

REPORT

Road 2020/02



THEMATIC REPORT ON SERIOUS ACCIDENTS INVOLVING HEAVY GOODS VEHICLES: FRAMEWORK CONDITIONS FOR ORDERING GOODS TRANSPORT BY ROAD

The Accident Investigation Board has compiled this report for the sole purpose of improving road transport safety. The object of any investigation is to identify faults or discrepancies which may endanger road transport safety, whether or not these are causal factors in the accident, and to make safety recommendations. It is not the Board's task to apportion blame or liability. Use of this report for any other purpose than for road transport safety shall be avoided.

*This report has been translated into English and published by the AIBN to facilitate access by international readers.
As accurate as the translation might be, the original Norwegian text takes precedence as the report of reference.*

Photos: AIBN

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SUMMARY

The thematic investigation is based on four serious road traffic accidents involving heavy goods vehicles that were reported to the AIBN in winter 2019, and where road users other than the drivers of the heavy goods vehicles suffered personal injuries (one of them fatal).

The AIBN has investigated the transport assignments the respective heavy goods vehicles had performed or were performing when the accidents took place, and mapped the different parties involved in the transport assignments.

The purpose of the thematic investigation has been to register and assess attitudes to road traffic safety among those ordering transport assignments, as regards the selection of suppliers, the drawing up of contracts, the ordering of transport assignments and follow-up of suppliers. Through this work, the AIBN has examined the framework conditions that those ordering transport assignments have themselves drafted and influenced through the transport booking process. The findings in the thematic investigation underpin that there is a great potential for improvement relating to whether those ordering transport assignments give due consideration to road traffic safety.

The AIBN has also looked at overarching framework conditions for ordering goods transport by road, including the industry structure, political, societal and professional guidelines, current laws and regulations, supervision and enforcement, as well as the safety requirements that apply to goods transport in different transport sectors in Norway.

The AIBN finds it a cause for concern that safety requirements relating to goods transport appear to be less stringent for road transport than is the case for other forms of transport, and that the responsibility of those ordering transport assignments is not sufficiently addressed in the regulations. Furthermore, the AIBN believes that standards are too little used as a tool when selecting suppliers, and that a greater focus on ISO 39001 among those ordering transport assignments could strengthen suppliers' obligations in relation to traffic safety work.

The thematic investigation has highlighted that framework conditions influence road traffic safety. Based on the findings in the thematic investigation, it should be possible to further increase the safety level in the road transport industry through the introduction of traffic safety measures relating to regulations, supervision and safety requirements, as well as implementation of relevant industry measures.

Based on the thematic investigation, the AIBN issues a safety recommendation to the industry concerning the implementation and coordination of increased traffic safety work aimed at goods transport by road.

1. INTRODUCTION

1.1 Background to this thematic investigation

1.1.1 The AIBN's mandate

The Accident Investigation Board Norway (AIBN) is a public investigation body. The objective of the AIBN's investigations is to elucidate matters deemed to be important to the prevention of transport accidents. It is not the AIBN's task to apportion blame or liability under criminal or civil law.

Based on its own preliminary investigations and information received, the AIBN decides which accidents to investigate, as well as the scope of the investigation and how it is to be conducted.

When making the decision to initiate an investigation, account is taken of what lessons can be learnt from it with a view to improving road traffic safety, the degree of severity of the accident or incident, its bearing on road safety in general and whether it forms part of a series of accidents or incidents. The AIBN can also initiate a thematic investigation of a selection of accidents with shared characteristics or common features.

1.1.2 Decision to conduct a thematic investigation

During the winter 2018/2019, the AIBN was notified of several road traffic accidents where drivers of heavy goods vehicles had lost control of their vehicles under demanding driving conditions. Information obtained about four of these road traffic accidents showed that, at the time of the accident, the heavy goods vehicles¹ were either about to perform a transport assignment or en route to a destination in connection with a new transport assignment.

The four road traffic accidents that were investigated occurred despite the fact that safety measures, both technical and operational, had been implemented. There were no causal factors that can be directly linked to the enterprises that ordered the transport assignments. These road traffic accidents nonetheless happened when the drivers lost control of their vehicles, which shows that, at the time of the accident, there were inadequate safety margins between the chosen driving behaviour and the challenges the drivers encountered.

In previous investigations, the AIBN has identified safety problems relating, among other things, to the technical condition of vehicles and winter road maintenance. In this thematic investigation, the AIBN has chosen not to emphasise the operational or technical factors that may have contributed to the road traffic accidents concerned, but rather to investigate the safety-related framework conditions for ordering goods transport by road. This distinguishes this thematic investigation from the AIBN's ordinary safety investigations of road traffic accidents.

The framework conditions that were investigated include both mandatory and optional requirements for enterprises ordering goods transport by road (cf. Chapter 3), and

¹ In this context, a 'heavy goods vehicle' is defined as a vehicle combination consisting of a tractor unit with one or more trailers (drawbar trailer, centre-axle trailer or semi-trailer) attached.

framework conditions that the enterprises ordering the transport assignments in question themselves formulate and influence through the transport booking process (cf. Chapter 4).

The AIBN's framework and analysis process for systematic safety investigations (the AIBN method²) states as follows:

An investigation of safety-related framework conditions can help us to explain and understand how and why a failure or deficiencies occurred at lower levels. Safety-related framework conditions include authorities, regulations, inspections and supervisory activities aimed at facilitating adequate safety, and priorities and decisions made at the overarching level. Other external circumstances and framework conditions, such as finances and the market, may also have influenced the organisations and other parties involved.

In this investigation, the AIBN has divided the overarching framework conditions for ordering goods transport by road into the following topics: the industry structure, political, societal and professional requirements, current laws and regulations, supervision and enforcement, and the safety requirements that apply to goods transport (cf. Chapter 3).

Furthermore, the AIBN has mapped the parties involved in ordering the transport assignments for the heavy goods vehicles involved (cf. Chapter 2), and investigated what road traffic safety considerations they have taken into account in connection with the transport booking process. The transport booking process has been divided into the following topics: the choice of supplier, the drawing up of contracts, booking of transport and supplier follow-up (cf. Chapter 4).

The AIBN has also mapped the parties involved in the performance of the transport assignments, but has given limited focus to the suppliers (freight forwarder/transport carrier) (cf. Chapter 5). Nor have the drivers' framework conditions been directly addressed in this investigation, only indirectly through the transport chain.

1.1.3 Scope of accidents involving heavy goods vehicles

1.1.3.1 *The National Transport Plan and Vision Zero*

Through the 'National Transport Plan (NTP) 2018–2029', the Norwegian Parliament has defined the main goal for transport safety as '*Reducing accidents in line with Vision Zero*'³. For road traffic, 'Vision Zero' means a traffic system that does not lead to loss of life or permanent injury.

Over time, the number of serious accidents in the Norwegian transport sector in general has clearly decreased, but the number of fatalities and serious injuries in road traffic accidents is still high compared with corresponding accidents in the rail transport, marine transport and aviation sectors⁴. In 2018, 108 people died in road traffic accidents in Norway.

² Accident Investigation Board Norway. (2018). The AIBN Method: Framework and Analysis Process for Systematic Safety Investigations. ISBN 978-82-690725-3-2.

³ Source: National Transport Plan 2018–2029. Section 1.2.3 'Improving transport safety'.

⁴ The Royal Norwegian Ministry of Transport and Communications. (2017). National Transport Plan 2018–2019. Meld. St. 33 (2016–2017) Report to the Norwegian Parliament.

The Government's goal for the period is that the number of fatalities and serious injuries in road traffic shall be reduced to a maximum of 350³ by 2030. According to NTP 2018–2029, heavy vehicles are identified as one of five main areas on which efforts need to be focused in order to achieve this goal.

1.1.3.2 Accident statistics

In 2018, 14 people died and 135 were injured in road traffic accidents in Norway involving heavy goods vehicles. Heavy goods vehicles were involved in a total of 109 road traffic accidents that year⁵.

Figure 1 shows the number⁵ of fatalities and serious injuries in accidents involving heavy goods vehicles during the period 2003–2018. The figures show that the number of injuries and fatalities in accidents involving heavy goods vehicles has been reduced during the period in question. In 2003, 36 people died and 327 were injured in accidents involving heavy goods vehicles. By 2018, the number had been more than halved.

The number of accidents involving heavy goods vehicles was also reduced during the same period, despite the fact that the number of heavy goods vehicles on Norwegian roads has increased in recent years.

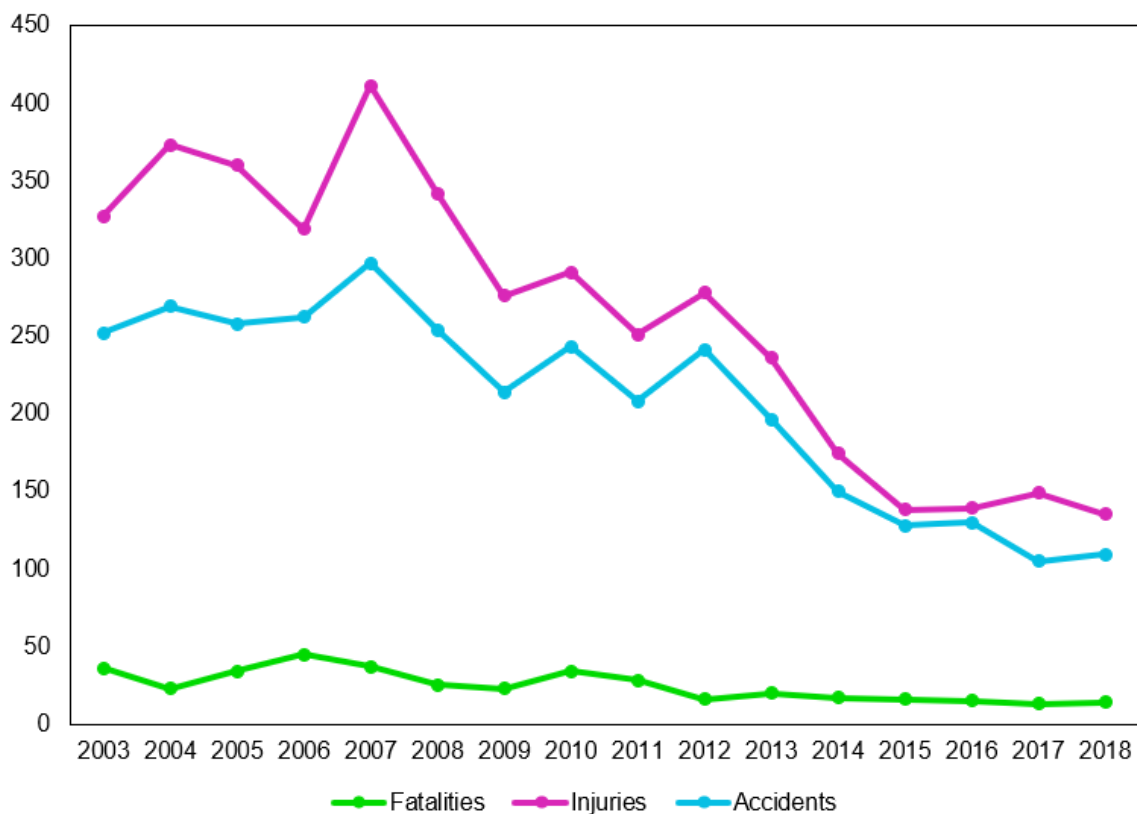


Figure 1: Number of fatalities and serious injuries in road traffic accidents involving heavy goods vehicles during the period 2003–2018. Source: Statistics Norway

⁵ The statistics include fatal accidents and other accidents involving personal injuries that were reported to the police. The traffic accidents that are included in the statistics took place on public or private roads, streets or places open to general traffic. Source: Statistics Norway.

Figure 2 shows the number⁵ of accidents involving heavy goods vehicles during the period 2004–2018, categorised by accident type. As shown in Figure 2, accidents involving heavy goods vehicles are dominated by ‘other head-on accidents’⁶. Reports to the police show that heavy goods vehicles were involved in 59 such accidents in 2018.

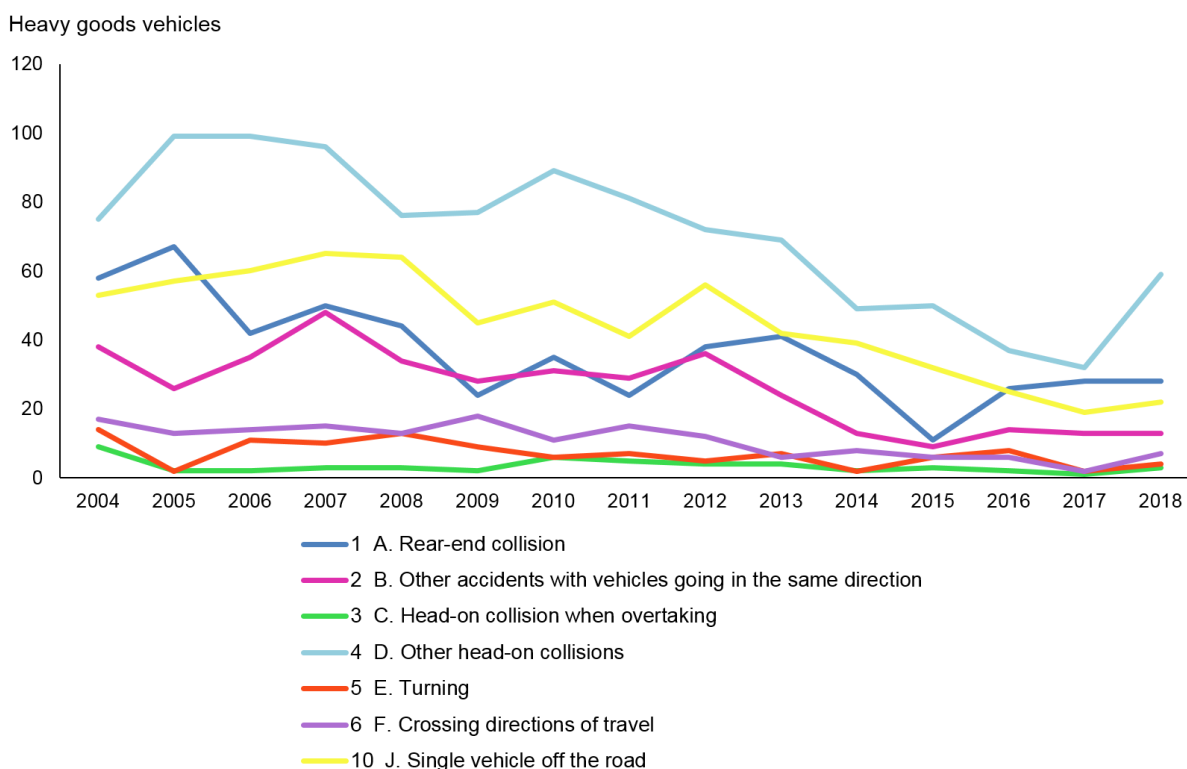


Figure 2: Number and type of road traffic accidents involving heavy goods vehicles during the period 2004–2018. Source: Statistics Norway

1.2 Investigation method and implementation

The following sections provide a description of the method chosen for this thematic investigation. The four accidents included in the investigation are presented, as is the process for identifying the parties involved and for the collection of information.

The AIBN’s framework and analysis process for systematic safety investigations (the AIBN method) is also described, as well as the method used in connection with this thematic investigation. The structure of the report is also presented in this context.

1.2.1 Investigation method

The thematic investigation is based on the following:

⁶ This category includes road traffic accidents where the sequence of events is defined as ‘collision on a straight stretch of road’, ‘collision on bend’, ‘collision while overtaking a stationary or parked vehicle’, ‘start-up from stationary or parked position’ and ‘collision where sequence of events is unclear’.

- 1) Obtaining factual information from four road traffic accidents involving heavy goods vehicles.
- 2) Mapping of the parties involved in the ordering and execution of the transport assignments the heavy goods vehicles involved in the four road traffic accidents were performing.
- 3) Mapping of overarching framework conditions for ordering goods transport by road, including a review of regulations, supervisory activities, literature and relevant reports.
- 4) Obtaining information from and meetings with the parties involved, including those ordering and performing transport assignments, as well as authorities and relevant special interest organisations.

1.2.1.1 *Four road traffic accidents involving heavy goods vehicles*

The point of departure for the thematic investigation is four road traffic accidents that occurred during the winter of 2019. The four accidents shared the following common characteristics: heavy goods vehicles were involved and the drivers had lost control of their vehicles, the accidents occurred in winter and under difficult driving conditions, each heavy goods vehicle had or was in the process of performing a transport assignment at the time of the accident, and other road users sustained personal injuries in the accidents.

A brief introduction to the four accidents is provided below. They are described in more detail in Appendix A.

- On Monday 7 January 2019, the trailer of a heavy goods vehicle skidded and subsequently hit an oncoming passenger car. The driver of the passenger car was critically injured and later died as a result of the injuries. The accident occurred on the E8 road near Nordkjosbotn in Troms county.
- On Saturday 2 February 2019, a heavy goods vehicle lost control and crossed into the opposite traffic lane, where it collided with an oncoming truck. The driver of the truck was seriously injured. The accident occurred on the Rv 3 road in Stor-Elvdal in Hedmark county.
- On Friday 15 February 2019, the trailer of a heavy goods vehicle skidded and collided with an oncoming passenger car. The driver of the passenger car was seriously injured, while two passengers sustained minor injuries. The accident occurred on the E10 road near Bjerkvik in Nordland county.
- On Tuesday 12 March 2019, the trailer of a heavy goods vehicle skidded and subsequently hit an oncoming passenger car. The driver of the passenger car was seriously injured. The accident occurred on the E134 road near Høydalsmo in Telemark county.

1.2.1.2 *Mapping of the parties involved*

The AIBN has identified the parties involved in ordering and performing the transport assignments in the four above-mentioned accidents. The mapping process, including the

functions performed by the parties involved in the respective transport assignments, is described in more detail in Chapter 2.

1.2.1.3 *Obtaining information from the parties involved and special interest organisations*

The AIBN has held meetings with those who ordered the transport assignments performed by the heavy goods vehicles involved in the four road traffic accidents. After the meetings, the AIBN obtained further information and documentation from both the enterprises ordering transport and the suppliers (freight forwarder/transport carrier). In this context, it has been important for the AIBN to ascertain whether enterprises ordering transport themselves consider that due consideration is given to road traffic safety in the booking process. The AIBN's mapping, analysis and assessments of their road traffic safety considerations are described in more detail in Chapter 4.

The AIBN has also had meetings with and/or obtained information from the Norwegian Labour Inspection Authority and the Norwegian Public Roads Administration (NPRA), as well as the Norwegian Logistics and Freight Association (NHO Logistikk og Transport), the Norwegian Truck Owners Association (NLF) and the Institute of Transport Economics (TØI), in order to gain an overview of the overarching framework conditions for goods transport by road.

1.2.2 Framework and analysis process for safety investigations

The information obtained in connection with the thematic investigation has been collated, studied and analysed in line with the AIBN's framework and analysis process for systematic safety investigations (the AIBN method⁷). The analysis process identified systemic safety problems, and they are addressed in Chapters 4 to 7.

The AIBN method⁷ describes a 'systemic safety problem' as follows:

A systemic safety problem is a risk factor that can reasonably be regarded as having the potential to adversely affect the safety of future operations, and is a characteristic of an organisation or a system, rather than a characteristic of a specific individual, or characteristic of an operational environment at a particular point in time.

(...)

Systemic safety problems will usually refer to problems with an organisation's risk controls, barriers or a variety of organisational influences and framework conditions that impact on the effectiveness of its risk controls.

(...)

In other words, a systemic safety problem is a factor for which an organisation or authority has some level of control and responsibility and, if not addressed, will increase the risk of future accidents.

⁷ Accident Investigation Board Norway. (2018). The AIBN Method: Framework and Analysis Process for Systematic Safety Investigations. ISBN 978-82-690725-3-2.

1.2.3 Assistance

In connection with the thematic investigation, the AIBN asked the Institute of Transport Economics (TØI) to carry out a study of literature on professional road transport (cf. section 3.7).

The work on collecting data included important contributions from the police, the NPRA, the Norwegian Labour Inspection Authority and the parties involved in the four road traffic accidents, as well as other important operators in the road transport market.

1.2.4 Structure of the report

Chapter 2 presents the parties involved in the ordering and execution of the transport assignments the heavy goods vehicles involved in the four road traffic accidents were performing. The AIBN has chosen not to name the parties concerned, but will describe their functions in connection with the transport assignments. The accidents in question are presented in Appendix A to the report.

Chapter 3 concerns the overarching framework conditions for ordering goods transport by road in Norway. The chapter provides a description of the industry structure, political, societal and professional requirements, current laws and regulations, as well as supervision and enforcement. The chapter also describes safety requirements in the goods transport industry, and presents findings from a literature study of the importance of framework conditions to safety in connection with goods transport by road.

Chapter 4 presents the AIBN's analysis and assessments of the information obtained from the enterprises ordering the transport assignments in connection with the investigation. Measures implemented by the involved parties as a result of the thematic investigation are also presented in this chapter.

Chapter 5 presents information that the AIBN has obtained from the suppliers involved (freight forwarder/transport carrier) in connection with the thematic investigation.

In Chapter 6, the AIBN assesses the consideration given to road traffic safety by enterprises ordering transport assignments, and whether due consideration is given to road traffic safety in the transport booking process.

In Chapter 7, the AIBN looks at findings from the mapping of overarching framework conditions for ordering goods transport by road, and whether these framework conditions ensure that due consideration is given to road traffic safety.

Chapter 8 describes the main findings of the thematic investigation, and presents the AIBN's concluding remarks.

Chapter 9 presents the conclusion of the thematic investigation.

Chapter 10 presents the AIBN's safety recommendation based on the findings of the thematic investigation.

2. PARTIES INVOLVED IN THE ORDERING AND PERFORMANCE OF TRANSPORT ASSIGNMENTS

2.1 Introduction

The following sections describe the process for identifying the different parties involved in the transport assignments performed by the heavy goods vehicles that were involved in the four road traffic accidents. The AIBN has chosen not to name the parties concerned, but will describe their functions in connection with the transport assignments in the following sections.

2.2 Road traffic accident on the E8 road near Nordkjosbotn in Troms, 7 January 2019

The driver of the heavy goods vehicle had been in Tromsø delivering goods for a Norwegian furniture chain prior to the accident. The transport assignment had started a week earlier in Lithuania. When the accident occurred, the driver was on his way to Finland in connection with a new transport assignment whose destination was in Lithuania.

Information the police gave the AIBN when it was notified of the accident indicated that the vehicle was registered abroad, and when interviewed by the police, the driver stated that he had delivered goods for a furniture company in Norway prior to the accident.

The AIBN established contact with the Norwegian furniture chain. Early in the investigation, the AIBN was informed that the furniture chain was both the client and the enterprise ordering the transport, and that a Norwegian container and logistics company was the freight forwarder for the furniture chain in connection with this particular transport assignment. The AIBN was also informed that the Norwegian container and logistics company had used a Lithuanian transport company as the transport carrier for the transport assignment in question. The transport chain and the functions of the parties involved are illustrated in Figure 3.

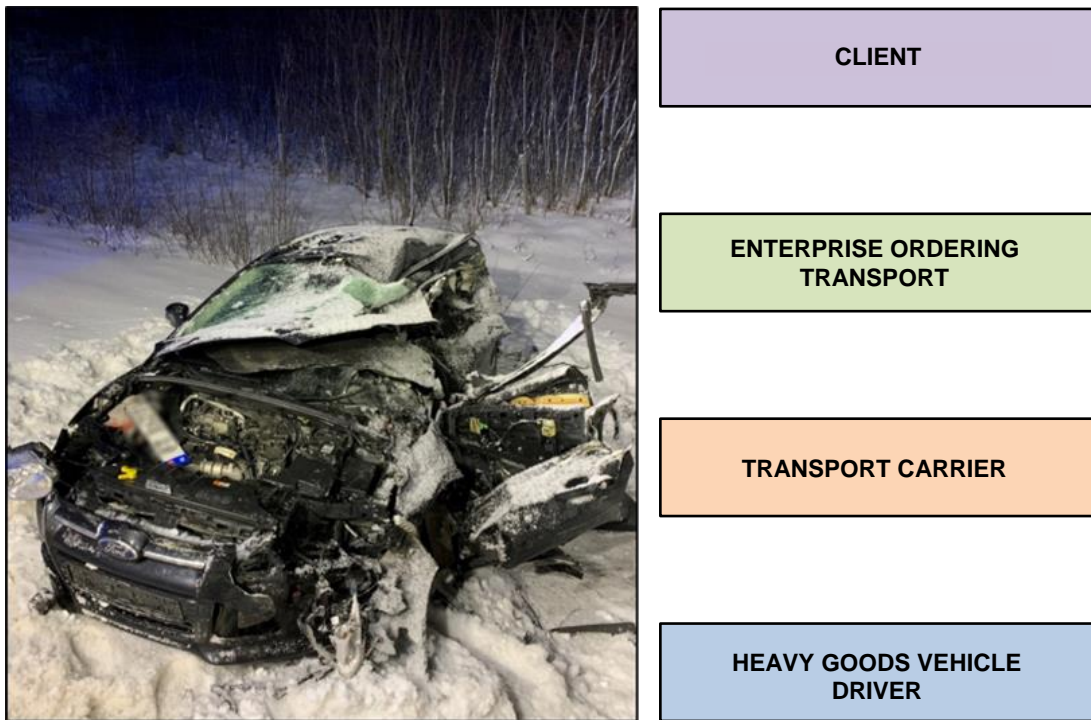


Figure 3: The functions of the parties involved in the ordering and performance of the transport assignment of the heavy goods vehicle involved in the road traffic accident on the E8 road near Nordkjosbotn on 7 January 2019. Illustration: AIBN

In its further dialogue with the parties involved, the AIBN has been informed that the Norwegian furniture chain was the client for the transport assignment, and that the Norwegian container and logistics company was the enterprise ordering the transport. The Lithuanian transport company was the transport carrier for the transport assignment. The driver of the heavy goods vehicle was employed by the Lithuanian transport company, which also owned the vehicle.

