

# InnoTrans 2018 Report



B2B-Magazine for the Railway Industry

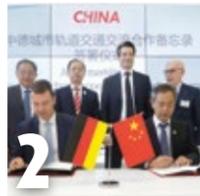
No. 4 ■ 22<sup>nd</sup> annual set ■ November 2018

**THEME  
IN FOCUS**

**REVIEW OF  
INNOTRANS  
2018**

**Trade fair  
of Superlatives**

More than 150,000 visitors from 149 countries and more than 3,000 exhibitors: InnoTrans 2018 was THE world's leading trade fair of transport technology.



**2** German and Chinese railway industries agree to co-operate.

**Good  
business**

90 per cent of the trade fair visitors are satisfied with the business deals;



**5** other infrastructures. Raycap offers a broad portfolio for protection.

**High  
tension**

Lightnings and overvoltages are a big danger for critical station and



**10** experience with their quality products made in Italy.

**Enjoying  
travel**

Italcarrelli and partners convert travelling by rail into a culinary

## InnoTrans 2018 – more innovative and successful than ever



The Outdoor Display was again a highlight for the visitors of the 2018 trade fair.

Photo: Messe Berlin

More than 400 innovations, 155 world premieres, 155 vehicles and midsummer temperatures – all this awaited the 153,421 trade visitors during the four days of the trade fair at the Berlin exhibition grounds.

The guests attending the trade fair had travelled from 149 countries to get informed by the 3,062 exhibitors from 61 countries about the entire repertoire of products and services of the mobility sector. Numerous exhibitors benefited from InnoTrans as a high-profile stage to launch their world premieres.

155 vehicles were tightly packed at the Outdoor Display. Among the vehicles presented were the new Berlin S-Bahn from the manufacturer consortium Siemens/Stadler, the train of ideas from DB Regio, the low-floor train Coradia Stream from Alstom, a shunting locomotive with a hybrid AC traction

equipment from the Chinese CRRC Corporation Limited and the four-axle DE 18 locomotive from Vossloh Locomotives.

A highlight for the trade visitors was the Bus Display that was again presented this year and on which a total of ten electric buses turned their rounds.

Among them were the manoeuvrable VDL Citea SLFA Electric of VDL Bus & Coach, the Aptis from Alstom or the Sileo S18 from the manufacturer with the same name. The new Trollino 12 from Solaris celebrated its premiere. It convinced, among others, by its silent and environment-friendly drive.

**A throughout positive feedback for InnoTrans 2018**

The InnoTrans Convention – the high-level supporting programme of the trade fair – also presented fascinating new formats. When the International Bus Forum made its debut, the participants of the panel discussed about the level of operational maturity of electric buses in public transport. The first Onboard Hospitality Forum drew the attention of the participants to the comfort and well-being of passengers. For the first time a technology marathon was held at the InnoTrans with the 'HackTrain Hackathon'. 80 developers worked during four days at smart IT solutions for the railway sector. The winner was a concept for an efficient control of bordering green areas along the tracks.

After the visit to the fair, exhibitors and trade visitors gave a throughout positive feedback on the InnoTrans. According to a representative survey, 90 per cent of the trade visitors declared to be satisfied with the success of their visit to the trade fair. The same percentage of trade visitors as well as of exhibitors would recommend the visit of the trade fair. The high level of concluded businesses that the exhibitors reported confirms the feedback from exhibition visitors.

**COMMENT**

**Business hotspot for the industry**

Kerstin Schulz,  
Exhibition  
Director  
InnoTrans.

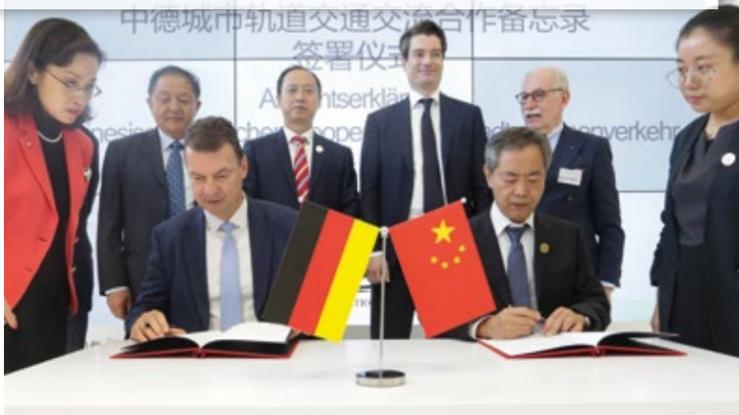
Photo: Messe Berlin



The international mobility industry is growing – this has again been impressively demonstrated by this year's InnoTrans. This means in trade fair key figures: more innovations, more world premieres, more vehicles on show, more exhibitors and more trade visitors. In all these fields the world trade fair exceeded its own record figures. The level of international attendance again reached a high level. More than 62 per cent of the exhibitors and more than 56 per cent of the trade visitors had arrived from abroad in order to boost their export business in the German capital city. Nine out of ten exhibitors are expecting positive business after the trade fair and announced their intention to participate in the next InnoTrans. During the four days of the trade fair many contracts were signed and international co-operations were concluded. This year's trade fair could again benefit from the typically high amount of decision-makers among the visitors. According to a survey one out of two trade visitors holds a leading position in his enterprise. The result of the trade fair conveys a clear message to us as organisers: We were able to reach our target to bring together exhibitors and trade visitors from all over the world to achieve a joint success of the industry. This is our momentum to start the preparation for InnoTrans 2020.

Ad

## InnoTrans: Meeting point of international markets



The German Railway Industry Association and the China Association of Metros concluded a close co-operation in urban rail transport during InnoTrans 2018.

Photo: Messe Berlin

As the leading international trade fair for transport technology, InnoTrans is much more than a platform for the latest products and expert discussions at the highest level.

At the Berlin ExpoCenter City, trade visitors and exhibitors are offered the unique opportunity to get to talk to industry colleagues from all over the world and, above all, to do business. This year, 90 per cent of

the trade visitors declared to be highly satisfied with the business success of their attendance at the trade fair. During the four days of the event, a high number of domestic and international contracts and co-operations were concluded again: GE Transportation, for example, announced an order of 300 shunting locomotives from the Kazakh railway Kazakhstan Temir Zholy (KTZ).

### More international co-operation

Siemens Mobility and Deutsche Bahn AG also signed an agreement for future co-operation. Furthermore a co-operation between the German and the Chinese railway industries was concluded: Volker Schenk, President of the German Railway Industry Association (VDB) and Zhou Xiaoqin, Executive Vice President of the China Association of Metros, signed a 'Memorandum of understanding on the Chinese-German cooperation in urban rail transport' that provides for a joint coordination in planning, building, construction and standardisation of rail transport systems in metropolitan regions.

## 'InnovationTrans' invites

The Palais am Funkturm was packed out when Dr. Christian Göke inaugurated InnoTrans 2018 on September 18.

The list of speakers was as top-class as the 1,500 invited guests. Violeta Bulc, the European Commissioner for Mobility and Transport emphasised the importance of the trade fair in the European 'Year of Multimodality'. She said that rail traffic plays an important role when it comes to the combination of different transport modes for passengers and freight.

