

traffic light REPORT

Magazine for traffic engineering



NEXT STOP

HAMBURG



HAMBURG
ITS World Congress
11 - 15 Oct 2021

Experience Future Mobility Now

We'll be there!

B7.411



Traffic light



Detection



Parking



E-Mobility



EDITORIAL

Dear readers,

Our company motto is Authentic people. Reliable products. Cooperation is particularly important during these difficult times. With so many of us working from home and physically separated from our colleagues, teamwork has never been more critical.

Here at RTB, we adapted quickly and established the tools we needed to overcome physical barriers and continue developing our solutions. This has worked so well thanks to the enthusiasm and dedication of everyone involved.

But it's not only people we've been connecting—we've also had to focus increasingly on integrating systems. For example, our TOPO product range now offers a complete end-to-end package and delivers all information required for proactive traffic planning in real time.

System integration is also proving essential in the Duchy of Lauenburg, where an autonomous driving project is bringing the future of mobility a step closer. TaBuLa-LOG, which demonstrates how passenger and goods transport can be combined in the future, is an anchor project of this year's ITS World Congress in Hamburg.

Of course, amidst all this technological sophistication, it's also important to remember the fundamental principle of safety. With this in mind, everyone at RTB is pulling TOGETHER as a team—despite working from home and despite the difficult circumstances—to successfully overcome the challenges of the digital age.

Stay tuned for more!
Sincerely,

Alexander Schmidt

CONTENTS & EDITORIAL 2

HAMBURG - WE'LL BE THERE! 3

REAL FAST - TOPO 4/5

BEST IN CLASS - TOPO 6/7

ODDS & ENDS 8



HAMBURG - WE'LL BE THERE!

The Duchy of Lauenburg, on the River Elbe, is breaking new ground in the autonomous driving sector. The TaBuLa project saw an autonomous, passenger-carrying bus become an established part of their transport system. Now TaBuLa-LOG has been launched as one of the key anchor projects of the ITS World Congress, a project funded by the Federal Ministry of Transport and Digital Infrastructure (BMVI), combining passenger and goods transport.

The anchor projects selection criteria were based on the ITS strategy goals: improve traffic safety, reduce environmental impact, whole system efficiency, good and secure information sharing, and innovation funding.

With 1.99 million euros funding, the project aims to use the autonomous TaBuLa shuttle bus that already runs in Lauenburg—and which itself is completely innovative—to also transport goods. An automated transport robot platform is to

be developed specifically for this application, as an interface for delivering the goods. Three back-to-back test scenarios are to be evaluated in order to draw conclusions about potential application areas or recommend actions to decision-makers in different sectors. So: **innovation made in Germany!**

In this context, RTB can well imagine integrating the latest LOC.id innovations for genuine, barrier-free local public transport and the contactless radar push button. These innovations will also be on show in Hamburg at the ITS World Congress!



Experience Future Mobility Now

We'll be there!

B7.411





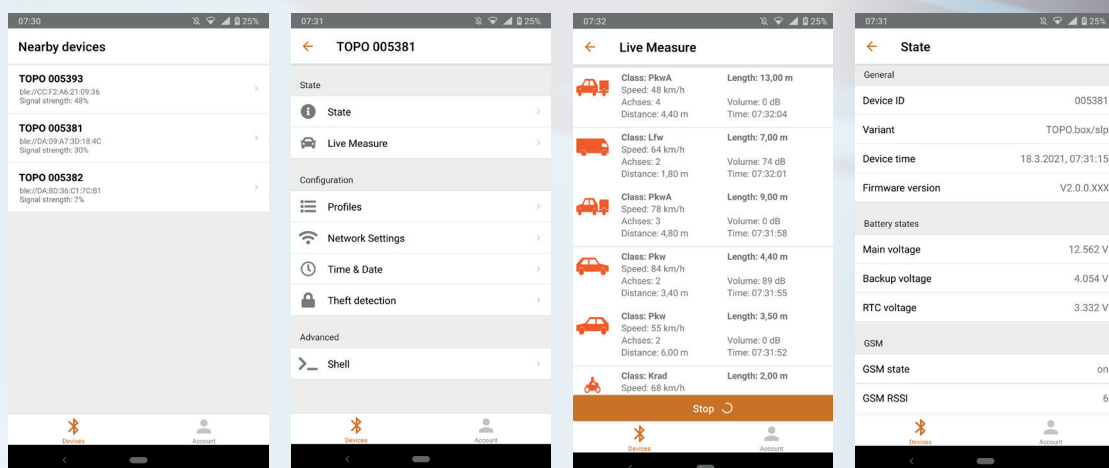
REAL FAST

Increased traffic on the roads frequently disrupts traffic flows, both in and outside built-up areas. Here, too, there is a requirement for contemporary, forward-thinking solutions that enable traffic flows to be closely managed. The new generation of TOPO-systems have the fast 4G/LTE standard that enables data to be accessed in real time.

This live data from the streets can be fed straight into the traffic computer to help control the traffic. For example, where the TOPO-systems are used as longterm count points, it may be important to know what the current traffic volume is.

