

---

# Corporate Presentation 2018

Adrian Andermatt, [Verkaufsleiter](#)

Ruf ICT Transportation – Ruf Telematik AG

## Ruf Group

- We are a privately held Swiss company founded in 1917 and employ 170 people. Ruf Group consist of three business divisions:
  - **ICT public** – solutions for public authorities,
  - **ICT transportation** – passenger information systems for public transportation,
  - **ICT enterprises** – solutions in digital signage and data security.
- Ruf Telematik is an engineering and systems integrator company that specializes in Mobile Passenger Information Systems (PIS) for public transportation. Our systems are designed for harsh and demanding applications, are scalable and designed for easy configuration and adaption to changing demands.
- We are a leading international supplier for PIS systems, with headquarters in Schlieren, Switzerland, production in Ammersbek, Germany and a worldwide customer base.

# Company History and Key Milestones

**1917**

- Foundation of Ruf AG by Alfons Ruf



**1997**

- Acquisition of Teleinform AG

**2001**

- SBB (Swiss Railway) gained as client

**2004**

- Foundation of Ruf Deutschland GmbH

**2009**

- Start of export business with projects outside Switzerland

**2012**

- Acquisition of C.O.P.S Electronics GmbH and merger into Ruf Deutschland GmbH

**2015**

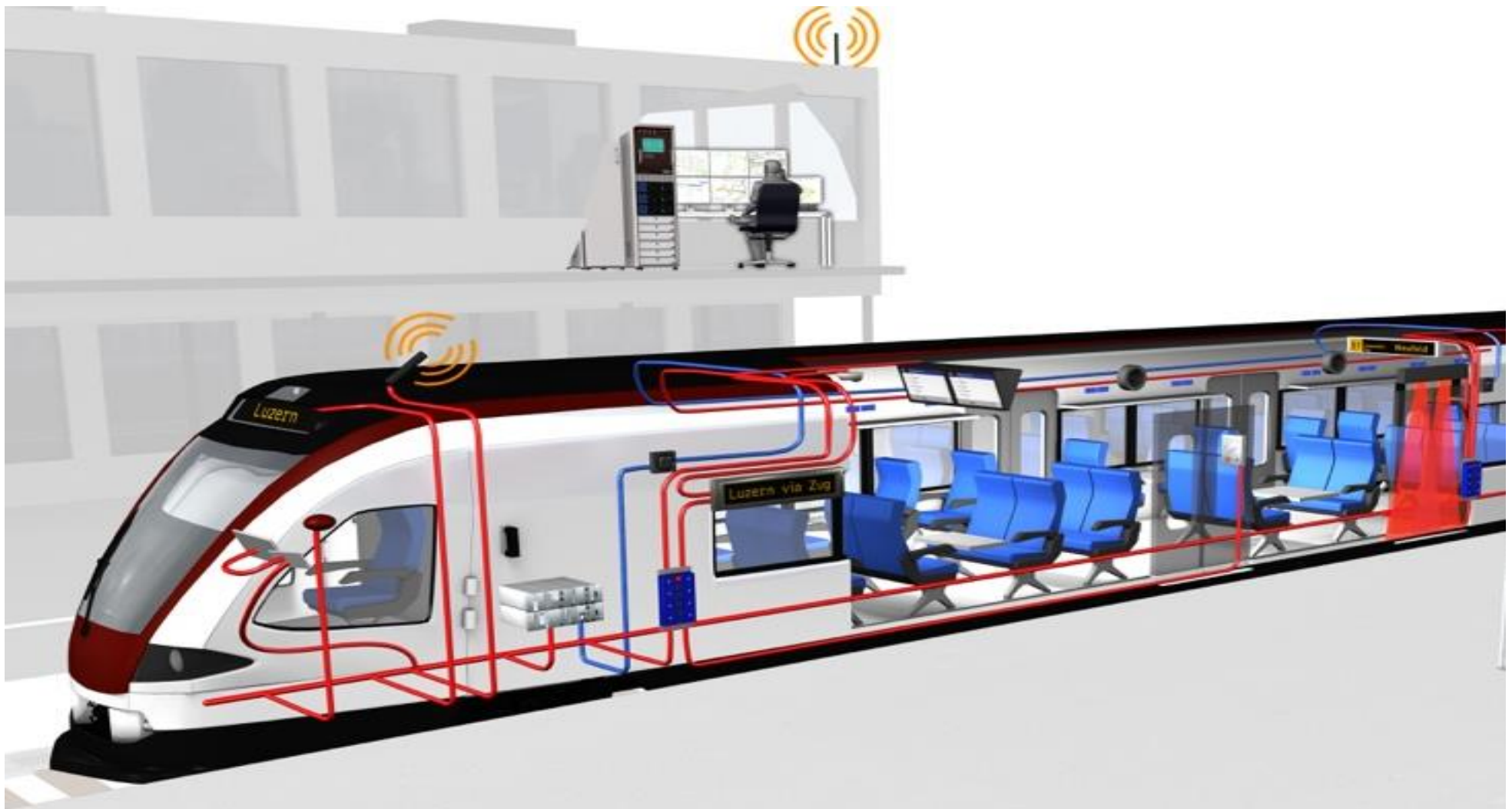
- Expansion of Ruf Deutschland GmbH (larger production facility)



