The Betuwe Express is a joint initiative by ECT and Kombiverkehr of Germany. The container shuttle plies a daily route between the Euromax Terminal and ECT Delta Terminal on the North Sea and the inland terminal DeCeTe Duisburg. This inland terminal is situated in Germany’s most important economic centre, comprising a consumer market numbering 30 million people. In addition Duisburg offers onward connections to some 70 destinations elsewhere in Germany but also to Italy, Poland, Slovenia and Turkey.

Preparations
Every afternoon ECT loads up a new Betuwe Express on the Maasvlakte, bound for Duisburg. At exactly 19.26 hours the wagon train is subsequently fetched by railway company Rotterdam Rail Feeding (RFF) which diesels it to the Pernis rail yard in the port centre. There the wagons are hooked up to an electric locomotive from Kombiverkehr. This e-loc ES64 F4 is suitable for travel across various different safety systems and can also adapt to different strengths of electrical current - prerequisites for completing the entire route non-stop. What’s more, the electric locomotive is environmentally friendly and more cost-efficient than a diesel fuelled engine.

21.43 hours. Departure from Rotterdam
RFF supplies the engine driver. On duty today is Edwin van der Graaff. Punctually according to the timetable he starts up the locomotive at 21.43 hours. With overhead power of 25 kV the 1064 tonne heavy goods train travels the first kilometres of its journey through the port under the old ATB (automated train guidance) security system. Towards the end of 2009 the port is due to switch to the new European Rail Traffic Management System ERTMS, already in operation further up the Betuweroute. But things aren’t that far yet. Van der Graaff steers carefully along the railway line in accordance with the signalling instructions.

22.10 hours. No Need to look Outside
The Betuwe Express passes the shunting yard Kijfhoek just east of Rotterdam on the right and enters the Sophiatunnel. It’s 22.10. Where the route so far has followed existing, upgraded railway line, the next 120 kilometres of the Betuwe-route up until the German border have been purpose-built. Inside the more than eight kilometres of tunnel, driver Edwin van der Graaff switches to the ERTMS safety system. “Effectively, from now on I don’t even have to look outside through the window,” he says. “All my instructions come to me via the computer screen. And if I don’t respond, the computer takes over.”

22.35 hours. Giessentunnel
And indeed, outside there’s not a signal to be seen. At a comfortable speed of just over 90 km per hour the Betuwe Express travels alongside the A15 motorway heading east. “It’s always good to bypass the traffic jams here,” grins Van der Graaff. At 22.35 hours the train enters the Giessen-tunnel. Only every now and then does the computer instruct Van der Graaff to do something. For long stretches of the route flanked by noise reduction screens, the train steadily makes its own way.

23.30 hours. German Border
Another two tunnels down the line the train reaches the end of the Betuweroute at 23.35 hours. A few minutes later, just an hour and three quarters since its departure out of Rotterdam, the Betuwe Express crosses the German border at almost 23.30 hours. Now Van der Graaff has to pay close attention outside the window again, so that he can follow the instructions given by the German rail safety system with its signal posts alongside the line. The overhead power is also different: the train is now working to the German standard of 15 kV. But most striking of all is the number of railway crossings the Betuwe Express encounters in Germany. The previous 160 kilometres in the Netherlands numbered no crossings at all.

23.35 hours. Emmerich Station
At 23.35 hours the Betuwe Express pulls into the station of the German border town of Emmerich. For Van der Graaff the job is done. A German colleague takes over and drives the train to its final destination in DeCeTe Duisburg, a journey of just under an hour. From here the containers find their way quickly to German customers or are relayed efficiently further into the European interior.