2.3 Road traffic accident on the Rv 3 road near Stor-Elvdal in Hedmark, 2 February 2019

The driver of the heavy goods vehicle was en route to Norrköping in Sweden to deliver goods to a Swedish energy company when the accident occurred. The transport assignment had started on 1 February in Oslo.

Information the police gave the AIBN when it was notified of the accident indicated that the heavy goods vehicle was registered abroad, and the AIBN requested further information from the police about the transport assignment and the parties involved.

According to the police documents, the driver was employed by a Polish transport company (subcontractor), and when interviewed by the police, the driver explained that the transport assignment was carried out on behalf of a Danish transport and logistics company (principal contractor).

At the AIBN's request, the police obtained the consignment note for the transport assignment, which showed that the logistics department of a Norwegian waste and recycling group was named as the sender (client) and that the Swedish energy company was named as the recipient. In the consignment note, the Danish transport and logistics company was named as the transport carrier, although the transport assignment was carried out by a subcontractor of the company. The transport chain and the functions of the parties involved are illustrated in Figure 4.

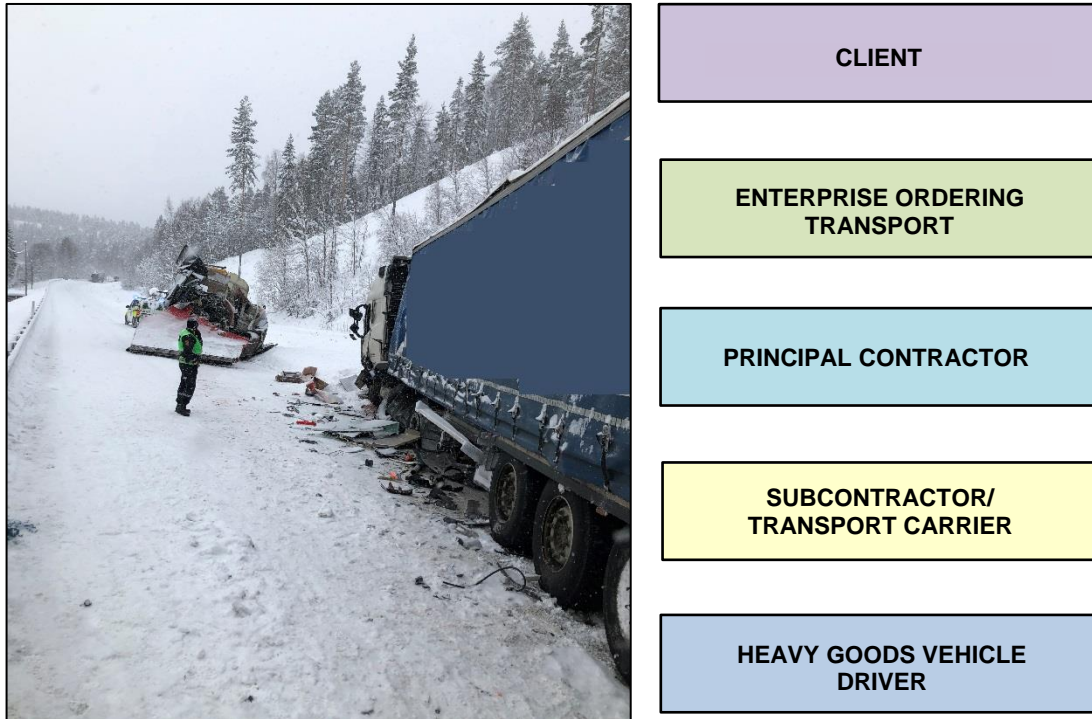


Figure 4: The functions of the parties involved in the ordering and performance of the transport assignment of the heavy goods vehicle involved in the road traffic accident on the Rv 3 road near Stor-Elvdal on 2 February 2019. Illustration: AIBN

The AIBN established contact with the Norwegian waste and recycling group's logistics department, and was told that the tractor unit in the vehicle combination belonged to the Danish transport and logistics company, and that the trailer belonged to the Polish transport company. At an early stage of the investigation, however, it was unclear to the group's logistics department whether the Danish transport and logistics company could also be assigned the function as transport carrier for the relevant transport assignment, in addition to the function as freight forwarder.

In its further dialogue with the parties involved, the AIBN was told that the Norwegian waste and recycling group's logistics department acted as the client and was also the enterprise ordering the transport assignment. The AIBN was also told that the Danish transport and logistics company (principal contractor) was the recipient of the transport booking, and that this company used the Polish transport company as the transport carrier for the transport assignment in question. The driver of the heavy goods vehicle was employed by the Polish transport company (subcontractor).

2.4 Road traffic accident on the E10 road near Bjerkvik in Nordland, 15 February 2019

The driver of the heavy goods vehicle had been in Harstad delivering goods to a dairy belonging to a Norwegian food producing company prior to the accident. The transport assignment had started on 12 February in Sunne in Sweden, where the heavy goods vehicle had been loaded with goods for transport to Norway. The accident happened as the driver was en route to Skjervøy to pick up fish in connection with a new transport assignment whose destination was Aukra in Norway.

Information the police gave the AIBN when it was notified of the accident indicated that the heavy goods vehicle was registered abroad, and photos from the scene of the accident showed that the vehicle belonged to a Lithuanian forwarding and transport company (principal contractor). The transport chain and the functions of the parties involved are illustrated in Figure 5.

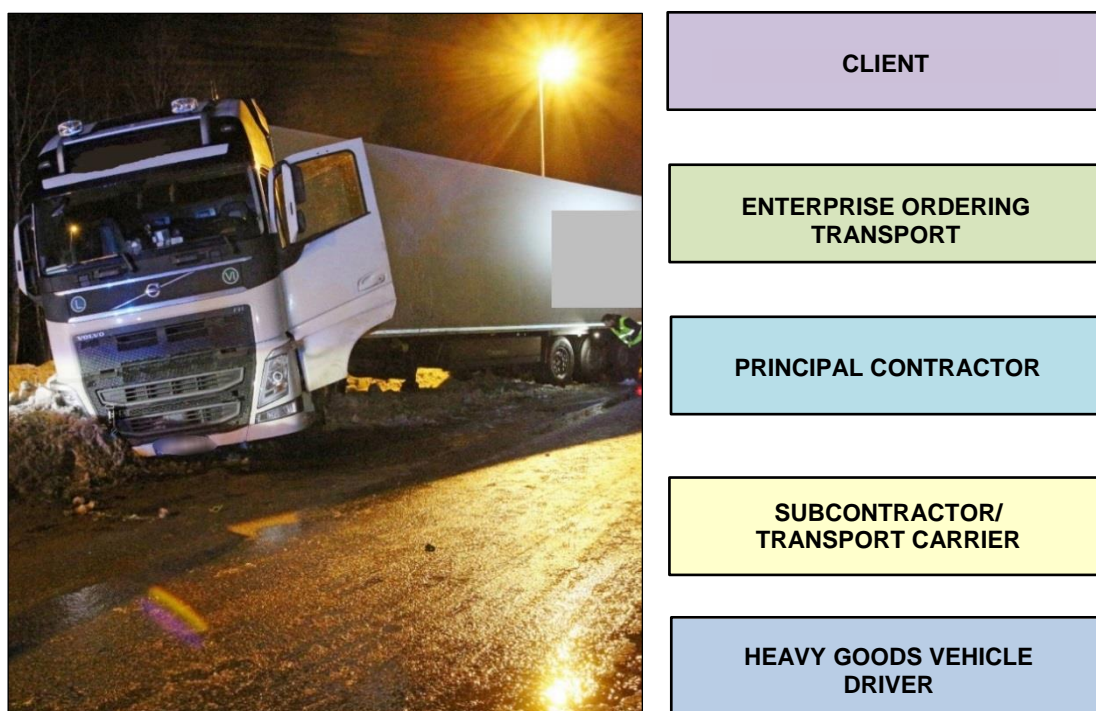


Figure 5: The functions of the parties involved in the ordering and performance of the transport assignment of the heavy goods vehicle involved in the road traffic accident on the E10 road near Bjerkvik on 15 February 2019. Illustration: AIBN

Based on information obtained from the police, the AIBN contacted a Norwegian transport and logistics company owned by the Lithuanian forwarding and transport company. On the AIBN’s request, the company obtained the consignment note for the transport assignment in question. The consignment note showed that a Swedish food processing and packaging company was named as the sender (client), and that a dairy belonging to a Norwegian food producing company was named as the recipient. The Lithuanian forwarding and transport company was named as the transport carrier, and another Lithuanian transport company was named as the ‘sub-transport carrier’ (subcontractor).

The AIBN then established contact with the Swedish client's Norwegian division, and was given the name of a contact person in the client's parent company. The contact person was responsible for customer relations between the Swedish food processing and packaging company and the Lithuanian forwarding and transport company (principal contractor).

In its further dialogue with the parties involved, the AIBN was told that the Swedish company acted both as the client and the enterprise ordering the transport, but that an external company in Amsterdam was responsible for the practical aspects of the transport booking. The Lithuanian forwarding and transport company (principal contractor) was the recipient of the transport booking, and the other Lithuanian transport company (subcontractor) was used as the transport carrier for the transport in question. The driver of the heavy goods vehicle was employed by the subcontractor, which also owned the vehicle combination.

2.5 Road traffic accident on the E134 road near Høydalsmo in Telemark, 12 March 2019

The driver of the heavy goods vehicle was en route to Haugesund to deliver goods to a parcel and goods terminal belonging to a Nordic postal and logistics group when the accident happened. The transport assignment had started in Oslo on the same afternoon.

Information the police gave to the AIBN when it was notified of the accident indicated that the heavy goods vehicle was registered in Norway. The AIBN also received information from the police indicating that the heavy goods vehicle belonged to a Norwegian transport company, and that the vehicle had been performing a transport assignment for the Nordic postal and logistics group.

The AIBN established contact with different departments of the Nordic postal and logistics group. At an early stage of the mapping process, it was unclear which functions the different departments had had in connection with the transport assignment in question, and during this phase, none of them would acknowledge that they had ordered the transport assignment.

However, it emerged from the further dialogue that the Nordic postal and logistics group acted both as client and the enterprise ordering the transport assignment. The group in question used a Norwegian transport company as the transport carrier for the transport, and the driver of the heavy goods vehicle was employed by this company.

The AIBN obtained contact information for the Norwegian transport company from several different parties, but did not receive a reply until four months later. At that time, the AIBN was informed that the transport company was having financial difficulties, and that the company had been unable to establish contact with the AIBN sooner. At the same time, the AIBN knew that the transport company had been in contact with the Nordic postal and logistics group. The lack of communication on the transport company's part will be discussed further in Chapter 5.

The transport chain and the functions of the parties involved are illustrated in Figure 6.



CLIENT

**ENTERPRISE ORDERING
TRANSPORT**

TRANSPORT CARRIER

**HEAVY GOODS VEHICLE
DRIVER**

Figure 6: The functions of the parties involved in the ordering and performance of the transport assignment of the heavy goods vehicle involved in the road traffic accident on the E134 road near Høydalsmo on 12 March 2019. Illustration: AIBN

3. FRAMEWORK CONDITIONS FOR ORDERING GOODS TRANSPORT BY ROAD

3.1 Introduction

Many different factors make up the overarching framework conditions for goods transport by road in Norway. ‘Framework conditions’ means external conditions that set requirements for or impose restrictions on how a business or activity is to be operated. Overarching framework conditions include financial, legal and professional conditions⁸.

This thematic investigation has focused on the overarching framework conditions that can influence road traffic safety when ordering goods transport by road. In this investigation, the framework conditions have been broken down into ‘industry structure’, ‘political, societal and professional requirements’, ‘laws and regulations’, and ‘supervision and enforcement’. These topics are discussed in sections 3.2, 3.3, 3.4 and 3.5, respectively.

Section 3.6 also discusses differences in safety requirements for goods transport in the different transport sectors in Norway. Goods transport by rail is discussed, in particular, in this context. In addition, differences in the statutory requirements that apply to road traffic safety in connection with the carriage of dangerous goods (ADR transport) and goods transport by road in general are discussed.

Section 3.7 presents the findings of a study of literature on professional road transport, focusing on the impact framework conditions have on safety.

3.2 Industry structure

3.2.1 The goods transport industry

3.2.1.1 *International trade and goods transport by road*

The project ‘A broad social analysis of goods transport’ was initiated by the Ministry of Transport and Communications, and conducted by a project group comprising representatives of the NPRA, the Norwegian National Rail Administration (NNRA) and the Norwegian Coastal Administration (NCA). A project report⁹ describing trends and developments in the goods transport sector was published in 2015.

According to the report, changes in the type of trading and the geographical location of new trading partners, in other words changes in what we trade in and who we trade with, have led to changes in the means of transport used for goods transport. This, in turn, has led to an increase in international transport by road to and from Norway. Logistics systems relating to the distribution of goods are also changing, and there is a tendency for central warehouses to be located outside Norway and the Nordic region. The centralisation of warehouses in Central and Eastern Europe enables cheaper transport solutions.

⁸ Source: <https://sml.snl.no/rammebetingelser>.

⁹ Askildsen, T.C. & Marskar, E-M. (2015). NTP Godsanalyse. Delrapport 1: Kartlegging og problemforståelse. ISBN 978-82-7704-147-6.

The report states the following concerning the road transport industry and foreign transport companies:

Since payroll expenses make up a large proportion of the costs (around 70% of time-dependent costs (Grønland et al., 2014a)), the road transport industry has a long-standing tradition of experimenting with how to reduce these expenses: Using drivers living in regional policy areas has saved employer's National Insurance contributions; using drivers registered as self-employed has saved non-wage labour costs (...); hiring foreign drivers has reduced payroll expenses, and – what appears to be a current trend – using foreign transport enterprises as subcontractors has allowed Norwegian transport purchasers to benefit from a 'total package' of more favourable foreign framework conditions.

(...)

There is nothing to prevent Norwegian transport companies from employing foreign drivers, but outsourcing an entire transport assignment to a foreign enterprise seems to yield some additional benefits over and above the pay of the foreign driver. There are several ways of outsourcing a transport assignment to a foreign transport carrier: the Norwegian goods owner can either entrust the carrier's responsibility (responsibility for ordering and carrying out the transport) to its foreign trading partner, purchase transport from a foreign transport carrier or purchase the transport from a Norwegian transport carrier who, in turn, outsources the assignment to a foreign subcontractor.

(...)

For road transport, the changes in the nationality of transport carriers are most apparent from Statistics Norway's figures for cross-border transport performed by heavy goods vehicles, where we see that the number and proportion of vehicles registered abroad, especially in Eastern Europe, are growing rapidly.

(...)

Increased use of foreign transport enterprises as subcontractors for cross-border, and gradually also national, transport assignments has probably led to more cost-efficient transport as a result of better capacity utilisation, but also to very poor pay and working conditions in the road transport industry. The use of international goods vehicles and drivers in Norway gives rise to many road traffic safety challenges. Among other things, drivers holding a Norwegian driving licence are required to complete a course in driving in winter conditions. It is not possible to apply the same requirement to drivers holding foreign driving licences. Heavy goods vehicles from other countries are three times as likely to be involved in an accident as Scandinavian goods vehicles in Western Norway/Trøndelag/Northern Norway.

3.2.1.2 Profitability and competition in the road transport industry

The Institute of Transport Economics (TØI) has prepared a report¹⁰ that, among other things, addresses the financial framework conditions for various forms of transport. It is clear from the report that the road transport industry, due to increased costs and

¹⁰ Hovi, I.B., Bråthen, S., Hjelle, H.M. & Caspersen, E. (2014). Framework conditions in the Norwegian logistics market. TØI report 1353/2014.

competition, is dominated by small operators, low profitability for the enterprises involved, and falling operating costs.

The report states, among other things:

The choice of means of transport is usually the result of weighing the price against the quality of the service, focusing on solutions that can reduce costs across the value chain (from raw materials to the final product and distribution to the end customer), including flexibility.

(...)

Goods transport in general is an industry characterised by low, and sometimes negative, operating margins. A more detailed mapping of the individual subgroups in the industry shows that goods transport by sea has been the most profitable segment during the period, followed by road, rail and air transport, respectively.

The road transport industry is dominated by small operators (companies with 0–4 employees), low profitability, low equity and falling operating margins due to increased costs and competition. Corrected for the number of employees without wages in the structural business statistics, profitability in the road transport industry, excluding limited liability companies, is negative.

(...)

We have also looked at the profitability of different parts of the transport chain, such as storage, forwarding, port operation and loading/unloading. In general, it appears that the industries that comprise other parts of the transport chain are more profitable and robust than the transport industries themselves.

3.2.2 Description of parties in the transport chain

3.2.2.1 *Introduction*

Several different parties can be involved in ordering goods transport by road and performing the transport assignment. Examples of such parties are presented in Table 1.

Table 1: Parties involved in the ordering and performance of road transport. Source: Spurkeland (2018)

Function	Who	What
Client	Goods owner or representative of goods owner.	The party paying for the logistics and transport services.
Enterprise ordering transport	Forwarder/goods owner/agent/representative.	Orders goods transport.
Freight forwarder	Logistics and transport companies.	Orders transport on behalf of the goods owner.
Forwarding agent	Employee of a freight forwarder who negotiates prices with the vehicle owners.	Orders transport, draws up routes, enters into agreements with vehicle owners.

Transport carrier	Transport companies.	Perform transport assignments themselves or with the help of a subcontractor.
Sender	Goods manufacturer/goods owner/freight forwarder.	Sender of goods.
Recipient	Buyer/customer/goods owner's goods receipt.	Private parties, enterprises, public undertakings.

The 'Guide to Ordering Transport Services' ('Veileder for bestilling av transporttjenester' – in Norwegian only)¹¹ (cf. section 3.3.9) shows how applicable laws and regulations use different designations and definitions for the different parties in the transport chain. Examples of this are shown in Table 2.

Table 2: Designations and definitions used for different parties in the transport chain.

Designation	Definition
Client ¹²	A collective term that also includes enterprises ordering transport services, and may include both the party ordering transport, the principal contractor and subcontractors.
Enterprise ordering transport ¹³	A physical or legal person hiring contractors or suppliers to perform an assignment.
Principal contractor ¹³	Contractor or supplier that has taken on an assignment for the party ordering the transport, and that has engaged one or more subcontractors to perform part of the assignment.
Subcontractor ¹³	Contractor or supplier performing part of the assignment agreed between the principal contractor and the party ordering the assignment.

Importers or exporters of goods, wholesalers, storage enterprises, freight forwarders, transport carriers, shops, public enterprises or other institutions use transport services to transport goods¹⁴. The different parties involved in the ordering and performance of road transport of goods and their functions are described in more detail in the following sections. The description of the functions in the transport chain is based on Spurkeland (2018).

3.2.2.2 Client

A client in a transport chain is normally the goods owner and purchaser of transport, and the party paying for the logistics and transport services. In some contexts, the term 'client' can also refer to the enterprise ordering the transport.

¹¹ Tripartite Transport Industry Programme. (2017). Veileder for bestilling av transporttjenester.

¹² Source: Regulations of 12 August 2016 No 974 relating to public procurements.

¹³ Source: Regulations of 22 February 2008 No 166 relating to the duty to provide information, duty to ensure compliance and right of access to information.

¹⁴ Source: Spurkeland, E. (2018). Transportbestilleren: Innføring i transportbestilling for godstransport. Fagbokforlaget.

3.2.2.3 *Enterprise ordering transport*

The enterprise ordering the transport assignment is a customer of a transport carrier, freight forwarder or other operator in the logistics and transport industry, for example a goods owner or wholesaler. The enterprise ordering the transport purchases logistics and transport services from suppliers performing work in connection with goods transport. These suppliers can for example be freight forwarders or transport carriers.

A transport booking must start with a requirements specification from the client. The enterprise ordering the transport must then find a transport carrier or freight forwarder to perform the transport assignment, and ensure that the chosen transport carrier has the permits required to perform the assignment in question.

The enterprise ordering the transport can deal with different parties involved in the ordering and performance of goods transport in connection with a transport assignment. Alternatives include:

- The enterprise ordering the transport is the goods owner and orders transport of the goods directly from a transport carrier.
- The enterprise ordering the transport asks a freight forwarder to book transport of the goods.
- The enterprise ordering the transport asks the recipient (purchaser of the goods) to book transport of the goods.

3.2.2.4 *Freight forwarder*

The freight forwarder organises the flow of goods for import, export and domestic purposes. Freight forwarding thus involves both conveying, receiving and sending goods for the client's account, but may also include customs clearance, storage and distribution to recipients.

Freight forwarders may have permanent agreements with subcontractors or outsource on an ad hoc basis.

3.2.2.5 *Forwarding agent*

A forwarding agent is an employee of a freight forwarder who negotiates prices with vehicle owners. The forwarding agent may order transport, decide routes and enter into agreements with vehicle owners for the use of the vehicles for transport assignments.

3.2.2.6 *Transport carrier*

A transport carrier can be both a company performing a transport assignment and a subcontractor. The transport carrier draws up a price offer for a transport assignment based on the requirements specification from the enterprise ordering the assignment. Transport carriers can use their own or hired vehicles to perform the transport assignment.

3.2.2.7 *Sender*

The sender in the transport chain is normally the party that manufactures and sends goods.

3.2.2.8 *Recipient*

The recipient in the transport chain is normally the party that buys and receives goods.

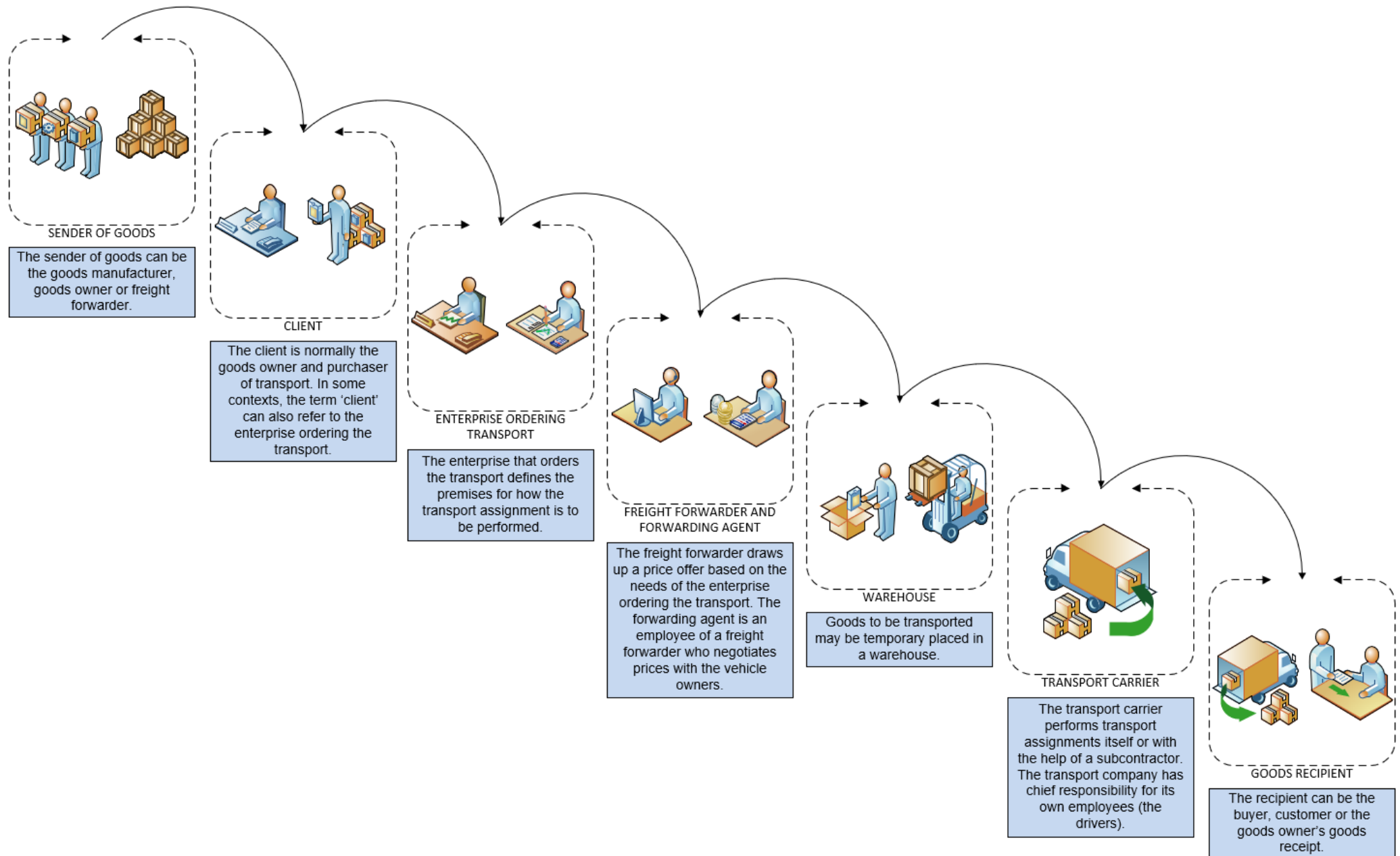


Figure 7: Overview of the different parties that may be involved in the ordering and performance of goods transport by road. Illustration: AIBN

3.3 Political, societal and professional requirements

3.3.1 Introduction

Several of the key parties involved in the road transport market as well as other road traffic safety stakeholders have implemented measures and engaged in impact efforts to improve safety on Norwegian roads. A lot of this work is also relevant to goods transport by road. For example, action plans, industry programmes and quality assurance systems have been developed to support, guide and influence the Norwegian road transport industry over and above the statutory requirements.