# Ruf Offices and Worldwide Partners



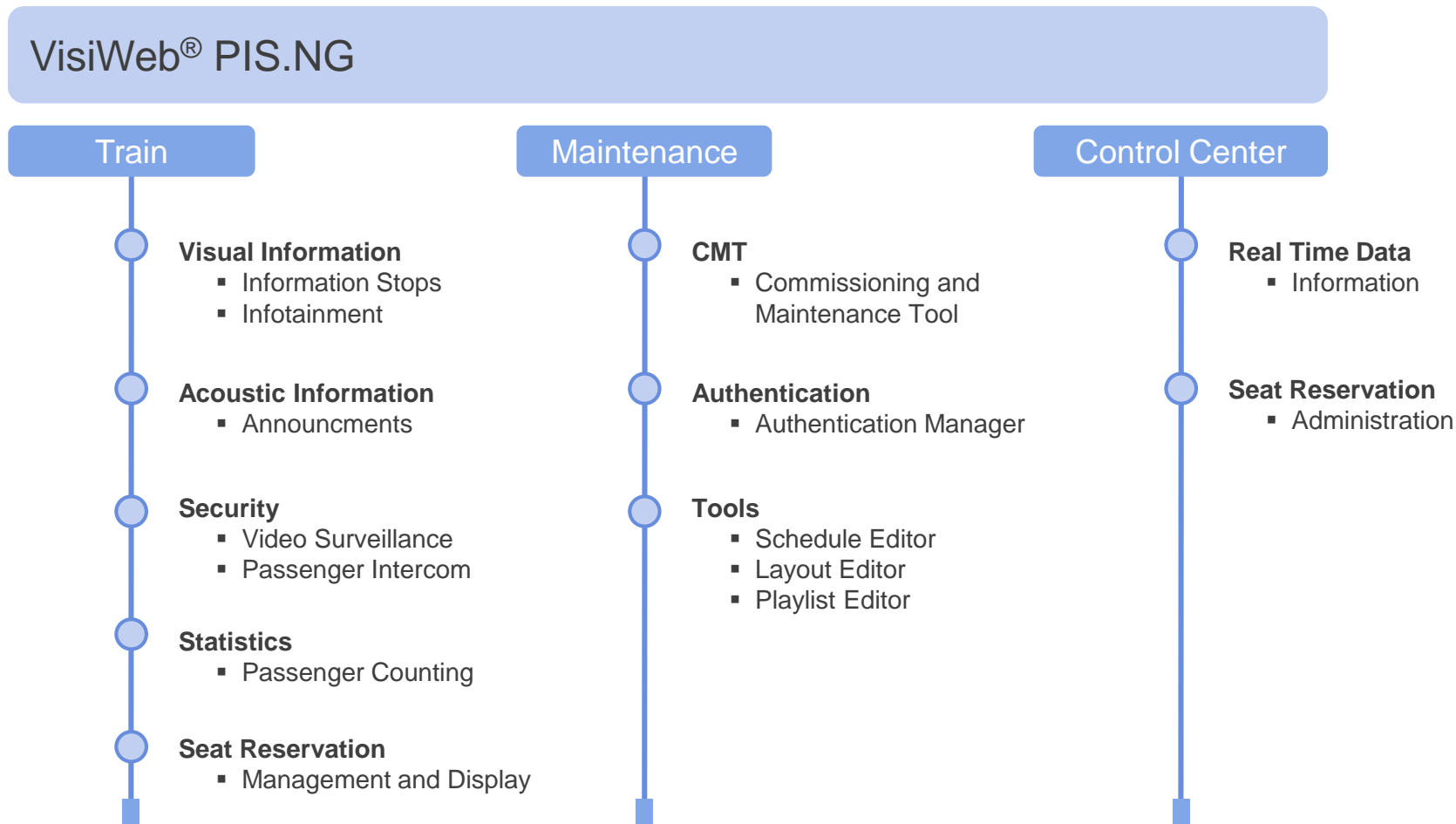
# VisiWeb® – in daily operation in more than 2300 train sets worldwide