### Germany needs the railways

Andreas Scheuer, Federal Minister of Transport and Digital Infrastructure (CSU) created the new term 'InnovationTrans' for the trade fair. Germany needs the railways in order to achieve its climate targets, said Scheuer. The Minister then discussed jointly with Jürgen Fenske, President of the Association of German Trans-

port Companies (VDV) and Dr. Richard Lutz, CEO of Deutsche Bahn AG on how to make the railways even more efficient and to further reduce their emissions. Fenske said that, among others, digitisation was helpful, be it by apps or by the preventive maintenance of tracks and trains through digital technologies. This was followed by a discussion with representatives of the railway industry, among others Henri Poupart-Lafarge, Chairman of the Board of Directors and Chief Executive Officer of Alstom and Michael Peter, CEO of Siemens Mobility GmbH who succeeded their predecessors and shared their views on the issue of 'Mobility: innovative – multimodal – sustainable' with the audience. Laurent Troger, President, Transportation of Bombardier stressed the importance of finding new talents for the railway industry, specifically addressing higher education institutions and universities.

## Young, creative and highly innovative: HackTrain Hackathon celebrates its premiere

How can smart IT solutions enrich the railway sector or even revolutionise it?

This is a question that the railway sector has to face like others in times of an increasing digitisation – and to which 80 young developers from 30 countries tried to find an answer at InnoTrans. The participants tinkered during four days in small teams to find digital solutions to problems of the railway sector in the framework of a HackTrain Hackathon. Among them were: How can the main factors for delayed trains be identified? How can booking processes become more customer-friendly and how can the work of the track workers become safer? At the end of the event that had been organised by HackPartners Ltd. the three teams that had presented the most promising solution concepts were honoured: Ranked number one at the first InnoTrans Hackathon was the 'Veggie on Rails' team with a GPS- and video-based solution to supervise the vegetation along the tracks – the team members were awarded a prize in the form of travelling vouchers amounting to several hundred euros. Ranked second was a concept for a simplified search of information for engineers, and the third place was achieved by the team 'Safety\_Eye' that had conceived a novel alarm system for a better protection of track workers.



Photo: Messe Berlin

Andreas Scheuer, German Federal Minister for Transport and Digital Infrastructure looks optimistically into the future of rail traffic.

## Sector elite at the Rail Leaders' Summit

Deutsche Bahn AG invited for the tenth time to the Rail Leaders' Summit at this year's InnoTrans.

Before the audience of about 400 invited participants, high-level international guest speakers from industry and politics discussed current and urgent topics, including, for example, the challenges that rapid urbanisation poses to railway companies and how to tackle them. It seemed that the speakers from the EU, the USA and China agreed that local and international co-ope-

ration is a highly relevant keyword. "Rail traffic is a team sport", said Dr. Richard Lutz, CEO of Deutsche Bahn AG. The German Federal Minister of Transport Andreas Scheuer who opened the Rail Leaders' Summit was quite optimistic in his speech as he thought that the challenges of the future can be tackled vigorously: "The mood at the trade fair is grandiose, the order books are well filled. Germany is a country for investment."

### IMPRINT

#### Publisher

Messe Berlin GmbH  
Business Unit  
MS Mobility & Services  
Messedamm 22, 14055 Berlin  
GERMANY  
T +49 30 3038 2376  
F +49 30 3038 2190  
innotrans@messe-berlin.de  
www.innotrans.com

#### Concept, Advertising

DVV Media Group / Eurailpress,  
Hamburg

#### Advertisements

tim.feindt@dvvmedia.com

#### Editors

Messe Berlin GmbH, Berlin  
breitschaft@messe-berlin.de  
in cooperation with  
Jennifer Schacha, Hamburg  
jennifer.schacha@dvvmedia.com  
and Mechthild Seiler, Düsseldorf  
mechthild.seiler@dvvmedia.com

#### Layout and dtp

GrafoService GmbH, Norderstedt  
info@grafoservice-gmbh.de

#### Picture credits

Messe Berlin GmbH as well as photos from the mentioned manufacturers

#### Print

L.N. Schaffrath GmbH & Co. KG DruckMedien,  
Geldern

mes

MOBILITY  
ELECTRONICS  
SUPPLIERS

INTERNATIONAL TRADE FAIR  
FOR THE ELECTRONICS SUPPLIERS  
OF THE MOBILITY SECTOR

# expo

**Be a driving force!  
Register now online.**

**5 - 7 NOVEMBER 2019**  
Berlin ExpoCenter City  
mobility-electronics.com

Supported by  
**DIE BAHNINDUSTRIE.**  
VOM VERBAND DER BAHNINDUSTRIE IN DEUTSCHLAND E.V.

**ZVEI**  
Die Elektroindustrie

Organizer  
**Messe Berlin**

## Four days full of highlights



The visitors huddled close together on the stand.

Photo: SPITZKE SE

The SPITZKE SE Group looks back at InnoTrans 2018 as a highly successful event. Fully focused on their own vision of 'Creating connected dimensions', their booth was a meeting point for trade visitors and furthermore a contact point for suppliers and interested young talents.

One of the highlights of the framework programme was the panel discussion on the second day of the trade fair that was moderated by Dr. Alexander von Lieven, Director Equipment/Electrical Engineering Division of SPITZKE

SE and speaker of the management of SPITZKE FAHRWEGSYSTEME GmbH. Dr. Volker Hentschel, Board Member for Production of DB Netz AG, Dr. Michael Bernhardt, Managing Director of Rail Power Systems GmbH, as well as

Dirk Flege, Executive Director of Pro-Rail Alliance (Allianz pro Schiene) and Ingolf Leithoff, Managing Director of QLX GmbH discussed how Deutsche Bahn AG can increase its civil engineering activities when at the same time

the operational performance has to be increased and the railway sector will not be able to count on more human resources.

There were also numerous ceremonial highlights at InnoTrans. SPITZKE

SE was nominated supplier of the year of DB in the category infrastructure. Furthermore, the SPITZKE employee Simone Bauer was awarded the distinction of 'Mobility Creator 2018' by Pro-Rail Alliance for the development of an extraction system for welding operations.

### SPITZKE received and awarded various distinctions

Before the trade fair was successfully concluded with the start of the SPITZKE student competition on the career day, the focus was also set on the suppliers of the group. SPITZKE brought its partners together to thank them for the successful co-operation and conferred the SPITZKE supplier award to NKT GmbH & Co. KG, Rail- und Signaltechnik Grün GmbH, Lehmer Maschinentechnik GmbH and DATEN-GUT Leipzig GmbH & Co. KG.

The railway infrastructure enterprise enjoyed a high level of interest even when no awards were conferred. As an example the German Federal Minister of Transport Andreas Scheuer and the Parliamentary State Secretary at the Federal Ministry of Transport and Digital Infrastructure Enak Ferlemann did not miss the opportunity to drop in. Dr. Richard Lutz, CEO of Deutsche Bahn AG as well as the head of infrastructure procurement of DB AG, Dr. Torsten Latz were also guests of the enterprise.

## Quieter urban life

Urbanisation is progressing further and it is estimated that nearly 70 per cent of the world's population will live in cities by 2050 with quite some challenges to the infrastructures.

Many cities are already facing the problem that railbound infrastructures are built closely to inhabited neighbourhoods or to areas that are sensitive to vibration. Ground vibrations from railways may be a nuisance to people or damage buildings. Solutions are needed to reduce the ground noise of railway systems in order to create healthy living conditions for people who live near or above (underground) railway lines.

