

100% availability – through digitalized lifecycle services in the rail industry

International Railway Fair in the area 1520 – August 28th, 2019
Johannes Emmelheinz | CEO Siemens Mobility Customer Services

Mobility Customer Services supports all service related topics and makes rail operations even more efficient with innovative technologies at all levels

Customer
Services

Mobility
Management



Customer
Services

Turnkey
Projects &
Electrification



Customer
Services

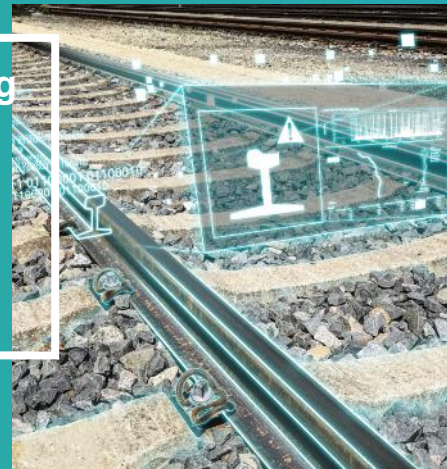
Rolling Stock



Spare Part
Services



Rail Monitoring
Systems
(MRX)



Digital Services



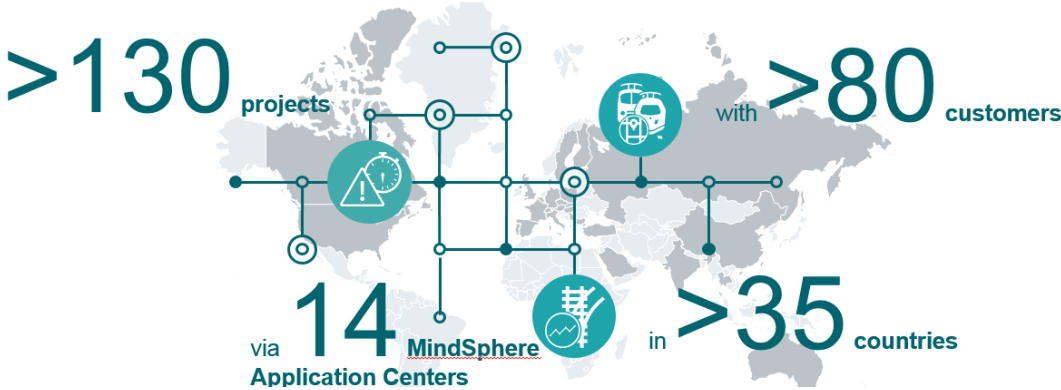
Mobility Services as leader in digital services



We shape connected mobility with integrated and digitalized processes for **100% system availability**

From “Traditional” Maintenance to Predictive Maintenance and Operations Optimization: We combine data analytics and deep rail domain know-how

Via our
Railigent
Open
Ecosystem
powered by
MindSphere



With the goal to:

Improve
Maintenance

Ensure **100%**
operational
availability

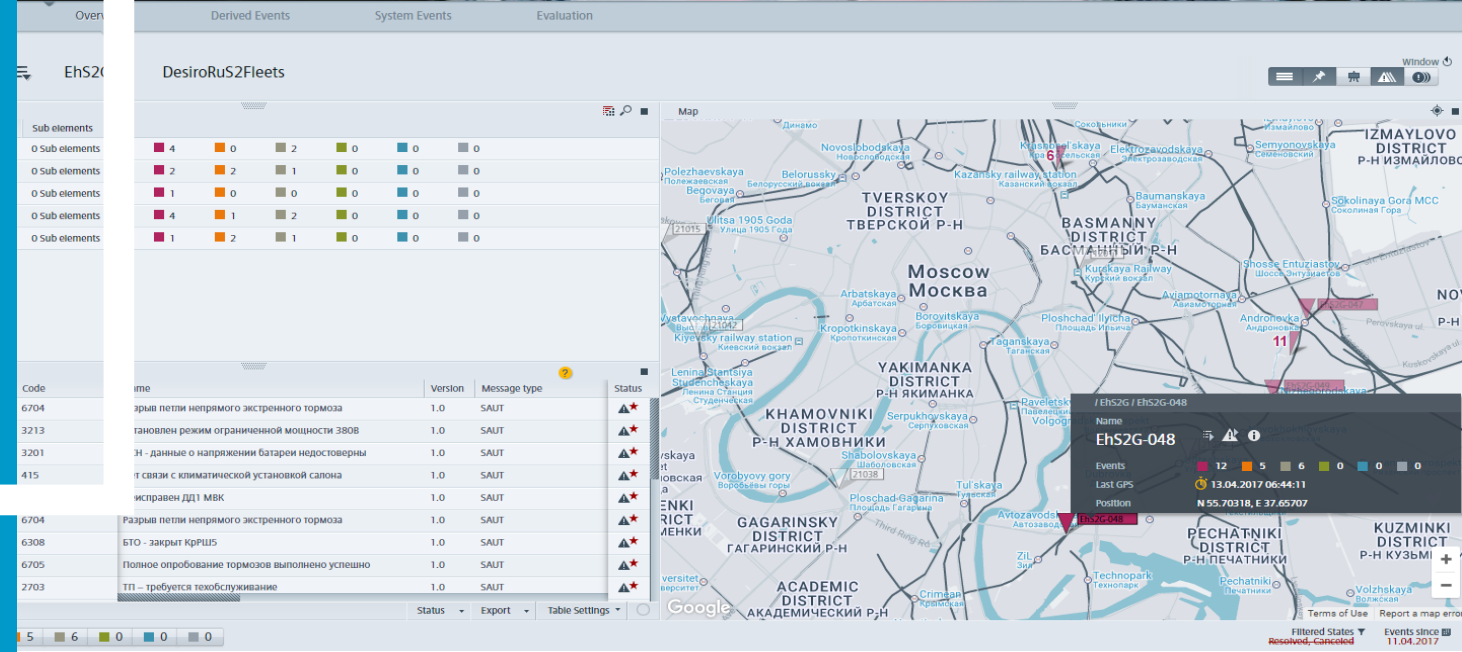
Optimize
operations



3 years of succesful Lastochka operation in Moscow enhanced with Siemens Mobility Digital Services

- Sep16: Launch of Moscow Central Circuit
- 129,5 mln passengers transported in 2018 (11% of total railway passenger turnover in Russia)
- Number of trains will be increased from 36 to 45 due to high passenger demand (headway – 4 minutes)
- 24/7 full service by Siemens in digital depot Podmoskovnaya
- 100% fleet connectivity enables **smart monitoring, data analysis and prediction**

SIEMENS
Ingenuity for life

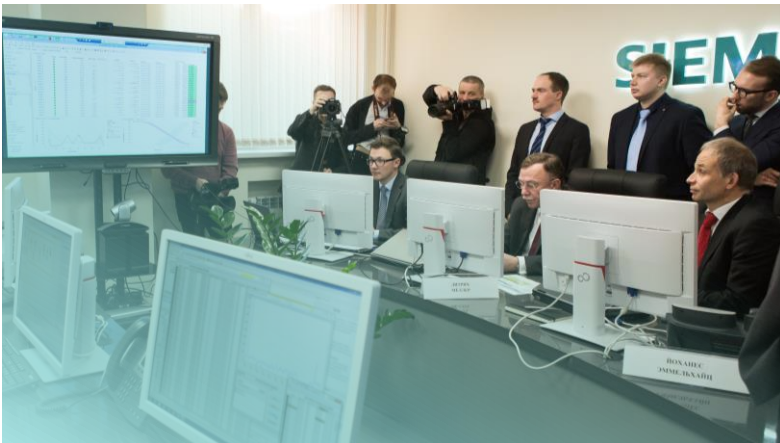


Siemens ensures reliable Moscow Central Circuit operation – From proven on-site maintenance to digital services



Depot Podmoskovnaya

- 24/7 full service on-site
- 80 5-car trains
- >99% fleet availability
- Modern depot designed according to Siemens requirements



Data Service Center Moscow

- Our open ecosystem powered by Railigent – Siemens railway IoT system
- Proximity to maintenance operations
- Data services for infrastructure and rolling stock
- Smart monitoring, analysis and prediction for Lastochka traction motors, doors, HVAC and more



Thank you very much!



Johannes Emmelheinz

CEO Mobility Customer Services

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[siemens.com/mobility-services](https://www.siemens.com/mobility-services)