## Core Competences

● Domain Knowhow	Consulting Pre-Sales Support	
● PIS Inhouse Engineering and R&D	Agile Quick reaction to costumer requests	
● Full System Provider	Fully Integrated System Single Point of Contact	
● System Integrator	Own and 3rd Party Systems	
● Project Management	Risk Management Transparency	
● After Sales Support	Training Tech Support Documentation	Consignment Stock Obsolescence Management

# Fully Integrated Passenger Information Systems



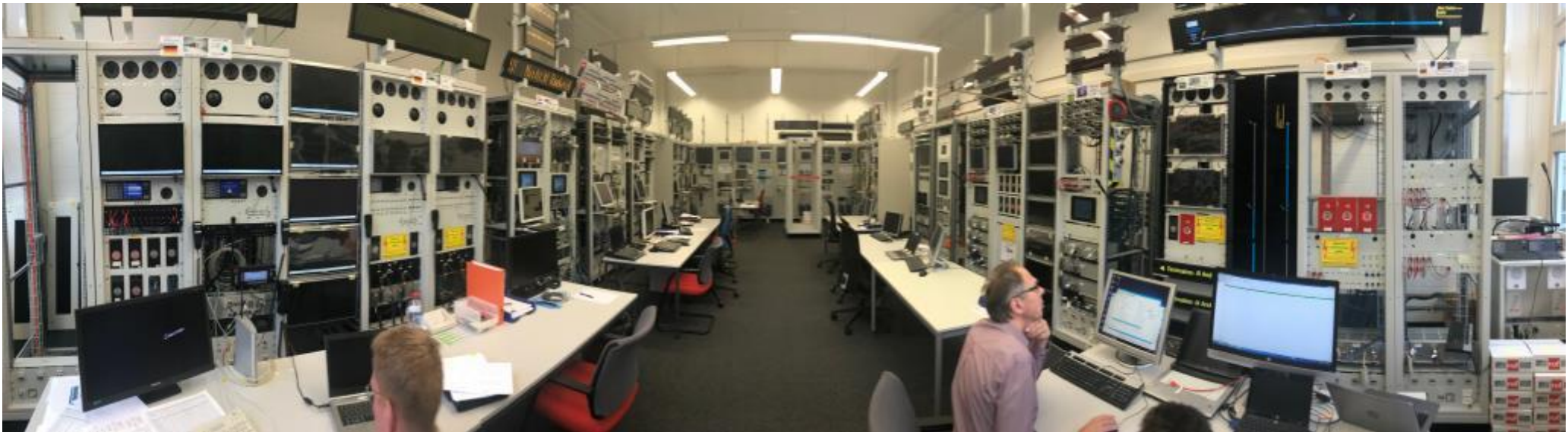
# VisiWeb® solution

Integrated system for:

PIS System Controller					
Communication					
Acoustic Announcement & Intercom System					
Displays & Monitors					
CCTV System					
Infotainment System					
Passenger Counting System Seat Reservation System					



