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MULTIPLE UNITS - GLOBAL MARKET TRENDS

Forecast, Fleet, Suppliers, Procurement Projects

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This study entitled “Multiple Units - Global Market Trends” provides a comprehensive overview into the structure, installed bases, procurements, manufacturers and development trends in the rail vehicle segment analysed.

Based on current developments in rail transport, the present study delivers an analysis and sound estimate of the market for diesel as well as electric multiple units. Based on the successful preceding study from 2013 and experience gained from more than 2 000 projects in the field of railway technology in the past few years, SCI Verkehr has verified the central input data. We have reviewed and updated all chapters of the preceding study.

The market study „Multiple Units - Global Market Trends” provides in particular

- A glance at the worldwide market for multiple units for regional and commuter transport differentiated by region, including an in-depth analysis of the most important national markets
- A comprehensive analysis of the current fleet stocks concerning operational purposes, quantities and age structures as well as future procurement potential
- An overview of the most important drivers behind the procurement and refurbishment
- Analysis of market shares of manufacturers as well as a forecast of the vehicle demand
- Overview of the manufacturers of regional and local transport multiple units including a brief description of the current range of products and services in the annex to the study
- A condensed presentation of the most important fleet-specific features of multiple units for regional and local transport in form of diagrams
- A list of operators’ rolling stock fleets and the current procurements of regional and local transport multiple units in the annex to the study

All in all, the study provides a well-founded analysis of the worldwide market for regional and commuter multiple units. The study therefore provides both, companies established in the railway industry as well as active and potential operators with important information for operational and strategic planning.

SCI Verkehr analyses markets from the bottom up: based upon systematic observation of the railway markets, a detailed worldwide database of the installed base and projects forms the basis for in-depth studies on the various segments of the railway industry and the most important regional focus markets. Within the scope of continuous creation of the Multi Client Series, SCI Verkehr systematically analyses railway technology of more than 100 core countries.

The study is available in English from February 2016.

Your contact:

Ann Kathrin Arntz
Marketing and Sales
Phone: +49-221-93178-20
Fax: +49-221-93178-78
Email a.artz@sci.de

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1 Executive Summary: Multiple Units – Global Market Trends

Market Overview


North America			EMU	Trend	DMU	Trend
	Installed base	Units 2015	xxx	→	xxx	→
		Average development 2015-2020 (p.a.)	+x,x%		+x,x%	
		Average age 2015 (in years)	xxx		xxx	
	Market for new vehicles	Average volume 2014-2016 (EUR million p.a.)	xxx	↗	xxx	↗
		Average development 2015-2020 (p.a.)	+x,x%		+x,x%	
		Volatility market volume 2015-2020 (SAW)	x,x%		x,x%	
	Market for after sales	Average volume 2014-2016 (EUR million p.a.)	xxx	↗	xxx	↗
		Average development 2015-2020 (p.a.)	+4,1%		+9,9%	
		Volatility market volume 2015-2020 (SAW)	x,x%		x,x%	
↑ Boom/strong growth ↗ small growth → stagnation ↘ small decrease ↓ clear decline Volume: > +5% p.a. +2 to +5% p.a. 0 to +2% p.a. -2 to 0% p.a. < -2% p.a. Installed Base: > +5% p.a. +2 to +5% p.a. 0 to +2% p.a. -2 to 0% p.a. < -2% p.a.						

Figure 1:Market Overview North America

[...]

6 The Market for Multiple Units in North America

[...]

Market Environment/Transport Market

Commuter rail in North America is focused on some major networks and many smaller services. Many newer commuter railways offer service exclusively during peak times (e.g. West Coast Express, Go Transit). [...] Commuter rail transport is dominated by public companies that focus on their regional markets. [...]

Reflecting to weekday ridership, the most important commuter rail operators are:

- Long Island Rail Road (New York)
- [...]