The following sections present examples of impact efforts that are most relevant to this thematic investigation, and that comprise most of the political, societal and professional requirements for goods transport by road in Norway.

3.3.2 'National Plan of Action for Road Safety 2018–2021'

'The National Plan of Action for Road Safety 2018–2021' is an action plan prepared by the NPRA, the police, the Directorate of Health, the Directorate of Education and Training, the Norwegian Council for Road traffic safety (Trygg Trafikk), the county authorities and seven city municipalities¹⁵ in Norway. The plan is based, among other things, on the 'National Transport Plan 2018–2029', and the purpose is to present a spectrum of measures for increasing safety on Norwegian roads, and to strengthen cooperation between key road traffic safety stakeholders in Norway.

The action plan presents 13 priority areas that will be the focus of particular attention during the period covered by the plan. One of them is 'transportation involving heavy vehicles'. The priority areas were chosen because the implementation of targeted measures will have a large potential to reduce the number of fatalities and serious injuries in road traffic, because the areas are important in road safety prevention work in general, or because there is great political interest in them.

The action plan lists 136 road safety measures that will be followed up in the period covered by the plan. The measures are divided into nine main topics, one of which is 'systematic road safety work in the public and private sectors'. Various measures for systematic road safety work in enterprises are presented under this topic, with reference to, among other things, the 'Tripartite Transport Industry Programme' (cf. section 3.3.8), the 'Guide to Ordering Transport Services' and 'ISO 39001' (cf. section 3.3.9), as well as the Norwegian Truck Owners Association's quality assurance system 'KMV' (cf. section 3.3.11).

In the priority area 'transportation involving heavy vehicles', road safety measures will target the inspection of heavy vehicles, including checking compliance with driving and rest period provisions, unlawful cabotage operations¹⁶ and winter equipment. The action plan states, among other things, that the NPRA will give priority to supervision and inspection of vehicles and enterprises where there is a high risk of violations of laws and regulations. It also states that any sanctions following an inspection will be addressed to the employer, and that, in the event of gross violations of provisions on working hours

¹⁵ Oslo, Bærum, Kristiansand, Stavanger, Bergen, Trondheim and Tromsø.

¹⁶ Transport where a transport carrier from one state engages in transport between two points in the territory of another state.

and/or generally applicable regulations on pay, the enterprise ordering the transport assignment will also be followed up.

3.3.3 'Report on Road Cabotage in Norway'

In 2013, the Ministry of Transport and Communications appointed a cabotage working group consisting of representatives of relevant organisations and authorities in the road transport sector. The purpose was to identify the most important challenges relating to cabotage (transport in Norway performed by foreign transport carriers), and to propose measures to meet these challenges.

A report¹⁷ was prepared by the working group and submitted to the Ministry of Transport and Communications in 2014. The purpose of the report was to form the basis for further follow-up of cabotage, both politically and by business and industry. The report addressed challenges relating to the increase in goods transport cabotage and the market situation for goods transport, and measures proposed within the framework of EEA regulations and national regulations.

The report includes the following description of 'proposed measures':

6.1.3 Ensuring increased cooperation between supervisory agencies

The working group proposes increased cooperation between different supervisory agencies. The purpose is to develop more effective and formalised cooperation between different supervisory agencies, including a coordinated inspection strategy. The proposal assumes that the cooperation will include all types of inspections of road transport, including of cabotage. This is because cross-sector cooperation in the road traffic area can result in important synergies. The most relevant supervisory bodies in this context will be the Norwegian Public Roads Administration, the police, the Norwegian Labour Inspection Authority, Norwegian Customs and Excise and the Norwegian Tax Administration.

(...)

6.2.4 Clarifying responsibilities in the transport chain

The members of the working group propose that the Ministry of Transport and Communications, in cooperation with other relevant authorities, clarify responsibilities in the transport chain for road traffic and professional transport.

The purpose of the proposal is to ensure that existing provisions on the accountability of parties other than the driver and enterprise in the road traffic and professional transport regulations are enforced.

The members of the working group agree that Section 41 of the Professional Transport Act sets out a joint accessory liability for facilitating unlawful cabotage operations. There are also other provisions on liability (...). It is also conceivable that provisions of the Penal Code can be applied to road transport. During the discussion of this topic, the members from the Norwegian Transport Workers' Union and the Professional Drivers' Union argued in favour of introducing a separate strict accessory liability provision, which would mean that buyers of

¹⁷ Source:

https://www.regjeringen.no/globalassets/upload/sd/vedlegg/rapporter_og_planer/2014/rapportomkabotasje26april2014_web.pdf?id=2234917.

transport services could be held legally and financially liable for breaches of the regulations. The purpose was to ensure that buyers of transport services are held accountable, because these members of the working group believe that the currently applicable rules on joint liability are insufficient. It was not possible for the rest of the working group to endorse this proposal, with reference to the existing provisions on liability.

The working group nonetheless agreed that the prosecuting authority should give higher priority to reviewing and clarifying responsibilities in the transport chain and to accessory liability pursuant to the Professional Transport Act. A possible solution to the latter issue is a circular issued by the Director General of Public Prosecutions, which specifies the rules that apply to liability and how they should be enforced and given priority.

The proposal will not entail material financial or administrative consequences, as it is a question of clarifying and, if relevant, enforcing the rules currently in force. The proposal must be followed up by the Ministry of Transport and Communications in cooperation with the Ministry of Justice and Public Security and the Director General of Public Prosecutions.

The AIBN requested information from the Ministry of Transport and Communications about whether and how the proposed measure to ‘clarify responsibilities in the transport chain’ has been followed up. The AIBN was informed by the Ministry that, based on the proposed measure, the Directorate of Public Roads had been asked to look into any unclear areas in the transport chain. Furthermore, the AIBN was informed that the Directorate had concluded that the regulations were not unclear on any point, and had decided on this basis not to proceed with amendments to the regulations.

The AIBN was also informed that the road transport industry has itself followed up the proposed measure through the ‘Tripartite Transport Industry Programme’ (cf. section 3.3.8), and more specifically through the ‘Guide to Ordering Transport Services’ (cf. section 3.3.9).

The follow-up of the measure ‘ensuring increased cooperation between supervisory agencies’ is discussed further in section 3.5.4.

3.3.4 Investigations of road traffic accidents involving heavy vehicles

Accidents involving heavy vehicles represent one of the core areas of interest in the AIBN’s investigations. A previous report¹⁸ published by the AIBN identified a need for improved safety management in transport companies. The investigation found that too little focus had been given to systematic follow-up of both requirements set out in the Working Environment Act and the safety requirements applicable to goods transport by road. In that connection, the AIBN submitted a safety recommendation that pointed out that Norwegian authorities should take overall road traffic safety considerations into account when issuing licences for goods transport by road.

¹⁸ Accident Investigation Board Norway. (2009). Report on head-on collision between two heavy goods vehicles on the E39 road by Lenefjorden in Lyngdal on 29 September 2006. AIBN Report ROAD 2009/04.

3.3.5 ‘Trygg Trailer’

‘Trygg Trailer’¹⁹ is a joint venture between the NPRA and buyers of freight transport services in Norway. The transport companies that participate are given training and information by the NPRA concerning the requirements for winter tyres and snow chains for heavy vehicles. Based on these requirements, buyers of transport services can carry out inspections of heavy goods vehicles the companies use for goods transport, and, if necessary, refuse to use vehicles that are not up to standard. The measure was initiated because of traffic flow problems and dangerous situations on Norwegian roads caused by inadequately equipped heavy goods vehicles. The goal of the initiative is to ensure that heavy vehicles transporting goods in Norway are better equipped for winter conditions, and thereby improve road traffic safety.

3.3.6 ‘Trucker’s Guide’

‘Trucker’s Guide’²⁰ is an information brochure that the NPRA has developed as a tool for professional drivers. The guide addresses, among other things, driving in winter, the use of tyres and snow chains, the Norwegian inspection authorities, and laws and provisions that apply to transport operations in Norway. The guide is available in nine different languages (English, German, Polish, Finnish, Latvian, Russian, Romanian, Croatian and Bulgarian).

The NPRA represented by the Directorate of Public Roads has informed the AIBN that the guide is used, among other things, in connection with roadside inspections as a tool for communicating with drivers who do not speak Norwegian or English.

3.3.7 The information campaign ‘Mother Presents’

‘Mother Presents’²¹ is an information campaign developed through the ‘Tripartite Transport Industry Programme’ (cf. section 3.3.8). The campaign is an initiative aimed at improving foreign professional drivers and their employers’ knowledge about special Norwegian rules and driving conditions. Among other things, the campaign describes driving and rest period requirements, and includes information about road conditions in Norway.

3.3.8 ‘Tripartite Transport Industry Programme’

Tripartite industry programmes take a comprehensive approach to regulation, and are a tool for achieving decent working conditions in selected industries where this is a challenge. Industry programmes are intended to encourage employers, employees and the authorities to document and deal with common challenges. The Norwegian Labour Inspection Authority’s tools and resources constitute the authorities’ contribution in the relevant industry initiatives.

The transport industry programme was established in 2014, and has focused on combating non-law-abiding operators, work-related crime and social dumping in the road transport industry. The activities carried out as part of the programme include mapping working conditions in the goods transport industry. This mapping will form the basis for

¹⁹ Source: <https://www.vegvesen.no/en/vehicles/professional-transport/trygg-trailer>.

²⁰ Source: <https://www.vegvesen.no/en/vehicles/professional-transport/truckers-guide>.

²¹ Source: <http://www.motherpresents.org/en/>.

the work on developing measures to deal with challenges relating to working conditions and the working environment in the industry. A number of different guides have also been developed in connection with the programme, including a guide to ordering transport services (cf. section 3.3.9).

3.3.9 'Guide to Ordering Transport Services'

The introduction to the guide²² specifies that:

The enterprise ordering the transport plays an important role in the work of establishing a good foundation for the performance of transport assignments, so that both the driver and the goods arrive safely at the agreed time. The checklists in this document are useful tools in this work.

Everyone ordering goods transport by road must be familiar with the laws and rules that apply. The guide provides a clear overview of the requirements both private and public enterprises must comply with. It also contains tips and advice on how clients should proceed in order to quality assure a transport assignment.

Among other things, the guide contains a checklist for ordering goods transport by road, consisting of ten checkpoints (cf. Figure 8). The introduction to the checklist states that the client must go through the checkpoints regardless of the type of transport assignment, and regardless of whether the assignment is to be performed by a Norwegian or foreign enterprise. A selection of the checkpoints are described in more detail in Figure 10. The purpose of the different provisions is also described in this connection.

²² Tripartite Transport Industry Programme. (2017). Veileder for bestilling av transporttjenester.

Checkpoint	Control question	Yes	No	Not relevant
1. Duty to provide information	In the contract with the principal contractor, has the enterprise ordering transport included information that the drivers are entitled to generally applicable pay and working conditions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Duty to ensure compliance	Has the enterprise ordering transport established procedures for checking that the principal contractor complies with the General Application Regulations?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Co-responsibility for drivers' working hours	Is it practically possible to carry out the transport assignment within the framework of the regulations relating to drivers' working hours?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Driving and rest periods	Is it practically possible to carry out the transport assignment within the framework of the regulations relating to driving and rest periods?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Responsibility for working hours for persons other than own employees	Does the client have an agreement with a transport carrier who is not self-employed?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Responsibility for persons other than own employees – goods receipt	Is the client's goods receipt capable of meeting the requirement for a satisfactory working environment for the drivers?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. HSE coordination	Does the transport assignment require the client to coordinate the company's HSE system with the transport carrier?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Consignment note – general	Is the client also the sender of the goods to be transported?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Consignment note, ordinary loads	Are the goods loaded in accordance with the regulations and the consignment note?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Client's responsibility for the choice of means of transport	Is the client the one paying for the transport?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 8: Checklist for ordering goods transport by road (general points). Source: Tripartite Transport Industry Programme

The guide also contains a list of checkpoints that can be useful in connection with the booking of transport (cf. Figure 9). The introduction to this checklist reads as follows:

There are a number of factors clients can check in addition to the statutory requirements to ensure that the transport is carried out in a lawful and safe manner, and that the driver's working conditions are safeguarded. Although it is not a statutory obligation, clients should, among other things, check whether the transport carrier has the necessary dispensations and certifications, whether the driver holds an HSE card and whether the load is properly insured.

The checklist mentions, among other things, registration duties, transport licences and cabotage transport.

Checkpoint	Control question	Yes	No	Not relevant
18. Registration duties	Is the transport carrier registered in the Central Coordinating Register for Legal Entities, the Register of Business Enterprises and the VAT Register?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Licence	Is the transport carrier registered in the register of transport carriers?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Loads that require dispensation	Has the transport carrier obtained the necessary dispensation, for example for wide loads?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Does the driver have a valid HSE card?	Is the transport carrier certified to meet quality, safety and environmental requirements?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Insurance	Are the goods sufficiently insured?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Certifications	Is the transport carrier certified to meet quality, safety and environmental requirements?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Cabotage	If a foreign transport carrier is performing transport assignments in Norway (cabotage) – is this in compliance with the cabotage regulations?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Customs clearance	In connection with the import or export of goods, the transport carrier must be competent to perform the border crossing. Has the client checked the transport carrier's competence in this respect?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Price of assignment	Is the price 'too good to be true'?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 9: Factors that can be useful to check when booking transport. Source: Tripartite Transport Industry Programme

Certifications are also a checkpoint in the guide, and those ordering transport assignments are encouraged to check whether the transport carrier has the certificates needed to meet quality, environmental and safety requirements. In this context, reference is made, among other things, to the international road traffic safety standard NS-ISO 39001, the purpose

of which is to help to prevent serious traffic incidents²³. The standard describes specific requirements for a road traffic safety (RTS) management system, and it can help transport undertakings applying the standard to establish and develop a safety culture²⁴.

²³ Tripartite Transport Industry Programme. (2017). Veileder for bestilling av transporttjenester.

²⁴ Source: Spurkeland, E. (2018). Transportbestilleren: Innføring i transportbestilling for godstransport. Fagbokforlaget.

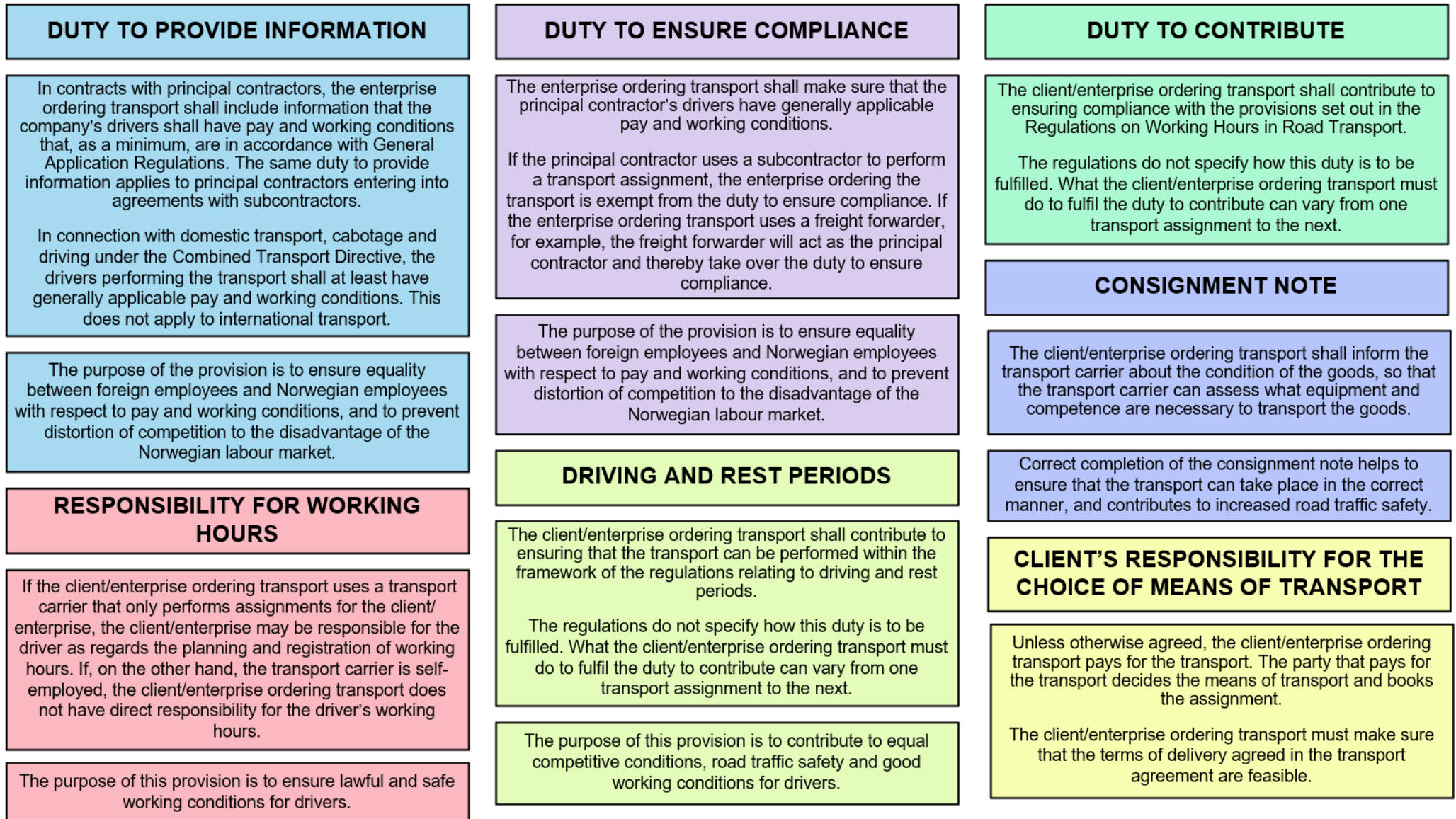


Figure 10: Selected checkpoints from the checklist for ordering goods transport by road. Source: Tripartite Transport Industry Programme. Illustration: AIBN

3.3.10 The ‘Fair Transport’ quality assurance programme

‘Fair Transport’²⁵ is a quality assurance programme for road transport carriers developed by the Norwegian Truck Owners Association (NLF). The programme was introduced in Norway in 2017 for the purpose of promoting safe road transport by responsible transport carriers. NLF describes the programme as follows:

In an unhealthy competitive situation, where prices are dumped in an increasingly tougher market, it is too often the case that both buyers and sellers of transport services lower their standards as regards safety, environmental considerations and social responsibility. It is this unhealthy situation that NLF aims to put an end to.

We believe that both buyers and sellers of transport services must take their share of the responsibility for a safe, clean and responsible transport industry. Fair Transport will make it easier for buyers of transport services to make the right choices.

NLF has launched the Fair Transport programme to ensure safe, sustainable and responsible transport by getting transport buyers to choose, and transport companies to deliver, high-quality transport services based on certain criteria.

Fair Transport is a binding quality assurance programme for Norwegian transport companies. The programme aims to improve road traffic safety, reduce greenhouse gas emissions and improve drivers’ social conditions.

Fair Transport aims to counteract unhealthy practices in the transport chain that contribute to more accidents, organised transport crime, distorted competition and social dumping.

By making transport buyers aware of their responsibility for contributing to this situation, while at the same time offering state, municipal and private transport buyers a tool that ensures sustainable transport services, NLF aims to make socially responsible, high-quality transport services more respected and accessible.

Transport companies certified under the ‘Fair Transport’ programme have documented work in relation to a number of criteria²⁶. A selection of these criteria is presented in Figure 11.

3.3.11 The ‘KMV’ quality system

‘KMV’²⁵ (‘quality and environment on the road’) is NLF’s quality assurance and environmental management system. The system covers quality assurance, systematic follow-up of the employer’s responsibility, HSE and information about laws and regulations. Among other things, the system contains reminders concerning verification of driver qualifications, the preparation of procedures in connection with road traffic accidents, an emergency response plan and review of the management system²⁷. NLF offers the quality assurance system to both small and large transport companies, and the companies are encouraged to use the system as part of the process for achieving ISO

²⁵ This industry tool is currently only available to NLF’s members.

²⁶ Source: <https://fairtransport.no/For-transportkjoepere3/Infobox-Section/OM-FAIR-TRANSPORT-PROGRAMMET/Fair-Transport-et-forpliktende-kvalitetsprogram>.

²⁷ Source: Norwegian Truck Owners Association.

certification (ISO 39001). The 'National Plan of Action for Road Safety 2018–2021' states the following:

For companies that have KMV, ISO certification (ISO 39001) will be greatly simplified and help to further increase the focus on road traffic safety.

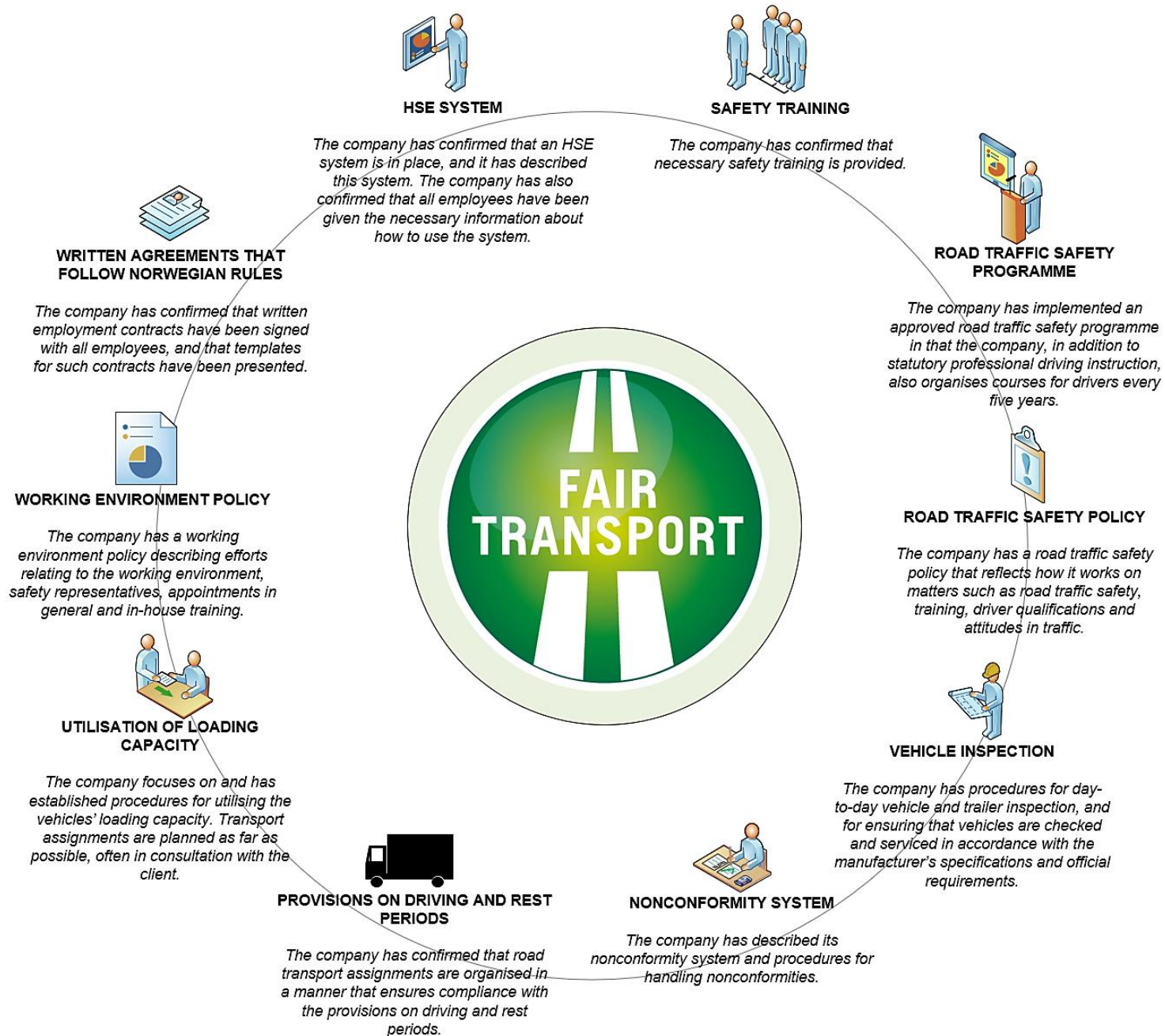


Figure 11: A selection of the criteria transport companies must meet to be certified under the 'Fair Transport' programme. Source: NLF. Illustration: AIBN

3.4 Laws and regulations

3.4.1 Introduction

Domestic transport takes place between two or more geographical locations in Norway, and can be performed by vehicles registered in Norway or abroad, cf. EEA regulations implemented in Norwegian law. This means that foreign transport carriers can perform temporary transport assignments in Norway.

