



## Editorial

Dear Readers,

The first issue of the Gorba Times for this year will lead you across the entire portfolio of Gorba products and halfway around the world. In this issue we report all about our cooperation with PostAuto Switzerland and the transit operators in St. Gallen. The interplay between passenger information in and on vehicles and at stops in the east of Switzerland is discussed in the lead article as well.

The short articles in this issue of the Gorba Times span from Rosenheim in Germany to Athens and from Haute Savoie in France to Hong Kong. In Rosenheim, Gorba was able to get a RTPI system up and running in a record time of four months in time for the regional Garden Show. In Haute Savoie the story centers around how the exact positioning of busses aids in the dynamic displays for vehicles. The special requirements for displaying Greek and Chinese characters and text are described in our articles from Athens and the Far East.

As always, we are working on new and exciting developments in our various product areas. In addition to the revamping of the icenter media modul to accommodate TFT control in vehicles, we describe our newest central interface, the German standard of VDV 453.

Enjoy your literary adventure through the world of Gorba. Do you have any special wishes or comments about the Gorba Times? If so, please drop us a line at: gorbatimes@gorba.com.

Welcome to the newest issue of our magazine!

Best wishes,

Ufuk Ebcinoglu

## gorba report

# Realtime information for Eastern Switzerland

Gorba installs a meta-database in St. Gallen

In late 2009 Gorba was commissioned by PostAuto Switzerland and the Transit Authority of St. Gallen (VBSG) to develop a new passenger information system for the agglomeration of St. Gallen. During the initial phases of 2010 alone, the project will incorporate every product area in the Gorba portfolio, including:

- **iqube** with 128 displays that will be set up in the VBSG and PostAuto's eastern Switzerland regions
- **icenter** as an RTPI server with interfaces according to the German standard VDV 453 to the various CAD/AVL systems of each transit operator
- **imotion** with short range radios for all vehicles from PostAuto and VBSG for a clear sign-on and sign-off of vehicles on the iqube displays.

At the heart of this new system is the icenter with a high powered RTPI server that downloads prognoses and scheduling information from the transit operators and transfers that information to its own as well as external displays. For that purpose, interfaces according to VDV 453 with RTPI service come into play. The challenge of such interfaces lies in the detail. Since PostAuto and VBSG run on two different CAD/AVL systems, a so-called meta-database was defined in which different stop definitions within the CAD/AVL systems are harmonized. This allows the systems to transfer the data from one system to the other and on to the displays.



MAN Lions Regio R12 in the PostAuto station in Chur

But there is still another technical hurdle to overcome. The reaction time from CAD/AVL systems is usually insufficient for the precise registration and deletion of trips onto the displays. By the time a vehicle has been located, a possible delay calculated, the data transferred to the RTPI system, and information sent to the displays, several minutes can be lost. To ensure that this new RTPI system signs-on and signs-off the vehicles rapidly, new cutting edge short range radio devices (iTags) come into use. iTags send trip information from the on-board computers along with special data messages to the iqube. This procedure shortens the reaction time of the displays to mere seconds.

In the future, further transit operators around the cantons of St. Gallen and Appenzell can be integrated into the RTPI system. All that is necessary are a central connection to the icenter over VDV 453 and an iTag in each vehicle.

## gorba technical

# icenter gets a new outfit, new contents, and interfaces

More functions and unified interfaces for central Gorba software

Through the fusion of Gorba with the public transit branch of Precimation, central software modules were merged under the icenter brand, but many interfaces were left differently constructed and had functions that sometimes overlapped. That is why all modules will be completely overhauled and unified in 2010 and 2011. The product management and development teams of Gorba are working at this moment to design the necessary specifications and processes.

The most recent result of this development is the completely

upgraded module of icenter.media that includes a web-based version and will be ready for delivery by the second quarter of 2010. As before, users can determine interfaces, backgrounds, text, graphic and video for their TFT screens in the vehicles. The new software is simpler with more clearly designed interfaces and symbols. It navigates the user through the whole program with fewer steps as well. As soon as the user has uploaded text, photos, or videos for the screen, the sequences begin running fully automatically on the respective bus or tramline.

There are also some important developments in the pipeline in the area of stationary passenger information. In addition to the central interfaces on VDV 453 as utilized in the St. Gallen project (see head article in this issue), other simplified

forms of interfacing are coming into use as well. There will be one XML version for the Transit Association Berlin Brandenburg and for the meta-database, DEFAS FGI Bavaria. Through these interfaces, simple requests are started regarding stops and their respective lines on each server. In turn, the status messages and delays for each line are sent back. This allows for information to be sent directly to the displays at the stops.