Rockdelta products from Rockwool B.V., a subsidiary of Lapinus, have been specifically developed to solve such problems and have found great interest at InnoTrans 2018. They consist of mats from rock wool from an extremely durable volcanic stone that can be fully recycled. Depending on the application, different modifications – single or multi-layer with or without a geotextile layer – can be used.

All variants consist of elastic rock wool mats that contain billions of minute fibres that are linked to each other. Rock wool mats bend when subjected to forces and take back their initial shape afterwards, so that they effectively act as a spring. The spring effect efficiently decouples the dynamic behaviour of the track infrastructure from the ground. Rockdelta products are used in three main areas of application: to absorb vibration for ballasted superstructures and for slab tracks as well as for the protection of buildings with all types of track. Rock wool mats are resistant to weather conditions and chemical impacts as well as extremely rugged and not sensitive to temperature variations and ultraviolet radiation. They also withstand temperatures up to 1,000 degrees Celsius. They can therefore be easily stored and are at the same time safe even with spark emitting building activities.



The Rockdelta team at InnoTrans 2018.

Photo: Lapinus/ROCKWOOL B.V., Rockdelta

Ad

# WAGO

Meet us again at  
InnoTrans 2020.



## Does It Get More Versatile than TOPJOB® S? No Way!



WAGO's electrical interconnection and automation products have reliably served in railway systems for decades.

With either push-buttons or levers, WAGO's new TOPJOB® S Rail-Mount Terminal Blocks leave nothing to be desired in terms of versatility. You now have two new ways to wire your demanding rail applications. Get your hands on them!

The Way to Connect!

[www.wago.com/topjob-s](http://www.wago.com/topjob-s)

# Intelligent brakes



Braking systems found a high level of resonance at InnoTrans.

Photo: KES GmbH & Co. KG

Ad



## Multilayer conduits

Improved performance and safety for the rail industry.

**PMA**

Multilayer conduit with inner and outer layer for improved safety and performance. Our new innovative railway engineering multilayer product line provides protection and safety for cables on intercarriage jumper connections, bogies, roof installations and undercarriage installations. The new PMA multilayer technology allows combinations of materials for optimal product characteristics in rail applications. [abb.com](http://abb.com)

**ABB**

Condition-based data from systems are nowadays indispensable, and this applies to brake systems as well. As a matter of fact it is not only for safety reasons but also for the savings potential.

■ KES GmbH & Co. KG has presented the intelligent braking system KES IBS 300 at InnoTrans 2018. Further to the hybrid brake control (KES EDS 300) that combines a UIC approved electronic brake control valve with a purely pneumatic fall-back level in a single device, the system offers the innovative compact brake unit (KES CBU 300) and the driver brake valve (KES DBV 300).

The capabilities of the system in the area of predictive maintenance have aroused a very special interest among the numerous visitors of the KES stand. One of the examples is the electronic retrieval of the brake pad wear by sensors in the compact brake unit. The captured data are transferred to the brake control system or the train bus and enable the operator an early information when brake pads have to be changed.

The enhanced safety that the KES IBS 300 system offers, has produced numerous positive reactions at InnoTrans 2018. The safety of the system is substantially increased by the fact that there are sensors to retrieve the braking force reporting it to the brake control system. This allows to supervise the functionality of the braking system in a closed loop that not only records the output pressure but also gives a feedback

on whether the required force is also applied.

## A future-oriented system also for freight transport

The use of the KES IBS 300 system in modern freight wagons has also found a positive resonance. Further to the autonomous energy supply of the system via an axle generator, the integrated GPS-/GSM interface, the integrated wheel-slide protection as well as the possibility of automatic brake tests are well prepared for the freight wagons of the future.

Beyond this application the system can also be used in multiple units, metros and passenger coaches. The modular design of the system was particularly acclaimed. This allows for a quick system maintenance that may be carried out by the customer on request and that leads to low life-cycle costs (LCC). Furthermore the modular design opens numerous possibilities for adaptations to new rolling stock as well as for the obsolescence management. This has been demonstrated by KES when the brake control for the Alstom Lint 41 vehicles had to be replaced while form, fit and function of the old system had to be maintained and carried out with modern KES technology. KES draws a positive balance of InnoTrans 2018 and looks forward to coming back in 2020.

## NEWS

### En passant – measuring in passing

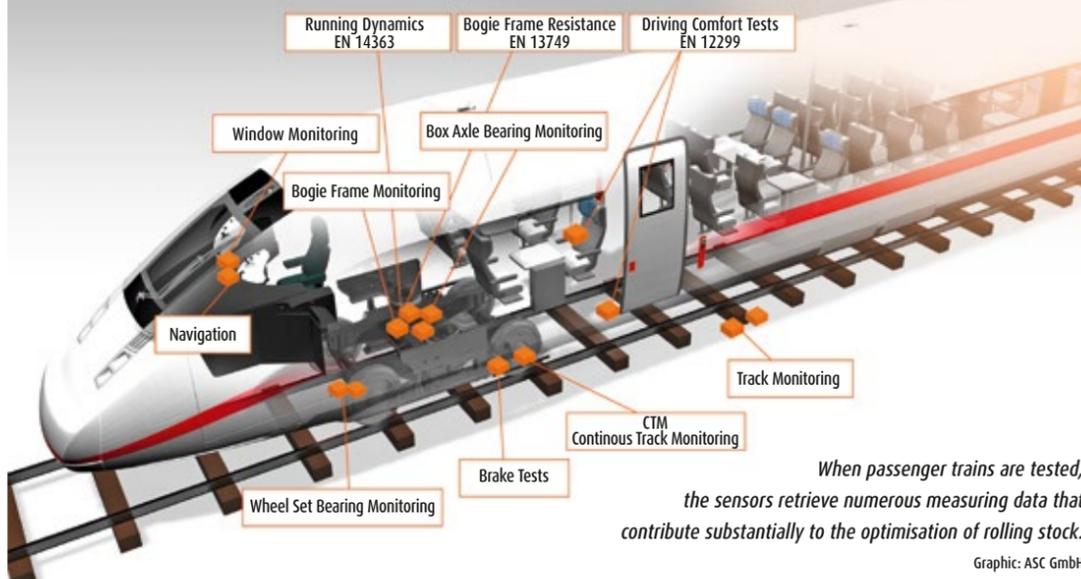
Althen GmbH Mess- & Sensortechnik has presented the 3D wheel measurement system to measure railway vehicles automatically and without contact in real-time. It combines five laser scanners that are installed in the track area and calibrated so as to form a system. Measurements are being carried out at an average speed of 50 kilometres per hour when trains pass by or before they roll into the station or the maintenance area respectively. An RFID code allows to individually identify each wheel. An additional camera also identifies the vehicle by its RFID code. As soon as the code of the wheel has been recognised, the measuring cycle starts. While the wheel passes the laser scanners, the diameter, profile as well as the wheel distance are measured and the corresponding tolerances are indicated. The data are automatically transferred to the operators. The necessary software can be integrated into an existing solution such as for example Aura.



3D wheel measurement system installed in the track area.

Photo: Althen GmbH Mess- & Sensortechnik

## For more safety and comfort



When passenger trains are tested, the sensors retrieve numerous measuring data that contribute substantially to the optimisation of rolling stock.

Graphic: ASC GmbH

Safer and more efficient railway traffic is only possible through a continuous supervision of trains and infrastructure.

The sensors of ASC GmbH detect even the slightest variations on vehicles and structures. They record the position of trains and ensure a high comfort of travel. This year the enterprise located in Pfaffenhofen, Germany, presented its broad railway technology product program for the first time at InnoTrans.

