

Modernisation of CMK line

# PKP

ACS2000 and RSR123

## Country

Poland

## Segment

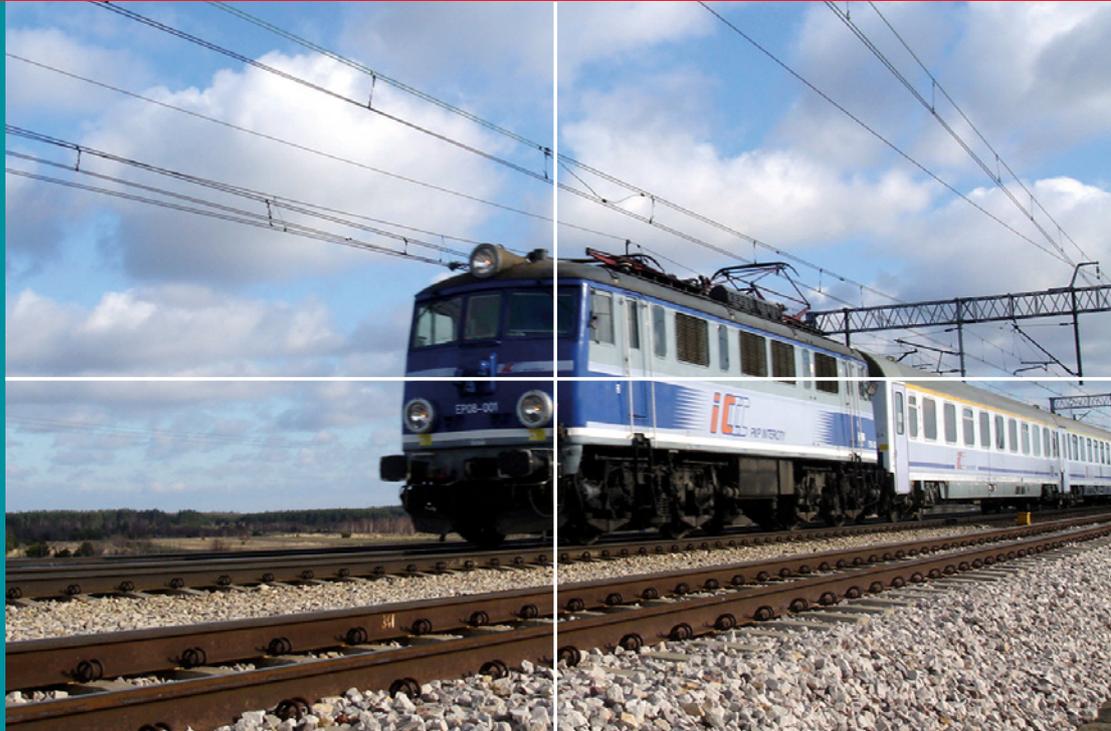
Main Lines

## Application

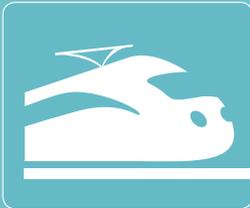
Train detection

## Project start

2007



CASE STUDY | EN



### Requirement

The CMK line (Centralna Magistrala Kolejowa) was constructed in the 1970s and forms one of the most important high-speed lines in Central Eastern Europe. The most vital task in the course of modernisation was the optimisation of operational safety by integrating state-of-the-art components into the existing automatic block system EAC.

### Solution

As an alternative to the existing track circuit technology, Frauscher offered the axle counting system ACS2000, a system that has been tested and approved all over the world, in combination with the wheel sensor generation RSR123.

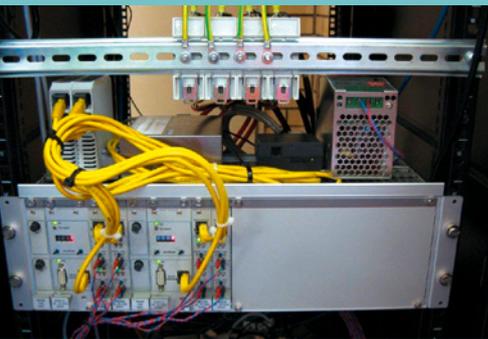
### Benefits

Experiences with operation to date have shown that weather-related disruption no longer occurs and therefore a considerable improvement of availability has been achieved. The simultaneous simplification of the electricity supply structure and the ability to implement individual reset procedures form further advantages of the system modernisation.

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CMK line



ACS2000



Implementation RSR123

### Project details

The CMK line (Centralna Magistrala Kolejowa) measures 223 kilometers in length and trains on this line reach top speeds of over 200 km/h.

The aim of modernising the line, which has existed for almost 40 years, was to make significant improvements with regard to maintenance expenditure, maintenance and resistance to the elements (e.g. temperature, EMC, atmospheric discharges). The aim was to continue using the existing cabling systems.

With this intention in mind, Frauscher offered the tried-and-tested axle counting system ACS2000 in combination with the wheel sensor generation RSR123 as an alternative to the existing track circuit technology.

In parallel to this, Frauscher was granted unrestricted permission by the Polish rail authority „Urząd Transportu Kolejowego“ to connect the Frauscher ACS2000 to the existing block system Eac.

Since 2007, the existing systems have been gradually replaced by ACS2000 in combination with the wheel sensor RSR123, as a result of which it has been possible to significantly improve availability. Furthermore, work to fundamentally simplify the electricity supply structure and individual reset procedures has been successful.

In conjunction with PKP and other partner companies, Frauscher Polska also developed new solutions in areas such as level crossing protection systems and blocks.

<b>Operator</b>	PKP Polen
<b>Scope of Supply</b>	Trial, Components, Commissioning
<b>Scope of Project</b>	225 track sections, 275 counting heads
<b>Axle counting system</b>	ACS2000
<b>Wheel sensor</b>	RSR123