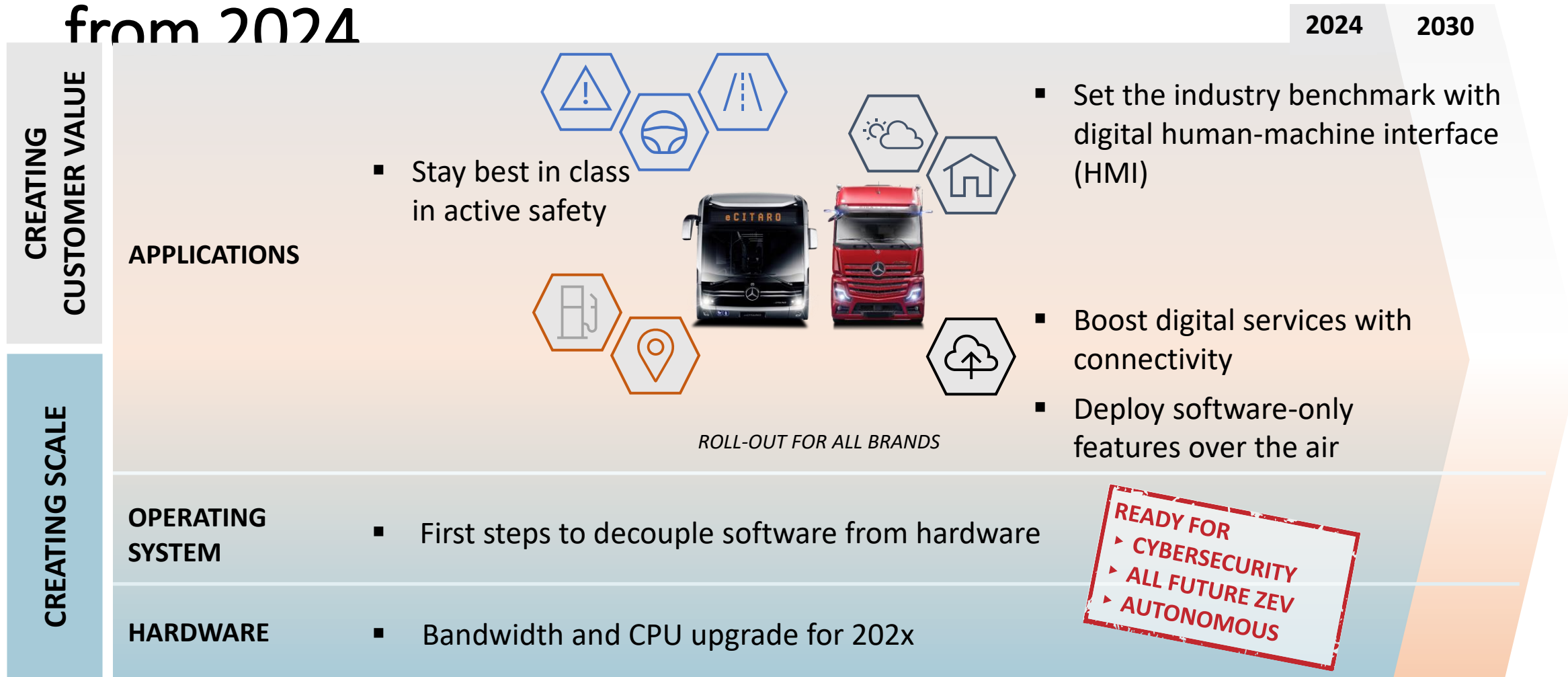
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# The big picture: Daimler Truck & Bus technology strategy focuses on long-term differentiation with maximum commonality



# While a global electronics hardware platform remains the foundation, the roll-out of **next evolution applications starts from 2024**



# The connected bus ecosystem unleashes the full potential of future mobility for our customers and it is about collaboration and partnerships.