# Testfloor



## References Manufacturers

**STADLER**

**CAF**

**ALSTOM**

**SIEMENS**

**newac**  
GROUP

**BOMBARDIER**

HYUNDAI  
**Rotem**

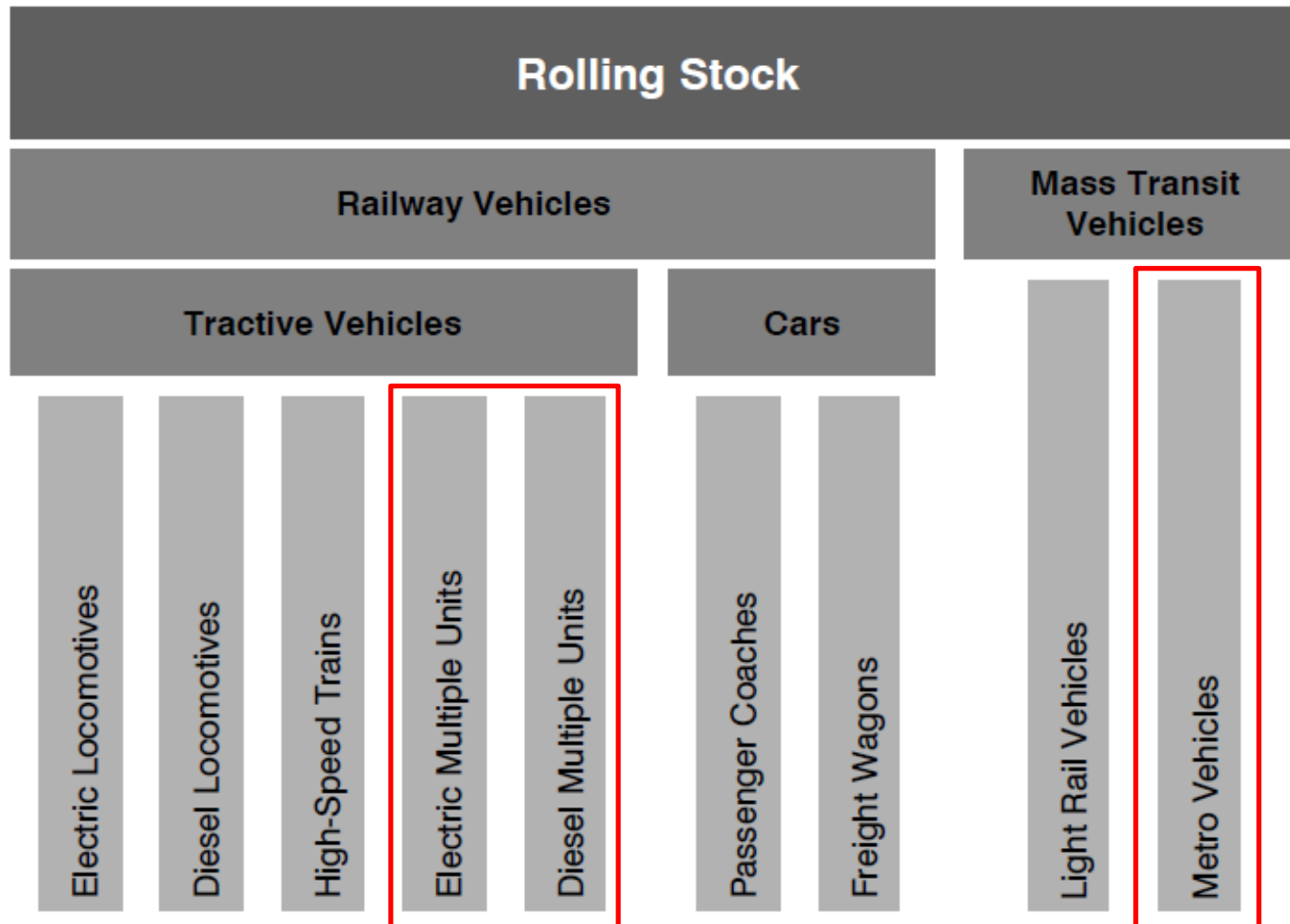
**I N A U T E C** GmbH  
International Automation Technology