Responsibility for ensuring that a transport assignment is carried out in accordance with the safety requirements that apply under laws and regulations does not rest solely with the driver. Transport agreements for domestic transport shall be based on the provisions and guidelines that apply to goods transport by road in Norway. This includes requirements relating to goods, vehicles, drivers and other links in the transport chain. For example, companies that provide transport services must meet minimum requirements in the form of licences, professional qualifications and financial strength, and drivers must be familiar with the regulations applicable to the work in question²⁸.

All laws and regulations relating to road transport do not necessarily apply to all types of transport assignments. The rules that apply can also vary based on whether someone orders a transport assignment themselves or uses a freight forwarder for this purpose.

Table 3 shows the main laws and regulations that make up the overarching legal framework for goods transport by road in Norway.

Table 3: Laws and regulations applicable to the ordering and performance of goods transport by road in Norway.

Acts of law	
➤ The Act of 18 June 1965 No 4 relating to road traffic (the Road Traffic Act)	The Road Traffic Act sets out requirements for, among other things, the driver's responsibility in connection with use of the vehicle and requirements of the vehicle, in addition to provisions on speed limits, including adapting the speed to the local conditions, road conditions, visibility and traffic conditions, and duties in the event of traffic accidents.
➤ Act of 21 June 2002 No 45 relating to Professional Transport by Motor Vehicle and Vessel (the Professional Transport Act)	<p>Any party intending to operate transport services for reward must have a licence to do so. A transport licence may be granted to any party who meets certain business requirements and can demonstrate good conduct, financial capability and professional qualifications.</p> <p>A licence from the Ministry of Transport and Communications is required for goods transport if the maximum authorised weight of the motor vehicle is 3,500 kg or more.</p> <p>Furthermore, Section 12 'Licences' and Section 14 'International transport services and cabotage outside the EEA' specify that the Norwegian Public Roads Administration grants licences for goods transport by motor vehicle and goods transport to or from other countries.</p>

²⁸ Source: Spurkeland, E. (2018). Transportbestilleren: Innføring i transportbestilling for godstransport. Fagbokforlaget.

	<p>In principle, cabotage²⁹ is not permitted under Section 10(3) of the Professional Transport Act, but EEA regulations implemented in Norwegian law, cf. Section 53 of the Professional Transport Regulations, entail that foreign transport carriers can perform temporary transport assignments in Norway.</p> <p>A foreign transport carrier that has transported goods to Norway can perform a transport assignment using the same vehicles within the country's borders. The number of assignments is limited to three in the course of seven days, before the vehicle must leave the country. The Community authorisation (licence to drive in the EU/EEA) only applies to vehicles transporting goods to Norway, which are subsequently allowed to perform transport assignments in connection with leaving the country³⁰.</p> <p>Those ordering transport assignments must be aware that the assignment is being performed as a cabotage operation, as the enterprise ordering transport is obliged to contribute to ensuring that the transport is lawful ('duty to contribute').</p>
<p>➤ Act of 17 June 2005 No 62 relating to Working Environment, Working Hours and Employment Protection (the Working Environment Act)</p>	<p>The Working Environment Act regulates the duties of employers and employees, including the requirement for work on health, safety and the environment (HSE), and the employer's duty to cooperate. The Act also contains provisions on working hours, the working environment and control measures in the enterprise.</p> <p>The scope of the Norwegian Working Environment Act does not extend to professional drivers employed by foreign enterprises performing international transport. They are covered by the working environment legislation in the country where the enterprise is located. If the driver is a posted employee (driving a heavy vehicle or tour coach and performing cabotage transport), however, the driver shall be paid the generally applicable Norwegian wage rate.</p>
<p>➤ Act of 20 December 1974 No 68 relating to contracts for the carriage of goods by road (the Road Carriage Act)</p>	<p>The Act regulates domestic and international carriage between senders, carriers and receivers of goods. The consignment note documents the contract of carriage regulating the rights of the parties.</p>
<p>➤ Directive 2006/126/EC of 19 January 2013 (the Third Driving Licence Directive)</p>	<p>The purpose of the Directive is to achieve greater harmonisation of driving licence rules in Europe, among other things in order to improve road traffic safety. The report 'Accident risk of heavy goods vehicles on Norwegian roads: Comparison of Norwegian and foreign actors'³¹, states the following about the Directive:</p> <p><i>'Despite the introduction of a common European training standard, there are two factors on Norwegian roads that are a challenge for European professional drivers in ways that may impact road traffic safety, namely driving in winter and driving on roads with steep upward/downward gradients (...). Foreign drivers' lack of expertise in driving on Norwegian roads has</i></p>

²⁹ Transport where a transport carrier from one state engages in transport between two points in the territory of another state.

³⁰ Regulations relating to Professional Transport by Motor Vehicle and Vessel (the Professional Transport Regulations).

³¹ Nævestad, T-O., Hovi, I.B., Caspersen, E. & Bjørnskau, T. (2014). Accident risk of heavy goods vehicles on Norwegian roads: Comparison of Norwegian and foreign actors. TØI report 1327/2014.

	<p><i>been identified as a significant problem, especially when it comes to driving in winter (Engene & Underthun, 2012). Norwegian professional drivers must undergo a compulsory course in winter driving in order to be issued a licence. Winter courses are not compulsory in countries further south in Europe, which makes it difficult for drivers from these countries to handle Norwegian roads in winter.'</i></p>
Regulations	
<p>➤ Regulations of 26 March 2003 No 401 relating to Professional Transport by Motor Vehicle and Vessel (the Professional Transport Regulations)</p>	<p>The Regulations regulate licences for transport, terms and conditions and case processing in that connection.</p>
<p>➤ Regulations of 2 July 2007 No 877 relating to driving and rest periods for road transport in the EEA</p>	<p>The Regulations regulate driving and rest periods, and conditions for how these data are recorded and processed.</p>
<p>➤ Regulations of 10 June No 543 relating to working hours for drivers and other road transport workers (Regulations on Working Hours in Road Transport)</p>	<p>The Regulations regulate drivers' working hours in connection with active driving, but also when carrying out other work, such as loading and unloading, as well as rest periods and periods during which the driver is available to the employer. All links in the transport chain, including the enterprise ordering the transport, shall contribute to ensuring compliance with the provisions ('duty to contribute'), cf. Section 3.</p>
<p>➤ Regulations of 22 February 2008 No 166 relating to the duty to provide information, duty to ensure compliance and right of access to information</p>	<p>Pursuant to Section 5 of the Regulations, enterprises ordering transport are obliged to ensure ('duty to ensure compliance') that the principal contractors' drivers are given the generally applicable pay and working conditions. The regulations do not specify how this duty is to be fulfilled. Reference is made to how the duty to ensure compliance can be fulfilled, for example, by including clauses stating that employees shall at least have pay and working conditions that are in accordance with general application regulations, and that this shall be followed up by obtaining documentation of the employees' pay and working conditions.</p> <p>In this context, the enterprise ordering transport also has a 'duty to provide information', cf. Section 5. This duty means that, in contracts with suppliers, the enterprise ordering transport shall include information that the company's employees shall at least have pay and working conditions that are in accordance with general application regulations.</p>
<p>➤ Regulations of 31 March 2017 No 535 relating to the general application of collective agreements for goods transport by road</p>	<p>The Regulations apply to all employees performing goods transport in Norway using vehicles of more than 3.5 tonnes, and to cabotage operations and combined transport, cf. Section 2 (a) and (b), but not international transport.</p> <p>The contract between the enterprise ordering transport and the supplier (freight forwarder/transport carrier) shall include information about the pay and working conditions that follow</p>

	from the Regulations Relating to the General Application of Collective Agreements for Goods Transport by Road ³² .
➤ Regulations of 6 December 1996 No 1127 relating to systematic health, environmental and safety activities in enterprises (the Internal Control Regulations)	The enterprise ordering transport can check that the transport carrier follows the Regulations by requesting self-reports on the transport company's HSE work. A transport carrier can also provide information about the company's HSE and internal control system in the agreement with the enterprise ordering the transport. Relevant HSE guidelines can also be included in the transport agreement between the enterprise ordering the transport and the transport carrier ³³ .
Special topics	
➤ General Conditions of the Nordic Association of Freight Forwarders (NSAB 2015)	NSAB describes the freight forwarder's and client's rights and duties in connection with transport assignments. The provisions entered into force on 1 January 2016, and apply to both members of the Nordic Association of Freight Forwarders and non-member enterprises. The provisions do not address road traffic safety in connection with transport assignments.

3.5 Supervision and enforcement

3.5.1 Introduction

Several agencies carry out inspections and supervision of transport activities on Norwegian roads. The police, the NPRA, the Norwegian Labour Inspection Authority, Norwegian Customs and Excise and the Norwegian Tax Administration are all inspection and supervisory agencies that are tasked with controlling the transport sector, and they cooperate in several areas (cf. section 3.5.4). The main focus of this chapter will be limited to the NPRA and the Norwegian Labour Inspection Authority, and the legal authority provided by the applicable regulations for the agencies' supervision and inspections of both transport carriers and enterprises ordering transport.

3.5.2 The NPRA

The NPRA and the police are responsible for inspecting vehicles and road users. Inspections of heavy vehicles include checking the driver, the technical condition of the vehicle, the load and use of the vehicle. Checks of the driver include driving entitlement/driving licence, necessary certificates of competence (e.g. in connection with the transport of dangerous goods (ADR transport)), driving and rest periods, and professional driver qualifications. The technical vehicle inspection includes checking, for example, tyres and tachograph data. Inspections of the load and use of the vehicle can

³² The purpose of the Act of 4 June 1993 No 58 relating to the general application of collective agreements etc. (the General Application Act) is to ensure equality between foreign employees and Norwegian employees in terms of pay and working conditions, and to prevent distortion of competition to the disadvantage of the Norwegian labour market.

³³ Source: Spurkeland, E. (2018). Transportbestilleren: Innføring i transportbestilling for godstransport. Fagbokforlaget.

include weights and dimensions, dangerous goods and compliance with the Professional Transport Act (including cabotage³⁴)³⁵.

The NPRA represented by the Directorate of Public Roads has informed the AIBN that the agency, in addition to checking the driver and vehicle during a transport assignment, also carries out supervisory activities relating to transport companies. The relevant regulations do not provide specific legal authority for controlling enterprises ordering transport, and the agency therefore does not supervise this link in the transport chain.

3.5.3 The Norwegian Labour Inspection Authority

3.5.3.1 *General information*

The Norwegian Labour Inspection Authority is tasked with ensuring that enterprises fulfil their responsibilities pursuant to the Working Environment Act, the general application regulations and the Regulations on Working Hours in Road Transport, and other relevant regulations under the agency's authority. The instruments available to the Norwegian Labour Inspection Authority include supervision, guidance and rule development, as well as strategic and operational cooperation with other supervisory agencies.

Section 2-2 of the Working Environment Act, 'Duties of the employer towards persons other than own employees', is an interesting provision in this context. In certain circumstances, it gives the client responsibility for other employees than its own: *'When persons other than the employer's own employees, including workers hired from temporary-work agencies or other companies and one-man enterprises, perform tasks in connection with the employer's activities or installations...'*

The preparatory works to the Act³⁶ specify that those protected under this provision must *'perform work on or in the proximity of the area where the employer physically carries out activities or has installations'*. (...) *'The responsibility under the provision primarily includes cases where more than one enterprise work in the same place and towards the same objective, on the same project or similar. This can be said to constitute the provision's core area of application, and construction sites are the typical example.'*

The Norwegian Labour Inspection Authority has informed the AIBN that the agency has not used this provision much in its supervision of the transport sector. The reason is the criterion that the activity must take place in the proximity of the main employer, which is difficult to reconcile with transport assignments on the roads network.

The Norwegian Labour Inspection Authority cooperates with the NPRA on supervisions of working hours and driving and rest periods. Figure 12 shows the interfaces between the NPRA and the Norwegian Labour Inspection Authority in connection with the enforcement of road transport regulations, and a selection of topics of relevance in connection with supervisory activities the agencies carry out in relation to transport

³⁴ Transport where a transport carrier from one state engages in transport between two points in the territory of another state.

³⁵ Source:

https://www.regjeringen.no/globalassets/upload/sd/vedlegg/rapporter_og_planer/2014/rapportomkabotasje26april2014_web.pdf?id=2234917.

³⁶ Proposition to the Odelsting No 49 (2004–2005) on the Act relating to working environment, working hours and employment protection etc. (the Working Environment Act).

industry operators³⁷. The blue squares show regulations under which both agencies have the authority to carry out supervisory activities in relation to road transport, and topics that both agencies focus on in their supervision of the different operators in the transport chain.

3.5.3.2 *Supervision of enterprises ordering transport services*

In 2015, the Norwegian Labour Inspection Authority launched a national initiative targeting goods transport by road, which involves carrying out inspections of the transport industry. The purpose of these inspections is to increase knowledge among employees and managers of transport companies and enterprises ordering transport services about the applicable regulations and increase their understanding of them, thereby creating a better basis for preventing injuries in the transport industry. One of the goals of the transport industry initiative is to enable the Norwegian Labour Inspection Authority, in cooperation with other inspection agencies, to reduce the possibility of disreputable companies operating in violation of the Norwegian regulations.

During the period 2015–2017, the Norwegian Labour Inspection Authority carried out 2,732 inspections targeting different parties in the transport industry. The inspections targeted both transport carriers and enterprises ordering transport assignments. The Norwegian Labour Inspection Authority wrote the following in the report³⁸ documenting the findings of the inspections:

Enterprises ordering transport services are a very important target group for the industry initiative. This is because collective agreements have been made generally applicable in parts of the transport industry, and buyers of such services are therefore subject to a duty to provide information and to ensure compliance. Enterprises buying transport services play a very important role in the effort to combat the disreputable, and sometimes criminal, part of the industry.

The Norwegian Labour Inspection Authority's inspections of the transport industry resulted in several findings. A selection of these findings is summarised in Figure 13.

In 2019, the Norwegian Labour Inspection Authority also published a report³⁹ describing the supervisory activities carried out by the agency in the transport industry in 2018. The agency carried out inspections of both transport carriers and enterprises ordering transport assignments, and the findings are concurrent with previous inspections of transport industry operators. The inspections showed, among other things, that more than 60% of the investigated enterprises did not adequately fulfil their duty to provide information or duty to ensure compliance.

³⁷ 'Relevant topics in connection with supervision of the transport chain' in Figure 12 is not an exhaustive list as regards the Norwegian Labour Inspection Authority. Information about other relevant topics relating to the Norwegian Labour Inspection Authority's supervision of transport carriers and enterprises ordering transport is available here: www.arbeidstilsynet.no/om-oss/prioriterte-aktiviteter/aktiviteter-2020/transport/.

³⁸ The Norwegian Labour Inspection Authority. (2018). Arbeidstilsynets tilsyn med transportbransjen 2015–2017. ISBN 978-82-90112-74-0.

³⁹ The Norwegian Labour Inspection Authority. (2019). Arbeidstilsynets aktivitet i transportnæringen i 2018. The Directorate for the Norwegian Labour Inspection Authority. ISBN 978-82-90112-82-5.

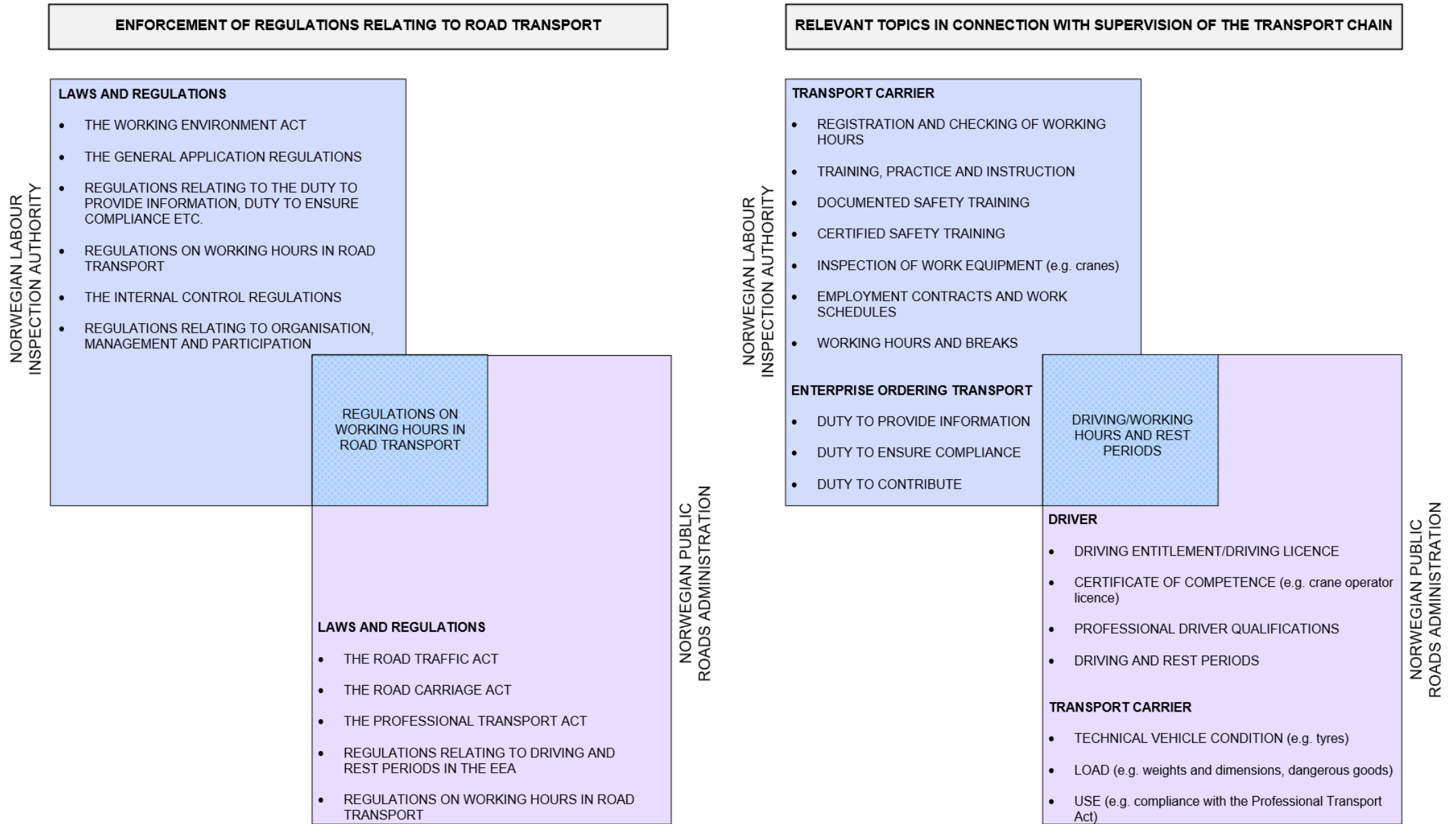


Figure 12: Laws and regulations relating to road transport that the Norwegian Labour Inspection Authority and the Norwegian Public Roads Administration enforce, as well as topics of relevance in connection with supervisory activities and inspections in the transport chain. Illustration: AIBN

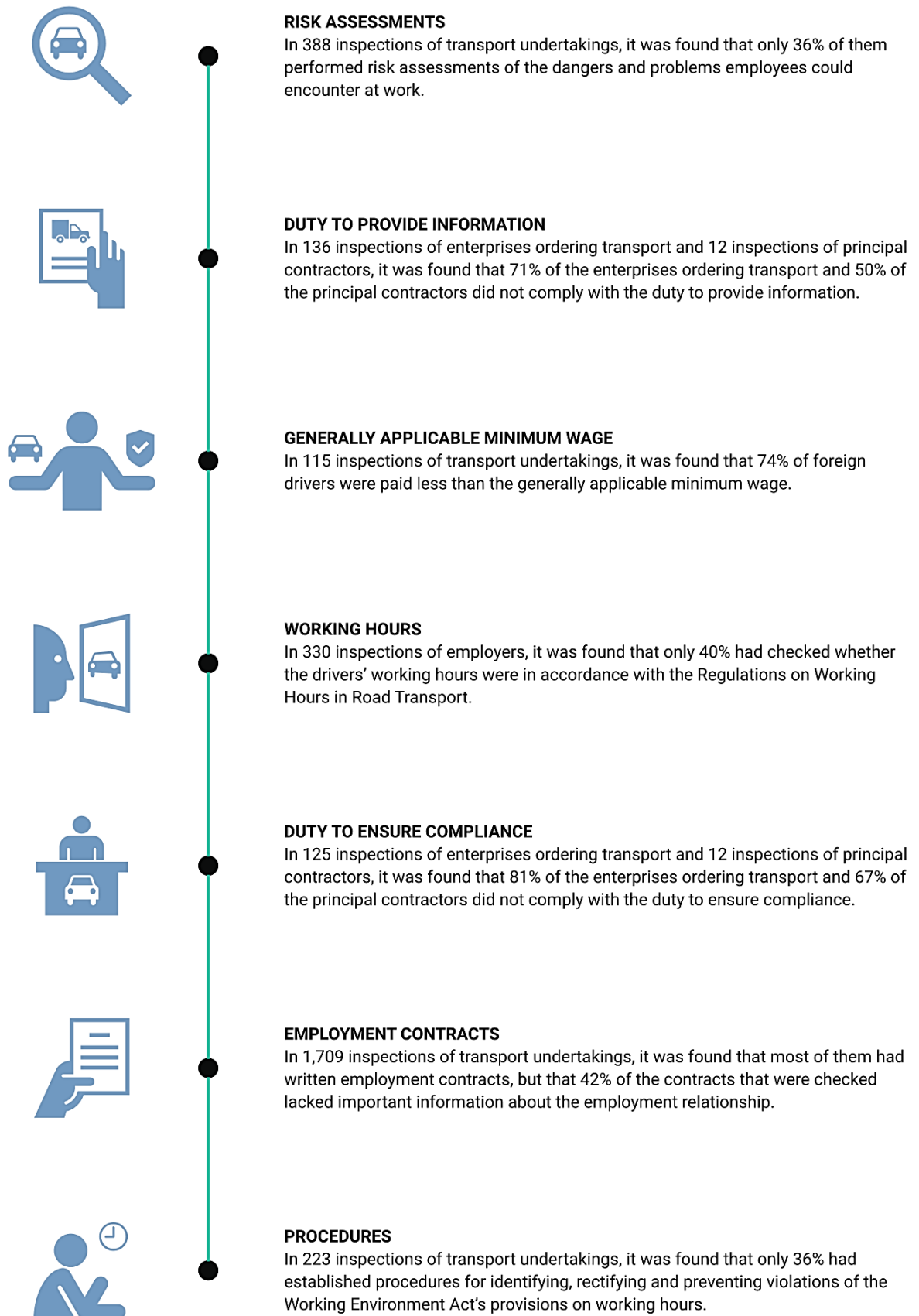


Figure 13: The Norwegian Labour Inspection Authority's findings in connection with inspections of transport carriers and enterprises ordering transport assignments during the period 2015–2017. Source: The Norwegian Labour Inspection Authority. Illustration: AIBN

3.5.4 Strategy for increased cooperation between the inspection and supervisory agencies in the road traffic area

As part of the follow-up of measure 6.1.3 described in the 'Report on Road Cabotage in Norway' (cf. section 3.3.3), the Ministry of Transport and Communications gave a working group the assignment of ensuring increased cooperation between supervisory agencies. The working group that was given the assignment comprised representatives of the Norwegian Labour Inspection Authority, the police, Norwegian Customs and Excise, the Norwegian Tax Administration and the NPRA represented by the Directorate of Public Roads. On this basis, the working group prepared a draft strategy for increased cooperation in the road transport area between the inspection and supervisory agencies and the police.

The strategy proposes two measures aimed at strengthening cooperation between the supervisory agencies, and four measures that will entail regulatory changes. The six measures are presented in Figure 14.



Figure 14: Proposed measures as part of the strategy for increased cooperation in the road transport area between the inspection and supervisory agencies and the police. Source: The Norwegian Labour Inspection Authority. Illustration: AIBN

3.5.4.1 Proposed amendments to the General Application Act

Cooperation between the Norwegian Labour Inspection Authority and the NPRA on control activities pursuant to the General Application Act was one of the proposals in the strategy. In November 2019, the Ministry of Labour and Social Affairs distributed a proposal for consultation⁴⁰ for a new provision to be included in the General Application

⁴⁰ The Ministry of Labour and Social Affairs. (2019). Consultation paper on amendments to the Act on the General Application of Collective Agreements etc. Section 11 concerning supervision of pay and working conditions.

