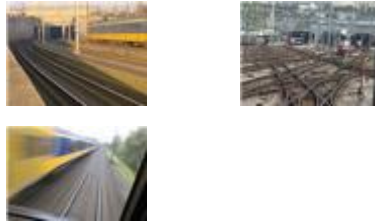


## POSS board-shore communication



Not only infrastructure, but also trains should function in a safe and reliable way.

A wealth of information about the status of the systems is available on board of trains. Nearly all systems are continuously diagnosed. The driver automatically receives a report in the case of failures, indicating the type of failure and the required actions.

All the information about on-board systems can be sent to the shore in real time by means of POSS, Strukton's preventive maintenance and diagnosis system. The data are used on shore to support the driver and to prevent failures or repair them more quickly.

### Precautionary maintenance to prevent failures

A crucial aspect of POSS is the timely recognition of abnormalities in the operation of systems and/or objects. Online diagnosis makes it possible to take prompt action. Repairs can mostly be done before an abnormality turns into a breakdown. Modern communication tools such as GPRS are used to retrieve the data from the trains. The same system can determine the position of the train using GPS. Trends can be deduced since the data remain available.

POSS is an open system that is able to use data from other sources, such as an electronic maintenance book or a maintenance management system. This data may for example be used to determine in advance which type of maintenance and repair is required and, for a specialist on the shore, to support the driver on the train in the case of failures.

### Board-shore communication with POSS

Using the POSS technology, the board data are shown on shore in real time. The information obtained by linking the latest failure data with data from other sources can be used for e.g.:

- providing the maintenance team with information at an early stage;
- on-line contact with the driver;
- analysing available data;

- support for locating failures on site (owing to interface with maintenance database),
- position-finding of the train to find out where to go to.