

Dear Readers,



This 55<sup>th</sup> issue of the Berghaus News once again brings interesting news to your attention.

The Federal Ministry of Transport and Digital Infrastructure has decided to increase the investment resources for the Transport Infrastructure Plan. We can therefore expect a considerable increase in construction work, with the need for professional protection of the corresponding roadworks. Here we will gladly support you with innovative products and professional services for your traffic safety.

In view of the considerable growth of the AVS Group in recent years, in February we invited all employees to attend a company event in Berlin, where we celebrated and reinforced our community spirit and prepared ourselves for the tasks ahead.



Dieter Berghaus,  
CEO

## Extending the production area for vehicle construction

**With immediate effect, our vehicle construction team working in Kürten-Eichhof now has more space for manufacturing mobile LED pre-warners and mobile warning trailers. At the same time the workforce has also been increased, with now altogether eight employees in the „Mobile Warning Trailers“ department.**

We offer a whole range of different warning signs for the professional traffic safety of urban, country and main roads as well as motorways. For example, we also make LED add-on pre-warners without a trailer that can be set quickly on a flatbed vehicle when the need arises. Furthermore, we produce do-it-yourself warning sign kits for road signs number 615 and 616-31 which customers can fasten to their own vehicles.

The LED pre-warners or mobile warning trailers made by our vehicle construction team are approved for use on the roads at speeds of up to 100 km/h. All advance warning lights and illuminated arrows used in the mobile warning trailers are already equipped ex works with energy-saving but bright LED technology, naturally BAST-tested. Depending on the specific model and customer requirements, various additional features are available as extensions for series types SM (for road signs number 615 and 616-31) and AM (for road sign number 616-30), including for example larger battery compartments with processor-controlled electronic battery charger, loading area with drive-on ramp and winch to take an LED pre-warner, radio remote control, electric device for raising and lowering the upper section of the warning sign and further options.

Brochures for all our mobile warning trailers and LED pre-warners can be downloaded on our website [www.berghaus-verkehrstechnik.de](http://www.berghaus-verkehrstechnik.de). Please also do not hesitate to contact us for an individual quotation!



top: mobile warning trailers for roads without oncoming traffic types AM 3 TL and AM 4 TL with additional MV-LED pushed onto the loading area; bottom: mobile LED pre-warner MV-LED and mobile warning trailer type SM 40 for roads with oncoming traffic.

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## Trams and buses control mobile traffic lights MPB 3400

**Priority for local public transport: data radio messages emitted by the vehicles themselves are received and evaluated as a long established standard feature in stationary traffic lights and with our mobile crossroads controllers.**

**But did you know that even our mobile traffic light system MPB 3400 can be actuated by local public transport vehicles?**

To this end, we use a special radio receiver (FEE) that receives, filters, analyses and processes the data radio messages emitted by buses and possibly also trams. Selective actuation of the mobile traffic light controller then takes place according to the specified configuration.

For mobile, off-grid operation, we have put the FEE in a waterproof housing with an antenna and equipped it accordingly for 12V operation from the traffic light controller. The FEE is simply mounted at the rear of any MPB 3400 traffic-light head and plugged into the central input of the traffic light control. Just one single cable provides the 12V power supply for the FEE and serves at the same time to actuate the traffic light. By the way, it is irrelevant whether the MPB 3400 is being used for alternating one-way traffic, T-junctions or crossroads control, because only one FEE is needed for all directions. The required data messages are evaluated in accordance with the customer's specific requirements according to direction and vehicle and forwarded immediately to the MPB 3400 control. All traffic light signal heads are then actuated according to the required local public transport priority functionality via the internal radio or cable system of the MPB 3400.

The modular structure of our mobile radio receiver for 12V operation means that local public transport priority functionality can be added even to an alternating one-way traffic system in the roadworks with just a couple of simple actions.



Local public transport vehicles, such as service buses or trams, can also be given priority at mobile traffic light systems. The additional module „FEE“ evaluates the data messages from the vehicle and then actuates for our example our mobile traffic light system MPB 3400.

# Reliable roadworks maintenance with Service Control GPS

The recently published software update has introduced suggestions made in the field, together with further improved handling for the customer.

