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Extract from Rigsrevisionen's report on
train punctuality
submitted to the Public Accounts Committee



1849
147.281
237
1976
114.6
22.480
908

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1. Introduction and conclusion

1.1. PURPOSE AND CONCLUSION

1. This report concerns the effort made by DSB (Denmark's national railway operator) and Banedanmark (the national Danish infrastructure manager responsible for maintenance and traffic control on the Danish national railway network) to achieve their common passenger punctuality target set for DSB's long-distance and regional traffic. Much to the inconvenience of the passengers, the passenger punctuality of long-distance and regional trains fell short of the target in 2015 and was considerably below the target for most of 2016. Rigsrevisionen initiated the study in November 2016.

2. The background for the study is the new target for passenger punctuality that was included in the new ten-year contract entered between the Ministry of Transport, Building and Housing (the Ministry of Transport) and DSB in April 2015 concerning operation of the train traffic in the period 2015 to 2024. Our study covers the first two and a half years of the contract period.

The new passenger punctuality target will be increased gradually over the ten-year contract period during which Banedanmark will carry out major construction work on the railway network, and DSB has committed to increasing the frequency of rail services and reducing travelling time. This combination of circumstances forces DSB and Banedanmark to optimize their effort to ensure a high level of punctuality.

3. Passenger punctuality is closely related to the quality of the timetable. The planning of railway timetables is carried out in close interaction with fleet management plans, staffing tables, maintenance plans and other train operators, and it requires detailed knowledge of both infrastructure and rolling stock. The report examines whether DSB has developed a robust timetable in collaboration with Banedanmark. We define a robust timetable as a timetable that contributes to ensuring reliable operation of trains and good punctuality.

Passenger punctuality is also closely related to the quality of infrastructure (rails and signals) and rolling stock. Banedanmark is the *Danish infrastructure manager* and as such responsible for ensuring a well-functioning infrastructure, while DSB is the *owner of the train fleet and train operator* and as such responsible for maintaining the trains and ensuring well-functioning operation of the train traffic. The report examines whether DSB's and Banedanmark's effort to achieve the passenger punctuality target has been satisfactory in the sense that they have achieved the common passenger punctuality target, or – if they have failed to achieve the target – whether they have continuously worked on improving passenger punctuality and supporting achievement of the target.

4. The purpose of the study is to assess whether DSB's and Banedanmark's effort to achieve the target set for passenger punctuality has been satisfactory. The report answers the following questions:

- Has DSB, in collaboration with Banedanmark, developed a robust timetable?
- Has DSB's effort to achieve the target set for passenger punctuality been satisfactory?
- Has Banedanmark's effort to achieve the target set for passenger punctuality been satisfactory?

CONCLUSION

It is Rigsrevisionen's assessment that the outcome of DSB's and Banedanmark's effort to achieve the target set for passenger punctuality has not been satisfactory. Passenger punctuality fell short of the target in 2015 and was considerably below the target for most of 2016. In 2016, passenger punctuality was 74 per cent against a target of 81.8 per cent. Rigsrevisionen has noted, though, that DSB and Banedanmark have continuously worked on improving passenger punctuality and minimising the major causes of delays. Although this effort has had a positive impact in 2017, passenger punctuality is still below target; during the first eight months of 2017, it was 79.2 per cent against a target of 82.4 per cent.

The timetable for 2016, which was developed by DSB in collaboration with Banedanmark, was not sufficiently robust to ensure reliable train services and good punctuality. Partly because certain data and assumptions, that DSB was responsible for, were invalid. To this should be added that DSB had to make last-minute adjustments to the timetable due to the political decision to introduce identity checks of passengers going to Sweden and control of the border between Germany and Denmark. In order to improve passenger punctuality, DSB and Banedanmark have added more time to the timetable since it took effect in 2016. DSB has also taken steps to secure accurate data and has made use of these in the planning of the timetable for 2017, to the widest possible extent.

The outcome of DSB's effort to achieve the passenger punctuality target has not been satisfactory. The poor punctuality performance is mainly caused by errors on the trains, which is the responsibility of DSB. Due to the many errors, the mean distance between failures has decreased, and the need for more capacity at the maintenance depots has increased. DSB's inadequate management of the re-entry of trains into service after maintenance has contributed to this problem. Throughout 2016, DSB worked on reducing the number of errors on the trains by strengthening the daily control and management of the re-entry of trains into service. In that connection, DSB also decided to employ close to 200 new staff to increase the capacity of the maintenance depots. DSB's effort to achieve the target set for passenger punctuality is challenged by the fact that its fleet of trains includes many old and different types of trains, and that fewer IC4 trains than anticipated are in service due to poor reliability.

Rigsrevisionen's report from October 2017 concerning DSB's effort to complete the IC4 trains describes in more detail the challenges of improving the reliability of the trains.

Banedanmark's effort to achieve the punctuality target has not been satisfactory either. The primary cause of the poor punctuality performance is signalling failures, which is the responsibility of Banedanmark. The many failures can be ascribed to Banedanmark's old control and signalling systems. Another major reason for the shortfall is delays in large track renewal projects caused partly by Banedanmark's inadequate project management. Banedanmark has worked on reducing the number of signalling failures through an increased preventive maintenance effort since 2015. In January 2017, Banedanmark also decided to introduce new planning principles for large track renewal projects to ensure timely implementation of future projects. In the short term, the considerable risk of delays associated with the old signals challenge Banedanmark's effort to achieve the target set for passenger punctuality.

Passenger punctuality will be challenged for many years ahead, because Banedanmark's roll-out of the Signalling programme has been delayed, and because DSB will be facing problems with outdated and defective trains for many years to come. Rigsrevisionen finds that the Ministry of Transport, which has the overall responsibility for train services in Denmark, should contemplate how train services could become more reliable and punctual, considering that the principal conditions for achieving the target set for passenger punctuality have changed since the ministry entered the contract with DSB.

In response to this suggestion, the Ministry of Transport has informed Rigsrevisionen that a possible solution might be to assess whether frequency (number of train departures) on some routes is higher than warranted by the number of passengers. Such an assessment would give the ministry an opportunity to examine whether reduced frequency on certain routes would contribute to improving passenger punctuality. The ministry does not see a lowering of the targets set for passenger punctuality in the contract as an obvious solution, because it would not influence the passengers' perception of punctuality.

Rigsrevisionen's report from January 2017 concerning the delayed Signalling programme, describes in more detail Banedanmark's management of the Signalling programme and challenges encountered in meeting the programme schedule.