The very wide frequency range in combination with their extremely robust and durable construction make the capacitive acceleration sensors and inertial measurement units (IMU) outstandingly suitable for the extremely harsh operational conditions in railway traffic.

The acceleration sensors ASC 4421MF (uni-axial) and ASC 5525MF (tri-axial) with a frequency range of 0 hertz to 7 kilohertz (typ.  $\pm 3$  decibels) and a high impact resistance of up to 6,000 g are used for the analysis of the structural

durability of bogies as well as for complete trains. The sensors ASC 4311LN and ASC 4411LN furthermore allow to improve the riding comfort of railway vehicles. Many users utilise sensors of the ASC CS-series for the supervision of bridge structures as they ensure a loss-free signal transmission over very big distances. On the other hand, the light, robust and high-frequency piezo-electric acceleration sensors ASC P203A11 that operate in the measuring ranges of  $\pm 50$ ,  $\pm 100$ ,  $\pm 500$  and  $\pm 2,000$  g are proven.

### Tests with a broad detection spectrum

The detection of track bed vibrations is also mandatory for the operational safety. For applications in this field, ASC offers the acceleration sensors of the ASC OS-series

that are extremely durable and furthermore hermetically sealed. The measuring range lies between  $\pm 2$  and  $\pm 200$  g and they are supplied in a rugged stainless steel casing with an impact resistance of up to 6,000 g (ASC OS 125MF). The tri-axial acceleration sensors ASC OS-315LN furthermore feature the lowest spectral and broadband noise as well as an excellent signal-noise-relation.

In railway technology applications the sensors ASC IMU 7.x.y are used. They are composed of a tri-axial capacitive MEMS acceleration sensor as well as a tri-axial angular rate sensor and include six degrees of liberty. The range of acceleration lies between  $\pm 2$  and  $\pm 50$  g, the rotational range between  $\pm 75$  and  $\pm 900$  degrees per second. All ASC sensors are used for test and approval rides but not for the use in big series.

## Air technology on track

Design, application properties, durability – rolling stock manufacturers must be able to count on the best product performance when choosing a coating system.

At InnoTrans 2018, the paint manufacturer Mankiewicz Gebr. & Co. (GmbH & Co. KG) presented the experiences it has gained among others in the aviation industry. These coatings are meanwhile also adopted for exterior and interior coatings of railway rolling stock.

In the base coat-clear coat system for exterior coatings, it is suf-

ficient to apply a single layer of the base coat that acts as colouring layer with the advantage of very short waiting times for re-coating. This layer – and with it the shade – is then sealed by a clear coat that ensures a high resistance against UV radiation, chemicals as well as big temperature differences and mechanical loads. For interior ap-

plications manufacturers are facing challenges to match the fire protection standard EN 45545-2 that must also be considered in the composition of the coating. In this field Mankiewicz also benefits from its experiences in the aviation industry. It has to be remembered that the coating is an important factor for the perception of a brand.

## Protecting infrastructures against overvoltage

The electric sub-distribution of 'non-railway power' to critical infrastructures or the 'last mile' to railway stations but also to workshops, operations control centres and interlockings is endangered by lightning strikes.

There is a danger for electronic devices of any kind even if the lightning hits at a distance of up to two kilometres. Furthermore all electric switching operations are potential sources of danger for the electronics; possible sources of damage are also short circuits and earth faults as well as temporary overvoltages (TOV).

Among others, Raycap GmbH has developed the ProTec systems T1HS, T1H and T2H that were presented at InnoTrans 2018. These systems are so-called surge protection devices (SPDs) and are able to reliably extinguish lightnings (T1) and overvoltages (T2). The more powerful HS variant is dimensioned for a discharge capacity of up to 100 kiloamperes (10/350 microseconds). ProTec T2H is installed as an overvoltage protection in the sub-distributions or in the main junction boxes. In conjunction with varistors, gas arrestors (GDT) guarantee that even high current peaks can be quickly handled; furthermore this construction improves the durability. In addition to this, Raycap has optimised the resistance against vibrations and shocks with its patented lock-

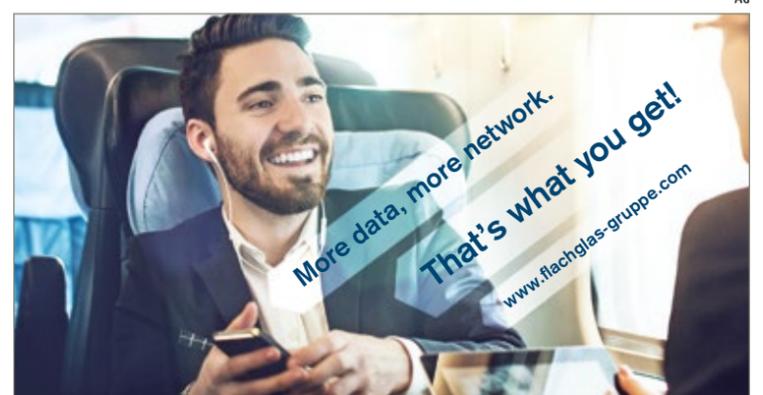
ing mechanism. Contacts are coded according to their SPD type and network voltage in order to prevent erroneous connections. A new thermic separation was developed for the ProTec product range: The 'ADV solution', that is the so-called 'traffic light indicator' gives an early warning for the need of an exchange while the protection still remains active.

The enterprise offers further solutions in their portfolio of railway applications such as for example for the protection of turnouts and signalling equipment with an improved TOV stability as well as voltage limitation cabinets to be installed directly near the track.



ProTec T2H system with 'traffic light indicators'.

Photo: Raycap GmbH



## Surfers need waves!

FLACHGLASconnect® – the brand of glass for your best reception on the train

- Permeable for high-frequency radio waves thanks to a special laser procedure during manufacture
- Improved energy efficiency and sun protection qualities
- Maintenance-free and unobtrusive in design

**FLACHGLAS GRUPPE**

FLACHGLASconnect®

## REVIEW

■ **This was InnoTrans 2018 – a wide spectrum on Twitter too**

# Tweets from InnoTrans 2018

InnoTrans 2018 presents products and companies but focuses on communication and exchange as well. While the leading trade fair of the industry is receiving much attention on the exhibition grounds, it is also well reflected in the media. More than ever, InnoTrans 2018 has been reflected in the social networks – frequent occasions were the presentation of new products, the awarding of prizes and the series of lectures at the InnoTrans Convention. A look back in tweets.

**ALSTOM** **Alstom** @Alstom · Sep 21

And it's a wrap for Alstom @InnoTrans! We had a fantastic event and we are proud to shape the future #mobility together. Don't miss our #InnoTrans2018 #video highlights & see you at #InnoTrans2020

**Alstom at #InnoTrans2018 - Video highlights**  
At InnoTrans 2018 in Berlin, we showcase how we help drive the global transition to more sustainable transportation as well as innovations that exemplify the...  
youtube.com



**DB** **DB Cargo** @DB\_Cargo · Sep 21

From @InnoTrans trade fair to the public days. Thank you all for an exciting & very interesting #InnoTrans2018 we hope you enjoyed it as much as we did! And for all those railway enthusiasts among you - public days start tomorrow! Stay tuned for more info :).