For verification of implemented maintenance and controls in accordance with ZTV-SA, our customer „Hahn Auf Straßen Innovativ GmbH & Co. KG“ makes successful use of the Service Control GPS, with one very recent example in Nuremberg. The work involved in the course of rebuilding „Fire Station 1“ needs a mobile crossroads traffic light system to control traffic at the junction of Reutersbrunnenstraße and Maximilianstraße. Alfred Kellermann, Hahn's Technical Manager, advocates electronic, PC-independent documentation by Berghaus for precise verification of the daily inspection tours. „We use the Service Control GPS so that we can give our clients reliable verification of the time, location and scope of all implemented maintenance. The maintenance reports are printed out from the self-contained system once a week in the office; a copy is also enclosed with our service invoices to give the client another clear indication of which services we have performed and are now invoicing.“

„Lukas Verkehrssicherung“ from Dortmund also uses the Service Control GPS for inspection tours. Josef Mihai is responsible for maintenance at several roadworks. In his maintenance vehicle, the hand-held device is kept fully charged and ready to go in the vehicle holder. Individually numbered RFID detection marks are installed at the roadworks where the maintenance engineer signs on and off again on the spot with his Service Control GPS. „We really like this electronic, tamper-proof documentation with the Service Control GPS. The detec-

tion marks are uniquely allocated to each set of roadworks. Our inspection tours are automatically saved in the device and print-outs are subsequently produced in the right sequence according to the specific site. In the past, we faced an ever growing workload with handwritten lists that had to be carefully allocated to each individual set of roadworks, taking great care so as not to lose anything.“

Heike Köster from Köster Verkehrsicherungen, Hundsdorf/Westerwald carries out maintenance and inspection tours on motorways mainly in the Rhineland-Palatinate, Hesse and North Rhine-Westphalia. „The Service Control GPS is really easy to handle. After signing on at the site, the system queries all maintenance criteria one by one so that no points are forgotten. One very practical feature is that we can also work with several detection marks, for example in motorway roadworks. On entering the site, we sign on to the first detection mark, perform the necessary maintenance and sign off again at the second mark on leaving the site. We also like to work with two marks on main roads as well, because it then doesn't matter which is used for signing on or signing off. This puts us in a better position to plan the necessary inspection tours as appropriate for either the outward or return journey.“

The recently published software update has included suggestions made from practical use in the field, together with further improved handling of the Service Control GPS for the customers.



GPS controlled 

The Service Control GPS is operated intuitively with four soft keys. There is capacity for up to 1,000 maintenance tasks. It has a forgery-proof digital signature for data memory and print-out. The heavy duty lithium ion battery ensures long service times. A vehicle battery charger with device holder is available as an accessory, to give the Service Control GPS its own established position in the maintenance vehicle and ensure it is always ready for use.

Service Control GPS can now be used for comprehensive control of all maintenance criteria required in point 7 [6] of the ZTV-SA 97 in next-to-no time. Reliable records are kept of the daily inspection tours required by the regulation. The service team receives tamper-proof documentation with date, precise time, coordinates (GPS) and a list of the work performed. It is thus possible to prove that the control obligation has been fulfilled and when this was carried out, with corresponding unquestionable on-site

inspection of road signs, markings, directing elements, roadside equipment, illumination and protection systems. With every inspection, the ACTUAL status of the traffic safety system is recorded in the device, with electronic documentation of the maintenance work that has been performed.

Service Control GPS also gives clients or awarding road construction authorities reliable proof that the stipulated inspections were performed regularly on site in the scope of the traffic safety obligation.



# Major AVS company event in Berlin

To celebrate the company's 55<sup>th</sup> anniversary, in February 350 employees from all companies in the AVS Group came to Berlin for a joint event. This was intended to be something very special: especially lively, especially interactive. And so SwarmWorks was entrusted with the concept and implementation.

To gather so many of the Group's employees together at an event of this kind was an absolute first for AVS Traffic Safety Professionals. Following a number of acquisitions and the expansion of the AVS Group in recent few years, the workforce tended not to have a very strong feeling of belonging. The aim therefore was to enhance the community spirit, show appreciation and express gratitude to everyone for all their efforts. It soon became clear that this special framework needed an extraordinary concept.

SwarmWorks developed the motto „Green Light for the Future“ as a neat way of expressing the event's positive, future-oriented objective, while at the same time also fitting in very nicely with the AVS theme world. And then at last on 3 February 2017 the day had arrived: employees from many different AVS locations came to the Radisson Blu Hotel in Berlin, which had been booked completely for our exclusive use on this special occasion. After enjoying refreshments, the participants then began their experience of the thoroughly interactive day's event, which

also included a whole range of different presentations about the company and its products.

