

Simulator with a separate Driver's Desk

Training simulator RAILplus AG in container

Railplus is a group of several meter-gauge railway companies in Switzerland, who work closely together in the area of driver training.

Railplus AG has built, in close cooperation with the Berne University of Applied Sciences in Biel, a mobile simulation unit which has been successfully deployed since March 2007. The system is housed in a standard office container and is transported by truck or rail to the respective locations. This eliminates additional costs of travel and reduces expenses for the users. The simulation unit is self-contained and no extra accommodation is needed.

In the interior of the container, the cab is located in a separate room. The driver's desk is a reproduction of the latest generation of Stadler's MGB and asm EMUs. The typical range of control and display devices are installed corresponding to most of the owner's trains in service as well as related auxiliary equipment for rack operation, vacuum and air brakes and various other controls. The simulation image is projected with a beamer on a large-scale projection screen in front of the driver's desk.

Behind the cab area is the control centre of the instructor. To operate the simulator, and monitor the train driver, two monitors, a keyboard and mouse are available. The rear part of the container has space for meetings and theory lessons. The interiors are equipped with heating and air conditioning. Power is supplied via an external cable.

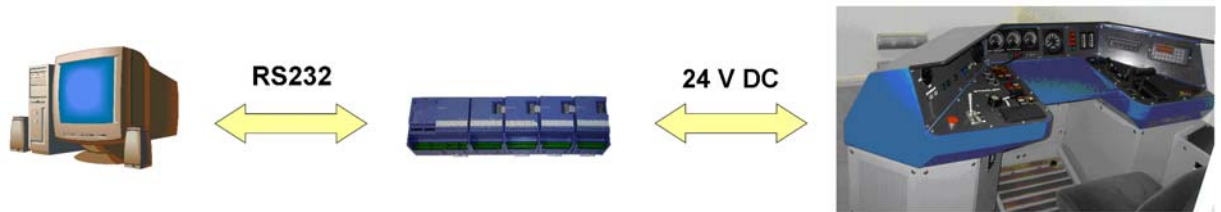
The idea for the construction of the simulation system developed from existing software LOCSIM at the Berne University of Applied Sciences in Biel and the need to offer practical education and training, without hindering commercial operations. Construction of the mobile simulator was made possible by the eight members of Railplus AG and various other sponsors from the railway supply industry.

The feedback since the commissioning of the plant in February 2007 has been very positive. Particularly valuable is the opportunity, to practice different conditions and situations, without the limitations of ever-growing schedule density, and not during night breaks. Through their joint procurement of the simulator, the eight meter-gauge railways with a total of 700 train drivers were able to achieve good economy of scale. The facility is also available to external customers.

Maintenance and support for the simulator is supplied by the Berne University of Applied Sciences and the department of rolling stock and technology of the Aare-Seeland-mobil AG.

LOCSIM

Der Loksimulator
für Führerstandsimulationen
und Zuglaufrechnungen



Simulator concept



Transport by road



Transport to rail (Rhaetian Railway)



Instructor's control center



Driver's desk
based on Matterhorn-Gotthardbahn low floor EMU

