Norway

NSA Annual Report 2017

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1. Introduction

The purpose of this report is to provide information on the safety related results from 2017. This report covers the main national railway network. Tramways and underground are excluded in the scope of this report. The intended addressees of this report besides the ERA are the National Investigation Body (NIB) and the Ministry of Transport and Communications (MTC).

2. Main conclusion on the reporting year - summary

It is safe to travel by train in Norway. The overall risk picture for 2017 based on accident records and results from supervision, shows marginal changes from 2016.

The reports show a total of 16 significant accidents. In addition to these 16 accidents, we had four significant accidents during shunting. 12 of the significant accidents involved passenger trains and four involved freight trains.

In 2017, three persons were killed in significant accidents: One on the open line and two in the station area. The reports show no serious injured persons in significant accidents in 2017.

10 of the significant accidents were classified as collision with obstacles. Nine of them were damage to overhead contact lines which lead to more than six hours stop in the train traffic. Three accidents were derailments, two were level crossing accidents and one collision between train and person.

After an analysis of the accidents statistics, we will highlights the following topics:

- Level crossings
- Trespassing
- Work near or on the tracks
- Emergency preparedness
- Loading of cargo before departure

3. NSA safety strategy, programs, initiatives

The main principle is that the railway undertakings (RU) are responsible for the safe operation of the railways and that the current safety level, as a minimum, shall be kept.

The Ministry of Transport and Communications set high-level goals for supervision.

The Norwegian NSA have established an annual supervision program to achieve these goals. The supervision program includes some defined areas of priority such as emergency preparedness and management commitment. The supervision program and the prioritized areas are established using a risk based model as support for priority. The Norwegian NSA are currently testing out maturity models as a basis for documentation of the NSA's assessment of the safety level of RUs and infrastructure manager (IM). This assessment will be input to the risk based supervision process.

The current programs are useful and have an appropriate level of detail to function as tools for priority of the focused areas. To ensure that the supervision activities add value, there has been a strong focus on risk, significance and effect on issued non-conformities. This has also had focus in the planning of the individual supervision activities and spot checks performed.

The Norwegian NSA arrange an annual safety conference to promote railway safety. In addition, the Norwegian NSA regularly arrange mini-seminars on chosen subjects as part of the guidance.

4. Safety performance

The development in safety performance represented by some of the most important common safety indicators (CSI) are shown in Table 1 below. The level of reporting is stabilizing on a high level. The high number of reports gives the RUs and IM a good basis for their safety management activities if used correctly.

In 2017 there were three fatalities and zero serious injuries spread over three accidents. The number of fatalities in Norway are low and has fluctuated between one and nine the last ten years. The number of serious injuries in Norway are also low and has fluctuated between zero and five the last ten years. There is no basis for concluding on a trend. Most of the fatalities are in connection to level crossings and trespassing.

The number of significant accidents in 2017 is lower than the average from 2008 to 2017. The previous trend of increase in accidents over the years is primarily due to collisions caused by overhead contact lines. Approximately 94% of lines with regular traffic on the Norwegian railway are single-track lines. This makes delays of six hours or more a normal consequence when there is a demolition of the overhead contact lines. When excluding collisions with overhead contact lines and accidents during shunting from the data, the number of accidents has been falling slightly from 2008 to 2017. Costs due to significant accidents are also rather steady.

Table 1: Summary of safety indicators in period 2008 – 2017

Summary of safety indicators	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Number of significant accidents	14	16	20	35	19	30	28	19	16	16
Number of fatalities	1	3	9	5	1	4	1	2	3	3
Number of serious injury to person	1	3	4	5	3	3	4	4	0	0
Number of precursors to accidents	132	193	253	134	76	168	161	172	158	139
Cost of all accidents in NOK (estimated)	31 mill	31 mill	31 mill	33 mill	97 mill	126 mill	77 mill	73 mill	88 mill	81 mill

5. Certifications and authorisations

Status on the number of certifications and authorisations for 2017

- 1 safety authorisation
- 6 safety certificate part A
- 12 safety certificate part B

In 2017, the Norwegian NSA had

- 1 renewal of safety certificate part A
- 2 renewals of safety certificate part B
- 1 new safety certificate part A
- 1 new safety certificate part B
- 1 amended safety certificate part B

Cooperation with other NSAs in the context of certification

The Norwegian NSA have a cooperation agreement on supervision and safety certification with the NSA in Sweden and Denmark.

The cooperation includes meetings and exchange of experience with respect to safety certification and supervision processes.

The Norwegian NSA have requested information on RUs having a part A certificate in Sweden. The main content of the contact and data provided is general information on how the safety management is perceived, last date of supervision, findings and the time schedule for the NSA to renew part A certificates in order for The Norwegian NSA to issue renewed part B certificates. The Norwegian NSA have to await the part A certificate to be issued before issuing a renewed part B certificates. Likewise, the Norwegian NSA have to await for Sweden to get the certificates registered and validated in ERADIS before the registration of the new part B certificates.