The employees were organised in small teams and given iPads with a series of questions about the various presentations. Everyone listened with great attention because of the interactive quiz that was taking place across and throughout the whole event. After all, everybody was eager to take pride of

place in the subsequent award ceremony. The various quiz elements were repeatedly interspersed with more relaxed games that were great fun while serving at the same time to clear everybody's minds. The excitement reached fever pitch when people started scoring goals in the football-pong and sped around the course during the race, past AVS crash barriers and road signs. The highlight for everyone was without doubt the big party in the evening, with tasty food and live music for cheerful celebrations that lasted through to the early hours of the morning. Workforce and management had a wonderful time and are sure to remember this special event in the German capital city for many years to come.

**Green Light for the Future.**



The management of the AVS Group: Dieter Berghaus, Hendrik Hücke, Steffen Weidner, Ralf Gressler and Jens Selling (from left to right). Andreas Schwingeler and Axel Keller were unfortunately not able to attend.

More pictures and a video clip of the event in Berlin can be found on [www.avs-verkehrssicherung.de](http://www.avs-verkehrssicherung.de) and on our YouTube channel.





## Successful traffic light training

Once again this year in good Berghaus tradition, traffic light experts received training at the end of January at company headquarters in Kürten (NRW) and in mid March at our subsidiary AVS in Mellingen (TH). Nearly 100 employees from renowned contractors for traffic safety and signalling technology, road traffic authorities, road maintenance depots and council depots from all over Germany took up this offer of further training.

Course participants both on the basic and advanced level were introduced to many new aspects in the two different, consecutively structured two-day seminars. The contents included German technical specifications and guidelines for construction site traffic signals (e.g. RiLSA, TL-LSA), as well as drawing up and implementing signal timetables and operation of the traffic light controllers including effective troubleshooting on site.

Operations manager Alfred Wurth and technician Uwe Banischewski led the participants through the various topics, once again imparting valuable tips and tricks from their more than 35 years of professional experience with mobile traffic light technology.

**Producing signal timetables by hand to practice before using the convenient automatic function.**

The seminar participants were particularly appreciative of the new editing function – a free update for our „AmpelTools“ software. The automatic editor is a practical aid particularly for users who have only just started to work with this kind of technology or only rarely produce signal timetables. After entering the number of groups and clearance distances for calculating the interim time matrix, the Berghaus software then produces the signal timetable automatically just with a mouse click.

Ampeltools arranges all signal groups as a suggestion, working automatically and without any errors. The suggestion can be simply accepted, or a mouse click will reveal the signal group once more so that the user can choose the best arrangement from the various computed suggestions – giving preference for example to the shortest circulation time.

In addition to our established traffic light courses, we also offer individual seminars on mobile traffic light technology. These seminars are adapted to the needs and individual equipment used by our customers. Our training and showroom is available for groups of up to 25 people. Needless to say we will also train your traffic light team „in-house“ at your own site. Please do not hesitate to contact us so that we can send you an individual quotation.

When you make your very first purchase of a mobile radio-controlled traffic light in Germany, usually the traffic light system will be delivered to your depot by a Berghaus customer service engineer who gives your employees free instructions on how to use the equipment.



## 8<sup>th</sup> German Roadside Equipment Congress in Cologne

On 8 and 9 March 2017, the Industrial Association for Roadside Equipment (IVSt) held the 8th German Roadside Equipment Congress in Cologne. For the first time, this year's congress was accompanied by a trade-fair held in a large exhibition hall. This gave the more than 500 congress participants and also over 300 registered trade-fair visitors an opportunity to enter into dialogue with 64 exhibitors, manufacturers and service providers to find out about the current product portfolio and all the latest traffic technology news directly on the spot.

At the joint exhibition stand for Berghaus Traffic Technology and AVS Traffic Safety, we presented the MPB 3400 mobile traffic light system with vehicle actuated red-phase residual time display. We showed the ProTec 120 mobile crash barrier (T3/W1) and the handy ProTec 50 City model (T1/W2) that is ideal for urban traffic safety. We also demonstrated the extensive possibilities of the new mobile overhead pre-warner TOP-LED, which gives warnings and information clearly visible from afar over the roofs of truck convoys.

We worked together with other traffic safety manufacturers to lay the cornerstone for a trade-fair in Germany, and are therefore very pleased to register such a positive echo from all participants, visitors, exhibitor colleagues and the organiser IVSt to the successful event. Despite the far greater framework, the 8<sup>th</sup> German Roadside Equip-



ment Congress remained an event of close professional and physical proximity. The focus was clearly on keeping distances short while providing information about current products and services offered by the branch, as well as appreciating an opportunity for sharing with colleagues.

