

SCI DATABASE – COMPREHENSIVE & RELIABLE COMPILATION OF MARKET DATA REGARDING ROLLING STOCK & INFRASTRUCTURE ASSETS

Nicolas Wille / Cologne, June 2020



SYSTEMATIC EVALUATIONS AND ANALYSES CAN BE REALIZED BASED ON RELIABLE DATA

Fleet Database

Worldwide fleet stocks
Regional distribution and market shares
Technical information

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Project Outlook / Market Monitoring

Current and future projects
Market potential
Procurement projects

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Market Forecast

Market volumes
Drivers of development
Top-down und bottom-up analyses

[▶ Read more](#)

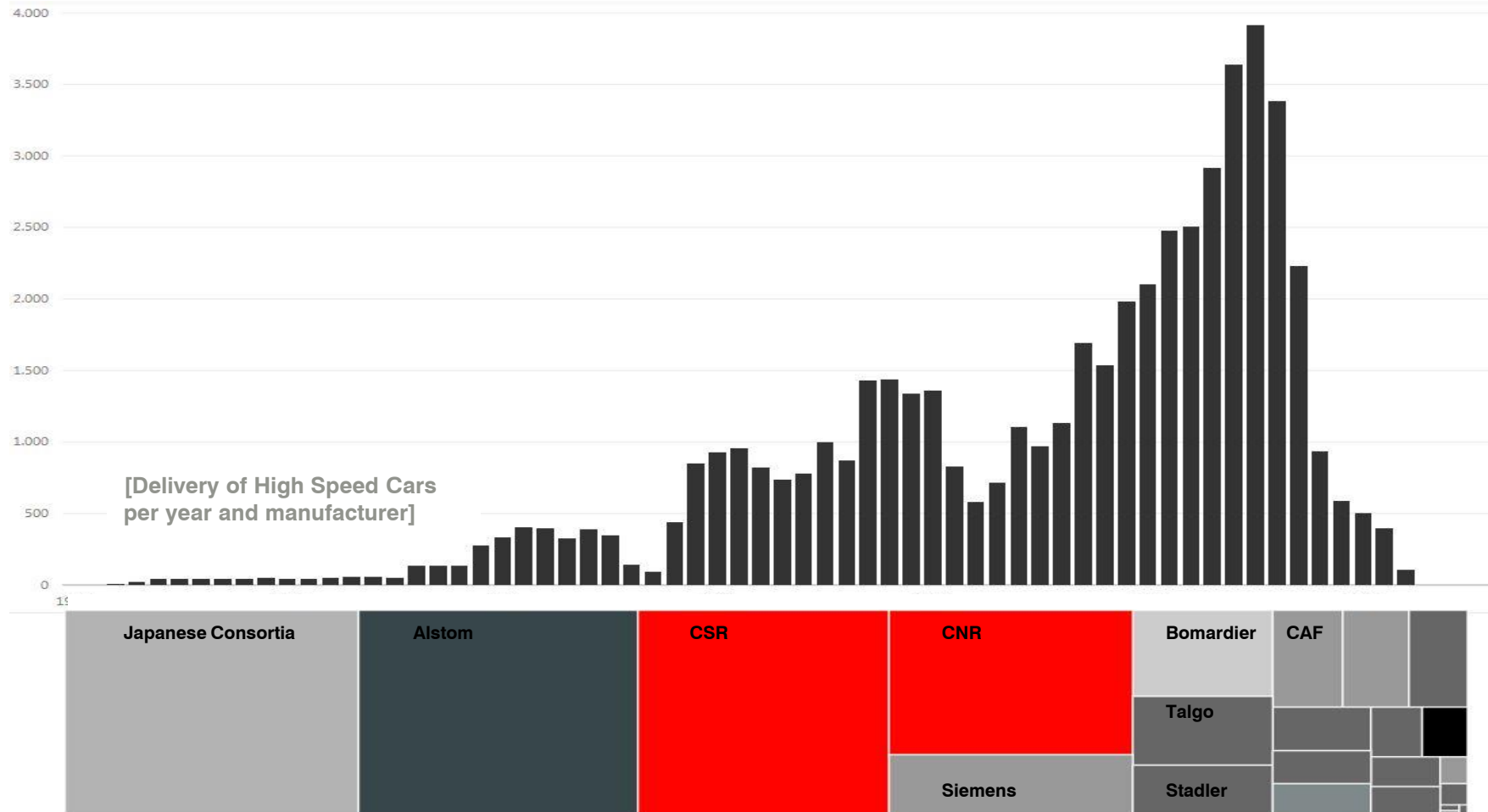
Player, Networks and Contracts

Key figures
Network lengths
Transport contracts

[▶ Read more](#)

- **Continuously collected and updated key figures on companies, vehicle fleets and network infrastructure**
- **SCI DATABASE provides a unique option for data-based decision making in the railway industry**
- **Our clients receive individual analyses and valuations by the fastest means**

FLEET DATABASE PROVIDES INFORMATION ABOUT AGE STRUCTURES, MANUFACTURERS, ETC.



- The database provides an overview of worldwide fleet sizes of railway vehicles
- Validated information exists for each product segment (e.g. installed base, regional distribution, market shares, developments etc.)
- The data sets include information about number, status and ownership of the individual types as well as series of railway vehicles
- In many cases technical information and the status of completed modernizations or current maintenance are stored