During 2010, the various interfaces will be combined with a universal adaptor so that a wide variety of control systems can have a single interface. The interface adaptor and the new module represent a substantial step in Gorba's development as a complete passenger information system provider for every aspect required in public transit.



New interface of icenter web.media

## Gorba on Tour

In the coming weeks we will be represented at the following trade shows:

- ✦ **Transports Publics** in Paris – June 8-10
- ✦ **InnoTrans** in Berlin – September 21-24
- ✦ **IAA – Commercial vehicles** in Hannover – September 23-30

If you need tickets for any of these events, just send us an email to [ticket@gorba.com](mailto:ticket@gorba.com). We will then get in touch with you.

## Hong Kong's double-decker buses on the road with Gorba displays

Chinese script provides technological challenges and success

Who is not familiar with pictures of the metropolis in southern China with a sea of houses surrounded by ocean and mountains? To drive a car through the streets of Hong Kong, City of the Aromatic Harbour, is an enormous challenge – and not just because they drive on the left. An essential component of public transportation in Hong Kong is passenger buses.

Similar to the London transit system, Hong Kong buses primarily consist of double-decker buses and reach the furthest corners of the city. With around 400 lines, the Kowloon Motor Bus Company (KMB) is one of the largest bus operators in the region. Gorba is providing KMB with displays and control units for 80 vehicles this year followed by 120 additional units next year. The 9360 pixel resolution (52x180) in combination with a font size of over 30 centimetres ensures optimal legibility of the final destinations in Chinese and in English simultaneously. The control unit CU6 has also been optimized to function in both languages with a dual-language keyboard and high resolution display. Together, these technological innovations provide both the transit savvy Hong Kong commuters and tourists alike with crystal clear information.



▲ Imotion displays for the KMB

## Obituary: Jan Verhaegen



Our dear esteemed colleague and friend, Jan Verhaegen died at the age of 76 on January 14th of this year. Jan was an important ally and supporter of Gorba for several years, coordinating our sales activities in the Belgian market. As a co-founder of Busworld in Kortrijk, Jan was not only well known in the field of bus transit, but highly respected for his expertise and gentlemanly character. His love for life, his humor, and his integrity are already sorely missed. We will hold him fondly in our memories always.

## Passenger information in the French Alps

Equipping 9 Bus Stations in the Haute Savoie

Around one year ago Gorba began working for the Department Haute Savoie in the French Alps. The scope of the project was considerable: renewing and completing the passenger information system for nine stations including the airport station Chambéry and implementing a control centre.

The Bourg Saint Maurice station already displayed real time passenger information within 30 days. Managed by the Gorba Office France, visual and acoustic passenger information, video surveillance, and admissions control at the designated bus stations were installed.

Admissions control with the Gorba system is simple. The buses are detected by the Gorba software through a close-range radio device based

on RFID at every station. Upon departure, the vehicles are checked out of the system again. The duration of park time can be directly billed to the transit authority.

The vehicles are presented on the displays in real-time through the exact detection at the stations. The largest Gorba displays are ideal for the Haute Savoie project because the displays types MM and ML are optimally used at the bus stations. The first phase of the project was completed by the end of the 2009/2010 winter season.



▲ iqube ML in the Haute Savoie

## Off to the Rosenheim Garden Show with iqube

Data supply with DEFAS FGI BAYERN

On April 23, 2010 the Rosenheim Garden Show will open its gates. From the opening day on, electronic displays will inform visitors of the bus departure times at the central station and downtown. The Rosenheim Transit Authority commissioned Gorba earlier this year to provide six displays in the city centre to display urban and regional buses in real time. Unique to this commission is the short turnover time of only four months, the RTP1 system connected to the Bavarian regional meta-database, DEFAS FGI BAVARIA, and the commitment of Gorba to operate the displays for a ten year period.



▲ Solaris Bus with imotion LED display in the city traffic of Athens

## Solaris and Gorba together in Athens

Outfitting 320 city busses

As Solaris Bus won the bid from the Ethel A.E. Thermal Buses Company in Athens, it was also grounds for celebration at Gorba AG. That is because the 220 Solaris "Alpino" low floor buses and the 100 articulated "Urbino 18" buses will be fully equipped with Gorba displays. LED displays will be outfitted for the entire interior and exterior of the vehicles.

There is something else special in store for Athens. Due to the narrow installation measurements for the side displays in the Alpino, Gorba AG has developed a unique LED display. The special pixel intervals allow for optimal legibility of the Ethel displays despite limited space in the vehicles. Ethel A.E. Thermal Buses currently operates more than 2000 buses on 334 lines throughout the larger metropolitan area of Athens.