**Scomi**


# References Operators



# Rolling Stock Structure




# World Market Overview EMU DMU Trains

World Market			EMU	Trend	DMU	Trend
	Installed base	Units 2015	33.400	↑	14.100	↗
		Average development 2015-2020 (p.a.)	+1,8%		+0,5%	
		Average age 2015 (in years)	20		22	
	Market for new vehicles	Average volume 2014-2016 (EUR million p.a.)	8.400	↗	1.100	↗
		Average development 2015-2020 (p.a.)	+3,6%		+2,7%	
		Volatility market volume 2015-2020 (SAW)	6,5%		9,3%	
	Market for after sales	Average volume 2014-2016 (EUR million p.a.)	6.600	↗	1.500	↗
		Average development 2015-2020 (p.a.)	+3,8%		+2,6%	
		Volatility market volume 2015-2020 (SAW)	0,4%		0,2%	
↑ Boom/strong growth   ↗ small growth   → stagnation   ↘ small decrease   ↓ clear decline <b>Volume:</b> > +5% p.a.   +2 to +5% p.a.   0 to +2% p.a.   -2 to 0% p.a.   < -2% p.a. <b>Installed Base:</b> > +5% p.a.   +2 to +5% p.a.   0 to +2% p.a.   -2 to 0% p.a.   < -2% p.a.						

## Key statements:

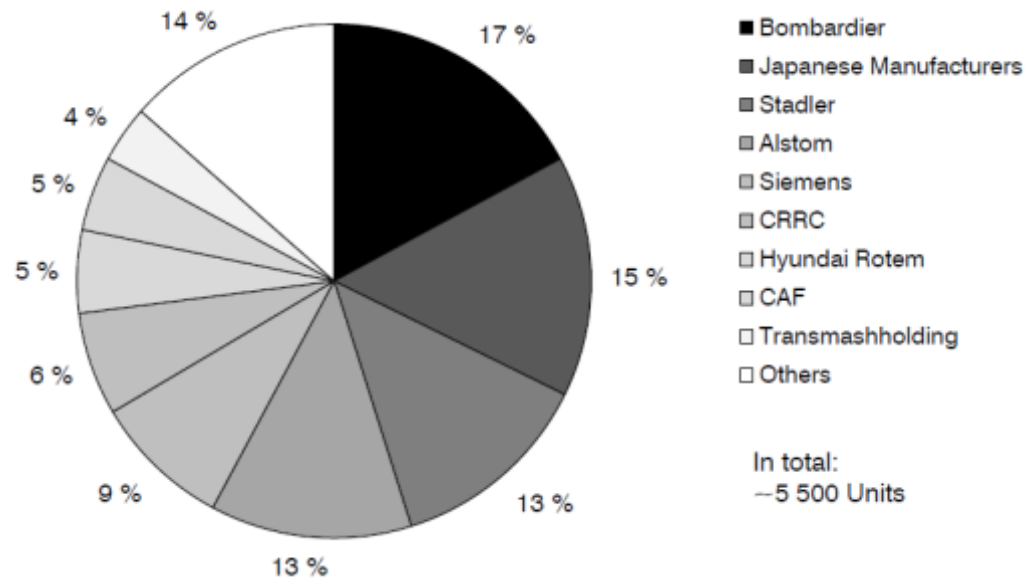
- Around EUR 9.5 billion currently being invested in new multiple units worldwide and EUR 7.9 billion invested in after sales
- Nearly 90% of the volume is accounted for EMUs
- The **TOP 5 markets are Germany, France, Japan, United Kingdom and Australia** with almost half of the worldwide market volume
- The OEM-markets for EMU and DMU **growth between 2% - 4% up until 2020**
- Growth mainly driven by the increasing demand for mobility, particularly in the conurbations in Asia and South America.