**Derby Rubber** @Derby\_Rubber · Sep 22

#InnoTrans2018 is over. What a fantastic event. We had such a successful exhibition and will be back for #InnoTrans2020. Great work @InnoTrans and farewell Berlin. #ballastick #gothedistance #australianmanufacturing #ballastregulator

**moovel** **moovel Deutschland** @moovelDE · Sep 21

Auf Wiedersehen #InnoTrans und bis in 2 Jahren! Großes Dankeschön an das @InnoTrans Team für die großartige Messe. Unser neues #moovel Video & insbesondere die musikalische Untermalung widerspiegeln unsere aktuelle Gemütslage 😊. Also, macht die Lautsprecher an 🎵 Happy weekend!

**SYSTRA Ltd** @SYSTRA\_LTD · Sep 22

We've had a fantastic @InnoTrans 2018. It may be over for this year but we're always thinking about the future of transport - check out our Latest Thinking pages & get in touch if you'd like to share ideas: [buff.ly/2x0SCMm](http://buff.ly/2x0SCMm)



**Siemens** **Siemens Mobility** @SiemensMobility · Sep 21

Goodbye #InnoTrans2018, we had a blast! Thank you to everyone for an insightful week and fruitful exchanges! Together, we are shaping connected mobility. For today and the future! [sie.ag/2xmSM0x](http://sie.ag/2xmSM0x)



Sabrina Soussan, Karl Blain, Wilko S. Wolters and 6 others

**The Rail Alliance** @therailalliance · Sep 24

What a week @InnoTrans we have had. Thank you to everyone who came to see us on the stand and we thoroughly enjoyed visiting #RAMembers exhibiting world class innovation to a global rail audience #ExportingisGREAT @tradegov.uk @beisgovuk



**ABI Electronics** @ABI\_Electronics · Sep 25

ABI would like to thank all customers and prospects from the transit sector for providing great insights and the opportunity to strengthen our relationship @InnoTrans last week. We loved your stories of how ABI products are making a difference in the business! #Repairdontwaste

Stay in control of your repair needs.  
Minimise costs and dependence of external suppliers



**ABI ELECTRONICS**  
Extending the life of your PCB since 1983 [www.abielectronics.co.uk](http://www.abielectronics.co.uk)

**Global Railway Review** @GlobalRailway · Sep 26

Record-breaking #InnoTrans2018 proves #rail sector is booming @InnoTrans [bit.ly/2xRWAGF](http://bit.ly/2xRWAGF)



**SWISSRAIL** @swissrail\_com · Sep 21

Die @InnoTrans ist Geschichte! Was bleibt sind die unglaubliche Zahl von 160'000 FachbesucherInnen und ganz viele neue Geschäftsbeziehungen. Wir blicken auf eine tolle #Swissrail-Woche in #Berlin zurück. Viel Spass und bis 2020! [youtu.be/TT5mTAcv4M](http://youtu.be/TT5mTAcv4M)  
#InnoTrans2018

**Thermo King Europe** @ThermoKingEur · Sep 21

Two words: THANK YOU! @InnoTrans

**Mafex** @MafexSpain · Sep 22

Gracias a todas las empresas participantes en @InnoTrans #InnoTrans2018 Instituciones @fomentogob @abalasmeco @Adif\_es @Renfe @Icex @Irekia @deiEJGV @grupospi @euskotrenEJGV y visitantes. THANKS to all, companies, institutions & visitors. #SeeyouInnoTrans2020.

**Strukton Rail** @StruktonRail · Sep 22

Thanks #customers, #partners and #colleagues for a great @InnoTrans show! Let's continue to make #safe, #available, #efficient and #sustainable rail transport together @DualInventive @SiemensMobility @eurailsout #willow #railrestore @Shift2Rail\_JU

**SGS GROUP** @SGS\_SA · Sep 21

We had a great week at #InnoTrans2018 meeting rail experts and professionals - thanks for having us @InnoTrans!

**Voith Turbo** @Voith\_Turbo · Sep 22

Thank you for a great exhibition @InnoTrans! We hope you got a great insight into the newest developments of the #rail industry. What did you like most this year? #InnoTrans2018 #DriveNewWays

**MASTERIS** @MASTERIS\_Rail · Sep 26

Encore merci à tous les visiteurs passés sur notre stand @InnoTrans ! Beaucoup de rencontres et de partages durant ces 4 jours de salon. Rendez-vous en 2020 ! ow.ly/4joa50yc5S3 #InnoTrans2018 #Railway

**DIE BAHNINDUSTRIE** @Bahnindustrie\_D · Sep 22

Wir blicken zurück auf eine großartige Woche! Die @InnoTrans 2018 war für die #Bahnindustrie ein voller Erfolg und hat einmal mehr bewiesen: #Bahn fahren macht immer mehr Sinn - und immer mehr Spaß! #TheFutureOfMobility #MobilitätNeuErfinden #MobilityReinvented #VDB

**HackTrain powered by Hack Partners** @TheHackTrain · Sep 25

HackTrain InnoTrans had amazing stats with over 200 attendees at the launch event & 2.5 million points of data were shared, the highest we have shared at any HackTrain event!!! #HackTrainIT #InnoTrans2018 #InnoTrans

WE HAD OVER 200 ATTENDEES AT THE LAUNCH AND JUST OVER 150 FOR THE FINALS	THE 50 INNOVATORS CAME UP WITH A TOTAL OF 13 IDEAS	OVER 200,000 LINES OF CODE WERE WRITTEN IN 72 HOURS	2.5 MILLION POINTS OF DATA WERE SHARED (THE MOST WE'VE EVER SHARED)
--	--	---	---

**CumminsEurope** @CumminsEurope · Sep 24

We had such an amazing time @InnoTrans and we want to say thank you to everyone who stopped by our booth! #Cummins #EvolveYourRail

**Willow** @Willow\_Tech · Sep 23

What an incredible event @InnoTrans 2018 was! Excited and proud to have launched Willow Rail powered by Strukton. Looking forward to continuing our innovative work with the team at @StruktonRail willowrail.com

#willow #willowrail #InnoTrans #InnoTrans2018

**Willow Rail**  
Discover how Willow Rail can enhance your rail capabilities, increase efficiency, reduce costs and optimise your resources.  
willowrail.com

**VisioStack Inc.** @VisioStack · Sep 21

Last day of InnoTrans, this show never ceases to amaze! Huge thanks to all those that came by to visit at AREMA and met with us at InnoTrans. See you at Big Data in Delaware!

#arema2018, #innotrans2018 #bigdata #RailLinks

**PTV Group** @PTVGroup · Sep 21

#InnoTrans2018 war der Wahnsinn! Ein riesen Dankeschön geht vor allem an das Team und an alle, die die diesjährige @InnoTrans einzigartig und besonders gemacht haben. #MindofMovement #InnoTrans2018 #InnoTrans

**UNIFE The RAIL IND.** @UNIFE · Sep 21

With every edition @InnoTrans proves itself as 'the place to be' for the rail industry. Even though this edition is about to finish we are already looking fwd to the next one, which will for sure surpass the records set this year! Thank you to all of our speakers & guests at our stand

**Lucchini RS** @LucchiniRS · Sep 21

InnoTrans 2018 is over. Thanks to everyone! #LucchiniRS #InnoTrans #LucchiniRS #InnoTrans #InnoTrans2018 #messeberlin #lookbeyond #innovatingforinnovators #tothefuture #exhibition #events #brandidentity #company #railway

## International Bus Forum discusses tomorrow's bus traffic



Photos: VDV, Thomas Trutschel / Messe Berlin

At this year's InnoTrans, for the first time, the International Bus Forum complemented the scope of the Bus Display.