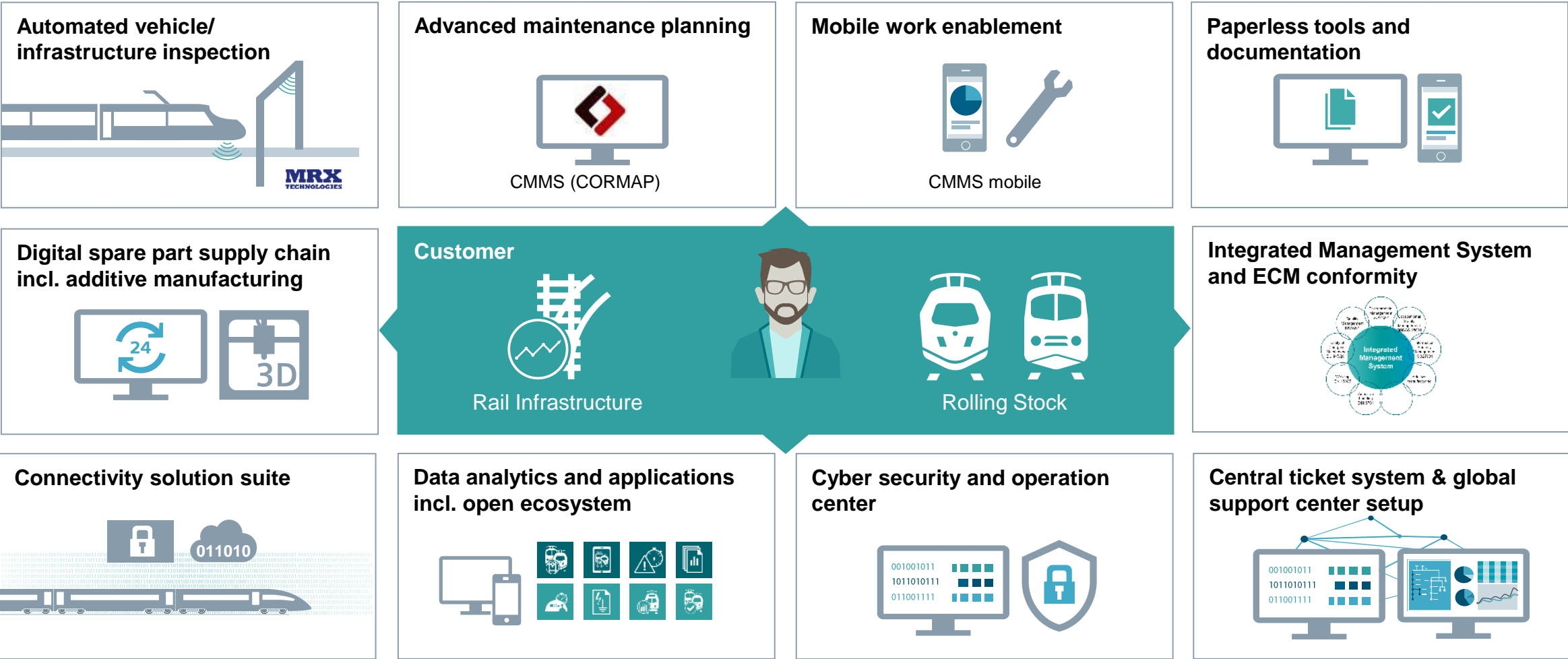
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Backup



Shaping connected mobility with integrated and digitalized processes for 100% system availability



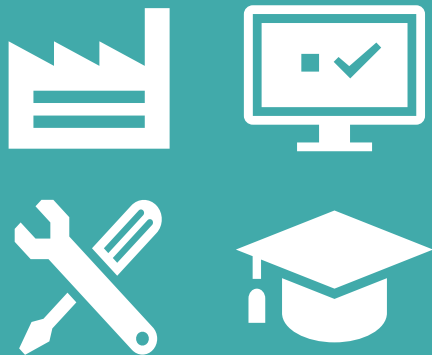
As our customers' trusted partner, we set the benchmark in terms of **SIEMENS** availability in the rail industry with our global service network

Ingenuity for life

Worldwide network of
>60
service sites



>99%
delivered availability in
>30 projects



Present in
>40
service countries with
>88 ongoing
maintenance contracts



Proven
Performance

Data analytics and applications on our open ecosystem Railigent® to **SIEMENS** help our customers improve return on their rail assets

Ingenuity for life

Rail asset data

Rolling stock

Rail vehicles today send between 1 and 4 bn data points per year

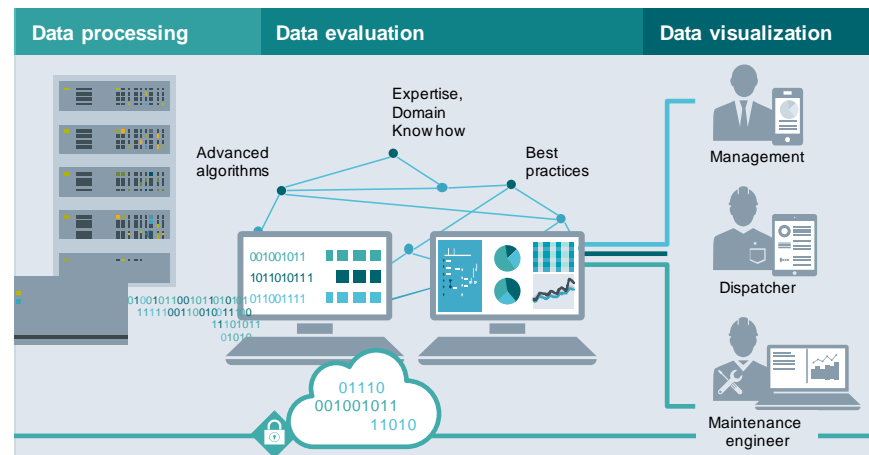
Signaling

Rail infrastructure/signaling can send up to billions of messages per year inside the system

Infrastructure

Measurement results from infrastructure provide up to 1 TB per run/measurement round

Railigent application suite powered by MindSphere



Improve Maintenance

Ensure **100%**
operational availability

Improve operations