Act. The provision will provide legal authority for the NPRA to obtain information that the Norwegian Labour Inspection Authority needs in connection with verification of enterprises' compliance with general application regulations in road transport, and the authority to convey this information to the Norwegian Labour Inspection Authority. The purpose of the proposal is to make the authorities' verification of compliance with the general application regulations for road transport more efficient.

The AIBN has been informed that the proposal was being considered at the time this report was published.

3.6 Safety requirements in connection with goods transport

3.6.1 Introduction

Whether and in what way safety requirements are made of goods transport operators varies from one transport sector to the next. Previous investigations and research support the perception that less stringent security requirements apply to goods transport in the road transport sector than in other forms of transport (sections 3.6.2 and 3.6.3). The safety requirements also differ within different road transport sectors. For example, special safety requirements apply to the transport of dangerous goods (ADR transport). This is discussed further in sections 3.6.4 and 3.6.5.

3.6.2 'The Office of the Auditor General's investigation of the shift from goods transport by road to sea and rail'

In 2017, the Office of the Auditor General presented a report to the Ministry of Transport and Communications that documented the findings of an investigation aimed at assessing the development in goods transport by road, sea and rail, and the reasons why the desired shift from road to sea and rail transport had not been achieved. The report⁴¹ states:

Train companies need a valid licence and safety certificate to conduct railway operations in Norway. The application process and documentation requirements for issuing a safety certificate are extensive. The train companies must document that they have the necessary expertise with regard to, inter alia, safety, risk and emergency preparedness, and that they have an information transfer system and a safety management system for management control that meet European requirements. All train companies must also document that they meet specific national requirements for risk management and safe use of the Norwegian rail network. The applications include large amounts of documentation, and the NRA⁴² also obtains further documentation as required. Supervisory activities are already carried out three to nine months after the applications have been granted. (...) The safety certificate must be renewed at least every five years.

(...)

Compared with sea and rail transport, road transport has become less expensive in recent years, both due to improved roads and because of changes in trading patterns and increased use of vehicles from low-cost countries. (...) The safety requirements also appear to be far less stringent for road transport than for sea

⁴¹ Office of the Auditor General. (2018). Riksrevisjonens undersøkelse av overføring av godstransport fra vei til sjø og bane. Document 3:7 (2017–2018). ISBN 978-82-8229-418-8.

⁴² The Norwegian Railway Authority.

and rail transport. Overall, it is easier to establish a transport company for road transport than for sea and rail.

The investigation shows major entrance barriers for operators looking to establish rail freight companies. (...) The safety requirements for rail transport far exceed those that apply to road transport. The application process and verification of safety certificates, approval of rolling stock and of driving licences is very extensive.



* Includes access to infrastructure (certificates and licences) and inspection/supervision of transport

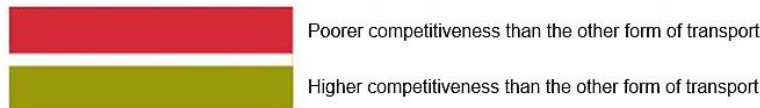


Figure 15: Differences in criteria, including ‘safety checks’, relating to the competitiveness of the road, sea and rail transport industries in connection with goods transport. Source: Office of the Auditor General (2018)

3.6.3 ‘NTP Godsanalyse’

The project ‘A Broad Social Analysis of Goods Transport’ was initiated by the Ministry of Transport and Communications and conducted by a project group comprising representatives of the NPRA, the Norwegian National Rail Administration (NNRA) and the Norwegian Coastal Administration (NCA). In 2015, a report⁴³ was published in connection with the project, mapping trends in the goods transport sector.

The chapter on regulations for domestic transport (‘Dagens regelverk for innenlandsk transport’) states, among other things:

Transport by sea and rail is preferable from a safety, environmental and efficiency perspective. It is a paradox that the safety requirements, in particular, appear to be far less stringent for road transport than other forms of transport. In

⁴³ Source: https://www.vegvesen.no/_attachment/800894/binary/1018338?fast_title=NTP+++Godsanalyse++Delrapport1+++februar2015.pdf.

sea transport, a pilot or a pilot exemption certificate is needed in addition to standby pilot services. In addition, maritime traffic is monitored by traffic service centres. This service is largely paid for by the operators themselves. Rail transport is dependent on having been granted access to the railway network, and operators are required to meet costly safety requirements and document section competence. This service is also paid for by the operators themselves. Railway traffic is monitored by traffic control centres, stringent requirements apply to safety margins, and the new, highly expensive management system ERTMS is under implementation. The goods transport operators are not charged for this, however. Road transport operators in the EEA do not have to plan their journeys for a long time in advance, apply for access to the infrastructure or document that the driver is qualified to drive the section of road in question or under the prevailing road conditions.

The chapter on safety requirements for operators ('Krav til aktørsikkerhet') states, among other things:

Rail transport operators are subject to very stringent safety requirements and also need to furnish extensive guarantees for liability in damages in the event of incidents or accidents – a minimum amount of NOK 400 million. In addition to safety approval and licensing in their own country, rail companies must have safety approval from each country the company plans to operate in, and all rolling stock must be approved in all countries it will be used in. In addition to certification, train drivers need specific training on each line section they will drive and for all types of rolling stock. Train drivers' certificates are of very limited duration. Although these approvals are largely free of charge, transport operators incur extensive costs to obtain the right to perform transport services.

Sea transport operators pay for required navigation papers and documentation requirements that follow from the Ship Safety and Security Act and that are necessary to be granted access to different fairways. All ships sailing with an approval document issued by the Norwegian Maritime Authority pay an annual basic fee. In addition, ships are subject to regular inspections that can be purchased from the Norwegian Maritime Authority via an annual inspection fee, but also from a classification society or another approved organisation. (..)

The risk of accidents, injury and loss of life is far higher on roads than for any other forms of transport. At the same time, operators transporting goods by road are only to a limited extent required to implement costly safety measures, over and above the safety benefits that follow from the procurement of increasingly safe vehicles. For example, road transport operators are not required to cover expenses for convoy driving in connection with bad weather conditions or similar. The compulsory driver training for heavy vehicles in Norway includes a safety course on a special track. (..) Non-Norwegian drivers of heavy goods vehicles drive legally in Norway without such competence. (..) It is currently not possible to make it a requirement that foreign drivers master driving in winter conditions, have section competence or the competence to master challenging driving conditions (..), as foreign train drivers are required to.

3.6.4 ‘Safety culture, safety management and risks associated with road transport companies’

The Institute of Transport Economics (TØI) has conducted a study of the relationship between safety culture, safety management and risks in four groups of road transport companies that to a varying degree have implemented measures aimed at organisational safety management. The purpose of the investigation was to find out whether increased safety management resulted in an improved safety culture and lower risk. The report⁴⁴ states, among other things:

Our review of the literature shows that the focus on safety culture and safety management is generally lower in the road transport sector than in other transport sectors, because enterprises in the road sector are not subject to the same statutory requirements for the establishment of safety management systems.

(...)

In addition, previous studies show that transport companies transporting dangerous goods (tankers) by road have an up to 75% lower risk of accidents than other goods transport companies. This indicates what can be achieved through systematic work on a safety culture and safety management (and special framework conditions).

3.6.5 Requirements of ADR transport

The Regulations of 1 April 2009 No 384 relating to Overland Transport of Dangerous Goods state the following concerning the purpose of the Regulations:

The purpose of the Regulations is to protect human life and health, the environment and material assets against misadventures, accidents and undesirable intentional incidents in connection with overland transport of dangerous goods.

In addition, the Regulations contain a section that specifically concerns the safe performance of transport. The report on road cabotage in Norway⁴⁵ states:

Section 4⁴⁶ of the Regulations of 1 April 2009 No 384 relating to the Overland Transport of Dangerous Goods contains a provision on joint responsibility, including for ensuring that the transport of dangerous goods is not left in the hands of operators who obviously lack sufficient knowledge, skills or vehicles to carry out the transport in a satisfactory manner.

The Regulations also make requirements of enterprises in relation to safety, including that they must identify hazards and problems that can arise in connection with the transport of dangerous goods. Based on the assessment, plans must be drawn up and measures implemented to reduce the risk to an acceptable level.

⁴⁴ Nævestad, T-O., Blom, J. & Phillips, R. (2018). *Sikkerhetskultur, sikkerhetsledelse og risiko i godstransportbedrifter på veg*. TØI report 1659/2018.

⁴⁵ Source:

https://www.regjeringen.no/globalassets/upload/sd/vedlegg/rapporter_og_planer/2014/rapportomkabotasje26april2014_web.pdf?id=2234917.

⁴⁶ Section 4. General requirements for the safe performance of transport.

The Regulations also require enterprises involved in the transport of dangerous goods to appoint one or more safety advisers, who will help to prevent undesirable intentional incidents in connection with the transport of dangerous goods.

The Norwegian Directorate for Civil Protection (DSB) has prepared a guide⁴⁷ describing the duties of a safety adviser. They include:

- *Verifying that requirements for the transport of dangerous goods are met.*
- *Providing guidance and advice on the transport of dangerous goods.*
- *Conducting investigations, preparing reports and implementing measures in connection with serious accidents, unforeseen incidents or the violation of provisions on dangerous goods.*
- *Ensuring that the enterprise identifies hazards and problems that may arise in connection with the transport of dangerous goods, and, on that basis, assessing risk.*
- *Verifying that the enterprise's employees receive appropriate training and that the training is registered.*
- *Verify compliance with the provisions relating to the transport of dangerous goods in connection with, for example, the choice of subcontractors/third parties and the procurement of vehicles.*

3.7 The impact of framework conditions on safety: A literature study of professional road transport

3.7.1 Introduction

In connection with the thematic investigation, the AIBN has tasked the Institute of Transport Economics (TØI) with carrying out a literature study of the importance of framework conditions for the safety of goods transport by road. The summary of the report⁴⁸ states:

There is little theory or conceptual framework that explains the relationship between framework conditions at the macro-level, enterprises at the meso-level and driver behaviour at the micro-level. The studies that are available assume that framework conditions are important because they influence health, the environment or safety outcomes (often accidents). Framework conditions are thereby presented analytically as a causal factor, but framework conditions are relatively 'peripheral in the chain of cause and effect', and we can assume they must be mediated through other analytical levels before influencing the drivers' behaviour, which, in turn, is related to [the likelihood of] being involved in accidents. This means that knowledge about the importance of framework conditions is often indirect, uncertain and characterised by a certain degree of speculation.

(...)

⁴⁷ Source: <https://www.dsb.no/lover/farlige-stoffer/fakta/sikkerhetsradgiver-for-transport-av-farlig-gods/>.

⁴⁸ Nævestad, T-O. (2019). *Sikkerhetseffekter av rammebetingelser: En litteraturstudie av profesjonell veitransport.*

Focusing on framework conditions is an analytical choice that also has implications for our ability to and possibility of preventing traffic accidents. Previous research shows that measures targeting road traffic safety have traditionally focused on the individual driver, as opposed to the organisational (meso) level or framework conditions (macro).

The studies reviewed show that framework conditions do have a bearing on road traffic safety, however, even though the term is a social construction and may be disputed. The framework conditions for safety vary between sectors, and the sectors with the best framework conditions often have the highest level of safety. The meta-analyses conducted by Elvik et al. (2009) show, for example, that transport companies transporting dangerous goods (ADR) have a 75% lower risk than other goods transport companies. This can largely be traced back to differences in the regulations, resources and the safety focus of those buying transport services. The impact of framework conditions on road traffic safety indicates that the framework conditions for drivers working in the road sector should be identified, recognised and regulated to a greater extent.

The main findings of the study are summarised in the following sections.

3.7.2 The importance of framework conditions to safety

The report⁴⁷ refers, among other things, to a study conducted by Nævestad et al. (2015), based on data from the NPRA's accident analysis groups (UAG), of 501 fatal accidents that occurred during the period 2005–2011. The study identifies four central framework conditions that may have a bearing on work-related factors in transport companies:

The relationship to transport buyers/freight forwarders. *The first framework condition is the relationship between drivers and buyers of transport services/freight forwarders. (...) Several of the interviewees expressed the view (...) that buyers of transport services and freight forwarders should increasingly be held (legally) responsible for road traffic safety, since their planning of routes has implications for road traffic safety. Since buyers of transport services and freight forwarders set the premises for road traffic safety, it was proposed that road traffic safety should increasingly be integrated as a clear criterion in competitive tender procedures and contracts (especially public contracts).*

Competition. *The second important framework condition identified by the interviewees is competition. According to the experts interviewed in the study, time pressure is especially widespread in the parts of the goods transport market where the competition is strongest. Strong competition between enterprises can mean that drivers accept assignments with a tight time schedule, which may, in turn, lead to time pressure and high speed.*

Type of transport. *The third framework condition highlighted by the interviewed experts was the type of transport involved. Most of the interviewees believed that the level of road traffic safety is better in public transport than in goods transport, because people are regarded as more 'valuable' than goods, and that the requirements for public transport are therefore more stringent. (...) It was also mentioned that the level of safety is considerably higher and the safety focus much stronger in connection with the transport of dangerous goods than is the case for other goods transport.*

Rules, supervision and enforcement. *The fourth framework condition emphasised by the interviewees comprised rules, supervision and enforcement. This can for example be related to inspections of heavy vehicles. A majority of the sector experts interviewed (..) believed that work-related factors with potential consequences for road traffic safety are not adequately addressed in today's inspections and supervision.*

The report⁴⁷ also refers to several cross-sector studies that, among other things, have identified the following framework conditions as having a bearing on the safety of drivers at work:

Regulations. *When discussing the importance of regulations to a safety culture, it is particularly relevant to mention the different regulations that apply to safety management systems in the transport sectors. In aviation, sea and rail transport, enterprises are required to introduce safety systems that are intended to foster a good safety culture (..). (...) In the road sector, on the other hand, the implementation of safety management systems is voluntary (e.g. EN ISO 39001).*

Inspection and supervision. *In the USA, supervisory activities are carried out by an external body that reviews the policies and practices of enterprises with a high number of accidents. As a result, enterprises may be ordered to implement a number of measures to avoid losing their transport licence. Chen (2008) concludes that enterprises that were subjected to such supervision showed a steady decrease in the number of accidents for several years after the review. Edwards et al. (2014) conclude that this example shows that both the threat of sanctions and advice on improvements may have had an impact on safety.*

Type of transport. *In their review of literature on framework conditions for goods transport, Edwards et al. (2014) refer to research indicating that the type of goods transported impacts the severity of accidents (..). In line with this, Nævestad et al. (2018) find that ADR transport is the factor that makes the strongest contribution to the analyses of which factors influence [the likelihood of] drivers being involved in accidents. They also find that the type of transport (ADR) involved influences the safety culture.*

Competition and financial factors. *Bjørnskau and Longva (..) point out that the differences in safety culture and safety level in the different sectors can partly be explained by safety being a competitive advantage in some sectors, for example aviation, to a larger extent than is the case in, for example, the road sector. Mayhew and Quinlan (2006) conclude (..) that goods transport by road is also increasing compared with competing forms of transport, especially rail. This is explained by the fact that hired road transport is extremely competitive (and subject to strong competition). The sector is characterised by a multitude of operators, including many small enterprises and sole proprietorships, and it is relatively easy to enter and gain a foothold in the industry. This also means that the turnover of operators is correspondingly high. The operators engage in fierce price-based bidding and competition for a limited number of assignments, and those buying transport services and the freight forwarders exert considerable market pressure.*

Chains of subcontractors. *Three of the studies identify different factors relating to major societal changes, such as the outsourcing of assignments and chains of subcontractors, as a key framework condition for the safety of drivers at work (..). Mayhew and Quinlan (2006) point out that this is a characteristic of the industry that*

gives it a high degree of flexibility and competitiveness, but can also result in low profitability, high financial pressure on the parties involved, and a high turnover among enterprises. The authors discuss whether these changes are related to increased financial pressure and competition, which can lead to more stress, time pressure, fatigue and potentially fewer resources and less focus on safety.

Customers' focus on safety. *Edwards et al. (2014) emphasise the importance of customers' focus on safety as a framework condition that has not been studied much in the existing research on safety in goods transport. Despite this, Edwards et al. (2014) point out that customers or buyers of transport services have considerable influence on safety in transport companies. Customers can both influence organisations and cause delays or time pressure. Edwards et al. (2014) also argue that buyers of transport services can influence the safety of transport enterprises through their safety policies.*

The discussion in the report⁴⁷ states, among other things:

The legal responsibility relating to safety has undergone development. In the Norwegian petroleum industry, for example, the operators have been assigned special responsibility (macro-level) for developing framework conditions (contracts) and following up contractors in a way that reduces the safety risk and the risk relating to the working environment. (...) The reason for this is the operators' extensive use of contractors and subcontractors, and the importance of oil prices, markets etc. to safety. It is also worth mentioning that the new Ship Safety and Security Act of 2007 shifted a large part of the responsibility from the shipmaster (micro-level) to the shipping company, based on recognition of the importance of the organisational context (meso-level).

In contrast to this, road sector experts often point out that the Road Traffic Act, which emphasises the driver's responsibility (micro-level), is applied to a far greater extent than the Working Environment Act, which emphasises the company's responsibility (meso-level) (Elvebakk et al., 2017). Sector experts interviewed in 2013 called for regulations equivalent to the 'construction client regulations' in the road sector, emphasising the responsibility of buyers of transport services for creating framework conditions for road traffic safety (Nævestad & Phillips, 2013).



FRAMEWORK CONDITIONS FOR
PROFESSIONAL ROAD TRANSPORT

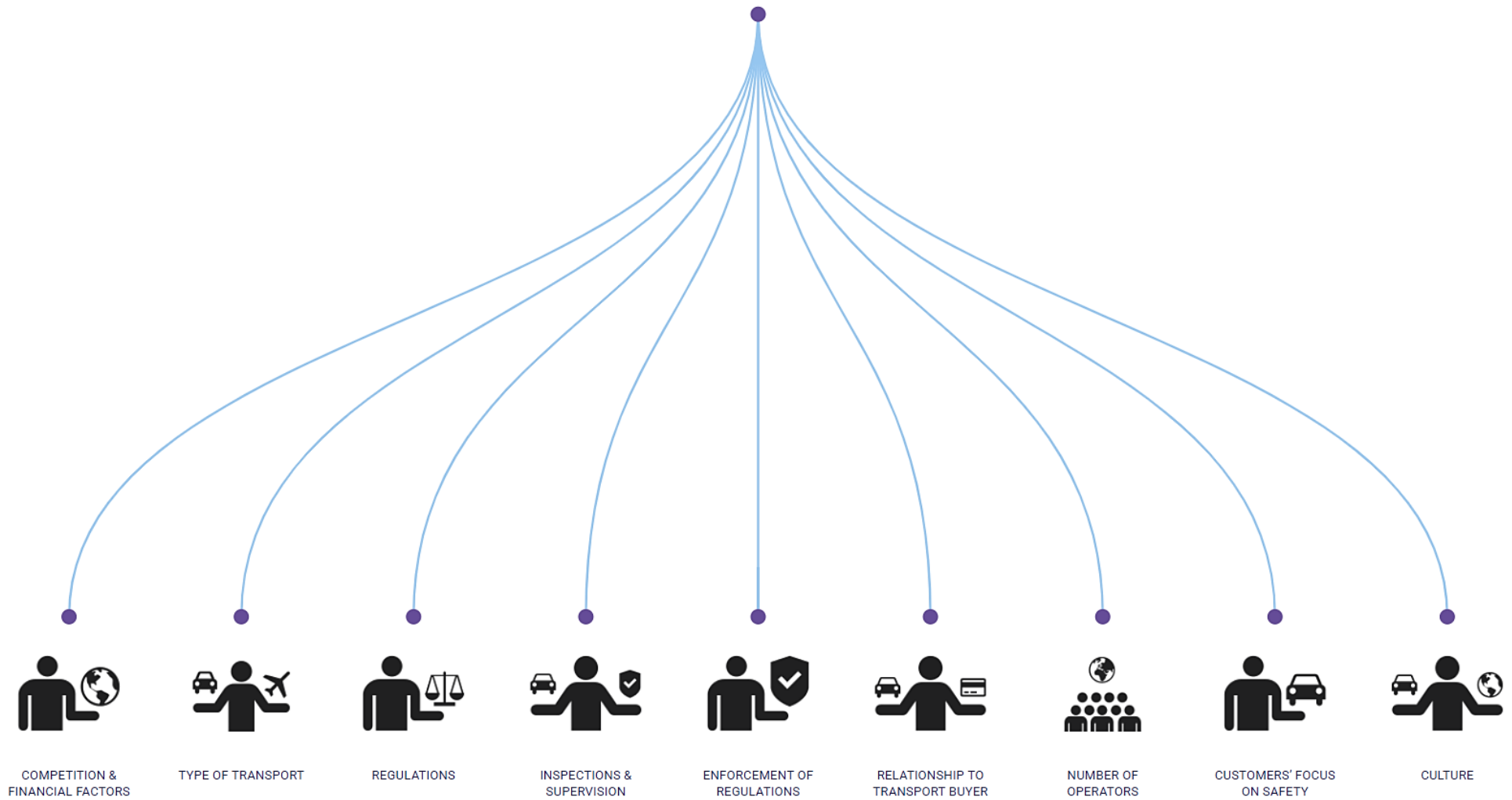


Figure 16: Framework conditions identified in a literature study of professional road transport. Source: Nævestad (2019). Illustration: AIBN

4. MAPPING OF WHAT CONSIDERATION ENTERPRISES ORDERING TRANSPORT GIVE TO ROAD TRAFFIC SAFETY

4.1 Introduction

Through the thematic investigation, the AIBN has examined the framework conditions that the involved enterprises ordering transport assignments have themselves helped to shape through the process for ordering transport. In this context, the investigation has further aimed to map and assess the consideration given to road traffic safety by the involved enterprises in connection with the transport booking process.

4.2 Information obtained from the enterprises involved

As part of the investigation process, the AIBN has mapped the companies that ordered the transport assignments that the heavy goods vehicles involved in the four investigated road traffic accidents were carrying out. The AIBN then obtained relevant information relating to the process for ordering transport.

In Table 4, the AIBN has broken down the information obtained into the following overarching topics: ‘selection of supplier’, ‘contract with supplier’, ‘ordering transport’ and ‘supplier follow-up’. The AIBN has chosen to categorise the information obtained in this way, because the aim of the thematic investigation has been to assess the attitudes of enterprises ordering transport to road traffic safety throughout the ordering process.

The AIBN has asked the investigated enterprises ordering transport assignments a number of questions relating to the given topics, and the AIBN’s analysis and assessments⁴⁹ of their responses has formed the basis for Table 4. This also includes documentation received from the enterprises ordering transport. The documentation includes contracts and, if relevant, transport agreements that the enterprises ordering transport have entered into, either with a principal contractor or directly with the contractor (transport carrier) performing the transport assignment in question.


Table 4 thus presents the AIBN’s own analysis of the information obtained from the enterprises involved, although the assessments are based on the factual information the enterprises have given to the AIBN.











The AIBN’s analysis and assessments of whether the investigated enterprises ‘fulfil’ the requirements addressed by the different questions are represented either as red (‘no’) or green (‘yes’) in Table 4. In most cases, the red fields in the table thus represent, in the AIBN’s assessment, a potential for giving more consideration to road traffic safety in the process for ordering transport.

The ‘transport assignment in question’ refers to the transport assignment the heavy goods vehicle either had performed or was in the process of performing when the accident took place. The ‘(principal) contractor’ refers to the company that acted as freight forwarder and/or transport carrier in connection with the transport assignment.

⁴⁹ Cf. section 1.2.2 ‘Framework and analysis process for safety investigations’.

Table 4: Mapping of consideration given to road traffic safety by enterprises ordering transport in connection with the selection of supplier, selection and inclusion of contractual requirements, booking of transport and supplier follow-up.