**Collaboration**

**Partnerships**

**Cyber Security**

**Standardization & API's**

**Data Protection**

**Trust**



# Thank you!



OMNIPUS ON

OPERATIONAL MONITORING

Performance deep dive

Period: 17.07.2023 - 23.07.2023

Vehicle	Driving style		Eco score	Braking Score	Acceleration Score	Drive style Score	Consumption fuel			Avg. fuel use* (l/100km)
	Total score	Eco score					Avg. total fuel consumption (l/100km)	Total fuel consumption	Driving fuel consumption	
	100	100	100	100	100	100	13.0	1470	1091	0.7
	85	85	85	85	85	85	6.78	1470	608	0.4
	85	85	85	85	85	85	4.21	920	608	0.6
	85	85	85	85	85	85	1.00	1907	1030	0.5
	85	85	85	85	85	85	4.08	2278	2540	1.0
	85	85	85	85	85	85	7.50	143	1087	0.8
	85	85	85	85	85	85	6.25	3082	2880	1.0
	85	85	85	85	85	85	4.02	434	407	0.2
	85	85	85	85	85	85	1.0	134	134	0.0
	85	85	85	85	85	85	2.00	200	200	0.0
	85	85	85	85	85	85	4.1	200	407	0.2
	85	85	85	85	85	85	4.0	200	400	0.0