Many thanks to all interested visitors, customers and business partners for coming to our exhibition stand in Cologne, for the many pleasant conversations and new contacts, as well as the ever growing interest in our services, products and innovations!

## In-house fair and symposium in Oslo



With more than 50 service centres, the traffic technology division BD Samferdsel of the Brødrene Dahl AS Group is Norway's largest full-range provider of traffic safety products. For many years now, Brødrene Dahl AS has been successfully selling mobile crash barriers and traffic light systems made by Berghaus.

A large in-house fair was held at Oslo airport on 22 and 23 March to mark 100 years of the Group's existence (including among others the business units for traffic safety, energy and climate, hydropower).

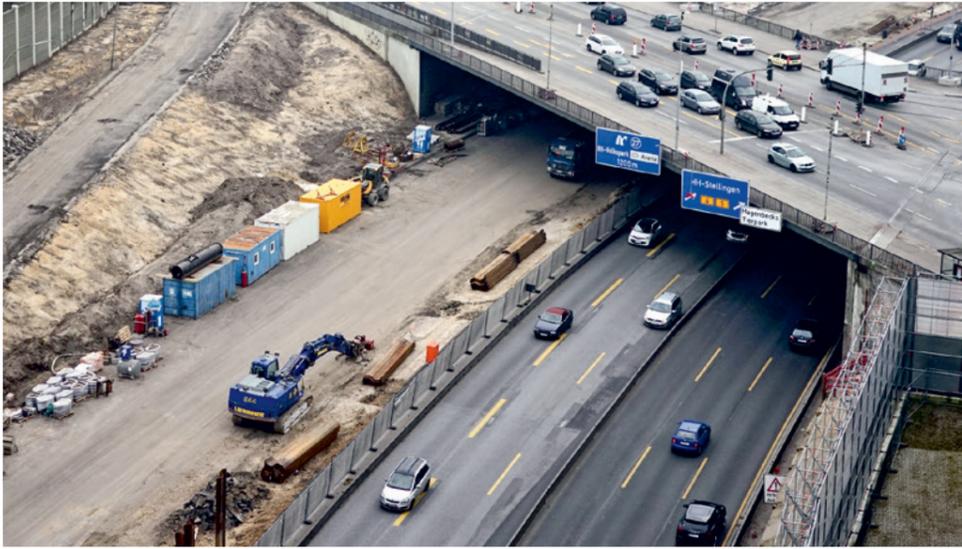
At the same time, Brødrene Dahl had also extended an invitation to what was its fourth 360° symposium. Since 2011 the company has been focusing on important topics such as traffic, the environment and the climate. Under the heading Green Future, lectures and workshops were held to discuss how joint cooperation could possibly help to reduce the damage and consequences of climate change, taking a 360° all-round view of the issues involved. The symposium was attended by company representatives, scientists and representatives from the authorities and political sector, including Fisheries Minister Per Sandberg and Transport Minister Ketil Solvik-Olsen.

Services and partners involved in traffic safety were presented in a separate building. Here Berghaus Traffic Technology also had an exhibition stand, where CEO Ralf Gressler and Sales Manager Thomas Keller presented the ProTec 50 City and ProTec 100 mobile crash barriers to the interested trade visitors, together with the MPB 3200 mobile traffic light system on a trailer undercarriage.

Speakers and visitors at the exhibition included among others Norway's Transport Minister and the Director of Nye Veier AS (New Roads), Norway's state-owned company for planning, constructing and operating motorways.



## AVS copes admirably with extensive night-time modifications



6+0 traffic layout on the A7 motorway/Kieler Strasse in Hamburg-Stellingen.

Photo: DEGES ©coptercloud

At the start of November, AVS Traffic Safety received the order to modify the road layout and roadworks protection in the adjoining areas of the public-private partnership project for the A7 and the tunnel being constructed in Hamburg-Stellingen, during the night-time hours of 11 to 12 November. A thorough review by the technical departments at AVS of the provided documents soon revealed the considerable scope of work involved. This entailed moving the whole road layout, modifying the mobile crash barriers, removing provisional road markings and applying corresponding markings for the new road layout.

