

# A maintenance revolution for the UK - update

**Plasser UK's Mark Simmons details the latest on the Robel mobile maintenance train for Network Rail.**

Two months does not, I am sure, feel a long time to a magazine editor who not only has to prepare and publish a magazine in that time, but constantly chase contributors who promised him that he would have an article by the end of last week (or at least the outline of one...).

It certainly does not seem long to contributors when the deadline for the next article seems to arrive immediately after the last one is submitted - although that may have something to do with the editor having to chase repeatedly for the submission. At the end of machine build, however, the most amazing amount of activity seems to be crammed into this very short period.

## Calm?

The world appears calm outside my window. It seems to be gearing up for a lovely summer's day of sunshine and showers and the calm is not broken by a big yellow machine. We also seem to be missing a training building at West Ealing, but I do not think even the most diligent search will allow me to find that again!

I would have to go some way to find the missing Network Rail Robel Mobile Maintenance System - eight hours transit up the East Coast Main Line with a maximum speed of 60mph to be precise! Yes, in the two months since I last provided an update on its progress, the machine has been to and gone, on time, from West Ealing and is now at its new home in Darlington. It is also now hiding under a new name - the Mobile Maintenance Train. As an on-track machine manufacturer, we build and have authorised systems for machines but, of course, the operators of these new machines refer to them as a maintenance train.

All is now calm and (somewhat) tranquil, but that belies the frantic activity that had to go on, at times, to ensure the machine left Robel, arrived at West Ealing, then left and arrived in Darlington smoothly, after a short period of UK commissioning and training.

## On the move

At the time of the last update, Robel was trying to get time on the machine it had built to complete final commissioning before its departure to the UK. After the last of the visitors were bid farewell, this was all completed and the machine readied for transit.

It was planned that the machine would be delivered locomotive-hauled through the Channel Tunnel. Special gauging checks were made and a route cleared for the transit. Certificates were organised and, of course,



**The first Network Rail Mobile Maintenance Train leaving Robel's workshops at Freilassing, Germany (above), and en route at Salzburg, Austria (below).**



the transport was arranged. Even the French inspector who had held previous new types of machines at the border was invited to the factory for a pre-inspection - which went very well. With all risks mitigated, the machine therefore set off from Robel's workshops in Freilassing, Germany, on 12th June.

Notwithstanding the mitigations put in place, no-one had considered how to handle a simple human error. Yes - a single tick mistakenly missing from the wrong box in the transit paperwork meant that the path through France was blocked until the paperwork had been resubmitted. Then, the booked path having been lost, a simple wait of 25 days would allow us to obtain a new path!

Needless to say, that was too long to wait and so, amid much hurried alternative

planning, the machine was rerouted to Cuxhaven in the north of Germany. It was split into three parts, lifted onto three lorries, taken by ferry across to Immingham and driven down by road to West Ealing.

## Safe arrival

After all the frantic arrangements and issues that required resolving to make plan B operate, it was an incredibly welcome relief to see the three machine sections on their lorries. They were basking in the early morning sunshine, in their planned parking positions, when I arrived at 07.00, as pictured below, only three days after discovering the problem with the machine transit! It was also significant because this was the day of the next progress meeting



## New Equipment

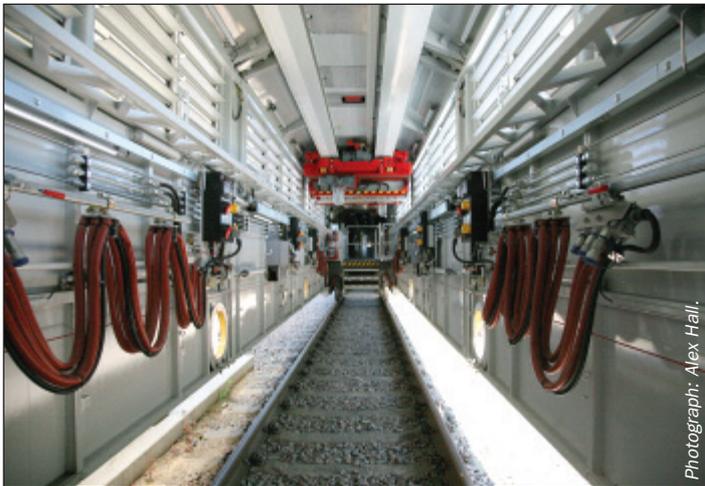


In addition to the machines on their lorries, it was necessary to fit two mobile cranes on-site at West Ealing to carry out the unloading operation. So, things were quite cramped! To move around the Plasser UK site, it was vital that the sections were each unloaded in the correct order and facing the correct direction so, once on-track, the shunting locomotive could position them ready for reformation. In some cases, this involved the machine having to be lifted so high that the cab of the transport lorry could be driven underneath, before it was placed on the rails. Of course, there was also an added pressure of the customer being present for the unloading operation! Incredible respect must be paid to the teamwork which allowed this procedure to be carried out safely, smoothly and all in one day.

### No time to rest

Of course, all of that work was simply the start of the UK commissioning activities. As quickly as plan B had been operated, the machine had still arrived at Plasser UK later than was hoped. With the planned handover date in mind, it required an evening shift to support the UK commissioning activities. Among other things, these included commissioning the GSM radios and carrying out detonator audibility tests.





Photograph: Alex Hall.



At the same time, training had to be carried out for the Colas Rail drivers, maintenance staff and trainers, as well as Network Rail supervisors and trainers. Additionally, there was also training on the special small plant developed to complement efficient operations within the Mobile Maintenance Unit (MMU) area that makes use of the power supplies (hydraulic, pneumatic and electric) available.

Special storage racking has also been fitted into the intermediate car, in accordance with a Robel efficient storage paper that was produced, to assist in making operations as smooth and effective as possible. All the small plant ordered with machine number one was fitted and locked into position ready for transit.

In parallel with all these activities, the test results had to be processed and reports prepared and submitted. Along with the commissioning results they were passed to the NoBo/DeBo for compliance review in time to get the necessary paperwork to transit the machine to Darlington on schedule.

During this time, while the machine was at West Ealing, a steady stream of diverse and important visitors required access to the machine and guidance on its features, construction and operation. The range naturally included a number of disciplines within Network Rail including commercial,

technical, executive, project management, safety, planning and operational, as well as staff from the operator/maintainer, signatories, the regulator, union representatives, supplier representatives and outside interested parties.

The most important visit was the final inspection by Network Rail London North Eastern Route and the signing of the handover document - a major milestone in the project. One of the people involved in that meeting had been to Austria in 2012 to carry out a technical evaluation on the operation of a MMU to determine if there was a business case for a UK purchase. So, it was fantastic for them to inspect the fruits of that work in the form of a UK specific machine, standing

on UK soil, being handed over on time.

### Next stage

Within a week of that meeting, the machine was on its way and the track outside my office was more than a little emptier. There is now a fairly extensive period of familiarisation and functional commissioning to be undertaken around Darlington. Proving working procedures and processes, becoming truly comfortable with all the operations and refining them. Eventually, the operating team will become like a Formula One pit crew, ready to blaze a trail for an entirely new way of maintenance on the UK infrastructure. No doubt they will also demonstrate it to an ever increasing number of fascinated visitors!

Arrival in Darlington on 21st July.



Photograph: Alex Hall.