While ten electric buses made their rounds in the summer garden, the panel participants of the International Bus Forum discussed at its debut the future of e-buses in public transport.

It seems that, among others, there was a big need to discuss the maturity for commercial operations of electric buses within this new format of the InnoTrans Convention. While the French Transdev group presented the daily operations of around 500 buses in and around Eindhoven and Amsterdam, the head of Berlin's BVG, Sigrid Evelyn Nikutta questioned the operational readiness with regard to the inductive charging, hinting at the experience of line traffic

in inner-city Berlin. According to Transdev's Marc Vanhoutte their buses cover an annual distance between 70,000 and 105,000 kilometres. He claimed that their availability exceeds that of diesel vehicles. However, they are charged by direct cable connections. Vanhoutte qualified his statement claiming a higher investment in e-mobility. The lower ranges between recharging made it necessary to buy more buses than for diesel operations. Furthermore maintenance

needs more employees and investment per unit is higher while the consumed energy is cheaper.

Siegfried Balleis, coordinator of the 'Special Clean Air Programme' of the German Federal Government pointed out that there is still money for subsidies in municipalities and said: "The change is expensive but the money is well invested." Frank Steinert, team leader at the Fraunhofer Institute for Transportation and Infrastructure Systems IVI,

emphasised that many synergy effects could still be generated when the various components such as air conditioning systems could be interconnected.

The International Bus Forum, an element of the InnoTrans Convention was organised by the Association of German Transport Companies (VDV). It complemented the Bus Display for the first time in terms of contents. The exhibition space for electric buses that was introduced in 2016 and the related

charging infrastructure again enjoyed great popularity with trade visitors at InnoTrans 2018. This is where the Trollino 12 from Solaris, as an example, celebrated its premiere. It convinces thanks to its silent and environment-friendly drive. Trade visitors were able to take a ride in the manoeuvrable VDL Citea SLEA Electric from VDL Bus & Coach, in the Aptis from Alstom or in the Sileo S18 from the manufacturer of the same name.

### NEWS

#### Zero-emission mobility

The Dutch manufacturer EBUSCO B.V. has presented its successful electric bus 2.1 to the public. It has been on the market for quite some time and operates for example on Borkum and in Munich in local transport as well as in 15 further cities in 6 countries. The electric bus is 12 metres long and can transport up to 90 passengers. It is able to cover 300 kilometres with a single charge of its 311 kilowatt-hours battery. Its successor that shall come out at the end of this year will be named 2.2. The new electric bus model is also 12 metres long and will offer space for up to 90 passengers. It will be powered by a new 363 kilowatt-hours battery to allow for a range of 350 kilometres. The big battery capacity will allow the electric bus to operate during the day until night. EBUSCO B.V. is the first enterprise to have replaced the diesel buses of a line by electric buses. In this case 10 diesel buses were replaced by 10 electric buses. In order to simplify the transition from diesel to fully electric operation as easy as possible and to increase the range of the buses, the battery technology is continuously further developed.



Graphic: EBUSCO B.V.

At the end of 2018 the EBUSCO 2.2. is to come onto the market.

Ad

## We are on Track! Electronic control for rail vehicles



**USB charger**  
for passenger area

**Economical solution for charging mobile phones and tablet PCs on rail vehicles.**

- Two USB-A ports
- Supply voltage DC 24 V
- Output voltage 5 V per port
- Output current 1,5 A per port
- Y-type pluggable terminal
- LED status indication per port
- Optional with protection cap IP65
- Type tested acc. to EN50155

**Safely  
Charged**

Lütze Transportation GmbH • D-71384 Weinstadt • Tel.: +49 71 51 60 53 - 545  
sales.transportation@luetze.de • www.luetze-transportation.com

**LÜTZE**   
TRANSPORTATION



## IRMA 6 – makes it easy

IRMA 6 – Sensors for automatic passenger counting.

Photo: iris GmbH

Even simpler, more intuitive and flexible. IRMA 6, the sixth generation of sensors for automatic passenger counting from iris-GmbH, made its debut from September 18 to 21 at InnoTrans 2018 in Berlin, the home and birthplace of the company.

■ The hardware has been re-developed from scratch and features increased storage and computing performance while retaining the robust and proven time-of-flight (TOF) technology. The increased resolution of 80,000 pixels generates more intuitive and easy to understand video images (HD / TOF image streaming). To allow more flexible mounting positions and heights, the counting sensor was fitted with an advanced technical feature in lighting technology.

The implementation of the ITxPT sensor communication achieves maximum standardisation. IRMA 6 = Plug&Play.

### User-friendly web interface

Apart from technology development, iris GmbH is also committed to product design. Cleverly devised details save time and therefore installation costs. Overall, IRMA 6

is designed for modularity – this allows the use of numerous different physical interfaces such as Ethernet, Ethernet with PoE and various other future IOs. A user-friendly web interface allows direct access to the system by browser. With the development of the sixth generation of IRMA sensors, iris GmbH not only intends to expand the options of the technology, but also aims at creating an intuitive product which shortens and facilitates all work steps at all levels of use.

For many years now, the management of small and large fleets has been an important issue in the development of local transport networks. In the past 15 years satellite-based tracking and the introduction of powerful processors have led to a widespread use of telematics systems

for fleet control and passenger information in real time. We are now seeing a further boost in innovation, triggered by powerful and globally accessible server networks (cloud computing) and the massive spread of smartphones. New system architectures including mobile terminals and data sets in the cloud are under discussion or are being tested in practice.

IRMA 6 is an offer benefiting the fast evolving digital structure in public transport. The focus is no longer only on fleet management or vehicle deployment, but rather on the control of passenger flow. With more precise data passengers can plan their trip more accurately – to achieve this, the IRMA 6 sensor offers decisive prerequisites.

## NEWS

### ■ Ticketing of the future

A futuristic-looking design caught the attention of visitors at the booth of ALMEX GmbH: Free-standing ticket vending machines that can be equipped with information and/or video systems and that can be operated from both the front and the rear face. They feature the latest technical achievements with RFID technology and can convince with their touchpad screen sizes of up to 49 inches. The new ALMEX ticket vending machines of the cashless series offer cashless ticket purchases via a PIN pad with a card reader and a contactless reader for bank and credit cards as well as e-ticketing media but may also provide customer support. ALMEX also offers vending machines with a video function to guide customers through the sales process with the help of an assistant and with the supply of further far-reaching information; a video camera, loudspeaker and microphone support the video assistance. An industrial computer in a modern stainless steel casing with a Windows operating system is used. This protects the vending machines in the best way against vandalism and makes them ready for the future in terms of functionality and design.



A convincing design complements the functionality.

Photo: ALMEX GmbH

## Energy for realistic real-time simulations in public transport

Data-driven innovations such as the new IoT sensor technology or the Smart Rail Maintenance app exemplify how intelligent data analysis sustainably reduce maintenance costs and improve the reliability and the operational safety in urban transport at the same time.

■ Sensor-based remote monitoring as well as predictive maintenance concepts are highly promising, particularly in difficult to access areas such as, for example, underground railway tunnels. For this reason, Vossloh has selected

the Easydrive-i point machine as a pioneering application for its IoT sensor technology.

