

# Lord of the tracks: Duty controllers in operations control centers for electronic interlocking control centers for railway control the networks at the click of a mouse

In rail transport, around 40,000 trains run on German rails every day.

This bustling activity is planned, controlled and monitored by the traffic controller in the **electronic rail interlocking control centers**, the control center for the railway interlocking.

This is how rail traffic can run safely.

Preferably trouble-free.

A total of 3,000 interlocking control centers of all types are entrusted with responsible tasks.

Today, modern electronic interlocking control centers (ESTW) have significantly improved operations management for the train dispatcher.

JST offers state-of-the-art technology that is precisely adapted to the planning and optimization of the interlocking's control center.

With our specially developed JST **Profi-Tools** we give the dispatcher the best support in 24/7 operation.

#### **OFFER ELECTRONIC SIGNAL BOX RAILWAY**







BVG Berliner Verkehrsbetriebe

- Ground work: Analysis and planning
- One for all: Architecture, technology, light, acoustics, climate.0
- Ergonomically right at the front: control room furniture from Germany
- Everything in view: monitor walls for the 24/7 operation
- Comprehensive: baua study, professional association, VBG, escape routes
- Optimal: pleasant working atmosphere, suitable design



















## Practical examples: Electronic interlocking control centers railway

Jungmann Systemtechnik with its team of experts is the ideal partner for the **planning, modernization and implementation** of **control centers and electronic interlocking control centers (ETSW) for railways**.

Already in the early planning phase, JST considers all decisive components such as **ergonomics, viewing** 

Already in the early planning phase, JST considers all decisive components such as **ergonomics**, **viewing angle**, **lighting**, **furniture**, **technology and software**, **infrastructure** and the **adaptation of existing systems and networks**.

In the electronic interlocking control centers, successful establishment ultimately also includes **successful human communication**.

In our <u>reference projects</u> we show you how this composition can look like after project completion.

We will be happy to put you in touch with the respective contact person.

#### New control center for traffic monitoring with monitor wall and flexible control

Rush hour traffic in the city.

The streets are full and commuters gather at the local transport stops.

If a bus breaks down now, it's gonna be tight.

In the event of breakdowns or delays, everything depends on the control center in the university town of Göttingen.

There, ideal technical conditions for traffic monitoring have now been created in favor of reaction time

With products from JST, the employees of the Göttinger Verkehrsbetriebe GmbH keep the overview.

TO THE PROJECT







Praise from traffic master Ricardo Mecke: "I have never worked with someone so professionally before. From the first meeting to the installation, everything went perfectly."

Thomas Zimmermann / Ricardo Mecke / Dr. Jens Conrad (from left)

Operations manager / traffic master / administrator





## New traffic control center is the heart of the subway

"We have proven that Berlin construction projects can be completed on time and without increasing costs," says Antje Michalak, responsible for the "Control Centers 2014+" project of Berliner Verkehrsbetriebe, which includes the new operations control center for the subway (BLU). This new building project with a total budget of 8.9 million euros was also supported by Jungmann Systemtechnik.

170 employees control the train traffic around the clock from the heart of the Lichtenberg underground.

**TO THE PROJECT** 





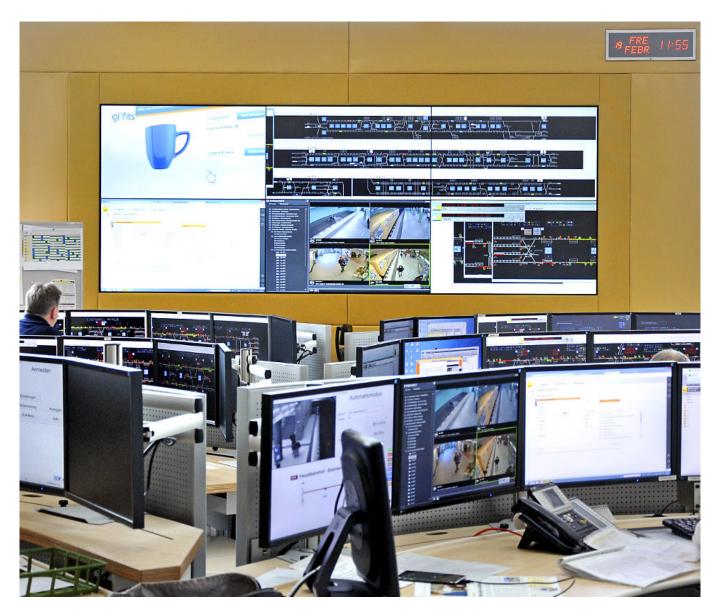


"We have built a perfect control center here."