Development of the rail transport performance in North America between 2011 - 2015 [Index 2011 = 100]

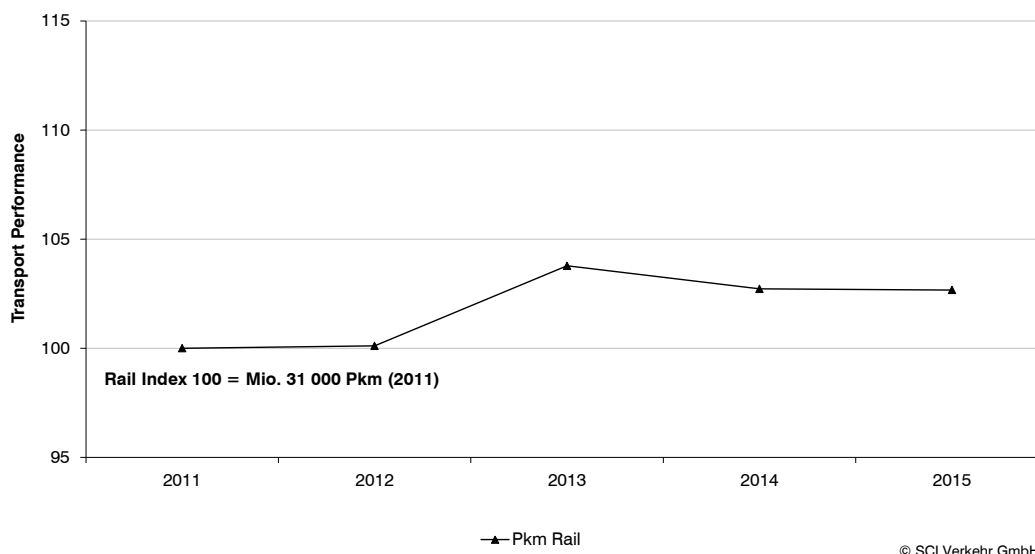


Figure 78: Transport development in rail passenger transport in North America

The region performed 32 billion Pkm in 2015. The US accounts for around 92% of the transport performance. From 2011 to 2015, the transport performance in the region grew by just 3%. [...]

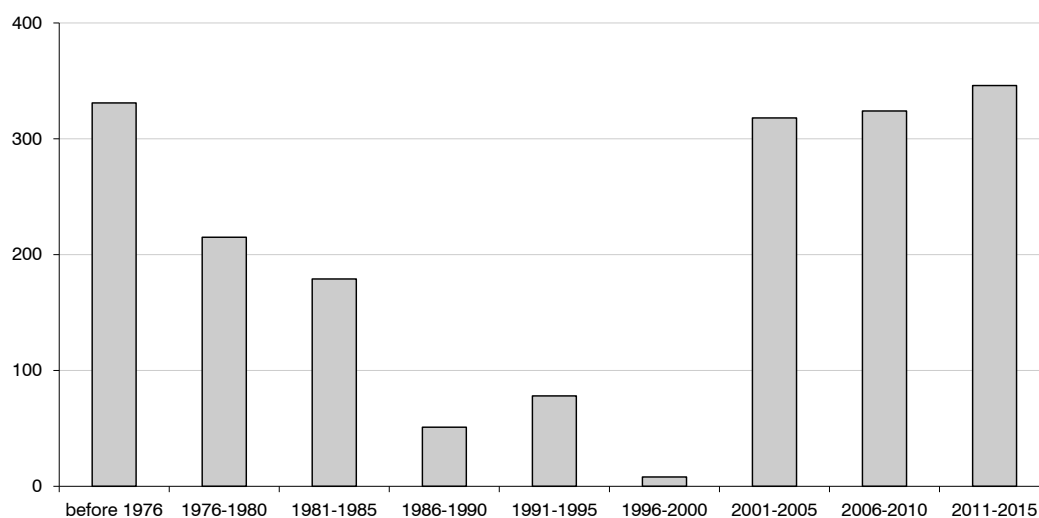
Installed base/age structure

Electric multiple units

Approximately 1.850 EMUs are currently operated in North America. One EMU is made up of about 1.9 cars on average. [...]

Installed base and age structure EMUs in North America 2015			
Country	Current installed base [units]	Current installed base [units]	Average age
USA	x	x	x
Canada	x	x	x
Mexico	x	x	x
Total	1 850	3 740	20

North America: Age structure EMU fleet [Number of Units]



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Figure 79: Age structure EMUs North America 2015

Because of the high rate of new and replacement procurements in the last few years, the average age of the fleet is only 20 years. [...]