Source: SCI Database

PROJECT OUTLOOK / MARKET MONITORING DISPLAYS ALL RELEVANT (UPCOMING) PROJECTS

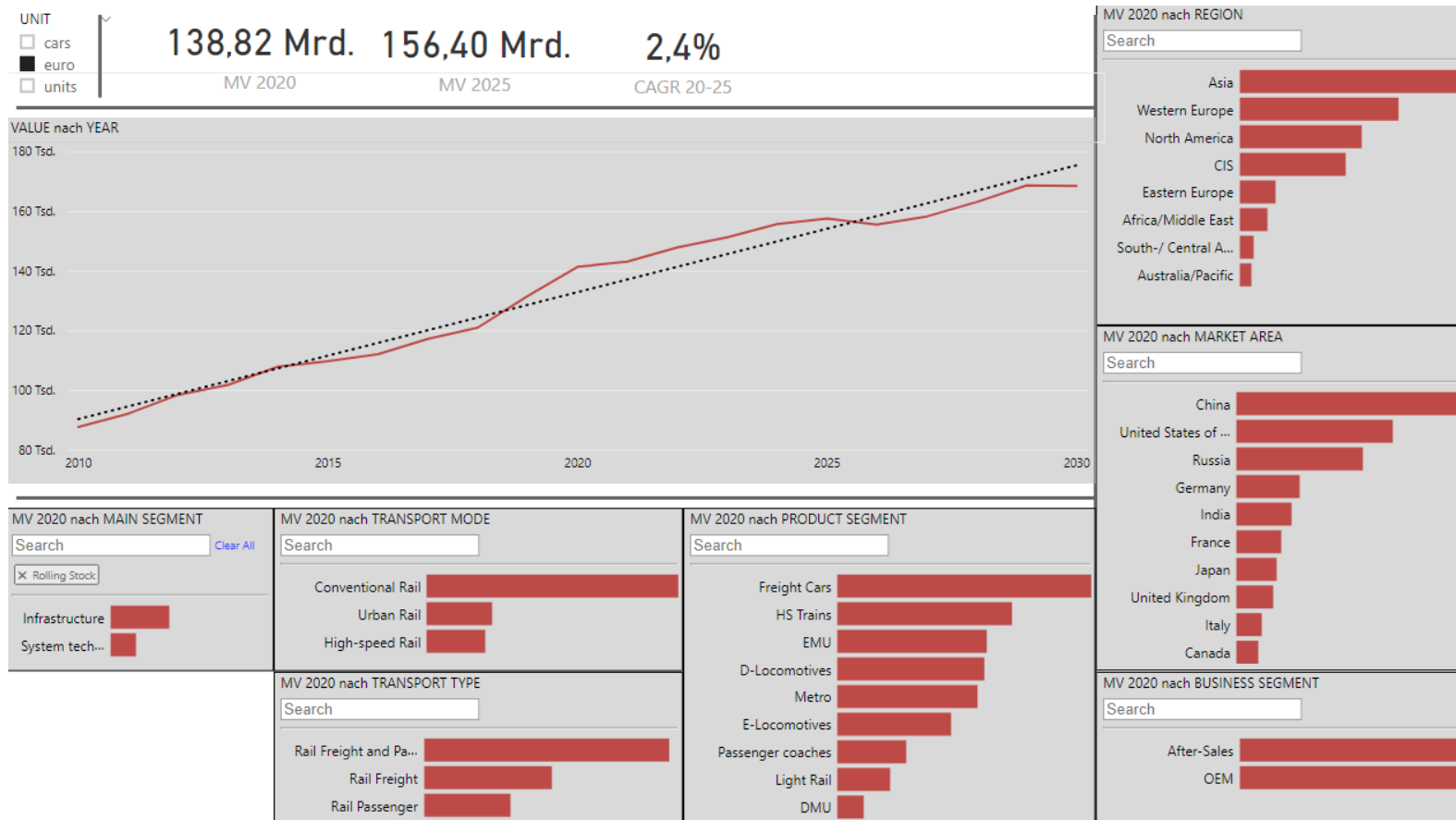
vehicle_order	Country	Project	Operator / Owner	Supplier	Asset Type
1392	Germany	HK2000	Berliner Verkehrsbetriebe	Bombardier Transportation GmbH	Metro
1754	Germany	Combino	Freiburger Verkehrs AG	Siemens AG, Mobility Division	Light Rail
299	Germany	HK 06 (Line 1,2 and 15)	Berliner Verkehrsbetriebe	Bombardier Transportation GmbH	Metro
7516	Germany	Prototype bi-directional short (Incentro)GT6-08	Berliner Verkehrsbetriebe	Bombardier Transportation GmbH	Light Rail
11850	Germany	Prototype bi-directional long (Incentro)GT8-08	Berliner Verkehrsbetriebe	Bombardier Transportation GmbH	Light Rail
11851	Germany	Prototype one-directional short (Incentro)GT6-08	Berliner Verkehrsbetriebe	Bombardier Transportation GmbH	Light Rail
11852	Germany	Prototype one-directional long (Incentro)GT8-08	Berliner Verkehrsbetriebe	Bombardier Transportation GmbH	Light Rail
42245	Germany	Flexity Berlin; Lines M4, M8, long unidirectional	Berliner Verkehrsbetriebe	Bombardier Transportation GmbH	Light Rail
48379	Germany	Type IK, U1-U4	Berliner Verkehrsbetriebe	Stadler Rail Group	Metro
43541	Germany	CAF	Freiburger Verkehrs AG	CAF Construcciones y Auxiliar de Ferrocarril	Light Rail
42246	Germany	Flexity Berlin short bidirectional	Berliner Verkehrsbetriebe	Bombardier Transportation GmbH	Light Rail
43870	Germany	Flexity Berlin, short unidirectional	Berliner Verkehrsbetriebe	Bombardier Transportation GmbH	Light Rail
44022	Germany	Flexity Berlin short and long bidirectional	Berliner Verkehrsbetriebe	Bombardier Transportation GmbH	Light Rail
42188	Germany	Type IK, U1-U4	Berliner Verkehrsbetriebe	Stadler Rail Group	Metro
48364	Germany	Flexity F8Z Berlin	Berliner Verkehrsbetriebe	Bombardier Transportation GmbH	Light Rail
49312	Germany	Type IK, U1-U4 exercised option	Berliner Verkehrsbetriebe	Stadler Rail Group	Metro