Lars Kramer (left) / Antje Michalak / Matthias Borgwald (right)

Subproject manager IT technology / overall project manager / subnetwork manager





#### New control room for more safety in operating processes

Whether simulated extreme conditions or realistic prerequisites – hardware and software of railway systems from Siemens are thoroughly inspected in the Wegberg-Wildenrath Test and Validation Center.

A track system over 30 kilometers long is available there.

Static and dynamic tests are performed on vehicles and systems 365 days a year.

A task that requires a perfectly equipped control room for monitoring.

With the assistance of the experts from Jungmann Systemtechnik a control room could be realized, which meets all requirements.



## **TO THE PROJECT**



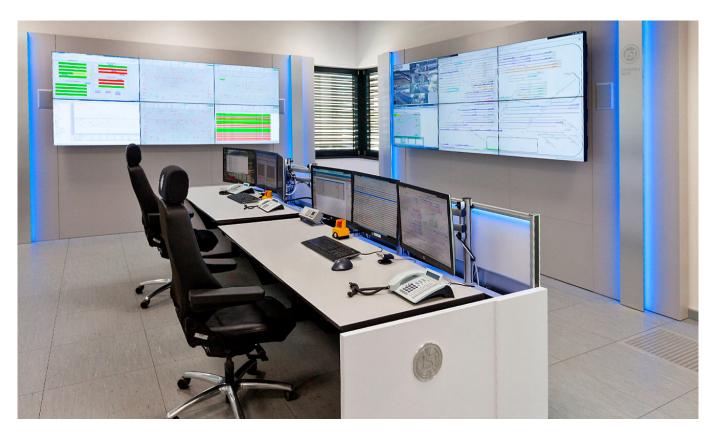
## **SIEMENS**

"The new technology is an enormous relief for the colleagues. Especially the reduction of monitors creates a much better overview."

**Dirk Wienforth** 

Project manager





## **ALL PROJECTS**

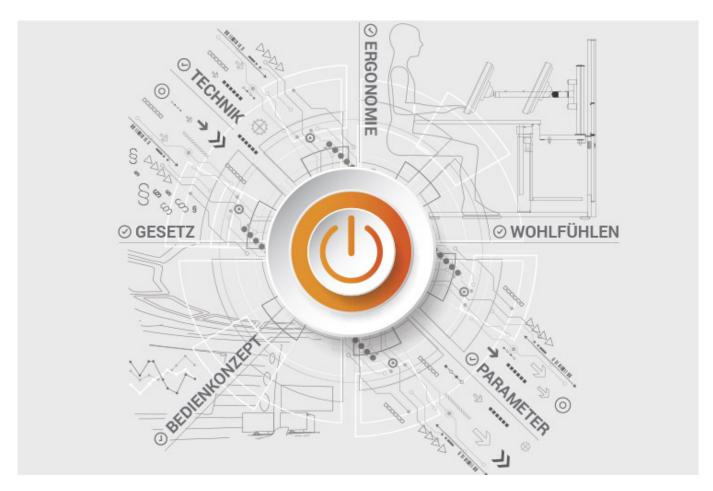
#### **Documents to download**

- Project report of the new traffic control center BVG Berlin (PDF)
- Project report on the new central control room of Infraleuna (PDF)

JST product overview: Think of everything!

Setting up the electronic interlocking for railways with the appropriate components





## Analysis and planning of your control room

Are you planning changes in your control room?

Or would you like to bring a breath of fresh air into your control room?

Then use the proven <u>planning packages</u> or the free of charge <u>online analysis</u> from JST.

Our experts support you according to <u>BAUA: Study</u> and all important standards and guidelines.

More about free analysis





## Large screen technology – react faster!

<u>Proactively</u> present important information to the right people before an incident can have a major impact. With scalable large screen walls based on <u>LC displays</u> and <u>cube technology</u>, we will also find the right large screen system for 24/7 operation for you!

More about the JST large screen technology





myGUI® – User interface for

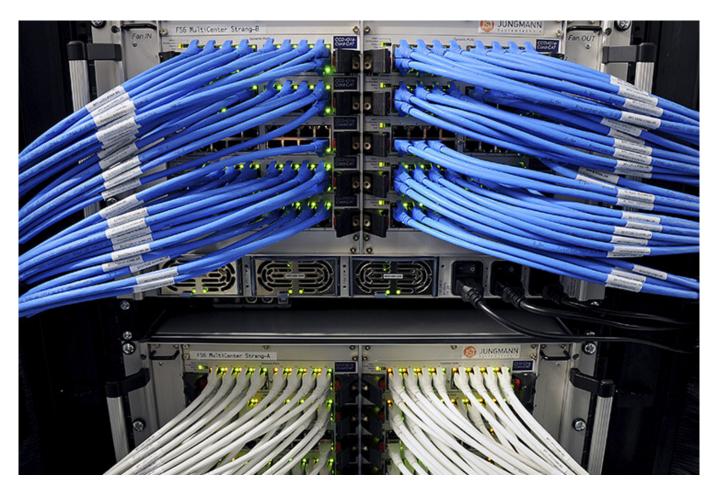
#### Large screen system, workstation & infrastructure

The intuitive myGUI® user interface in the 3D layout of your control room offers highest ease of use of your <a href="MultiConsoling"><u>MultiConsoling</u>® system.</a>

With one click you can operate <u>workstations</u>, <u>monitor walls</u> and <u>infrastructure</u> – always absolutely safe and outstanding in stressful situations.