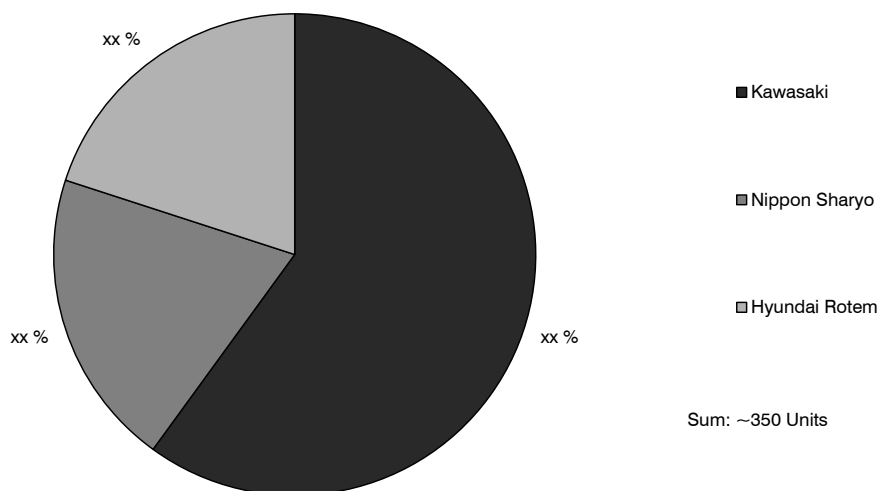
[...]

Manufacturers/Products/Market Shares

Electric Multiple Units

In the analysis period 2011 to 2015 around 350 EMUs were procured, all in the US. The Asian manufacturers Kawasaki, Hyundai Rotem and Nippon Sharyo share the market in the US. [...]

**North America: EMU Market share by manufacturer 2011-2015
[in Units]**



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Figure 81: Market shares manufacturers EMUs North America 2011-2015

Known procurements for the coming years are dominated by Kawasaki and Hyundai Rotem. [...]

Diesel multiple units

[...]

Market volume and market development

Electric Multiple Units

The current market volume for new EMUs in North America is around EUR xxx million per year, for after-sales services around EUR xxx million.

[...]

This market development is influenced by the following drivers:

Drivers of EMU Procurements	Brief description	Relevance	Trend
Demand for mobility	[...]	●	↗
Investment funds	[...]	●	↗
Rail infrastructure	[...]	◐	↗
Fleet structure	[...]	◑	↗
Comfort and level of quality	[...]	◒	→

[...]

Important current and planned procurement projects

- For New York the Long Island Rail Road Company (LIRR) and Metro-North Commuter Railroad Company (MNR) announced the procurement of new EMUs from Kawasaki. The Railroads will procure 76 M-9 Married-Pair EMU Cars for LIRR in the Base Order and up to 600 additional M-9 Cars by exercise of multiple options under the M-9 Contract, with delivery starting in 2017.
- [...]