Regular exchange of information between the NSA and RU/IM

The Norwegian NSA publish guidance material for the RUs and IM. The Norwegian NSA have published several specific guidelines that may be helpful to the RUs and the IM. On the web site, the Norwegian NSA have guidance on safety management systems for smaller RUs, internal audits and supplier management.

The Norwegian NSA have regularly conducted information meetings with the RUs and the IM on different topics related to safety. The meetings are also a good arena to exchange information between the NSA and the RUs/IM.

It is useful to have an open dialog between The Norwegian NSA and the RUs and IM both prior to and during the application process. The Norwegian NSA offer guidance through meetings, phone or e-mail. It has been experienced that the RUs and the IM do not hesitate to get in touch with the NSA, basically to get advice or to update on their activity.

Another way of exchanging information is the feedback procedure for the RUs/IM through conducting user surveys biannually. The survey gives the RUs/IM the possibility to express their opinions on processing times as well as opinions on the communication and services in general. The Norwegian NSA have also established a feedback option through sending out questionnaires for participants in the meetings and conferences held for the RUs/IM.

6. Supervision

The Norwegian NSA made only editorial changes in the supervision strategy in 2017, but there was decided to react quicker with relevant sanctions when non-compliances are not corrected in time or in an appropriate manner.

The supervision program was based on the following identified risks:

- Lack of sufficient involvement of the top managements in the management of safety and security.

  Expected benefit: To ensure the top leaderships involvement in safety, especially that they were actively using results of risk analysis in decision-making, follow up of internal audits and carrying out management reviews.

  Result: The topic is decided to be followed up for one more year. It needs to carry out more audits before the effect can be concluded.

- Weaknesses in the systems of emergency preparedness. Especially emergency preparedness analysis and plans, emergency exercises and cooperation with public emergency authorities

  Expected benefit was: To ensure that the systems of the RUs were improved and that remaining improvements in the systems of the infrastructure manager were executed.

  Result: There were not identified serious non-compliances at the RUs. There are still need for several corrective actions by the IM related to emergency preparedness analysis, decision-making, execution of technical solutions and cooperation with public emergency authorities.

- Slow progress in necessary corrective actions by the infrastructure manager, especially related to:
  - Weaknesses in the systems of emergency preparedness
  - Control of suppliers
  - Follow up of internal audits
  - Risk analysis

  Expected benefit was: Improvement of the identified weaknesses

  Results: As to emergency preparedness: See above.
  As to control of suppliers it is revealed that there are still challenges related to lack of control with suppliers performing work at, and near by the track. As to risk analysis there are identified weaknesses related to follow up of risk analysis, that analysis are not sufficiently considered as a whole, that risk analysis not always is the basis for decisions when changes are made and that identified risk not always is evaluated against the risk acceptance criteria.

The Norwegian NSA's supervision program is executed only with minor adjustments during the year.

The Norwegian NSA have identified a need to improve the system of evaluation of the supervision process. It has also been identified a need for a more efficient process of follow up of non-compliances.

The Norwegian NSA do check the correct applications and effectiveness of the processes in Regulation 1078/2012. Amongst other the Norwegian NSA consequently require the companies to identify the root causes of non-compliances identified in other supervisions. The Norwegian NSA frequently also investigate follow up of incidents related to the topic of the audits including how the company has identified the root causes, executed corrective actions related to the root causes and how the effect of the actions has been evaluated.

7. Implementing of major EU projects

The Norwegian NSA participates in all relevant ERA groups related to the fourth railway package, in order to contribute to the processes in these groups, as well as being prepared for the implementation of the fourth railway package in the best possible way (Implementation of the fourth railway package still awaites approval from the Norwegian Parliament, before changes to the

Railway Act and Regulations can come into force). In addition, there are two groups set up in the Norwegian NSA in order to co-ordinate the implementation of the fourth railway package: One consists of caseworkers from all the departments. This group reports to a group consisting of the directors of the departments and the Director General. In 2017 the Norwegian NSA created an activity grid where tasks are continuously reviewed, altered and checked off as activities proceed. In September 2017 the Norwegian NSA arranged an external seminar devoted to EU rules and regulations, including the Fourth Railway Package. The Norwegian NSA are currently adjusting internal procedures in accordance with the changes brought about by the fourth railway package.

Common safety methods on risk assessment (CSM RA) is a topic we cover in meetings and dialogue with RUs and IMs. RUs use CSM RA as a rule. IMs are using CSM RA regularly.

The Norwegian NSA did an internal audit covering CSM Monitoring in 2017.

The Norwegian NSA are confident we are on schedule to implement major EU projects.

8. EU legislation and regulation

The Norwegian NSA had only one change in legislation and regulation relating to the railway safety directive in 2017. The regulation concerning safety management of railway undertakings and infrastructure managers on the national railway network was in 2017 amended to include the changes to the common safety indicators in relation to regulation 2014/88/EU.

9. Safety Culture

In 2017, the Norwegian NSA have not seen specific initiatives that contribute to development of a positive safety culture in the sector. The Norwegian NSA may consider to do that in the future.