THE MOST EFFICIENT ILTIS VERSION FOR INCREASING DEMANDS

Controlguide® Iltis as a Service (ILaaS)

SIEMENS

State-of-the-art control technology at all times

With Controlguide® Iltis as a Service (ILaaS) rail operators acquire the Iltis functions as a flexible service. Their focus is on railway operations, while we keep their control technology up to date, take care of the Iltis hardware and all software releases, and ensure compliance with the legally prescribed IT security regulations by means of IT security updates.

What are the advantages of Iltis as a Service?

Iltis as a Service, ILaaS for short, is financially interesting, as considerably less capital is tied up compared to investing in your own plant. With the licence-based business model, rail operators only pay a fixed amount for use and maintenance.

Rail operators can greatly reduce service and maintenance work by their own staff, as Siemens Mobility takes over operation and maintenance and carries out regular security patching.

Hardware can be reduced, and maintenance work simplified with ILaaS. This protects the environment in the long term.

How does Siemens Mobility inform operators when maintenance work is carried out in the data centre?

Two maintenance windows per year are fixed and communicated to the customer. We announce any additional necessary maintenance in good time and coordinate it with the railways as required.

Is there a risk of interruption due to simultaneous maintenance activities on the part of the railway operator and Siemens Mobility?

There is no risk of collision, as all activities are planned in advance by Siemens Mobility and agreed with the customer at an early stage. In addition, the geo-redundancy functionality will enable a hot standby, with which the railway route can continue to be operated in such cases.

IT security
IT security is becoming more and more of a focus due to the digitalisation of the railways and the associated increased interconnectedness of the systems. Public authorities require a high level of protection against improper interference from the outside in order to meet the increasing security demands. This includes, among other things, regular updates of Iltis computers. ILaaS ensures that your control technology infrastructure is always kept up to date with the latest IT security standards.

Investment protection
We take over the operation and the entire management of the Iltis hardware for you (cell computers or alternatively all Iltis computers) and ensure that your control technology is always up to date. You continue to adapt the workstation hardware to your needs yourself. New Iltis software releases are installed at no additional cost.

Always up to date
With ILaaS, you create optimal conditions for flexibly introducing new functionalities such as the process interface (PSS) for connecting peripheral systems, Iltis Web Services or other features. Our specialists can also provide you with obsolescence management as well as maintenance and monitoring of the Iltis computers on request.

Focus
Thanks to this easing of the workload, you can focus fully on railway operations. You benefit from more cost-effective operations and a high level of investment protection, while maximum availability is ensured by state-of-the-art monitoring and alarm systems as well as preventive maintenance by Siemens Mobility.

Redundant network connection for greatest availability
With the ILaaS hosted version, your cell computers are connected via a fully geographically redundant VPN tunnel network connection. This ensures that if a connection fails, data can still be exchanged between the cell computers and the workplace hardware.

Crypto boxes for a secure connection (ILaaS hosted)
State-of-the-art encryption technology (crypto boxes) secures the redundant connections between their location and the central data centres, protects the data from external interference and thus fulfils both the IT requirements and the railway security specifications.

ILaaS has been used successfully by the Berner Oberland-Bahn since April 2019. (Image: © Jungfraubahnen)

Is ILaaS fully developed?

Yes! ILaaS has been in use since 2016. Gornergratbahn, Berner Oberland-Bahn and Aare Seeland mobil AG are currently using the product.

The Iltis servers run as virtual computers in specially provided data centres at Swiss Siemens Mobility locations.

We have years of experience with virtualisation technologies. ILaaS is the "state of the art" technology, developed and operated by Siemens Mobility in Switzerland.

What is the difference between ILaaS on-premises and ILaaS hosted?

With ILaaS on-premises, Siemens Mobility operates the Iltis cell computers at two local sites belonging to the rail operator (geo-redundancy).

The operation of the cell computers in two geographically separated data centres (cloud service) is carried out in the ILaaS hosted version.

Comparison Iltis vs. ILaaS

Provision and administration	Iltis	ILaaS hosted/ on-premises
Third-party software licences for cell computers on the host	--	✓
Operation of the Iltis hosts	--	✓
Tracking the Iltis releases	--	✓
Corrective maintenance of the cells	--	✓
Preventative maintenance of the cells	--	✓
Technical responsibilities and all maintenance activities lie entirely with Siemens Mobility	✓	✓
Software updates on site	**Iltis**	**ILaaS hosted/ on-premises**
Signal box interface server software updates	--	✓
IT security management of workstations, signal box interfaces and networks (regular security patching) included	--	✓
Geo-redundancy	**Iltis**	**ILaaS hosted/ on-premises**
Redundant cell hardware at two geographically separated locations. In the event of a malfunction, automatic switchover to the other half-cell without interruption of operation (hot standby)	✓ One-time investment	✓ Annual fee

Maintenance comparison Iltis vs. ILaaS

Corrective maintenance	Iltis	ILaas hosted	ILaaS on-premises
Service Level Agreement • Best effort/ On-site hardware deployments included • Reserve material with the customer	Optional	✓	✓
Service Level Agreement • 24/7 – Call back by phone within 30 minutes • Remote login in four hours • On-site support within six hours included	Optional	--	✓
Preventative maintenance			
Regular renewal of the customer's local Iltis hardware (Signal box interfaces / Workstations / Operation cluster included)	Optional	--	✓
Regular renewal and inspection of the reserve material located locally at the customer's premises	Optional	--	✓