vehicle_order	Vehicle Family	order_date	delivery_from	delivery_to	Units	Cars per Unit	Total Amount of Cars
1392		01.01.2000	01.01.2001	31.12.2001	4	4	16
1754	Combino	01.01.2001	01.01.2002	31.12.2004	9	1	9
299		01.01.2004	01.01.2006	31.12.2007	20	4	80
7516	Flexity	01.01.2006	01.01.2008	31.12.2008	1	1	1
11850	Flexity	01.01.2006	01.01.2008	31.12.2008	1	1	1
11851	Flexity	01.01.2006	01.01.2008	31.12.2008	1	1	1
11852	Flexity	01.01.2006	01.01.2008	31.12.2008	1	1	1
42245	Flexity	01.01.2009	01.01.2011	31.12.2013	40	1	40
48379		20.07.2012	01.01.2015	31.12.2015	2	4	8
43541	Urbos	01.01.2013	01.01.2015	31.12.2017	12	1	12
42246	Flexity	01.01.2012	01.01.2013	31.12.2017	35	1	35
43870	Flexity	01.01.2009	01.01.2013	31.12.2017	24	1	24
44022	Flexity	01.01.2012	01.01.2016	31.12.2017	39	1	39
42188		20.07.2015	01.01.2017	31.12.2017	11	4	44
48364	Flexity	21.12.2015	01.01.2016	31.12.2018	47	1	47
49312		30.06.2016	01.04.2018	30.04.2019	27	4	108

Source: SCI Database

- Information on all current and already known future projects are continuously collected and maintained
- The overview of upcoming projects allows a timely recognition of future market potentials worldwide
- Within the segment of railway vehicles, the tool makes procurement plans, options, tenders and already contracted projects transparent
- Another project database collects information about expansion and new-build plans of infrastructure as well as public investment and financing plans

MARKET FORECASTS ARE BASED ON KNOWN PROJECTS COMBINED WITH EXPERT OUTLOOK



- **The market forecasts are based on concrete projects and integrate medium as well as long-term drivers of developments in country and transport markets**
- **Through the combination of top-down and bottom-up analysis in the form of continuous market observations and validation of outputs a high quality of results is achieved**
- **The market forecasts are attractive decision bases for strategy recommendations, because trends and market developments are identified at an early stage and get proved by concrete numerical data**

DATA SET EXAMPLE – BASIC INFORMATION INCLUDING OWNER / OPERATOR, VEHICLE TYPE, QUANTITY OF THE ORDERED VEHICLES AND ORDER TIME / DELIVERY TIME

Vehicle Asset Type:	EMU (ID 13) <input type="checkbox"/>	Vehicle Type:	FLIRT 3 (ID 1338) <input type="checkbox"/>
Vehicle Asset Subtype:	Regional Transport (ID 116) <input type="checkbox"/>	Vehicle Subtype:	FLIRT 3 5-car (ID 1627) <input type="checkbox"/>
VF Segment:	Regional and Commuter S <input type="checkbox"/>	Vehicle Operational Area:	passenger transport (ID 1) <input type="checkbox"/>
Level:	Single Deck <input type="checkbox"/>	Vehicle Operational Subarea:	regional and commuter tra <input type="checkbox"/>
Probability:	1 contracted / delivered (l) <input type="checkbox"/>	Type of Procurement:	<input type="checkbox"/>
Vehicle Owner <small>⚡</small> :	Landesanstalt Schienenfahrzeuge Baden-Württemberg (ID: 30348) (Germa		
Vehicle Operator <small>⚡</small> :	Go-Ahead Verkehrsgesellschaft Deutschland (ID: 28056) (Germany (ID: 3))		
SPNV Lot <small>⚡</small> :	Netz 1 Stuttgarter Netze Los 2 Rems-Fils (ID: 4702)	<input type="button" value="clear field"/>	
Line Franchise:	Stuttgarter Netz 1, Los 1b		
Type:	FLIRT 3		
Authority Number:	<input type="text"/>		
Factory Number:	<input type="text"/>		
Amount of Units:	19 <input type="checkbox"/>	Amount Cars:	5 <input type="checkbox"/>

DATA SET EXAMPLE – BASIC TECHNICAL DATA INCLUDING VEHICLE DIMENSIONS, ENGINE PARAMETER, POWER SUPPLY, DRIVING CHARACTERISTICS AND HOMOLOGATIONS