More about myGUI®





## $\textbf{MultiConsoling}^{\texttt{@}} - \textbf{the}$

#### **Control room switchboard**

MultiConsoling<sup>®</sup> is the high-availability control center to connect all signals of your systems with the monitors on the Operator station and on the monitor walls.

The transmission takes place in real time and no software is required on your computers.

More about the MultiConsoling®





# Control room furniture: ergonomic operator consoles, Recaro operator chair, AllMedia Conference System

Furniture and technology are available from JST from one source.

The height-adjustable and highly stable Stratos operator consoles and matching <u>surrounding furniture</u> form the ergonomic basis for your control room.

More about the control room furniture





#### Large screen control with graphic controller

With the IP-based graphics controller you can get your monitor wall going.

The graphics controller records all video signals via the IP network simultaneously and distributes them at any point and in any scale on the <u>large screen wall</u>.

More about graphic controllers





## PixelDetection® - the operator's eye

Shorten your reaction times!

With PixelDetection® you receive the right alarm at exactly the right moment and always keep an overview. Proven for many years and repeatedly awarded, PixelDetection® is also called the "artificial eye of the operator".

More about PixelDetection®





## JST myLogin® - the operator's login

JST myLogin<sup>®</sup> is a revolutionary solution that allows you to log on and off centrally and quickly at all <u>operator workstations</u> with your company ID card.

The login/logout process only takes a few moments.

If desired, your personal arrangement of the screen contents can also be saved.

More about myLogin®





#### CockpitView - the operator's dashboard

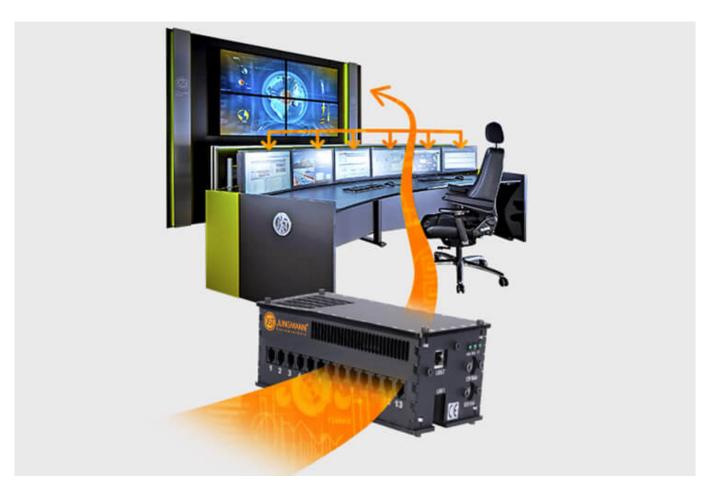
Create dashboards with content from different computers on different networks!

CockpitView offers you the perfect overview of your most important applications at a glance.

With CockpitView you stay in control and can reduce monitors at the workstation or even the large screen system.

More about CockpitView





#### Automation for video walls and

#### **Operator workstations**

With the JST CommandBox you can monitor circuits, relays, audio signals, and much more. and have them automatically switched on at defined <u>workstations</u> or on the <u>monitor wall</u> in the case of critical values.

The application possibilities are almost limitless!

More about ControlRoom-Automation





**Control room remote: connection of** 

#### decentralized systems and locations

The optional remote interface of the JST systems allows you to visualize and <u>operate</u> remote computers and entire control rooms.

Even complex emergency scenarios for backup control rooms can be realized!

More about ControlRoom-Remote





#### **Computer outsourcing and**

#### PC remote control

By outsourcing the computers from the control room to the technical room, you reduce the heat load and create more space in the employees' legroom.

Further advantages are the central administration of the computers and the physical access protection in the secured technical room.

More about computer outsourcing





#### **Optional service and maintenance packages**

To ensure that your control room is as available as you need it to be, we offer availability assurance packages in various scopes and versions.