Up to now, south-bound traffic was guided from a 4+0 into a 3+3 layout. But now the lanes had to be modified as follows: the 4+0 layout was to be extended, initially switching to 5+1, then to 3+3 and finally finishing up as a 6+0 layout – all within a construction area of just 1,000 m in length. Preferably the modifications were to be carried out at night without any road closures, ideally without causing traffic congestion or any other notable disruptions for all road users. Based on the wealth of experience accumulated by the AVS planning engineers when it comes to large-scale modification work also at night, it soon transpired during elaboration and planning of the required work that it would unfortunately not be possible to complete the specified modifications in such a short period during night-time hours without stopping the flow of traffic. A road closure was deemed to be indispensable: performing the necessary work

with constantly ongoing traffic would simply be expecting too much of all road users and put the construction workers under too great a risk.

After contacting Hamburg Police's central road authority, a meeting was then convened at short-notice, where all affected authorities consented to a road closure in the period from 9 pm to 7 am.

The AVS team started work two days in advance to prepare the complete road closure of the A7 from the Hamburg North-West interchange and the southbound carriageway on the A23 in order to implement the necessary diversion. Among others, five large road signs with concrete foundations and LED flashing pre-warners together with eleven other large information and traffic guidance signs were made individually and put in position for the motorways and adjoining roads.



## New for you on the sales team!



**New sales team member at Berghaus Traffic Technology: Thomas Keller (45) from Düren, Sales Manager for mobile crash barriers.**

Thomas Keller learnt traffic safety right from the start. After vocational training as a road maintenance technician followed by an administration course, he was employed by North Rhine Westphalia highway agency for many years before going into sales. Recently, Mr Keller worked as product manager and a member of the sales team at an engineering firm and at an SME construction firm operating on a national and European scale, where he was responsible for advice and sales of passive protection systems made of in-situ concrete.

With his many years of professional experience in the branch, Thomas Keller now works on the Berghaus sales team where he supports our customers in word and deed as an expert partner for mobile crash barrier systems and traffic safety products.

In this context, Mr Keller will also be responsible for further development of our foreign sales channels and for customer care. Thomas Keller sees his task as that of a solution provider with a clear focus on customer benefit.

On 11 November, the road closure was then set up together with the corresponding traffic guidance and diversions. The motorway was closed punctually at 9 pm to start work on the extensive modifications. That night, altogether 38 AVS employees were busy on site with four 40-ton articulated lorries, eleven 7.5-ton trucks and three mobile cranes. Three crash barrier teams dismantled around 1,500m of various different ProTec crash barriers and brought them to their new sites, where about 1,800 m of mobile ProTec crash barriers were then installed again. AVS employees in four marking gangs used the AVS PeelJet and a milling machine to remove the no longer needed road markings before then applying the new ones. Altogether 1,500m of foil and 2,000m of cold spray plastic were removed and about 3,200m of cold spray plastic and foil markings then applied. The modification work also entailed dismantling, moving and reinstalling countless TL safety beacons, road signs and traffic control boards with and without foundations.

While the modification work was in progress, it was also necessary for the fast lane of the north-bound carriageway to be provisionally closed. In addition, from 3 am onwards an AVS team also completely closed the Stellingen exit on the north-bound carriageway to repair the exit ramp. Furthermore, work was carried out during the night to prepare the new road layout for the adjoining Kieler Straße.

This job in Hamburg was a huge challenge for the AVS team given the extreme time constraints, but they coped admirably. Despite the poor weather conditions with ground fog, all the night-time work was completed successfully without incident. The extensive modifications necessary to the mobile road restraint systems were also completed on time. As a result, the work was accepted by the police and traffic authorities punctually and without any objections, subsequently terminating the complete road closure. The motorway was then opened for traffic again at 7 am.

## New additions to the management teams in the AVS Group

**Given the continuing growth of the AVS Group with correspondingly increasing complexity, all Group companies are gradually being provided with a second CEO.**

After implementing this arrangement within AVS Verkehrssicherung GmbH with CEOs Dieter Berghaus and Hendrik Hucke, as of 1 January 2017 a second CEO has also been appointed to AVS Mellingen GmbH and to Peter Berghaus GmbH.

At AVS Mellingen GmbH, Dipl.-Ing. Andreas Schwingeler has been appointed as CEO to work alongside Steffen Weidner. In terms of operative tasks at AVS Mellingen

GmbH, Andreas Schwingeler has taken on responsibility for the development and production of mobile crash barriers.

Dipl.-Kfm. Hendrik Hucke has been appointed as second CEO at Peter Berghaus GmbH alongside Dipl.-Informatiker Ralf Gressler. In addition to his role as CEO, Hendrik Hucke is also involved in financial affairs, human resources and strategic alignment.



Ralf Gressler



Hendrik Hucke



Andreas Schwingeler



Steffen Weidner