

SIEMENS

Ingenuity for life

Siemens Mobility Services (SIMOS™)

SIMOS™ Expert Features

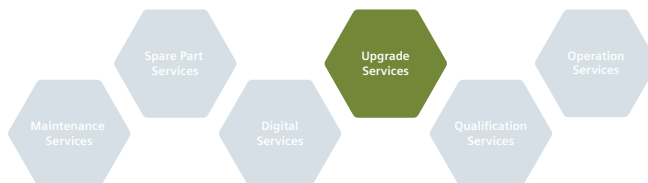
Keeping rail systems up to date – a rail life long

The service life of rail systems covers 30 years or even more. The challenge is to keep them operating effectively during this time, despite gradual aging and wear and tear, while ensuring that technical innovations are integrated wherever possible. These requirements can only be met with the kind of extensive system and service expertise that we, as the manufacturer, are ideally placed to provide. With SIMOS™ Expert Features as a component of the Upgrade Services, Siemens offers a wide variety of modifications and extensions for existing vehicles that will enable you to keep your fleet up to date while saving costs.

With our Expert Features, we ensure the availability of rail systems throughout their entire lifecycle. This service includes first-class support from experienced experts: from technical advice right through to future-proof upgrades.

Our solutions are aimed at:

- Optimizing operation
- Increasing availability
- Enhancing comfort and convenience
- Making vehicles more energy-efficient



Our service – your benefits

A range of solutions, backed up with the knowledge of our experts, ensures:

- Increased availability and longer operating times of fleets
- Enhanced passenger comfort and convenience
- Extended service life of rail systems and increased residual value
- Lower lifecycle costs as systems are updated continuously
- Increased market attractiveness

Keeping rail systems up to date ...



Availability and operational optimization

The availability of vehicles is a decisive factor for cost-effective operation. We increase the operating times of your vehicles and extend their lifecycle with our innovative improvements.

For example:

Snow plows, maintenance-friendly 3D-printed center skirts, shock-resistant turn lights, increase catenary tension, function for driving in icy conditions, alternative grit materials



Comfort and convenience

We provide increased comfort and convenience for your passengers and operating personnel. Trains connect many places and are used by huge numbers of people each day. Comfort and convenience are a decisive argument for broad acceptance. From smartphone connections right through to specially adapted spaces for people with handicaps, we offer solutions for almost every need.

For example:

Upgrading or complete retrofitting of air conditioning systems, 230V/USB connectors, red door closing lights, custom-designed, 3D-printed driver's armrest



Communication

We make it easier for people to connect. Today's travelers want to stay in touch on the move – whether by mobile phone or over the internet. We enable you to meet your passengers' information needs reliably with our innovative IT solutions.

For example:

Internet-on-Board (IoB), passenger information systems (PIS), entertainment solutions



Energy savings

We make your vehicle more efficient and environmentally friendly. Our world's resources are limited. We help you to conserve them, to improve your fleet's energy efficiency and to make your operations "greener". Our services also help you to cut lifecycle costs sustainably.

For example:

Various LED lighting features, twilight switches, automatic start-stop

... a rail life long

Driver assistance

We help the driver to focus more attention on the traffic situation. Innovative solutions and enhancements to existing technologies make your trains easier to operate, reduce the possibilities for human error and thereby increase the safety for your passengers. In addition, all this enhances the driver's cab and offers a more attractive working environment for train operators.

For example:

Video rear-view camera, video interior surveillance (CCTV), diesel level indication



The five areas of availability and operational optimization, comfort and convenience, communication, energy savings, and driver assistance contribute significantly to the success and competitiveness of rail operators. Our Expert Features address these five areas with appropriate solutions, enabling you to eliminate potential weaknesses in a targeted way.

Invest in the future – keep up to date

Existing investments are worth protecting. And by safeguarding them in the long term, you can also increase passenger safety, comfort and convenience. Existing vehicles can be upgraded or modified in line with current requirements. As a system manufacturer, we offer you a range of solutions to ensure that your systems always benefit from the latest developments in technology.

Optimized lifecycle costs

We are the right partner to help you optimize your lifecycle costs. Our Expert Features not only enhance comfort, convenience and safety but also help you to increase efficiency on the cost side. Small upgrades often generate major cost advantages in daily operation.

Tailored solutions

Most of the time, off-the-shelf solutions produce only average improvements. But, with Expert Features, we want to achieve more. That's why we give top priority to establishing a close, collaborative working relationship and taking your individual needs into consideration. This enables you to benefit from our long-standing, global expertise as well as maximum flexibility with regard to your specific system.

To find out which of these solutions is most suitable for you and what other possibilities are available from Expert Features, please contact us to discuss your requirements without obligation.

We look forward to receiving your inquiry.

Services at a glance

- Assurance of quality standards and integration of innovative improvements
- Optimization of energy costs
- Enhanced comfort and convenience for passengers and operational staff
- Expert contacts for technical advice, modernization or obsolescence management
- Provision of rail system and infrastructure experts by Siemens
- Evaluation and inventory of individual vehicles or entire fleet

We keep the world running.

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