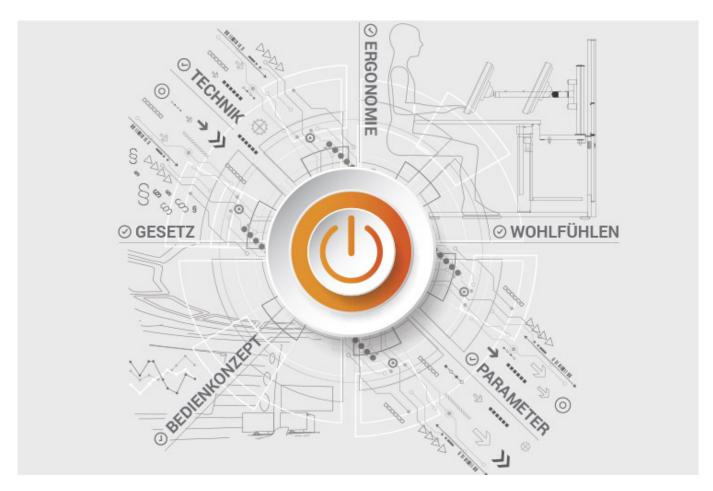
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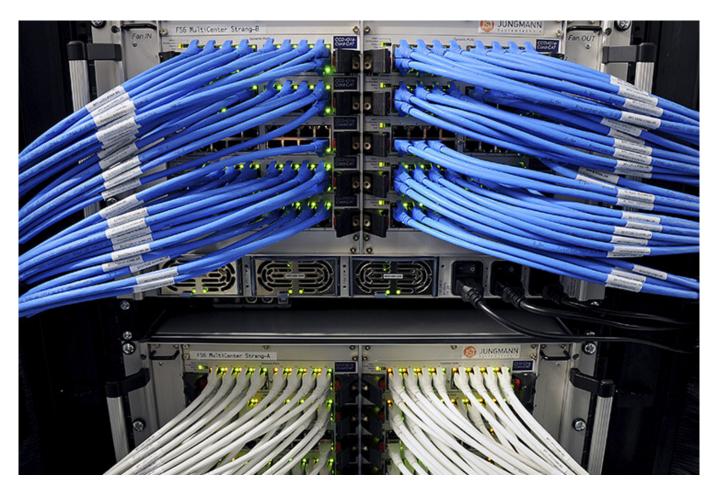
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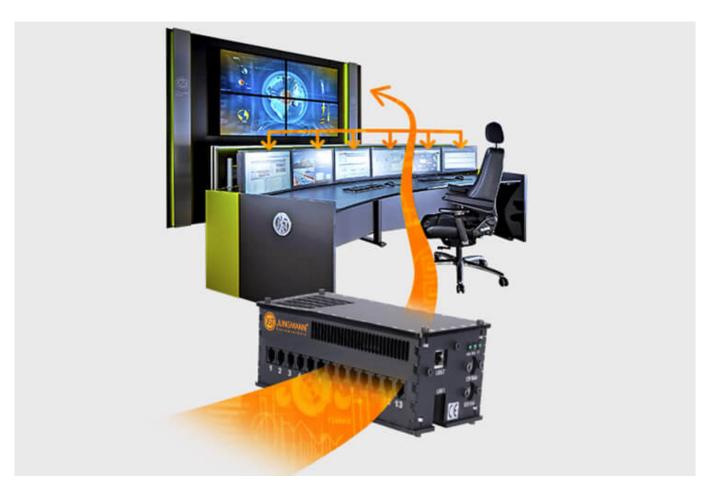
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#### Was möchten Sie als Nächstes tun?

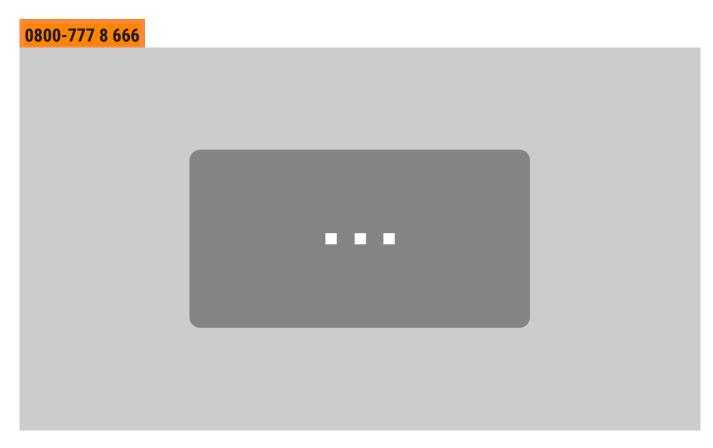
#### Ich möchte

- das kostenfreie Praxisbuch der Kontrollräume anfordern
- einen Rückruf für eine unverbindliche Beratung
- den Kontrollraum-Simulator in Buxtehude besuchen
- eine digitale 360°-Tour in einem Kontrollraum erleben



• mehr über Kontrollräume auf dem ko:mon Kongress erfahren

We will be happy to answer your questions on the subject of electronic railway interlocking



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