<p>1. Selection of supplier (Prior to entering into a contract with the (principal) contractor)</p>	<p>Degree of fulfilment</p>
<p>a. Before the contract was entered into, did the enterprise ordering transport check whether the (principal) contractor was either certified in accordance with or complied with the requirements of ISO 9001 (quality)?</p>	
<p>b. Before the contract was entered into, did the enterprise ordering transport check whether the (principal) contractor was either certified in accordance with or complied with the requirements of ISO 14001 (natural environment)?</p>	
<p>c. Before the contract was entered into, did the enterprise ordering transport check whether the (principal) contractor was either certified in accordance with or complied with the requirements of ISO 39001 (road traffic safety)?</p>	
<p>d. Before the contract was entered into, did the enterprise ordering transport check whether the (principal) contractor was either certified in accordance with or complied with the requirements of ISO 45001 (occupational health and safety)?</p>	
<p>e. Before the contract was entered into, did the enterprise ordering transport check whether the (principal) contractor had established HSE and internal control systems in the company?</p>	
<p>f. Before the contract was entered into, did the (principal) contractor document to the enterprise ordering transport that it carried out systematic work on road traffic safety internally in the company?</p>	
<p>g. Before the contract was entered into, did the enterprise ordering transport check whether the (principal) contractor provided safety training for drivers employed to perform transport assignments?</p>	
<p>h. Before the contract was entered into, did the enterprise ordering transport check whether the (principal) contractor held a valid goods transport licence and the permits required to perform goods transport by road?</p>	
<p>i. Before the contract was entered into, did the enterprise ordering transport request accident statistics from the (principal) contractor (number of road traffic accidents the company had previously been involved in)?</p>	
<p>j. Before the contract was entered into, did the (principal) contractor document to the enterprise ordering transport whether the company had previously been involved in one or more road traffic accidents?</p>	

<p align="center">2. Contract with supplier</p> <p align="center">(The signed contract in force at the time of the accident)</p>	<p align="center">Degree of fulfilment</p>
<p>a. At the time of the accident, was there a signed contract and/or framework agreement in place between the enterprise ordering transport and a principal contractor, who in turn used a subcontractor to carry out the transport assignment in question?</p>	
<p>b. At the time of the accident, was there a signed contract/framework agreement in place between the enterprise ordering transport and the supplier performing the transport assignment in question⁵⁰?</p>	
<p>c. At the time of the accident, was there a signed transport agreement in place describing in more detail the terms and conditions for the transport assignments?</p>	
<p>d. Did the enterprise ordering transport include a requirement in the contract that transport assignments must be performed in accordance with applicable laws and regulations?</p>	
<p>e. Did the contract contain specifications of the laws and regulations applicable to goods transport by road in Norway?</p>	
<p>f. Did the enterprise ordering transport include a requirement in the contract that the (principal) contractor must hold the necessary permits to perform transport assignments?</p>	
<p>g. Did the enterprise ordering transport include a requirement in the contract that the (principal) contractor should be either certified in accordance with or comply with the requirements of ISO 9001 (quality)?</p>	
<p>h. Did the enterprise ordering transport include a requirement in the contract that the (principal) contractor should be either certified in accordance with or comply with the requirements of ISO 14001 (natural environment)?</p>	
<p>i. Did the enterprise ordering transport include a requirement in the contract that the (principal) contractor should be either certified in accordance with or comply with the requirements of ISO 45001 (occupational health and safety)?</p>	
<p>j. Did the enterprise ordering transport include a requirement in the contract that the (principal) contractor should be either certified in accordance with or comply with the requirements of ISO 39001 (road traffic safety)?</p>	

⁵⁰ At the time of the accident, one of the enterprises ordering transport had not signed a contract with the supplier performing the transport assignment or with a principal contractor who in turn used the subcontractor in question to perform the transport. As a result, the remaining questions concerning requirements in the contract with the supplier have been logged as ‘no’.

<p>k. Did the enterprise ordering transport include a requirement in the contract that the (principal) contractor document safety procedures in connection with transport assignments, over and above securing loads?</p>	
<p>l. Did the contract contain requirements of the (principal) contractor concerning necessary equipment and vehicles in connection with the performance of transport assignments?</p>	
<p>m. Did the contract contain requirements of the (principal) contractor that drivers performing transport assignments had the necessary experience and competence?</p>	
<p>n. Did the enterprise ordering transport include a requirement in the contract that the (principal) contractor must have an HSE system?</p>	
<p>o. Did the enterprise ordering transport include a requirement in the contract that the (principal) contractor must have a road traffic safety policy?</p>	
<p>p. Did the contract contain information that the enterprise ordering transport would prepare an agreement form specifying the terms and conditions that applied to the ordered transport assignments?</p>	
<p>q. Did the enterprise ordering transport include a requirement in the contract that the (principal) contractor must inform the customer of any road traffic accidents/incidents the transport was involved in?</p>	
<p>r. Did the contract contain information that the enterprise ordering transport reserved the right to impose sanctions on the (principal) contractor in the event of deviations from road traffic safety regulations?</p>	
<p>s. Did the contract contain clauses giving the enterprise ordering transport access to necessary documentation in connection with inspections and audits of the (principal) contractor?</p>	
<p>t. Did the enterprise ordering transport include a requirement in the contract that the (principal) contractor must complete and submit self-evaluation forms describing road traffic safety measures?</p>	
<p>u. Did the enterprise ordering transport give permission in the contract for the (principal) contractor to use subcontractors to perform transport assignments?</p>	
<p>v. Did the contract contain information that requirements in the contract would also apply to subcontractors if such were used to perform a transport assignment in whole or in part?</p>	

3. Ordering transport (The transport assignment in question)	Degree of fulfilment
<p>a. Did the enterprise ordering transport use a principal contractor, who in turn used a subcontractor to carry out the transport assignment in question?</p> <p>b. Was the enterprise ordering transport familiar with all the contractors involved in the planning and performance of the transport assignment in question?</p> <p>c. Did the enterprise ordering transport prepare an agreement form specifying the terms and conditions that applied to the transport assignment in question?</p> <p>d. Did the enterprise ordering transport draw up a written requirements specification in connection with the transport assignment in question?</p> <p>e. Did the enterprise ordering transport draw up a consignment note in connection with the transport assignment in question?</p> <p>f. Did the consignment note describe the responsibilities (sender, recipient and executing transport carrier) for the transport assignment?</p> <p>g. Did the consignment note set time requirements (time of delivery) for the transport assignment in question?</p> <p>h. Did the enterprise ordering transport include information in the consignment note about the condition of the goods, so that the (principal) contractor could assess what equipment and competence were necessary in connection with the transport assignment?</p> <p>i. Did the enterprise ordering transport provide the (principal) contractor with written information about possible safety challenges in connection with the transport assignment (for example geographical, weather or driving conditions), so that the executing transport carrier could assess what equipment and competence would be necessary before performing the transport assignment in question?</p> <p>j. Did the enterprise ordering transport check that the (principal) contractor performing the transport had the necessary equipment and resources before performing the transport assignment in question?</p> <p>k. Did the enterprise ordering transport check whether the driver who was to perform the transport assignment in question had sufficient competence to drive on Norwegian roads in winter, before the transport assignment was carried out?</p> <p>l. Did the enterprise ordering transport check which route was planned for the transport assignment in question, before the transport assignment was carried out?</p>	

<p>m. Did the enterprise ordering transport know whether the transport assignment in question was to be performed by a vehicle registered in Norway or abroad, before the transport assignment was carried out?</p> <p>n. Did the enterprise ordering transport know whether the transport assignment was to be performed as a cabotage transport?</p> <p>o. Did the enterprise ordering transport check that the executing transport carrier had a valid licence and the necessary permits (e.g. a Community licence for international transport) to perform the transport assignment in a lawful manner, before the transport assignment was carried out?</p> <p>p. Was the enterprise ordering transport familiar with the Guide to Ordering Transport Services⁵¹ at the time it ordered the transport assignment in question?</p>	
<p style="text-align: center;">4. Supplier follow-up</p> <p style="text-align: center;">(During the period from contract signature until the accident occurred)</p>	<p style="text-align: center;">Degree of fulfilment</p>
<p>a. Has the enterprise ordering transport established procedures and/or systems to verify that the (principal) contractor complied with requirements set out in the contract?</p> <p>b. Did the enterprise ordering transport carry out audits of the (principal) contractor?</p> <p>c. Did the enterprise ordering transport carry out checks of the (principal) contractor to ensure that ordered transport assignments had been performed in accordance with applicable laws and regulations?</p> <p>d. Did the enterprise ordering transport check whether the (principal) contractor, internally within the company, followed up requirements in the Internal Control Regulations and the Working Environment Act?</p> <p>e. Did the enterprise ordering transport carry out occasional spot checks (not planned/agreed in advance) of the (principal) contractor to verify compliance with requirements in the contract?</p> <p>f. Did the enterprise ordering transport check whether the (principal) contractor worked systematically on road traffic safety internally in the company?</p> <p>g. Did the enterprise ordering transport perform risk assessments focusing on road traffic safety in connection with the performance of goods transport by road?</p> <p>h. Has the enterprise ordering transport established procedures for checking whether ordered transport assignments could be performed as cabotage operations?</p>	

⁵¹ Tripartite transport industry programme. (2017). *Veileder for bestilling av transporttjenester.*

<p>i. Has the enterprise ordering transport informed/notified the (principal) contractor of possible safety challenges relating to driving in Norway in winter?</p> <p>j. Was the enterprise ordering transport immediately notified by the (principal) contractor about the road traffic accident in question (regardless of whether the transport assignment had been completed or was being carried out at the time of the accident)?</p>		
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4.3 Measures implemented by the enterprises ordering transport

4.3.1 Introduction

During the investigation process, the involved enterprises ordering transport have implemented measures with the aim of strengthening the companies' work with road traffic safety. These measures are described in the following sections.

4.3.2 Norwegian container and logistics company

The company has informed the AIBN that the following measures have been implemented:

- A transport agreement has been drawn up that includes the following items:
 - Management of the work. This includes, among other things, the responsibility of the enterprise ordering transport for checking and following up the work, and for procuring the technical material needed to perform the transport assignment.
 - Working environment. This includes, among other things, compliance with the Working Environment Act, internal safety procedures, and the internal safety provisions and procedures of the enterprise ordering transport.
 - HSE. This includes, among other things, requirements for the supplier to have an HSE system, as well as requirements for training of employees.
 - Routines for document reviews with subcontractors. This includes, among other things, control of goods transport licences and relevant certificates.
 - Checklist for document review. This includes, among other things, control of hourly wages, registered working hours, compliance with the provisions on driving time and rest periods, written employment contracts and the permits needed to perform goods transport.

4.3.3 The logistics department of a Norwegian waste and recycling group

The company has informed the AIBN that the following measures have been implemented:

- The company has started work on implementing 'Trygg Trailer'⁵² at its facilities as a means of raising competence among its employees. The enterprise ordering transport

⁵² Cf. section 3.3.5 of 'Trygg Trailer'.

has concluded that goods transport operations will be safer if employees can inspect the vehicles before they leave the facility.

- The framework agreement will be revised to include specific requirements of suppliers' systematic road traffic safety work, in addition to the current requirement for compliance with all applicable regulations. Pertaining documentation requirements for suppliers will be included in the form of descriptions of procedures and routines.
- The company will request accident statistics from suppliers, and demand that the enterprise ordering transport receives documentation of this.
- The framework agreement will also be revised to include a requirement for suppliers to have a road traffic safety policy.
- The company will revise the agreement form, and introduce more stringent procedures for the use of agreement forms in connection with ordering transport.
- The company will prepare a general requirements specification that will be included in all transport bookings, in addition to the company's general follow-up of the transport companies used.
- The company has assessed transport and the use of subcontractors in its risk assessment, but the terms 'road traffic safety' and 'compliance with regulations' will be specified under the risk element 'use of subcontractors'.

4.3.4 Swedish food processing and packaging company

The company has informed the AIBN that the following measures have been implemented:

- The company has included a new question in the 'Supplier Qualification Questionnaire' concerning whether suppliers have implemented ISO 39001 (road traffic safety management systems).
- The company has started work on reviewing its standard terms and conditions.
- The company has started work on including possible additional information in connection with transport bookings. The enterprise ordering transport has considered that it would be relevant to address, for example, tyre sets in this context.

4.3.5 Nordic postal and logistics group

The company has informed the AIBN that the following measures have been implemented:

- The company has started work on increasing the number of suppliers that are required to complete a self-evaluation form in connection with supplier follow-up.
- The company has started work on making the 'Guide to Ordering Transport Services' available to relevant departments in the company in connection with transport bookings.
- The company has included 'check of licence' as part of the supplier background check.
- The company has implemented measures to consider introducing more stringent certification requirements where relevant.

- The company has implemented measures to look at how the focus on road traffic safety can be better incorporated into the company's supplier processes.
- The company has initiated a competitive tender procedure for the procurement of a new supplier follow-up IT system that includes background checks and self-evaluation.
- The company has included 'road traffic safety' as a separate topic in the company's supplier audits.
- The company is working on an e-learning programme on ethical standards for subcontractors. The target group is all employees in the group who work with follow-up of suppliers within transport.

5. MAPPING OF WHAT CONSIDERATION SUPPLIERS GIVE TO ROAD TRAFFIC SAFETY

5.1 Introduction

Through the thematic investigation, the AIBN has examined the framework conditions that the involved enterprises ordering transport assignments have themselves helped to shape through the process for ordering transport. The main focus of the investigation has thereby been the consideration given to road traffic safety by enterprises ordering transport assignments.

Based on the transport booking process, however, the AIBN has also carried out a limited mapping of the consideration given to road traffic safety by the involved suppliers. This has included the planned and registered working hours of the heavy goods vehicle drivers involved, and the suppliers' safety training for drivers and systematic work on road traffic safety⁵³.

The information obtained from the suppliers involved is presented in section 5.2 and Table 5. A summary of the findings is provided in section 5.3.

The aim of the thematic investigation has not been to examine the topics in detail, however, and the AIBN has largely chosen to look more closely at these factors in light of the emphasis given to road traffic safety by enterprises ordering transport in connection with the selection of suppliers, drawing up of contracts, ordering of transport assignments and follow-up of suppliers (cf. sections 6.2–6.5).

5.2 Information obtained from the suppliers involved

As part of the investigation process, the AIBN has mapped all the parties involved in the performance of the transport assignments that the heavy goods vehicles involved in the four investigated road traffic accidents were carrying out. The investigation has found that a total of six suppliers (freight forwarders/transport carriers) of road transport services have been involved in the planning and/or execution of the transport assignments in question.

Two of the suppliers have acted as principal contractors (freight forwarders), two have acted as subcontractors (performed transport on assignment for a principal contractor) and two have acted as executing contractors (performed transport on assignment for enterprises ordering transport) in connection with the four transport assignments in question.

The AIBN has requested information from the suppliers concerning the heavy goods vehicle drivers' planned and registered working hours, driver training and systematic work on road traffic safety.

Two of the suppliers have not provided the AIBN with the requested documentation. One of the suppliers acted as the principal contractor in connection with one of the transport assignments, while the other acted as the transport carrier for one of the other transport assignments.

The AIBN takes a serious view of the fact that two of the suppliers involved have not contributed factual information to the investigation, and considers their lack of dialogue

⁵³ As part of the investigation, the AIBN wanted to find out what the suppliers themselves consider to be systematic work on road traffic safety, and it has therefore not defined or elaborated on the concept in the report.

as an indication that these companies could give rise to challenges in the transport chain. The enterprises ordering the transport assignments in question have been informed of the lack of feedback from their suppliers.

Based on the lack of contact and information about financial problems, the enterprise ordering transport assignments from one of these suppliers has chosen to end its collaboration with the transport company.

Table 5: Mapping of the consideration given to road traffic safety by suppliers in connection with the heavy goods vehicle drivers' planned and registered working hours, safety training for drivers and systematic work on road traffic safety.

1. The drivers' planned and registered working hours

- The AIBN only received information from one of the four involved companies about the heavy goods vehicle driver's planned working hours.
- The AIBN has received information from three of the four suppliers about the drivers' registered working hours. In two of the cases, the NPRA had already looked at the drivers' driving and rest periods and not found violations of the applicable provisions. One of the other suppliers involved did not submit raw data to the AIBN, however, which is essential to get a full picture of a driver's driving and rest periods. The fourth supplier involved has not responded to the AIBN's repeated requests regarding the submission of documentation related to driving and rest periods.
- The AIBN wanted to investigate whether the suppliers involved have taken preventive steps, for example good planning of working hours, as a barrier against undesirable incidents and road traffic accidents. The lack of documentation of the driver's work schedules seen in relation to their registered working hours does not indicate that this is the case, however.

2. Safety training for drivers

Principal contractors	<ul style="list-style-type: none"> ➤ Two of the suppliers involved have acted as principal contractors (freight forwarders) for two of the transport assignments. They used subcontractors (transport companies) to perform the transport assignments in question. ➤ One of the principal contractors has not documented that the company provides safety training for drivers employed by its subcontractors. ➤ The other principal contractor provides safety training for its subcontractor's drivers in the form of an internal 'driver's academy' with pertaining compulsory courses. The drivers are required to serve at least one year in the group's 'Scandinavian fleet' before they can be used as drivers in the group's 'Nordic fleet'. This fleet only uses triple-axle vehicles. Drivers in the group's 'Nordic fleet' must complete additional training programmes before they can perform road transport assignments in the Nordic countries. The drivers must also take refresher courses every autumn before the start of the winter season. <p>The drivers' training is based on the NPRA's 'Trucker's Guide'⁵⁴ (cf. section 3.3.6) for driving in Norway. The guide includes, among other things, advice on safe driving in winter, tyre requirements</p>
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⁵⁴ Source: <https://www.vegvesen.no/en/vehicles/professional-transport/truckers-guide>.

	<p>and the use of snow chains, as well as relevant laws and regulations that apply to driving with a heavy vehicle in Norway. The 'Trucker's Guide' also addresses trailer skidding, including causal factors, potential consequences and preconditions for driving a heavy goods vehicle safely on slippery roads.</p> <p>The company's driver training has included the following topics: driving under extreme weather conditions (including video interviews with drivers who have previously been involved in road traffic accidents, and discussions of the causes of road traffic accidents), correct braking, choice of a safe speed, the use of snow chains (theory and practical training), specifications relating to driving a heavy vehicle in Norway (including convoy driving and driving in tunnels), traffic rules and regulations (including speed limits), loading and unloading of trailers, and documentation management (customs clearance).</p>
Subcontractors	<ul style="list-style-type: none"> ➤ Two of the suppliers involved have acted as subcontractors (transport carriers) for two of the transport assignments. ➤ One of the subcontractors relies on the principal contractor's 'Code of Conduct' (cf. section 6.5.4.1), and has stated that this document describes the rules that apply to drivers. The subcontractor has an internal driver training programme consisting of theoretical tuition, simulator training and practical training with an experienced driver, and it has stated that the programme takes place over a period of 3–4 weeks. ➤ The other subcontractor was organised under the group of the principal contractor for the transport assignment in question. The principal contractor provides safety training for those of the subcontractor's drivers who carry out road transport to the Nordic region.
Executing contractors	<ul style="list-style-type: none"> ➤ Two of the suppliers involved have acted as the executing contractors (transport carriers) for two of the transport assignments. They have not performed the ordered road transport on assignment for a principal contractor, but directly on assignment from the enterprise ordering transport. ➤ The AIBN only received information from one of these suppliers. The company in question does not provide any form of safety training for drivers internally in the company, but has stated that it only hires professional drivers for transport assignments to Norway, Sweden and Finland. ➤ The other supplier has not responded to the AIBN's repeated requests for relevant documentation.

3. Systematic work on road traffic safety

Principal contractors	<ul style="list-style-type: none"> ➤ One of the principal contractors has not responded to the AIBN's repeated requests for relevant documentation of the company's systematic work on road traffic safety. ➤ The other principal contractor has described orally that the company provides regular training for drivers in safety-related issues, and that HSE work is included in training programmes for new employees. The principal contractor uses an external company to follow up the company's HSE work. However, the
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	<p>principal contractor has not been able to document the company's systematic work on road traffic safety to the AIBN.</p> <p>The principal contractor has also been reluctant to inform the AIBN of any safety requirements the company has passed on to its subcontractor, for reasons of confidentiality. The AIBN has chosen not to pursue this, and is therefore unable to verify whether safety requirements have been communicated to the subcontractor and/or followed up by the principal contractor.</p>
Subcontractors	<ul style="list-style-type: none"> ➤ One of the subcontractors has stated that all vehicles are equipped with new tyres before the winter season, but has not documented this to the AIBN. The company has stated that the purpose of the measure is to improve the level of safety on the road network. The AIBN has also been informed that the company uses the NPRA's webcams for updates on weather and driving conditions, and that the company, on this basis, informs drivers performing goods transport assignments in Norway of the best route option. However, this subcontractor has also not been able to document the company's systematic work on road traffic safety to the AIBN. ➤ The other subcontractor was organised under the group of the principal contractor for the transport assignment in question. The AIBN has not received documentation showing that the principal contractor has required the subcontractor to work systematically on road traffic safety, or that the subcontractor has, on its own initiative, worked on road traffic safety internally in the company.
Executing contractors	<ul style="list-style-type: none"> ➤ One of the suppliers has stated that all the company's vehicles are in good technical condition and meet the technical requirements in the Norwegian regulations, and that the vehicles are equipped with necessary equipment with regard to the weather conditions in Scandinavia. The supplier has also stated that all drivers are given HSE instruction before they are employed by the company, but that no refresher training is provided during the employment period. However, the supplier has not been able to document the company's systematic work on road traffic safety to the AIBN. ➤ The other supplier has not responded to the AIBN's repeated requests for relevant documentation.

5.3 Summary

The AIBN requested information from the six suppliers about the companies' safety training for drivers. The information obtained has shown that the supplier's follow-up of this has been very varied. Several of the suppliers have not provided safety training for drivers performing road transport assignments to/in Norway. In this context, the AIBN considers safety training to include more than just winter driving courses. None of the involved suppliers have documented to the AIBN that the drivers who carry out transport assignments to Norway have undergone practical training in winter driving.

The AIBN also requested information from the six suppliers about the companies' systematic work on road traffic safety. None of the involved suppliers have documented to the AIBN that the companies work systematically on road traffic safety.

6. DUE CONSIDERATION FOR ROAD TRAFFIC SAFETY THROUGH THE TRANSPORT BOOKING PROCESS

6.1 Introduction

Through the thematic investigation, the AIBN has looked at the framework conditions that those ordering the transport assignments in question have themselves helped to shape through the process for ordering road transport. Figure 17 describes the process for ordering transport assignments that has been investigated.

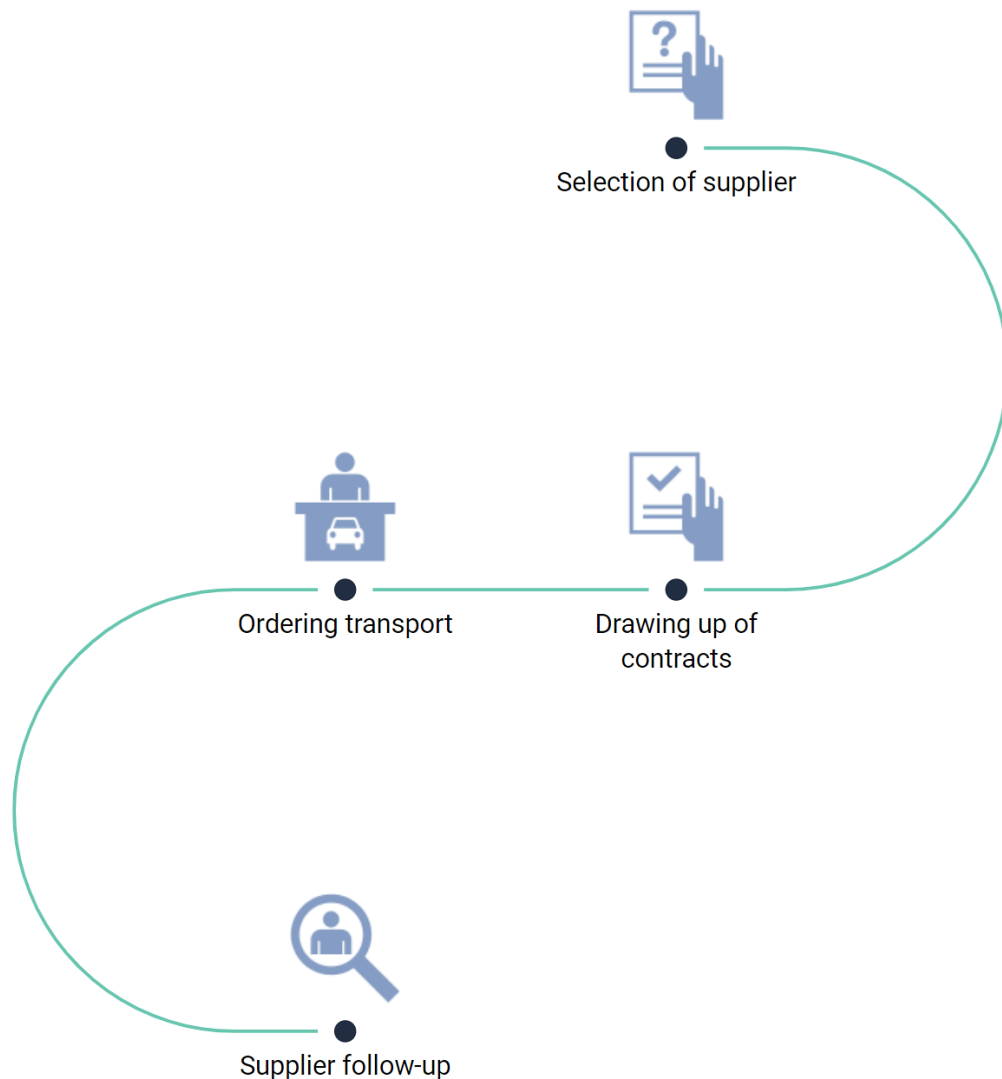


Figure 17: Mapped focus areas in the process for ordering goods transport by road. Illustration: AIBN

Another objective of the investigation has been to map and assess how much consideration those ordering the transport assignments in question give to road traffic safety when selecting suppliers, drawing up contracts, ordering transport and following up suppliers (cf. Table 4). During the mapping process, the AIBN has also discussed the activities of those ordering transport in relation to the duty to provide information, the duty to ensure compliance and the duty to contribute. However, the report does not contain any detailed assessments of possible shortcomings in relation to these statutory requirements.

The AIBN's assessments of whether those ordering transport give due consideration to road traffic safety in the transport booking process are presented in sections 6.2–6.5. Finally, the involved suppliers' focus on road traffic safety is discussed in section 6.6.