## World Market Overview Metro Trains

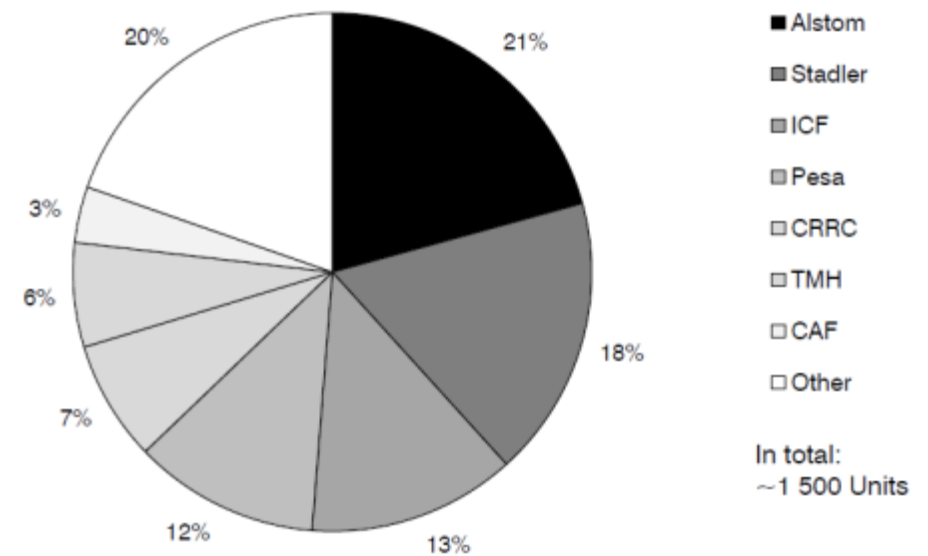
WORLD			Metro	Trend
	Installed Base	Cars 2016	108,800	↑
		Average development 2016-2021 (p. a.)	5.5%	
		Average age 2016 (in years)	14.3	
	Market For New Vehicles	Average volume 2015-2017 (EUR million p. a.)	8,110	→
		Average development 2016-2021 (p. a.)	1.5%	
		Volatility market volume 2016-2021 (SAW)	13.4%	
	Market For After Sales	Average volume 2015-2017 (EUR million p. a.)	4,900	↗
		Average development 2016-2021 (p. a.)	4.6%	
		Volatility market volume 2016-2021 (SAW)	11.7%	
<p>           ↑ Boom/Strong Growth    ↗ Small Growth    → Stagnation    ↘ Small Decrease    ↓ Clear Decline         </p> <p> <b>Volume:</b>                    &gt; +5%p.a.                    +2 to +5% p.a.                    0 to +2% p.a.                    -2 to 0% p.a.                    &lt;-2% p.a.         </p> <p> <b>Installed base:</b>                    &gt; +1.5%p.a.                    +0.5 to +1.5% p.a.                    -0.5 to +0.5% p.a.                    -1.5 to -0.5% p.a.                    &lt;-1.5% p.a.         </p>				

# World Market Overview EMU DMU Trains

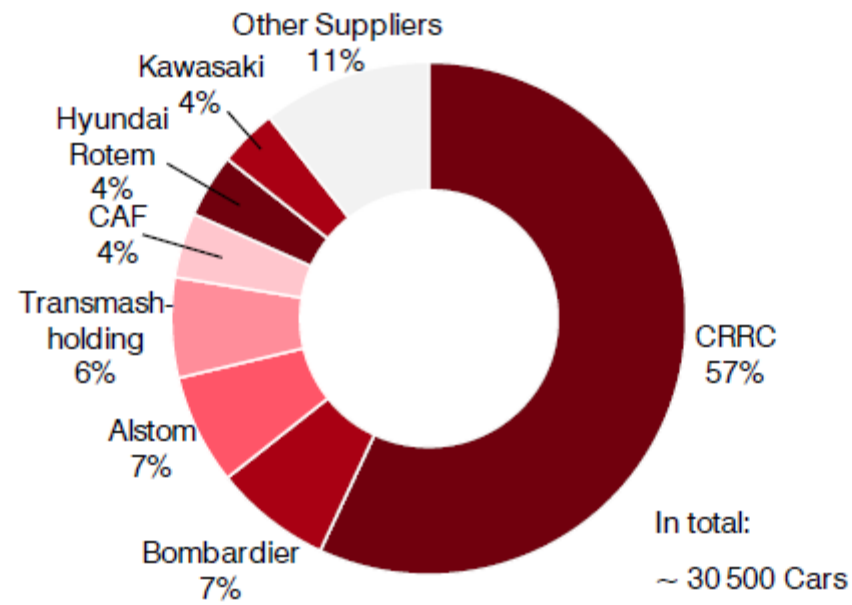
## ■ EMU



## ■ DMU



# World Market Overview Metro Trains





## Challenges & Obstacles

- Financially challenging projects
- Incomplete specifications at project order
- Obsolescence – long term component availability
- Our customers are train manufacturers, our system must be compatible with the operator's systems
- Digitalization
- Local content (governmental projects)
- Work permissions for commissioning and acceptance tests
- Reaction time during project execution and in the after sales period

# Swiss quality from the railway country

for operators, manufacturers and passengers



David Gubler – [bahnbilder.ch/picture/7260](http://bahnbilder.ch/picture/7260)