# Digital Mobility Solutions Conference



- Johanna Tzanidaki
- ERTICO – ITS Europe, Chief Innovations Officer
- Moderator



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# THE WORLD OF SWARCO A PORTFOLIO FOR THE PUBLIC TRANSPORT



PASSENGER INFORMATION



FLEET MANAGEMENT



TRAFFIC LIGHT ASSIST



CYCLING SOLUTIONS

PUBLIC TRANSPORT SOLUTIONS



CLOUD-BASED PRIORITY

E-VEHICLES SOLUTIONS

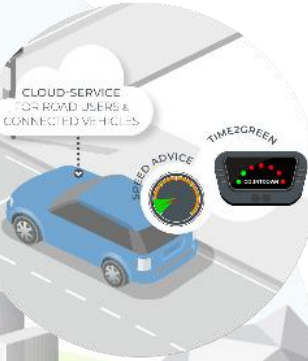


CHARGING MANAGEMENT

TAXI



AI/VS SOLUTIONS



CONNECTED SHUTTLE



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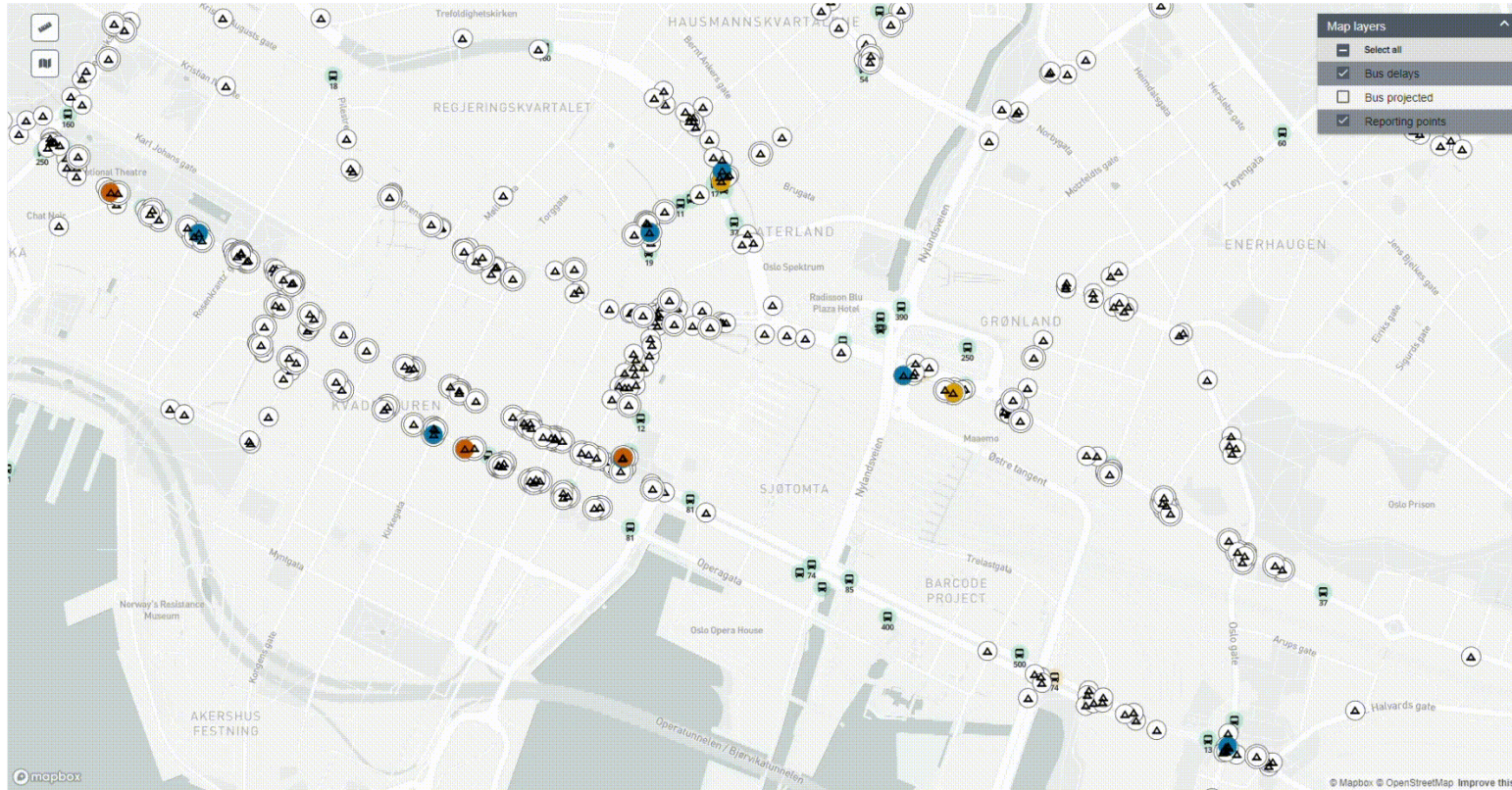
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# The Impact of Dynamic Bus Priority systems on Public Transport Service levels and mobility network performance



## Prioritize based on:

- **Vehicle classification** *Static*
- **Busline priority** *Static*
- **Real-time delay** *Dynamic*
- **Vehicle occupancy** *Dynamic*

## Some evaluation metrics from Copenhagen, Ballerup, Albertslund (DE)

Rush hour delay reduction	Up to 24%
Delay reduction outside of rush hour	Up to 28%
Avg. time reduction at intersections	Up to 30 seconds
Vehicle queue lengths	No impact