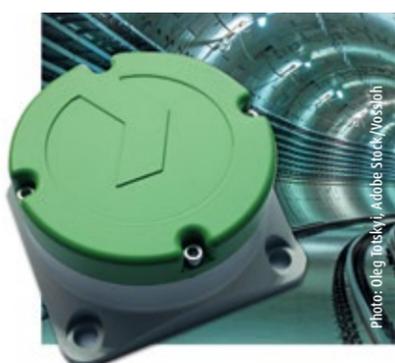
The new IoT sensor generation that will equip the premium point machines from Vossloh in future demonstrates that the development of additional data sources is a significant driver for the digitisation in the railway sector. In a first step the sensors can be available at the Easydrive-i point machine – and

this because of the high flexibility of this modularly constructed electrohydraulic actuator. All Easydrive models are fully compliant with the EU safety standard EN 50129-SIL4. Thanks to its external hydraulic unit, maintenance staff can work safely away from the line during manual operations of the point machine, whereas the unit can be installed at the wall or horizontally under the service dock.

### Safe, green and highly versatile

Both variants can be deployed for almost all types of turnouts in urban transport – whereas the in-track version can be particularly easily and flexibly arranged. It is therefore recommended to use this model to help introduce the innovative IoT sensor technology even when there is limited available space. The freely programmable sensors are now already prepared for 5G: They will in future com-

municate in a bi-directional way and in real time on the 3.5 or 28 gigahertz frequency bands of the coming mobile telephone standard respectively. With the help of a microprocessor, the IoT sensors carry out a prequalification or a first analysis of the raw data respectively. This ensures on the one hand that the requirements on bandwidths for data transmission are kept as low as possible and that on the other hand the status data that are sent to the central maintenance cloud are compressed to include the relevant facts only. From there, in the inverse sense, the sensor can also receive data, for example new sensor configurations. This makes the communication of the Vossloh sensors completely independent from the control and signalling systems for the railway network. The IoT sensors are also independent from an external power supply. Furthermore, the system is virtually maintenance-free; there is no need for cabling, battery exchange etcetera.



IoT sensor for connected point machines in urban transport (especially metros).

Photo: Oleg Iosky / Adobe Stock / Vossloh



## Enjoy the Italian way

More than just on-board catering: the diversity Italcarrelli and partners.

Photo: Italcarrelli di P. Lopez s.r.l.

Italcarrelli di P. Lopez s.r.l. and its partners offer innovation and technology for on-board travelling comfort.

Italcarrelli and Spinel, both from Italy, have presented the new OnBoard trolley with an integrated espresso machine at InnoTrans 2018. Powered by a lithium battery the machine supplies espresso and other coffee specialities at the push of a button. The trolley also provides for cold snacks: Insulated drawers in the lower part keep all sensitive products cool and fresh – even on long trips. Cold snacks

as well as hot and fresh coffee specialities are therefore available directly at the seat. Durable materials, an easy utilisation, a stylish functionality as well as a high level of performance with at the same time a reduced weight are the main characteristics of this unique espresso trolley.

On the joint booth the enterprise Fas International presented its new 3-in-1 self-service dispenser Combi

T300 for hot beverages, soups and fresh teabag products in its upper part as well as for fresh foodstuffs, snacks and cold beverages in the lower part. The produced waste can be directly disposed of and shredded in the Fas Trittech recycling machine, thus reducing the number of rubbish bags from seven to one. As a full service provider Italcarrelli completes the offer of snacks and foods both in the railway car and in the vending machine thanks to the partnership with six outstanding enterprises of the brand 'Made in Italy'.

## Onboard Hospitality Forum – focus on the customer

It was all about customer comfort and well-being in the new Onboard Hospitality Forum. The speakers of several European railway operators gave the auditorium a broad overview over the related possibilities such as exclusive passenger lounges in stations, high-class menus or diverse booking classes with selected extra services. As an example, Deutsche Bahn AG was able to increase the customer satisfaction in their lounges from 69 to 87 per cent with a new design of the lounge and special catering offers. This was announced by Christine Stockmann, in charge of onboard services with the group.

Claire Ansley from Virgin Trains East Coast gave an insight into the cooperation with TV cooking show presenter James Martin to revolutionise the onboard gastronomy. How to make a travelling experience from a rail trip was in the focus of the explanations of Creative Manager Manoj Pridhanani from Kaelis, Chief Customer Officer Marc Noaro from Eurostar as well as Nicola Webb, Commercial Director of Rail Gourmet UK. Simon Pont, CEO of ECR Retail Systems spoke about the increase of receipts generated on board and about the improvement of the passenger comfort with the help of a mobile point-of-sale technology.

The well-attended event clearly showed up that nowadays it is not enough any more to bring customers from A to B. Service to the customer has meanwhile become a decisive factor for success in business. The Onboard Hospitality Forum was organised by the International Rail Catering Group (IRCG) and the Onboard Hospitality magazine. Thematically, the format content is attached to the exhibition halls for Travel Catering & Comfort Services and the products that are presented here.



InnoTrans 2018 – Onboard Hospitality Forum – Roger Williams, Chairman, International Rail Catering Group.

Photo: Messe Berlin

Ad

### Anti-trap protection for bus and train doors



- Finger protection profiles with an integrated safety contact edge
- LEXI Light curtains for non-contact anti-trap protection
- Contact strip on the step tread







Rubber | Isolation | Fibreglass

**Gummi-Welz GmbH & Co. KG**  
 Otto-Renner-Str. 28    vertrieb@gummi-welz.de  
 89231 Neu-Ulm, Germany    www.gummi-welz.de  
 Phone: +49 731 93609 0    Fax: +49 731 93609 90

## Enhancing the customer experience

LSG Group supports train operators in the design and implementation of on-board service concepts.

Under the motto 'Indulge your passengers with an enriched customer experience', the LSG Group (Lufthansa Service Holding AG) presented its integrated approach to the upgrading of the concept and the related customer experience that includes the various expert brands of the group: LSG Sky Chefs for Catering & Hospitality, Evertaste for Convenience Food, SPIRIANT for Equipment and Retail inMotion for IT.

"We are prepared in the best way to offer train operators tailor-made solutions thanks to our know-how in concept design and menu development, our high quality standards, our logistic expertise as well as

the related support by a consistent IT platform" says Peter Rebelo Coelho, Head of Train Services Europe with LSG Group.

The experts of LSG Group informed on their concrete experiences with regard to the development and implementation of completely diversified on-board service concepts by case studies on the subjects of on-board sales, restaurant service as well as operations.

The LSG group has supported train operators in Europe with the development and implementation of on-board catering concepts for almost 15 years. Renowned enterprises such as Eurostar, Thalys, TGV Lyria, TGV France-Italy and the Intercity 2 trains of Deutsche Bahn

AG in the network North are part of the customer portfolio. With the liberalisation of the railway market in Europe in 2020, operators will have to re-evaluate their strategic positioning in a more competitive market. "Products are important for our existing and potential customers, but they have even bigger interest – with regard to the on-board service – in an all-embracing management of the whole", explained Peter Rebelo Coelho.

A well reflected concept that is adapted to the travelling class would stand out as a decisive point of differentiation for many operators in the framework of the liberalisation, if professionally and profitably implemented, he added.

## Albula tunnel breakthrough



Welcome to the miners from the South at the breakthrough of the new Albula tunnel on October 2, 2018.

Photo: swiss-image.ch/ A. Mettler

The tunnel project of Rhaetian Railways in Switzerland reaches an important milestone. Operations are due to start in early 2022.