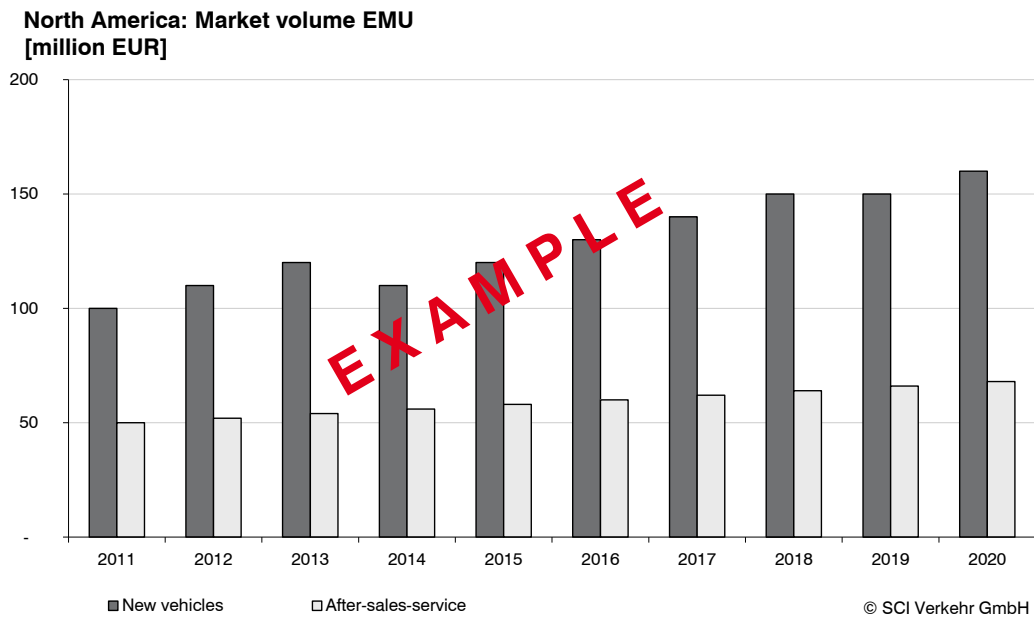


Figure 83: Analysis and forecast of market volume for new vehicles and after-sales service EMUs in North America 2011-2020

ANNEX A: EXAMPLE

Hyundai Rotem



Overview			
Head Office:	12 Heolleung-ro, Seocho-gu, Seoul, Republic of Korea		
Website:	www.hyundai-rotem.co.kr		
Shareholders:	43.4% Hyundai Motors, 24.8% Morgan Stanley (MSPE Metro-Investment AB)		
Management:	Kim Seung-Tack (Hyundai Rotem CEO)		
Employees (2014):	xxx		
Turnover (2014):	EUR x.x billion		
Profit (2014):	EUR -xx million		
<p>Rotem became part of Hyundai Motor Group (HMG) in 2001. With regard to its rolling stock activities, the company produces a wide range of rolling stock including high-speed rail (KTX), seeking for turnkey E&M (Electrical & Mechanical) projects that include relevant electrical equipment and signal systems. Hyundai Rotem is the largest company in the rail industry in the Korean market and is represented in all vehicle segments. Hyundai Rotem also manufactures magnetically levitated vehicles (MAGLEVs). [...]</p> <p>Although Hyundai Rotem has been able to compete against European and Japanese rolling stock producers so far, the company sees a further challenge to compete against the rapidly improving Chinese manufacturers with increasing competitiveness in both technology and price.</p>			
Sites of final assembly			
Hyundai Rotem's own sites are located in Korea and the US. [...]			
Country	Site	Products	Remarks
USA	Philadelphia	EMU, PC	Employees: ~250 Production capacity: 100 cars p.a.
[...]			
Product information			
Segment	Important products	Market shares (2011–2015)	Market positioning / main contracts
EMU	Silverliner V [...]	xx% (AF) xx% (WW) [...]	Hyundai Rotem is among the top 10 EMU manufacturers worldwide and present in most market regions. Eastern Europe and Asia are the main sales region for its multiple. [...]
DMU	[...]	[...]	[...]

Bestellformular MC Multiple Units

Bitte per Fax zurücksenden an: + 49 (221) 931 78-78 oder per E-Mail an: a.arntz@sci.de

SCI Verkehr GmbH – Büro Köln

z.Hd. Frau Ann Kathrin Arntz

Hiermit bestelle ich die Marktstudie „Multiple Units – Global Market Trends“

Anzahl	Ausgabe	Sprache	Einzelpreis*	Gesamtpreis*
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	PDF + 1 Printexemplar	Englisch	3.700 €	
			Gesamtpreis*	

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SCI/Verkehr

Hamburg Office

SCI Verkehr GmbH
Schanzenstraße 117
20357 Hamburg
Phone: 49 (0) 40 5071970
Fax: 49 (0) 40 50719720

E-Mail: info@sci.de
www.sci.de

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Cologne Office

SCI Verkehr GmbH
Vor den Siebenburgen 2
50676 Köln
Phone: 49 (0) 221 931780
Fax: 49 (0) 221 9317878

Berlin Office

SCI Verkehr GmbH
Köpenicker Strasse 48/49
Eingang G
10179 Berlin
Tel.: 49 (0) 30 2844540
Fax: 49 (0) 30 28445420