## Oslo city centre Dynamic Bus Priority operator overview

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# Depot charging

## Main use case for bus fleets



eBus depot charging

Destination

Logistic depot charging

Enterprise fleets

Residential

En-route

# From Analog to Digital

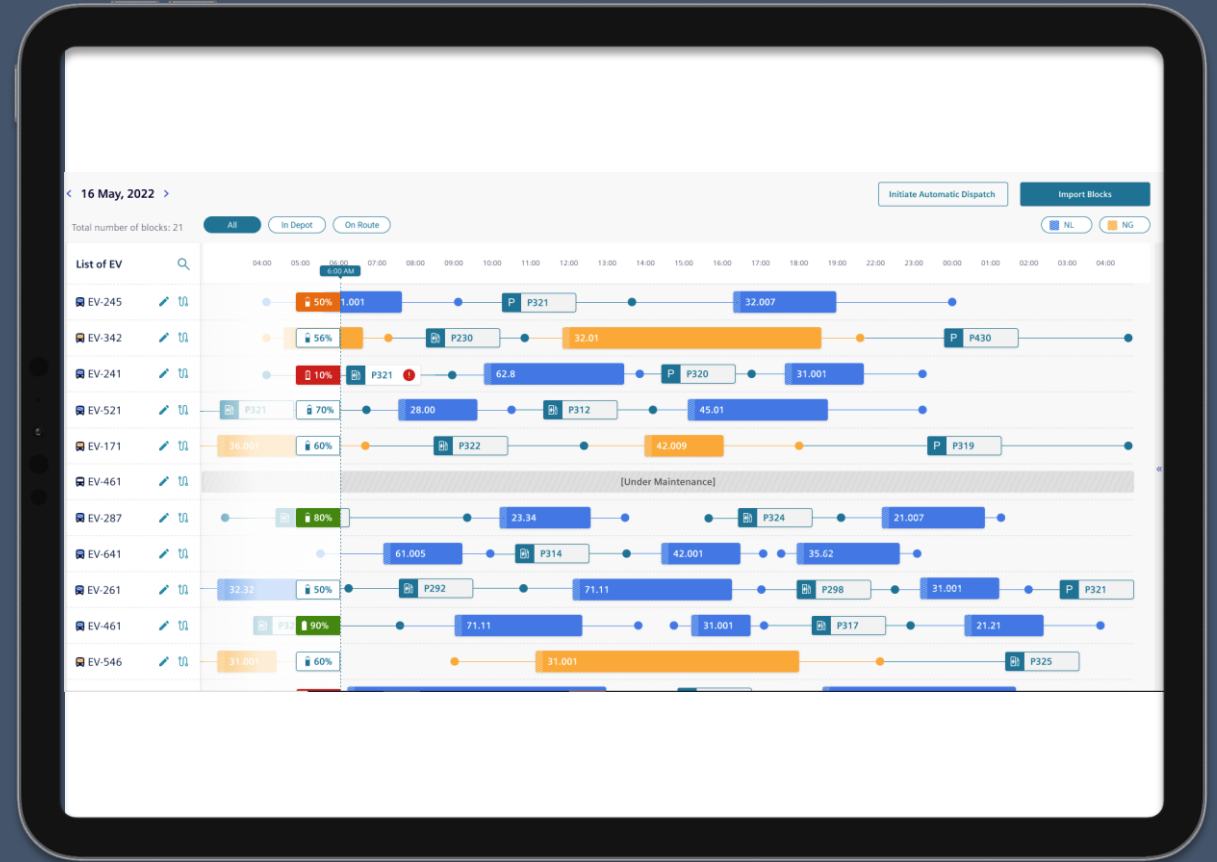
## Why digitalization supercharges your depot's profitability

**Run-Out Sheet**

Yardman:

26/04/2023

Running Duty Number	Fleet Number	Time Out	Start Point	Route Number	Time In
112	RS101 2613	03:56	HB	45 08:01 -3%	08:13
107	RS102 3589	04:28	HB	38	09:43
811	RS103 2541	04:56	HB	45 09:35 -23%	10:17
39	RS104 6351	05:13	RT	38	10:28
57	RS105 1702	05:28	HB	38	11:02
87	RS106 2356	05:56	HB	36 10:38 -32%	11:36
112	RS101 2613	03:56	HB	45 08:01 -3%	08:13
107	RS102 3589	04:28	HB	38	09:43
811	RS103 2541	04:56	HB	45 09:35 -23%	10:17
39	RS104 6351	05:13	RT	38	10:28
57	RS105 1702	05:28	HB	38	11:02
87	RS106 2356	05:56	HB	36 10:38 -32%	11:36



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## Solution Characteristics

- > IoT platform with web and mobile applications
- > User- and use-case centric "Software as a Service"
- > Data, analytics and unique vehicle knowledge
- > Industry and quality standards compliant: ISO 9001, IPxPT, ...
- > Automotive grade hardware and vehicle integration
- > Secure, scalable, reliable and available



## ZF 537 Assets and Values

- > Trusted partner in the automotive and transportation landscape
- > Independent
- > Quality in our DNA
- > Global company footprint
- > Over a hundred years of vehicle and transport solutions knowledge and experience

> Built the ZF 537 way:

- Passionate
- Empowered
- Anticipating