This lends itself to improved traffic flow control, particularly on roads that are used as detours when there are jams on the freeway. But TOPO-devices with a 4G module can also be deployed ahead of traffic lights to improve the traffic situation, for example by extending the green phase. The first projects using real time data transmission are already up and running, with the "Schlosskreuzung" project in Paderborn, at Karlsruhe University, and in Kleinwalsertal.

All the latest generation TOPO-devices can be configured with the TOPO.app. It is of course available for both iOS and Android operating systems. The current DD.web platform is to be upgraded, it can be used for an individual app management.



TOPO.app



HARDWARE

REAL TIME DATA

TOP0.app

DD.web

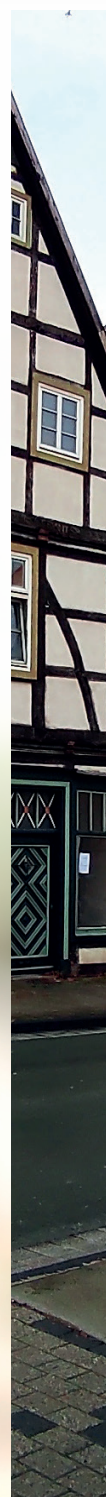
2/3/4G



BEST IN

AIR QUALITY INDEX

AQI	Category	NO ₂ [ppb] (1 hr)	O ₃ [ppb] (8 hr)	O ₃ [ppb] (1 hr)	PM _{2.5} [µg/m ³] (24 hr)	PM ₁₀ [µg/m ³] (24 hr)	CO [ppm] (8 hr)	SO ₂ [ppb] (1 hr)
0 to 50	Good	0 to 53	0 to 54	-	0.0 to 12.0	0 to 54	0.0 to 4.4	0 to 35
51 to 100	Moderate	54 to 100	55 to 70	-	12.1 to 35.4	55 to 154	4.5 to 9.4	36 to 75
101 to 150	Unhealthy for sensitive Groups	101 to 360	71 to 85	125 to 164	35.5 to 55.4	155 to 254	9.5 to 12.4	76 to 185
151 to 200	Unhealthy	361 to 649	86 to 105	165 to 204	55.5 to 150.4	255 to 354	12.5 to 15.4	186 to 304
201 to 300	Very unhealthy	650 to 1249	106 to 200	205 to 404	150.5 to 250.4	355 to 424	15.5 to 30.4	305 to 604
301 to 400	Hazardous	1250 to 1649	-	405 to 504	250.5 to 350.4	425 to 504	30.5 to 40.4	605 to 804
401 to 500	Hazardous	1650 to 2049	-	505 to 604	350.5 to 500.4	505 to 604	40.5 to 50.4	805 to 1004





CLASS



Good news for the coming census year 2021! Because RTB's TOPO-systems are delivering reliable, accurate traffic data, as has been confirmed yet again.

Having been presented to the Federal Highway Research Institute (BAST) for TZ 4 recertification, the TOPO-systems have now been labeled "Best in Class". They achieved such good results that they have reached the next quality level up, TZ 5. As such, the devices satisfy the BAST requirements for official traffic census, and can be used unrestrictedly in this area.

But that is not enough! The new generation of the TOPO product range is the only detector system that can integrate not only length and speed measurements and axle recognition, but also an environment sensor. Alongside the certified capture and classification of traffic data, they can now measure environmental data such as temperature, air pressure, humidity, fine particulate matter classes PM1, PM2,5, PM4 and PM10, and the combination of nitrogen oxides and ozone. In these times, when decision makers are increasingly looking at climate change, a solid data basis can play an increasingly important role in helping them make the right decisions.



INTERGALACTIC INTEREST

Darth Vader could not have chosen better: RTB's contactless radar push button has very rapidly triggered intergalactic interest! From all parts of the earth, we have recorded an enthusiastic echo and taken many orders. Apparently our new product has struck the right chord at the right time. And no wonder. After all, the contactless radar push button originated very close to the "Milchstraße" (Milky Way), that is, in the Schloss Neuhaus district of Paderborn, Germany.

We have rarely seen such a response to a product launch. So thank you everyone, for putting such faith in our innovative capabilities, for numerous orders without the usual on-site testing, and for incorporating a contactless radar push button into a large number of invitations to tender, the impact of which will be felt throughout 2021.

Moreover, in Schloss Neuhaus we are working on the "Schlosskreuzung" pilot project, aiming for smart traffic flow control. We shall be delivering this project, funded by the Ministry of Finance, Innovation, Digitization and Energy of the State of North Rhine-Westphalia, in collaboration with several partners, including the Heinz-Nixdorf Institute in Paderborn, the Stührenberg company, and the city of Paderborn.



Ministerium für Wirtschaft, Innovation,
Digitalisierung und Energie
des Landes Nordrhein-Westfalen



Production

Machradt Graphischer Betrieb KG, Bad Lippspringe

Edition

HACK PR- und Werbeagentur GmbH, Paderborn
Tanja Lauenstein, RTB GmbH & Co. KG,
Bad Lippspringe

Publisher

RTB GmbH & Co. KG,
Managing Directors: Rudolf Broer, Matthias Rieger
Schulze-Delitzsch-Weg 10, 33175 Bad Lippspringe
Tel. +49 5252 9706-0, Fax +49 5252 9706-10
E-Mail: ampel-nachrichten@rtb-bl.de, www.rtb-bl.de