

## Fyra. Throw old shoes away?

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Some time ago we already mentioned that we would come back to the problems with the Fyra high speed train. Promise is a promise and here is the column on the subject. From this story we can learn a lesson.

In 1989 the Netherlands, France and Belgium decided that a high-speed train was required, after which the Dutch government suggests in 1996 that the train would run in 2005. In 2002 it became clear that there are setbacks in the construction of the track and the delivery would take place in 2007. Thereafter, in 2004 the Italian company AnsaldoBreda was awarded the contract to build the trains, because the only other competitor shed<sup>1</sup>. In 2005 it became clear that the schedule was not met. Then the idea arose to set up an alternative service until the Fyra was ready.

The alternative service consisted of TRAXX locomotives and intercity coaches. This alternative service was run later into service than intended. That was partly by long doubts about the safety system that would be used for the Fyra. Eventually the system ERTMS 2.3.0 was chosen, for which no backup function existed. In the absence of that backup, the alternative service could not run on time<sup>2</sup>.

In March 2012 the carrier NS states that the Fyra is finished for 97%. Only details like a rattling trash can at speeds between 180 and 195 km / h had to be solved<sup>3</sup>.

On 9 December 2012 the Fyra was put into service, seven years late. The predecessor, the Benelux train, was immediately taken out of service. The rail track capacity which came available was used for other trains (the Fyra rides on a special high speed track). The operation was not entirely according to plan. About half of the trains was delayed. The Fyra regularly broke down due to loss of communication. The opening and closing of the doors did not work and there were problems with starting and braking. Finally pieces of trains broke off during the winter caused by ice. On 17 January this year, as many as 17 of the 20 trains dropped out<sup>4</sup> (breaking off pieces also happened once with Sprinter trains which were built in Germany, but never mind). It turned out that the problems were not to be like the details as indicated in March of last year. Since 18 January of this year, the international Fyra traffic is suspended.

Questions are now asked on whether the problems could not be foreseen. Denmark also had problems with the trains from this supplier<sup>5</sup>. The trains which the Danish railways has purchased, are also out of service. The 83 trains (type IC4) which were ordered from AnsaldoBreda in 2000, should be part of the time table in 2006. In May of 2011, 42 trains were handed over but due to technical problems there were only 9 in operations. According to experts in the Danish media, the problems with AnsaldoBreda are caused by inexperience in making diesel equipment. The Fyra however is powered by electricity. With electrical engines AnsaldoBreda has more experience. AnsaldoBreda and Fiat already constructed a high-speed train ETR500 for the Italian railways. Probably a hearing will be conducted on the tender process so we will be able to read more details later.

Suppose the choice for AnsaldoBreda makes sense, it still must have been obvious that the lack of a backup can lead to problems. Indeed, the alternative service could not run because there was no backup. When the Benelux train was immediately rushed out of service, there was a similar situation: no backup for the Fyra. That means that after 18 January there was no decent alternative for the affected travelers. Only the Thalys train (which runs much less frequent that the Fyra should do) and a

<sup>&</sup>lt;sup>1</sup> 'De Stentor' newspaper in the Netherlands, 22 January 2013

<sup>&</sup>lt;sup>2</sup> See <a href="http://www.nl.wikipedia.org/wiki/Fyra">http://www.nl.wikipedia.org/wiki/Fyra</a>

http://www.treinreiziger.nl/kennisnet/materieel/nieuws/ns\_hispeed\_klaar\_voor\_ontvangst\_v250-144225

<sup>&</sup>lt;sup>4</sup> See previous wikipedia site on the Fyra

http://www.treinreiziger.nl/kennisnet/materieel/nieuws/deense\_treinen\_van\_ansaldobreda\_allen\_buiten\_dienst-143956



crowded commuter train between the Dutch border town of Roosendaal and Antwerp (with a much longer travel time) offer some relief. With the experience of not having a backup for the safety system in case of the TRAXX train, it is at least remarkable that there was no backup when the Fyra was put into service.

There is one thing we can learn from the previous story for asset management. When you plan to replace a critical asset, never throw away your old shoes until you are sure that the new shoes work.

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