The newly constructed Albula tunnel was holed through on October 2, 2018. It took a good three years for the miners to break out the 5,860 metres long tunnel distance between the Albula valley and the Upper Engadine. It will serve the narrow-gauge trains of Rhaetian Railways (RhB) to replace the existing building from the year 1903. With the breakthrough one of

the major milestones of the project has been reached. A total of 250,000 cubic metres of rock were broken out. The excavated material serves as raw material for the production of concrete and ballast and is being processed in Preda. Lower quality material has been transported via conveyor belts to an on-site landfill to be deposited in a manner compatible with the natural landscape.

The construction of the interior of the tunnel is now due to start with the last layer of shotcrete of the tunnel lining, the tunnel floor will be laid open and then the substructure will be carried out. Furthermore, twelve transverse connections between the old and the new tunnel will be completed. After this the track construction and the cabling of the railway technology will start. The total investment amounts to 345 million Swiss Franks.

### Railway stations will also be renovated

The new Albula tunnel is foreseen to be taken into service by the end of 2021 or early in 2022. The old tunnel will then be rebuilt to become a safety tunnel. In combination with the new construction of the tunnel the two stations at the Albula tunnel will also be renewed. Both Preda and Spinis will be brought to the current state of technology and equipped with facilities for the disabled in the years 2020 and 2021.

The present Albula tunnel that was taken into service in 1903 is today classified UNESCO World Heritage. In 2006 its conditions were surveyed and a considerable need for renovation and upgrade in terms of safety was detected. After a thorough evaluation of the alternatives to restore the old tunnel or to build a new one, Rhaetian Railways decided in 2010 for a new construction. The decisive arguments for this were the relatively small cost difference, the very limited restrictions on timetables during the construction phase and the substantially higher safety level of a new construction. The new tunnel guarantees not least a high quality in the long term and is advantageous in terms of sustainability.

## Challenges and targets in tunnel construction

Digitisation and its influence was also an issue in the two Tunnel Forums of InnoTrans 2018.

Chaired by Dr. Roland Leucker, the Research Association for Tunnels and Transport Facilities (STUVA) organised the International Tunnel Forum during the second and third day of the trade fair. The first event dealt with long-term targets in tunnel construction. The range of topics on digitisation and the European Train Control System (ETCS) was given a great deal of attention during the panel discussion. "The future on rails is digital", emphasised Prof. Dr. Dirk Rompf from DB Netz AG. He called the first German ETCS-equipped line between Berlin and Munich a successful example since the achieved effects were even better than expected. The second Tunnel Forum was introduced by Leucker

with the following words: "A modern infrastructure is an important factor for the quality of life and represents the basis for a reliable transport network". This block of conferences concentrated on the current challenges in planning and construction of tunnels.

The speakers looked at international projects and outlined the current problems. All lecturers agreed on the fact that there was no backlog in investment but that planning processes were delayed, above all due to the difficult approval procedures and the lack of professional employees. Dr.-Ing. Stefan Deges called for an efficient deployment of the few resources and Chris Dulake from Mott MacDonald emphasised that a view into other business sectors might be helpful.



The speakers of the Tunnel Forums could count on a high level of interest.

Ad



## Shaping the future of mobility Drive New Ways

The future of mobility is being driven by the need for an efficient way of transport – Whether by road or rail. With our customer in focus, we are providing future-orientated solutions that drive the mobility market.

voith.com

**VOITH**  
Inspiring Technology  
for Generations

# An unforgettable experience



The winners of this year's Career Awards: Brunella Cocca, Jonas Ludwig, Daniel Manichello, Luke Cunningham, Dr. Elena Queck, Nadine Rössig, Lorenza Giletti, James Donovan, Michele Bellavia, William Mongeau, Lorenzo Pestana (from left to right).

Photo: Messe Berlin

The prize is highly gratifying: a visit to InnoTrans including all-round support. Since 2016 the trade fair calls for competing for the Career Award. The related competition is organised by domestic and foreign associations and institutions that honour native students for outstanding performances in the studies with relation to railway transportation and public transport. A total of eleven students from Australia, Germany, Italy, Canada and the USA won a trip to Berlin. At InnoTrans they receive the best overview of the sector and are able to make targeted contacts for their professional future. Six award winners describe their impressions:

**Michele Bellavia, Italian Railway Engineers Association (CIFI) / Italy:**

“InnoTrans 2018 is an extraordinary and innovative international railway fair. It was an honor and a wonderful experience to be a guest and to be able to compare myself with the big names in the sector.”

**Brunella Cocca, Italian Railway Engineers Association (CIFI) / Italy:**

“InnoTrans – a global network looking towards transport and mobility innovation!”

**Daniel Manichello, Railway Engineering-Maintenance Suppliers Association (REMSA) / USA:**

“My entire view of rail transportation evolved after my visit to InnoTrans as a Career award winner since I was in front of all of the industry's dynamic leaders who so generously shared insights, knowledge and the wealth of opportunities available to early-career professionals like myself.”

**William Mongeau, Canadian Association of Railway Suppliers (CARS) / Canada:**

“InnoTrans 2018 was an incredible and diverse experience that presented the other attendees and I with many different career opportunities covering a vast range of fields within the railroad and public transport industries, as well as many interesting technological innovations. Many thanks for the extraordinary experience!”

**Nadine Rössig, German Railway Industry Association (VDB) / Germany:**

“For me InnoTrans was marked by networking. It was exciting, huge and innovative as well as an excellent possibility to meet existing customers and to get to know new potential customers.”

**Luke Cunningham, John Holland Rail / Australia:**

“An unforgettable experience that opens up the vast possibilities of the world of rail and transport.”

## CONTACT

Your contact persons for InnoTrans

 Messe Berlin

### ORGANISER MESSE BERLIN GMBH

MS Mobility & Services  
**Matthias Steckmann,**  
Executive Director  
Messedamm 22, 14055 Berlin,  
Germany

T +49 30 3038 2376

F +49 30 3038 2190

innotrans@messe-berlin.de

www.innotrans.com

### EXHIBITION DIRECTOR

**Kerstin Schulz**

T +49 30 3038 2032

### VICE EXHIBITION DIRECTOR

**Kai Mangelberger**

T +49 30 3038 2356

### PRODUCT MANAGERS

**Lisa Höfer**

T +49 30 3038 2212

**Josephine Ruhp**

T +49 30 3038 2358

**Erik Schaefer**

T +49 30 3038 2034

### PROJECT ORGANISATION

**Stefanie Eisele**

T +49 30 3038 2430

**Danny Enwerem**

T +49 30 3038 3271

**Anne Gütte**

T +49 30 3038 2028

**Tim Hamker**

T +49 30 3038 2376

**Lan Hoang**

T +49 30 3038 2389

**Vera Rappsilber**

T +49 30 3038 2331

**Manuel Ruben**

T +49 30 3038 2011

**Lisa Simon**

T +49 30 3038 2124

### PRESS

**Daniela Breitschaft**

T +49 30 3038 2351

### ADVERTISING

**Bernhard Geradts**

T +49 30 3038 1851



The future of mobility

# InnoTrans 2020

22–25 September · Berlin

## Early Booking application for exhibitors

Take advantage of our special early booking conditions and register until 6<sup>th</sup> January 2019.

For further information please visit [www.innotrans.com/application](http://www.innotrans.com/application).

 Messe Berlin

Media partners for InnoTrans



**Eurail  
press**

**tunnel**

**MASS TRANSIT**