Vehicle Length [m]:	<input type="text" value="40.890"/>	<input type="checkbox"/>	Traction Type:	<input type="text" value="Dieselelektrisch (ID 3)"/>	<input type="checkbox"/>	Diesel Engine Supplier:	<input type="text" value="MAN"/>	<input type="checkbox"/>
Vehicle Width [m]:	<input type="text" value="3.000"/>		Vehicle Power Supply ↕:	<input type="text" value="Diesel Electric"/>	<input type="checkbox"/>	Diesel Engine Type:	<input type="text" value="MAN D2876 LE261"/>	
Height [m]:	<input type="text" value="4,04"/>		Traction Motor Supplier:	<input type="text" value="TSA"/>		Emmission Standard:	<input type="text" value="Euro IIIA"/>	<input type="checkbox"/>
Weight Empty [tons]:	<input type="text" value="70.000"/>		Traction Motor Type:	<input type="text"/>		Transmission Supplier:	<input type="text"/>	
Weight Total [tons]:	<input type="text"/>		Number of Engines:	<input type="text" value="2"/>	<input type="checkbox"/>	Transmission Type:	<input type="text"/>	
max. Axle Load [tons]:	<input type="text"/>	<input type="checkbox"/>	Engine Power [kW]:	<input type="text" value="382"/>	<input type="checkbox"/>	Generator Alternator Supplier:	<input type="text"/>	
			Total Power [kW]:	<input type="text" value="764"/>	<input type="checkbox"/>	Generator Alternator Type:	<input type="text"/>	
			Contin. Power [kW]:	<input type="text"/>		Traction Battery Supplier:	<input type="text"/>	
			Traction Converter Inverter Supplier:	<input type="text"/>		Traction Battery Type:	<input type="text"/>	
			Traction Converter Inverter Type:	<input type="text"/>		Battery Power [kW]:	<input type="text"/>	
			Transformer Supplier:	<input type="text"/>				

DATA SET EXAMPLE – OTHER INFORMATION LIKE MANUFACTURER, FINAL ASSEMBLING SITE, FINANCIAL ORDER VOLUME, SOURCE AND PASSENGER DATA ARE PARTLY ALSO AVAILABLE

Main Supplier:	Waggonfabrik Uerdingen, Waggon-Union
Category Supplier:	German Manufacturer (ID: 23841) <input type="checkbox"/>
Category Supplier Best Guess I:	
Category Supplier Best Guess II:	
Site Final Assembling:	Siemens Rail Systems (ID: 14074) (Town/City: Krefeld) <input type="checkbox"/>
Supplier Mechanical Part:	<input type="checkbox"/>
Supplier Electrical Part:	<input type="checkbox"/>
	<input type="checkbox"/> [from MRO Modul]
Bidder:	<input type="text"/>
Currency Selection #:	EUR - 2018-12-31 (ID 2663) <input type="text"/>
	Currency: (obsolete) <input type="text"/> [old values]
price per unit:	total prices:
Price per Unit (foreign currency):	1 <input type="text"/> [Original Currency million]
Price Per Unit Euro:	1 <input type="text"/> <input checked="" type="checkbox"/> [€ million]
	Total Price (foreign currency): <input type="text"/> [Original Currency million]
	Total Price Euro: <input type="text"/> <input type="checkbox"/> [€ million]

Passenger Capacity:	562
Amount of Seats Total:	265 <input type="checkbox"/>
Amount of Seats Firstclass:	<input type="text"/>
Amount of Seats Secondclass:	240
Standing Capacity:	297
Amount of Seats Folding:	25
Entrance Height [mm]:	735
Floor Height Low Floor [mm]:	735 <input type="checkbox"/>
Floor Height High Floor [mm]:	1000
Low Floor Share:	<input type="checkbox"/>
Amount of Doors:	6
Door Width [mm]:	<input type="text"/>
HVAC:	<input checked="" type="checkbox"/>
Heating System:	<input type="text"/>
Amount of Toilette Systems:	1 <input type="text"/> [nnn]

CONTACT



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