6.2 Emphasis given to road traffic safety when selecting a supplier

6.2.1 Focus on road traffic safety

The mapping of the four enterprises ordering transport has shown that, prior to entering into the contracts, none of them checked as a matter of routine whether potential suppliers work systematically on road traffic safety within their organisations, or whether they had provided safety training for their drivers.

Furthermore, it was also relevant in this context to clarify whether, prior to entering into the contracts, those ordering transport checked whether the supplier in question had HSE and internal control systems. Only one of the four enterprises ordering transport had checked this, and only one of four had checked whether the supplier had an approved operator's licence and the permits required to transport goods (cf. Table 4).

The investigation has also revealed that none of the four enterprises ordering transport requested accident statistics from potential suppliers before entering into the contracts. Nor had any of the suppliers documented to the enterprises ordering transport whether they had previously been involved in road traffic accidents (cf. Table 4).

The AIBN finds it inadequate that, prior to entering into the contracts, only one of the four enterprises had checked whether the supplier in question had an approved operator's licence and the permits required to transport goods. In this connection, the enterprises ordering transport have referred to the fact that it is a requirement in the framework agreement/contract that the supplier has such matters in order. The AIBN believes, however, that this argument underpins the AIBN's view that the enterprises in question have not understood the point of inspecting and checking suppliers prior to the conclusion of contracts.

The AIBN also notes that, prior to entering into contracts, none of the involved enterprises took any interest in whether the supplier worked systematically on road traffic safety, and nor did they request accident statistics from the suppliers in question.

The investigation has shown that several of the involved enterprises primarily emphasised the environment and quality when selecting a supplier, but not road traffic safety (cf. section 6.2.2). One of the involved enterprises has also informed the AIBN that suppliers are generally chosen on a 'random' basis, based on references and reputation. In the AIBN's view, if the limited emphasis given to road traffic safety by the four enterprises when selecting suppliers proves to be representative of the industry as a whole, then these findings paint an unfavourable picture of the goods transport industry.

6.2.2 Use of industry standards

The dialogue with the involved parties has shown that half of the enterprises ordering transport have emphasised suppliers' work on quality (ISO 9001) and the natural environment (ISO 14001) when selecting a supplier of road transport services. One of the enterprises ordering transport has also emphasised systems for following up occupational health and safety (ISO 45001).

The mapping of the involved parties has also shown that none of the enterprises ordering transport have emphasised road traffic safety when selecting a supplier of road transport services (cf. Table 4). In that connection, the facts collected during the investigation have also shown that none of the involved enterprises were familiar with ISO 39001 (road traffic safety management systems). The enterprises ordering transport have thereby neither checked nor followed up whether the suppliers in question have been certified pursuant to the requirements set out in ISO 39001 prior to entering into the contracts.

The AIBN regards standards for quality, the natural environment, occupational health and safety and road traffic safety as important tools that enterprises ordering transport should use as the basis for selecting suppliers. This can be followed up by making certification a requirement or by requiring suppliers to comply with the requirements in the standards without being certified. This would enable enterprises ordering transport to make use of suppliers' goals, plans, follow-up and internal audits within the different areas, and to follow this up in their own audits of suppliers (cf. section 6.5).

The AIBN believes that standards are too little used as a tool for selecting suppliers, and that a stronger focus on ISO 39001 among those ordering transport could strengthen suppliers' commitment to road traffic safety work. In addition, industry tools such as 'Fair Transport' (cf. section 3.3.10) and 'KMV' (cf. section 3.3.11) could be used by suppliers of road transport services to strengthen an enterprise's systematic work on road traffic safety. So far, however, these industry tools are only available for use by NLF's members.

Enterprises ordering transport, on their part, can choose to emphasise the use of such industry tools when selecting new suppliers of road transport services. In the AIBN's view, if enterprises ordering transport have a stronger focus on industry tools for following up road traffic safety when selecting suppliers, this could help to increase road traffic safety activity among suppliers.

6.3 Emphasis given to road traffic safety in contracts with suppliers

6.3.1 Validity of contract requirements

The investigation has shown that three of the four enterprises did not have a written contract with the supplier performing the transport assignment at the time of the accident. Two of the enterprises had signed a contract with a principal contractor that used a subcontractor to perform the transport assignment in question. In the contracts with the principal contractors, the enterprises ordering transport included a requirement that the contractual requirements shall also apply to subcontractors where such were used to perform transport assignments in whole or in part.

In the AIBN's view, a valid contract between the enterprise ordering transport and the supplier is necessary in order to ensure good supplier follow-up, including in the road traffic safety context. In this connection, the enterprise's responsibility for checking that contractual requirements are followed up should also be defined in the contract, so that this responsibility is given focus and made clear to the supplier in the documentation that regulates the collaboration.

6.3.2 Follow-up of road traffic safety in contractual requirements

A contract is intended to regulate the contractual relationship between the enterprise ordering transport and the transport carrier, and it constitutes the framework for how transport assignments are to be performed. In light of this, the AIBN has assessed the contractual requirements the enterprises have made of their suppliers. By contractual requirements is meant the requirements set out in signed contracts between the enterprise ordering transport and the supplier, and that applied at the time of the accident⁵⁵. The main findings concerning the contractual requirements that applied are set out below (cf. Table 4):

- None of the enterprises required the supplier to have a road traffic safety policy. None of the enterprises required the supplier to fill in and submit self-evaluation forms describing road traffic safety measures, and nor did they require the suppliers to document safety procedures in connection with the ordered transport assignments (over and above securing the load).
- None of the enterprises required suppliers to be certified pursuant to, or to comply with the requirements of, ISO 9001 (quality), ISO 45001 (occupational health and safety) or ISO 39001 (road traffic safety). Three of the four enterprises did not require the supplier to be certified pursuant to, or to comply with the requirements of, ISO 14001 (natural environment).
- Three of the four contracts did not contain information stating that the enterprise would prepare an agreement form describing in detail the requirements that applied to the transport assignment in question. Nor, at the time of the accident, had three of the four enterprises entered into a transport agreement with the supplier describing in detail the terms and conditions that applied to the transport assignment in question.
- Three of the four enterprises did not make it a requirement that the drivers employed by the supplier to perform transport assignments had the necessary experience and competence. Nor did three of the four enterprises make it a requirement that the supplier had an HSE system, and nor had they ensured that they were entitled to impose sanctions on the supplier in the event of deviations from road traffic safety regulations.
- Two of the four enterprises did not make it a requirement that transport assignments be performed in compliance with the applicable regulations. Three of four contracts did not specify the regulations that apply to goods transport by road in Norway.
- In the contracts, two of the four enterprises did not give the supplier permission to use subcontractors to perform transport assignments. Nor did they make it a requirement that the supplier had the necessary licences to perform the transport assignments or require the supplier to have the equipment and vehicles necessary to perform assignments.
- Two of the four contracts did not contain clauses giving the enterprise access to necessary documentation in connection with checks and audits of the supplier.

⁵⁵ One of the enterprises ordering transport had not signed a valid contract with its supplier at the time of the accident. See the last paragraph on this page for more detailed information.

- Two of the four enterprises did not make it a requirement that the supplier inform the enterprise about any traffic accidents that might occur in connection with transport assignments.

One of the enterprises ordering transport did not have a signed and valid contract with its supplier at the time of the accident. However, the draft contract contained requirements, including compliance with statutory requirements, a road traffic safety policy, the necessary permits, drivers' competence, an HSE system and access to documentation in connection with audits, as well as notification of any traffic accidents. In this connection, the AIBN takes a particularly positive view of the fact that the enterprise in question had made it a requirement that the supplier had a road traffic safety policy.

The investigation has shown, however, that none of the framework agreements/contracts emphasise road traffic safety. Only two of the four contracts make special mention of 'road traffic safety'. One contains a requirement for a road traffic safety policy, while another only mentions road traffic safety in connection with securing loads. None of the enterprises ordering transport had required the supplier to be certified pursuant to, or to comply with the requirements of, ISO 39001 (road traffic safety). Nor have any of them required the supplier to document safety procedures in connection with transport assignments or to fill in and submit self-evaluation forms describing road traffic safety measures.

Where the enterprise's framework agreement/contract includes requirements concerning the necessary permits, the driver's competence and experience, the AIBN has nonetheless not been able to verify the effect of this at the suppliers' end. The framework agreements/contracts largely ensure that consideration is given to HSE in connection with loading, the delivery of goods and to some extent securing loads, but not the activity – and thereby the risk – out on the road.

In the AIBN's view, the findings from the investigation indicate that there is a large potential for improvement in terms of choosing and formulating contractual requirements that to a greater extent take road traffic safety into account, and help to ensure that suppliers of road transport services carry out traffic safety assessments.

6.4 Emphasis given to road traffic safety when ordering transport assignments

6.4.1 Familiarity with suppliers involved in the transport assignments

The investigation has shown that two of the four involved enterprises were not familiar with the subcontractors that performed the transport assignments. This is clear, for example, from the consignment note pertaining to one of the transport assignments (cf. section 6.4.3.3), where a different supplier is stated to be the transport carrier than the supplier that actually performed the transport assignment.

The two enterprises mentioned above had a contract with a principal contractor that used a subcontractor to perform the transport assignment. However, the enterprises assumed that the principal contractor itself had been the transport carrier for the transport assignment in question. The enterprises ordering transport did not check this before the transport assignments were performed.

One of the enterprises ordering transport has informed the AIBN that subcontractors that are going to transport goods out of Norway must be pre-approved by the company. The

transport assignment in question was performed by one of the pre-approved subcontractors, but the enterprise ordering the transport did not know which of them performed the assignment. The pre-approved subcontractors included both Norwegian and foreign-registered transport companies. The enterprise therefore did not know whether the transport assignment would be performed by a Norwegian or a foreign-registered vehicle. Nor had this ordering enterprise established a system for following up subcontractors involved in such transport assignments, cf. section 6.5.

While the investigation has covered a limited number of enterprises ordering transport, in the AIBN's view, they are nonetheless representative of this part of the road transport industry. The AIBN finds it concerning that, in this link in the transport chain, it is not necessarily regarded as important to have an overview of which supplier is the actual transport carrier. The AIBN believes that this limits the possibilities for supplier follow-up, which, in turn, can have consequences for follow-up of road traffic safety (cf. section 6.5).

6.4.2 Follow-up of road traffic safety when ordering transport assignments

Findings from the investigation have shown that, in connection with the ordering process, none of the enterprises ordering transport informed their suppliers about possible safety challenges relating to the transport assignment in question. None of the suppliers were given information about geographical, weather and/or driving conditions in Norway as the basis for assessing what equipment and competence would be necessary.

However, one of the four ordering enterprises had chosen to send a general reminder to its suppliers about safety challenges involved in winter driving around a week before the road accident in question occurred (cf. section 7.2). The other ordering enterprises have explained that the reason for this is that the suppliers are themselves responsible for assessing road traffic safety in connection with planning and performing transport assignments.

Nor had any of the ordering enterprises checked whether the supplier and driver in question had adapted equipment, an approved licence, the necessary resources and permits and sufficient competence to drive on Norwegian roads in winter. The investigation has also shown that none of the four enterprises ordering transport checked which route the supplier had planned for the transport assignment.

One of the four ordering enterprises responded as follows to the AIBN's question about follow-up of safety challenges relating to the transport assignment:

'The contract clause (...) requires the supplier to use personnel with the qualifications required to perform the assignment. The assignment in question entails no unusual safety challenges.'

The enterprise in question has also stated the following:

'... as regards Norwegian transport carriers that operate in Norway and use drivers who regularly drive on Norwegian winter roads, special measures are not necessary to inform them about special safety challenges on winter roads.'

The AIBN has been informed that information about weather and driving conditions is provided by the part of the group that uses international suppliers, and that this is done,

among other things, through an HSE calendar that addresses topics such as driving in the winter months. The ordering enterprise has also told the AIBN that the business area in question – transport between terminals in Norway – does not enter into agreements with suppliers that have foreign-registered vehicles, and that this part of the group therefore does not have procedures for informing suppliers about such road traffic safety challenges.

The AIBN believes that the ordering enterprise's assessments in this connection indicate that it has an inadequate perception of the risk factors relating to transporting goods by road in Norway. All the four road traffic accidents investigated occurred on the Norwegian roads network in winter and under challenging weather and driving conditions.

There are no statutory requirements that oblige an enterprise ordering transport assignments to carry out risk assessments of road traffic safety when ordering goods transport. The AIBN believes that this is a missing barrier in work on road traffic safety, since the investigation of the four traffic accidents shows that road transport, as an activity, is a risk factor. The investigation has also shown that responsibility for carrying out road traffic safety assessments largely rests with the driver of the heavy goods vehicle alone.

6.4.3 Specification of special conditions

6.4.3.1 *The use of agreement forms and/or requirements specifications*

The investigation has shown that the four⁵⁶ enterprises ordering transport have prepared a framework agreement, contract and/or transport contract that sets out the conditions for the cooperation between the ordering enterprise and the supplier. The documentation in question describes, among other things, the rights and obligations of the ordering enterprise and the supplier relating to the cooperation, price, insurance, loss of or damage to goods, official requirements and regulations, the use of subcontractors and procedures for the delivery of services, as well as business conduct, HSE work and quality.

These contracts largely describe general terms and conditions for the cooperation, but there are, as expected, large variations between them. The AIBN found that road traffic safety was only mentioned as a topic to a limited extent. Any requirements of the supplier as regards equipment, vehicles, competence, permits and qualifications are formulated in general terms, and are not specified in connection with transporting goods to different destinations at different times of the year.

One of the four enterprises ordering transport had nonetheless formulated a requirements specification for vehicles as an annex to the transport contract between the enterprise and the supplier. The contract includes a fixed route and the requirements specification contains specifications of the vehicles that the supplier will use to perform road transport assignments on the route in question. The requirements specification did not include technical requirements concerning, for example, tyre sets, the use of snow chains or axle combinations, but it did include requirements concerning market and service-related factors such as promotion, temperature monitoring and GPS equipment. The specification

⁵⁶ Only three of the four contracts were signed before the transport assignments in question were performed.

points out, on the other hand, that the supplier can specify the desired vehicle equipment to the enterprise ordering transport.

None of the other involved ordering enterprises have drawn up agreement forms and/or requirements specifications in connection with the transport assignments. However, one of the ordering enterprises had included information in the contract stating that the enterprise would prepare an agreement form. The agreement form is intended to describe in more detail the conditions that apply to a transport assignment, including the route and requirements concerning the means of transport, and it should be signed by the ordering enterprise and the transport carrier in connection with ordering transport. Such a specification was not prepared, however, when the transport assignment in question was ordered, and the ordering enterprise has stated that this was a deviation from the applicable procedures.

The AIBN regards the use of agreement forms and/or requirements specifications as a useful tool in connection with ordering transport assignments, since it gives the ordering enterprise an opportunity to specify special conditions for each transport assignment. It is also an opportunity to shed light on road traffic safety challenges, such as weather and driving conditions if the transport assignment is to be carried out in winter. Moreover, conditions can be set for technical vehicle specifications, for example concerning tyre sets and the number of axles. In the AIBN's view, the use of documentation pertaining to the transport assignment in question could highlight conditions that otherwise appear to just be passive in the framework agreement/contract.

6.4.3.2 *The use of external companies for ordering transport*

The investigation found that one of the involved enterprises used an external company to order the transport assignment in question. In the AIBN's opinion, this can increase the distance between the executing party and the ordering enterprise, which can prove a challenge in relation to good communication.

One consequence of this could be that conditions for transport assignments are not specified or followed up by the ordering enterprise. This can be remedied by the ordering enterprise making it clear to the external company that the terms and conditions that have been set for a transport assignment will also apply to the subcontractor. The enterprise ordering transport must then verify whether the requirements in question have been communicated to the supplier prior to performance of the transport assignment.

The ordering enterprise that had chosen this way of organising things informed the AIBN that it continuously assesses whether responsibility for the ordering process should be moved back to the company. The reason for a possible change in the ordering logistics is that the entity responsible for ordering transport wants to carry out a more comprehensive assessment of the company's logistics and transport activities. The AIBN regards it as positive that the entity continuously assesses how it organises the transport ordering process, particularly as regards highlighting the company's responsibility for ordering.

6.4.3.3 *The use and content of consignment notes*

The investigation has shown that only two of the four enterprises ordering transport had produced a consignment note in connection with the transport assignment in question. Both the consignment notes included information about the condition of the goods, thereby enabling the supplier to assess what equipment and competence were necessary

to handle the goods. Neither of the consignment notes contained time requirements (for example time of delivery). Only one consignment note also correctly described the division of responsibility (sender, executing transport carrier and recipient) for the transport assignment. Neither of the consignment notes contained special instructions relating to the transport assignment.

One of the transport assignments was for transport between two fixed terminals. The AIBN understands that, because of the logistics of simultaneous transport of different loads, it is not common practice to prepare consignment notes for consolidated shipments.

A consignment note is intended to document the contract of carriage regulating the rights of the parties. In the AIBN's view, it is therefore important that the enterprise ordering transport prepares a consignment note in connection with transport assignments, and that the documentation is correctly filled in. The supplier, on its part, should check that the information in the consignment note is correct and sufficient. The AIBN is therefore concerned to note that it has not been common practice among all the involved enterprises to prepare consignment notes when ordering transport assignments.

6.4.3.4 *Familiarity with cabotage assignments*

The investigation has shown that three of the four enterprises ordering transport did not know whether it was planned to perform the transport assignment they ordered as a cabotage transport. One of the ordered transport assignments was to be carried out as a domestic transport assignment, and the enterprise ordering transport therefore knew that the assignment would not be performed as cabotage.

The three other enterprises ordering transport had not established procedures for checking whether ordered transport assignments would be performed as cabotage. One of them has informed the AIBN that the company requires the contracted⁵⁷ supplier (which in this case was the principal contractor) to follow this up. In addition, the enterprise informed the AIBN that the topic of cabotage is followed up in audits, cf. section 6.5.

6.4.4 Summary

The AIBN believes that the findings show that, in their dealings with suppliers, the enterprises ordering transport do not emphasise road traffic safety measures when ordering transport assignments. The road transport industry thereby fails to utilise the potential contribution of ordering enterprises to the prevention of road traffic accidents, by ensuring that all links in the transport chain focus on road traffic safety.

The investigation has also revealed that none of the involved enterprises were aware of or used the 'Guide to Ordering Transport Services'⁵⁸. This guide contains checkpoints for, among other things, checking drivers' working hours, consignment notes, licences and cabotage when ordering transport assignments.

⁵⁷ The supplier (freight forwarder/transport carrier) with whom the ordering enterprise has signed a contract.

⁵⁸ Tripartite transport industry programme. (2017). *Veileder for bestilling av transporttjenester*.

6.5 Emphasis given to road traffic safety when following up suppliers

6.5.1 Introduction

The following sections discuss the tools the involved enterprises have used in connection with selecting suppliers for follow-up, how subcontractors have been followed up by the ordering enterprise, and the extent to which road traffic safety has been emphasised in connection with the follow-up of suppliers. Inadequate dialogue with suppliers on the part of one of the ordering enterprises is also discussed.

6.5.2 Tools for and the selection of suppliers for follow-up

There are no statutory requirements that oblige an enterprise ordering transport assignments to carry out audits of suppliers of road traffic services. The investigation has shown that none of the involved enterprises have carried out audits of the contracted suppliers during the period from contract signature until the respective road traffic accidents occurred⁵⁹. The investigation has also shown that none of the enterprises have carried out spot checks to check whether the supplier in question has complied with the contractual requirements.

Three of the four ordering enterprises had established audit procedures, however. Findings from the investigation showed that, despite this, the ordering enterprises do not regularly audit their suppliers. For example, one of the enterprises has informed the AIBN that the company audits around five to six suppliers a year. The enterprises that have signed contracts with the largest number of suppliers for road transport services have informed the AIBN that suppliers are selected for an audit on the basis of risk, including an assessment of their financial circumstances. The audits of each individual supplier cannot therefore be regarded as regular follow-up.

The AIBN is concerned to note that a long time could potentially elapse between each audit of an individual supplier, particularly in cases where the enterprise ordering transport does not carry out spot checks of suppliers either. By regularly following up suppliers, the ordering enterprise ensures better goal attainment by ensuring contract performance, and audits and spot checks are useful means that enterprises ordering transport can use to check that the supplier complies with contractual requirements. In this connection, one of the involved enterprises has informed the AIBN that the company's goal is that all suppliers will be audited at least once a year.

The documentation received from one of the involved enterprises states, among other things, that one important goal of the company's supplier management is to reduce risk in the supplier chain. The process in question includes risk assessments of suppliers, which form the basis for selecting suppliers for auditing.

It is clear from the documentation, however, that these risk assessments of suppliers are largely limited to financial matters, reputation and/or suspicion of breaches of ethical standards, as well as whether the supplier is engaged in operations in countries or markets associated with a high risk to the group's ethical standards.

⁵⁹ One of the ordering enterprises has informed the AIBN that, at the time of the accident, an audit of the supplier in question was scheduled for March 2019.

The AIBN believes, however, that risk assessments of road traffic safety should also be included in the basis for selecting suppliers for audits (cf. section 6.5.4). All enterprises ordering transport assignments will benefit if their suppliers of road transport services work systematically on road traffic safety and focus on accident prevention – from both an economic and a societal perspective.

6.5.3 Follow-up of subcontractors

The AIBN underlines that enterprises ordering transport must be familiar with all the suppliers involved in both the planning and execution of transport assignments in order to identify which companies act as principal contractor and subcontractor, respectively.

The investigation showed that two of the four enterprises ordering transport had a contract with a supplier that had acted as principal contractor in connection with the transport assignments they ordered, and that had used subcontractors to carry out the road transport assignments. The investigation has shown that these enterprises have not followed up the subcontractors that carried out the transport assignments, and nor had they established systems and procedures for general follow-up of subcontractors carrying out road transport.

One of these enterprises has informed the AIBN that the company does not carry out audits of subcontractors. The company in question has explained that this is because contracts signed with suppliers of road transport services state that all contractual requirements shall be passed on to any subcontractors. The investigation has shown, however, that neither of the two enterprises that had signed a framework agreement/contract with a principal contractor has checked that contractual requirements have been communicated to and apply to the supplier that performed the road transport assignment. The ordering enterprise in question has informed the AIBN that the company does not follow up contracts between principal contractors and subcontractors in connection with supplier audits.

Moreover, one of the four ordering enterprises has informed the AIBN that it registers whether suppliers with which the company signs framework agreements/contracts carry out evaluations of their subcontractors. It is also specified which requirements and criteria apply. The principal contractor in question has informed the ordering enterprise that the company requires subcontractors to carry out maintenance of their own vehicles, and that subcontractors are not allowed to use subcontractors of their own (second-level contracting) to perform transport assignments. It is not clear from the documentation that the ordering enterprise in question has sent to the AIBN whether the principal contractor makes further requirements of its subcontractors, or whether the enterprise ordering transport follows this up by obtaining documentation, or carries out audits and/or spot checks.

One of the ordering enterprises has informed the AIBN that, through risk assessments, the company has identified ‘the use of subcontractors’ in connection with the performance of road transport assignments as a significant risk in relation to the following areas: ‘control of subcontractors’, ‘the export regulations’, ‘the driving and rest period regulations’, ‘the cabotage rules’ and ‘the Regulations relating to the General Application of Collective Agreements’. In light of this, the AIBN questions why the enterprise ordering transport has chosen not to carry out audits and/or spot checks of subcontractors based on the risk assessments it has carried out (cf. section 6.5.4).

The investigation has shown that none of the involved ordering enterprises have established a system for following up subcontractors, and the AIBN believes that there is a potential for improvement on this point in the enterprises' systematic supplier follow-up.

The AIBN believes that systematic supplier follow-up is essential in order to ensure compliance with contractual requirements by all suppliers, including subcontractors. In the AIBN's view, enterprises ordering transport should check that contractual requirements made of a principal contractor have been communicated to subcontractors and/or carry out audits of both principal contractors and subcontractors.

6.5.4 Focus on road traffic safety in connection with supplier follow-up

6.5.4.1 *The content of supplier audits*

The investigation has shown that none of the four enterprises ordering transport have carried out checks to ensure that the ordered transport assignments were performed in accordance with the applicable regulations, and nor have they checked whether the suppliers in question, internally within the companies, have complied with requirements in the Internal Control Regulations and the Working Environment Act.

The AIBN's investigation has had a particular focus on whether road traffic safety has been a topic that is followed up in supplier audits. Based on the information collected and the documentation submitted by the involved enterprises, the AIBN cannot see that road traffic safety is a topic in supplier audits. However, there are no statutory requirements that oblige enterprises ordering transport to carry out audits of suppliers of road transport services or to follow up road traffic safety in connection with supplier audits.

One of the four ordering enterprises has nonetheless carried out audits of the contracted supplier (which, in the case in question, was a principal contractor) after the road traffic accident occurred. The submitted audit reports show that the enterprise has emphasised how the principal contractor complies with the export regulations, the driving and rest period regulations and the cabotage rules. Moreover, as regards 'control of subcontractors', it is stated that the principal contractor has 'good control of the mentioned areas' without this being specified in more detail in the report.

It is stated in the audit report, however, that the ordering enterprise in question has proposed that the principal contractor carry out audits of its subcontractors in order to ensure closer follow-up of contractual requirements. The ordering enterprise has also stated that the principal contractor in question follows up its subcontractors annually with respect to vehicles, licences and insurance, without it being clear from the documentation whether the enterprise has followed up these matters any further.

The audit report also states the following as regards 'safety on the road':

The company makes requirements of its subcontractors and exercises good follow-up of the condition of vehicles and trailers.

The AIBN cannot see, however, that the ordering enterprise in question has checked which requirements the principal contractor has set for its subcontractors. Nor is it clear from the audit reports that the enterprise ordering transport has checked whether the principal contractor has worked systematically on road traffic safety or whether the

principal contractor has a focus on systematic road traffic safety work in its follow-up of subcontractors.

In that connection, the investigation has also shown that the principal contractor in question has drawn up a 'Code of Conduct'. In one of the audit reports, the enterprise ordering transport pointed out that all the principal contractor's subcontractors are required to sign the Code. The document describes the principal contractor's attitudes to, among other things, whistleblowers, human rights, the working environment and safety, the environment, business ethics, external communication and business partners. The AIBN has noted that the document does not mention road traffic safety, and nor does it contain any references to road transport.

The ordering enterprise that has carried out audits of the principal contractor in question has also informed the AIBN that the company checks drivers' competence in connection with supplier audits, but that it is not possible for the company to 'reach' its subcontractors' drivers. This enterprise has also informed the AIBN that the company regards it as the principal contractor's responsibility to follow up drivers who perform the transport assignments. However, the enterprise has also stated that it is desirable that principal contractors follow up subcontractors to a greater extent, and that the principal contractors take more responsibility in this connection for the safety training of its subcontractors' drivers.

Based on the submitted audit reports, however, the AIBN cannot see that safety training for drivers has been a topic in audits the ordering enterprise has carried out of the principal contractor in question. The content of the principal contractor's 'Code of Conduct' also shows that drivers' competence is not something the principal contractor focuses on, and nor is it a focus area in the follow-up of subcontractors. In this connection, the AIBN has also been informed that the principal contractor does not carry out training of heavy goods vehicle drivers.

The information obtained and the documentation sent to the AIBN by one of the other enterprises ordering transport also indicate that road traffic safety is not a topic in supplier audits. The documentation shows that the focus in supplier audits is on 'specially identified risk points', including '*matters that may be in breach of ethical standards for suppliers*', '*negative media coverage relating to the company, leading employees and/or shareholders*', as well as '*other areas that can represent a risk to the group*'. Furthermore, it is stated that the purpose of supplier audits is to ascertain the suppliers' ability to comply with ethical requirements, and to uncover whether there are particular risk factors that the group should be aware of.

It is also pointed out in the documentation that spot checks shall be carried out in business areas where there is a particular risk of breaches of the group's standards.

The AIBN believes that, because of the risk associated with transport activities on the roads network, enterprises ordering transport should treat goods transport by road as a separate risk area. This applies to both audits and spot checks, and in particular with respect to goods transport in winter.

6.5.4.2 *Risk assessments of goods transport*

The investigation has shown that none of the four enterprises ordering transport have carried out systematic risk assessments of goods transport that focus on road traffic

safety, and that only one of the four enterprises has informed its suppliers of road transport services about safety challenges associated with driving in Norway in winter. Only one of the four enterprises ordering transport was notified immediately about the road traffic accident by the supplier that performed the transport assignment.

The investigation has shown that there are no statutory requirements that oblige enterprises ordering transport to carry out risk assessments of road traffic safety in connection with goods transport. In the AIBN's opinion, however, enterprises ordering transport should carry out risk assessments of road traffic safety in connection with goods transport since road transport, as an activity, is a risk factor. The AIBN believes that requiring risk assessments will help to increase road traffic safety and also lead to road traffic safety being included as a topic in supplier audits.

6.5.5 Inadequate supplier dialogue

One of the four enterprises ordering transport has not been in dialogue with its supplier during the period the supplier has carried out transport assignments for the enterprise in question. As a result, at the time of the accident, there was no signed framework agreement/contract between the ordering enterprise and the supplier carrying out the road transport assignment.

The investigation has shown that the supplier in question has had major financial challenges without this being communicated to the enterprise ordering transport. The enterprise in question has informed the AIBN that the company was notified about the supplier's financial problems in spring 2019, and that the company became aware of the supplier's problematic circumstances at that time. Because of the financial challenges and lack of communication, the enterprise decided to end its cooperation with the supplier in question in summer 2019.

In the AIBN's view, it is unfortunate that an enterprise orders road transport services from a supplier that carries out transport assignments over a prolonged period without the parties having signed a framework agreement/contract with pertaining requirements for performance of the transport assignments. The enterprise in question has informed the AIBN that the company did not succeed in getting a signed agreement in place because it was difficult to communicate with the supplier. In the AIBN's view, the enterprise ordering transport should have acted on this danger sign, and the enterprise's supplier follow-up has been inadequate in this case.

6.5.6 Summary

The AIBN believes that the findings from the investigation indicate that there is a potential for improvement as regards systematic supplier follow-up by the enterprises ordering transport. One of the four enterprises has not had systems in place for supplier follow-up, while the three other enterprises have established systems, but nonetheless not carried out audits of the suppliers in question. Moreover, one enterprise ordering transport has ordered road transport assignments from a supplier that has chosen not to enter into a signed agreement with the enterprise in question.

Supplier follow-up should be more systematised to enable enterprises ordering transport to collect data about nonconformities relating to compliance with contractual requirements. One of the four enterprises has also stated to the AIBN that supplier audits should be made a regulatory requirement for enterprises ordering transport.

The enterprise that orders the transport defines the premises for how and to what extent road traffic safety is given consideration, for example when selecting focus areas for audits and spot checks. In the AIBN's opinion, road traffic safety should be included as a focus area in supplier follow-up, since a stronger focus on road traffic safety among enterprises ordering transport could trigger increased focus on road traffic safety among suppliers as well.

6.6 The suppliers' focus on road traffic safety

The investigation has revealed that the suppliers involved (freight forwarder/transport carrier) have not regarded safety training for drivers as an especially important barrier in the accident prevention context. In order to ensure that due consideration is given to road traffic safety on the Norwegian roads network throughout the year, the AIBN believes that it is important that proof of drivers' competence and skills is requested, checked and followed up by both suppliers and enterprises ordering transport. Key aspects that should be included in driver training include compliance with the applicable regulations, vehicle maintenance, assessing whether snow chains are necessary, and procedures in connection with road traffic accidents.

One of the four enterprises ordering transport has informed the AIBN that, as regards Norwegian transport carriers that operate in Norway and use drivers who regularly drive on Norwegian winter roads, it has not been regarded as necessary to introduce special measures to inform them about particular safety challenges on winter roads. All the road traffic accidents in question occurred in winter in Norway, however, and one of the four accidents that was investigated also involved a Norwegian transport carrier. In the AIBN's view, the ordering enterprise in question has an expectation that road traffic safety will be given due consideration, for example through mandatory winter driving courses, which is not in fact the case.

The AIBN believes that enterprises ordering transport should include both theoretical and practical safety training and driver competence as requirements for all drivers who are to transport goods to and in Norway. Moreover, in the AIBN's assessment, this should also be addressed by enterprises ordering transport in connection with the formulation of contractual requirements, and it should be included as one of the ordering enterprise's checkpoints in connection with supplier selection (cf. section 6.2), ordering transport (cf. section 6.4) and supplier follow-up (cf. section 6.5).

Nor have any of the involved suppliers documented to the AIBN that the companies work systematically on road traffic safety. The AIBN therefore believes that enterprises ordering transport should focus more strongly on this in connection with supplier selection, drawing up of contracts and supplier follow-up (cf. sections 6.2, 6.3 and 6.5).

7. DUE CONSIDERATION FOR ROAD TRAFFIC SAFETY THROUGH OVERARCHING FRAMEWORK CONDITIONS FOR ORDERING TRANSPORT

7.1 Introduction

Through the thematic investigation, the AIBN has mapped overarching framework conditions for ordering goods transport by road. In the investigation, the overarching framework conditions have been deemed to comprise the industry structure, political, societal and professional requirements, laws and regulations, supervision and enforcement, and safety requirements relating to goods transport.

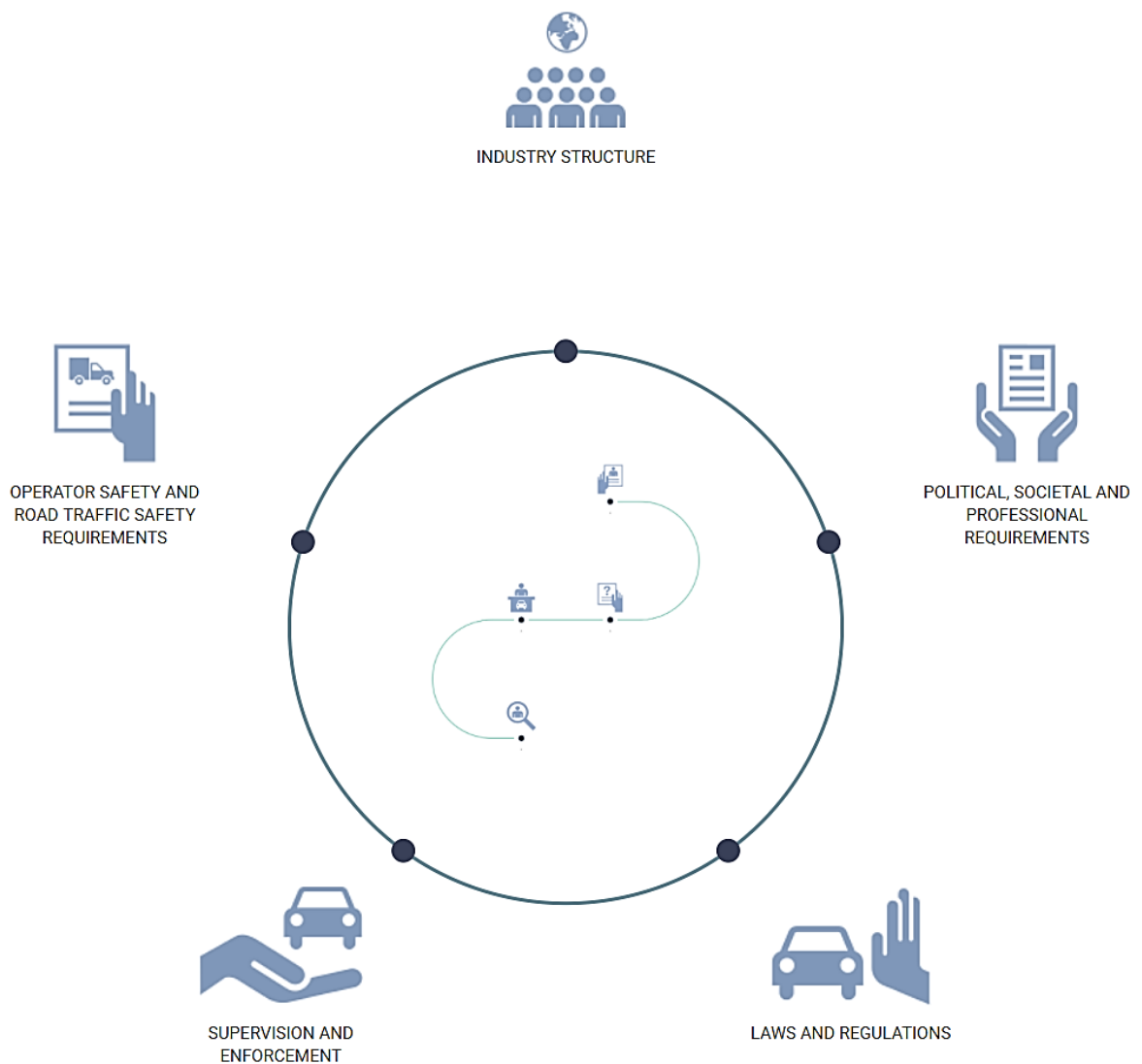


Figure 18: Mapped framework conditions for ordering goods transport by road. The core of the figure represents the investigated process for ordering transport. Illustration: AIBN

Another aim of the investigation has been to assess how road traffic safety is taken into account through the above-mentioned framework conditions. Sections 7.2 and 7.3 are about the emphasis given to road traffic safety in the current regulations relating to goods transport by road and in the supervision of enterprises ordering transport, respectively. Section 7.4 presents the results of the investigation relating to industry structure and

safety requirements in the goods transport industry, as well as political, societal and professional requirements. Finally, findings from a literature study of professional road transport, and the importance of framework conditions to safety in goods transport by road, are assessed.

7.2 Emphasis given to road traffic safety in the current regulations

7.2.1 The duty to provide information, the duty to ensure compliance and the duty to contribute

The duty to contribute in the road transport sector is implemented in the current regulations relating to goods transport by road. Pursuant to Section 3 of the Regulations on Working Hours in Road Transport, all links in the transport chain, including enterprises ordering transport assignments, have a duty to contribute to compliance with the regulatory provisions. Pursuant to Sections 5 and 6 of the Regulations relating to the Duty to Provide Information, Duty to Ensure Compliance etc., enterprises ordering transport also have a duty to provide information and a duty to ensure compliance. The duty to provide information, the duty to ensure compliance and the duty to contribute constitute statutory requirements that are intended to make the whole transport chain accountable, and the regulations thereby hold enterprises ordering transport accountable for following up their suppliers through these requirements.

In the AIBN's view, the duty to provide information, the duty to ensure compliance and the duty to contribute are important legal tools for making the road transport industry more professional, since they contribute to holding enterprises ordering transport accountable. However, these duties were not introduced primarily to strengthen road traffic safety.

In the AIBN's opinion, however, the requirements can contribute to a stronger focus on road traffic safety by those ordering road transport. The investigation has shown that one of the enterprises ordering transport has used the duty to provide information to inform its suppliers about the importance of focusing on road traffic safety when carrying out transport assignments in winter. At the same time, the enterprise in question made it a requirement that its suppliers confirm in writing that the vehicles they used met the applicable tyre requirements.

The enterprise in question has informed the AIBN that it felt a duty to inform its suppliers about road traffic safety challenges relating to driving in winter. At the same time, however, the investigation has shown that the other enterprises ordering transport chose not to inform their suppliers about possible safety challenges relating to driving in Norway in winter.

The AIBN would nonetheless like to see statutory requirements corresponding to the duty to provide information, the duty to ensure compliance and the duty to contribute that hold enterprises ordering transport accountable for following up road traffic safety in connection with road transport.

7.2.2 The focus on road traffic safety in the current regulations

The investigation has shown that the current regulations do not include a legal requirement that an enterprise ordering transport must contribute to due consideration being given to road traffic safety. In the regulations, the phrase 'road traffic safety' is only referred to in connection with transport assignments and/or goods transport in the

Regulations on Working Hours in Road Transport. In the introduction to these Regulations, it is stated that one of the purposes of the regulations is improve traffic safety. Road traffic safety is not highlighted as a main purpose in either the Professional Transport Act, the Professional Transport Regulations, the Road Carriage Act, the current General Application Regulations or in the General Conditions of the Nordic Association of Freight Forwarders (NSAB) (cf. Table 3).

During the investigation process, several of the involved enterprises have expressed the view that the regulations do not set clear and precise requirements for enterprises ordering transport. It has also been pointed out to the AIBN that the regulations are very generally worded, and that it is challenging for enterprises ordering transport to assess how the requirements can be met, and to assess how far 'down the transport chain' the ordering enterprise's responsibility extends.

This view is also underpinned by the fact that laws and regulations use different designations for different actors in the transport chain. The terms 'business'⁶⁰ and 'principals' (used in the Regulations relating to Driving and Rest Periods in the EEA and the Regulations on Working Hours in Road Transport, respectively) and 'orderer'⁶¹ (used in the Regulations relating to the Duty to Provide Information, Duty to Ensure Compliance etc.) can, for example, all refer to enterprises ordering road transport.

One of the enterprises also stated to the AIBN that the regulatory framework 'is lagging behind' in several areas as regards the legal requirements that apply to enterprises ordering transport, and that an effort that goes further than the regulations is required to meet customers' expectations and requirements. During the investigation process, several of the enterprises involved have also expressed the view that the Norwegian authorities should be clearer about what is expected in connection with ordering transport and as regards road traffic safety considerations.

Enterprises ordering transport have a key role in the transport chain, and are therefore an important agenda setter for road traffic safety. Findings from the investigation show, however, that the ordering enterprise's responsibility does not have a sufficient basis in the regulations, since the only legal requirements made of them are the duty to provide information, the duty to ensure compliance and the duty to contribute (cf. section 7.2.1).

The AIBN regards the legal framework as a significant factor in work on road traffic safety, and as a necessary tool for regulating the activities of enterprises ordering transport. The AIBN therefore believes that enterprises ordering transport should to a greater extent be held legally liable for giving due consideration to road traffic safety in connection with road transport when selecting suppliers, drawing up contracts, ordering transport and following up suppliers (cf. sections 6.2–6.5).

⁶⁰ The regulations in question have not been translated into English. The Norwegian word «foretak» has in this report been translated as «business».

⁶¹ The regulations in question have not been translated into English. The Norwegian word «bestiller» has in this report been translated as «orderer».

7.3 Emphasis given to road traffic safety in the supervision of enterprises ordering transport

7.3.1 Control and supervisory activities in the field of road transport

The NPRA's day-to-day control work includes road traffic safety factors such as tyre sets, loads, drivers' working hours and competence/licences. The Norwegian Labour Inspection Authority has no authority to check drivers and motor vehicle equipment on the road, and it therefore exercises supervision of this part of the road transport industry together with the NPRA.

The Norwegian Labour Inspection Authority primarily cooperates with the NPRA on roadside inspections. The Authority's participation in such inspections is planned on the basis of a common supervisory strategy and cooperation agreement between the two agencies. In coordinated inspections of heavy goods vehicles, the Norwegian Labour Inspection Authority is given access to vehicles and assistance from the NPRA when assessing which type of transport is being performed.

Work schedules, registered working hours and work equipment on vehicles are some of the most important things the Norwegian Labour Inspection Authority checks in this connection. This brings the authorities into contact with the transport carrier, who is usually the employer of the driver of the vehicle. These inspections also introduce the enterprise ordering the transport.

The Norwegian Labour Inspection Authority has carried out inspections targeting enterprises ordering transport in recent years, and the findings from these inspections show that both ordering enterprises and suppliers know too little about important risk factors and what statutory requirements apply to the parties involved. Among other things, the results of inspections carried out during the period 2015–2017 showed that 71% of the enterprises that were checked failed to follow up their duty to provide information. Another finding was that 82% of the enterprises that were checked did not follow up their duty to ensure compliance (cf. section 3.5.3.2).

The AIBN is concerned about these findings, particularly seen in conjunction with the fact that inspections targeting suppliers (the transport carriers) showed that they also scored poorly on compliance with their duties related to, among other things, employment contracts and working hours (cf. Figure 13).

7.3.2 Follow-up of road traffic safety through supervisory activities

In connection with inspections relating to road transport, the NPRA has the authority to obtain information, among other things pursuant to the Regulations relating to Driving and Rest Periods in the EEA, the Regulations on Working Hours in Road Transport and the Road Carriage Act. However, the NPRA has control authority within a number of areas not all of which have road traffic safety as their goal⁶². The Norwegian Labour Inspection Authority, on its part, has legal authority to obtain information in connection with inspections in the field of road transport pursuant to the Working Environment Act,

⁶² The Ministry of Labour and Social Affairs (2019). Consultation paper on amendments to the Act on the General Application of Collective Agreements etc. Section 11 concerning supervision of pay and working conditions.

the General Application Regulations and the Regulations on Working Hours in Road Transport.

In the AIBN's assessment, the legal authority of the two supervisory authorities and their supervisory activities enable them to reach enterprises ordering transport, both through their contact with vehicle drivers during roadside inspections and through transport carriers that act as suppliers for transport assignments, in addition to ordinary risk-based inspections by the Norwegian Labour Inspection Authority. However, the investigation has shown that neither the NPRA nor the Norwegian Labour Inspection Authority has legal authority to follow up whether and how enterprises ordering transport give due consideration to road traffic safety in connection with road transport.

Findings made during the investigation also indicate that the supervision of enterprises ordering transport can involve extensive processes, since it may be necessary in connection with supervisory activities to both verify transport carrier as the supplier, and check vehicles and the driver who carried out a given transport assignment. The success criteria for such supervisory activities include having sufficient resources, correct organisation of the resources and sufficient competence internally within the agencies. The AIBN therefore takes a positive view of closer cooperation between the supervisory authorities and the police on matters relating to road transport (cf. section 3.5.4).

In this connection, the supervisory authorities also seem to need amendments to be made to the General Application Regulations in order to give the NPRA a separate legal authority to obtain information, and a right to share data with the Norwegian Labour Inspection Authority for further follow-up (cf. section 3.5.4.1). In the AIBN's view, this could improve the utilisation of the agencies' combined resources in connection with control and supervisory activities in the field of road transport. The AIBN also believes that this could make a positive contribution to control and supervisory activities relating to follow-up of the duty to provide information, the duty to ensure compliance and the duty to contribute.

However, not all aspects of road traffic safety are captured by establishing whether enterprises ordering transport fulfil their duty to provide information, to ensure compliance and to contribute. In the AIBN's opinion, it will therefore be necessary for enterprises ordering transport to set other requirements for contracted suppliers in order to prevent road traffic accidents, cf. section 6.4.2.

Based on the thematic investigation, the AIBN believes it is necessary for the road transport industry, including the executive authorities, to give stronger emphasis to road traffic safety work in connection with goods transport by road. One possible contribution to this could be to allow Section 2-2 of the Working Environment Act, which concerns an employer's duty towards persons other than own employees, to also apply in the road transport industry by giving enterprises ordering transport greater responsibility for transport assignments, including for giving due consideration to road traffic safety.

7.4 Other results of the investigation

7.4.1 Introduction

The following sections describe findings made during the thematic investigation and the AIBN's assessments concerning the industry structure and differences between safety

requirements in the goods transport industry, as well as political, societal and professional requirements relating to the road transport industry.

In connection with the thematic investigation, the AIBN has also tasked the Institute of Transport Economics (TØI) with carrying out a literature study relating to the framework conditions for safety in connection with goods transport by road, and relevant findings from this literature study have been assessed in conclusion.

7.4.2 Mapping of industry structure

Developments in the road transport industry were described in section 3.2. Economic factors such as indirect taxes paid by employers, payroll expenses and other requirements are often cited as the reason why enterprises buying transport services use self-employed operators, foreign drivers and foreign transport firms as subcontractors in connection with the performance of transport assignments. In this connection, a report⁶³ has pointed out that, by using such methods, Norwegian buyers of transport services achieve advantages as a result of more favourable framework conditions in other countries. The report in question also pointed to road traffic safety challenges associated with the increased use of international goods vehicles and drivers in Norway.

A study⁶⁴ of framework conditions for transport and logistics also pointed to the fact that operating margins vary in the goods transport sector, and that heavy goods vehicle transport is dominated by small operators, strong competition and high costs. Moreover, the parties involved in the transport chain were described in section 3.2 to illustrate that many different parties can be involved in one and the same transport assignment.

Based on its dialogue with the parties involved in the transport assignments performed by the heavy goods vehicles involved in the four investigated road traffic accidents, and on relevant research reports and studies, as well as facts supplied by the authorities, the AIBN has found that these sources paint a reasonably accurate picture of the industry.

7.4.3 Safety requirements in the goods transport industry

7.4.3.1 *Different sectors of the goods transport industry*

The investigation has mapped the safety requirements that apply to the goods transport industry. The findings have shown that operator safety requirements vary greatly between different sectors of the goods transport industry, and that the requirements that apply to operators performing goods transport assignments on the Norwegian roads network are much less stringent than for goods transport by rail, for example.

In this connection, it has, among other things, emerged that the entry barriers for operators that want to establish transport companies in the railway sector are much higher than in the road sector. Operators that perform goods transport in the railway sector must undergo extensive application processes and checks of e.g. safety certificates, approval of rolling stock and driving permits. Rail companies must have safety approval from each

⁶³ Askildsen, T.C. & Marskar, E-M. (2015). *NTP Godsanalyse. Delrapport 1: Kartlegging og problemforståelse*. ISBN 978-82-7704-147-6.

⁶⁴ Hovi, I.B., Bråthen, S., Hjelle, H.M. & Caspersen, E. (2014). *Framework conditions in the Norwegian logistics market*. TØI report 1353/2014.

country the company plans to operate in, and all rolling stock must be approved in all the countries in which it will operate (cf. section 3.6).

Moreover, it is a requirement that all train drivers must be certified, and certificates have limited validity, as well as training in each line section on which the company in question plans to operate. Train drivers also need to have training in all types of rolling stock (cf. section 3.6).

Transport carriers performing goods transport in the railway sector must also furnish high guarantees for any liability in damages that might arise in connection with accidents. On this basis, in addition to meeting the requirements for safety certificates, rolling stock approval and section-based driver competence, the transport carriers incur large costs to acquire the right to perform transport assignments on the rail network.

The investigation has shown that corresponding safety requirements are not imposed on operators planning to carry out goods transport by road in Norway, over and above an operator's licence and technical vehicle requirements. Nor is it a requirement that drivers who are going to carry out transport assignments have competence relevant to the stretch of road in question or the driving conditions that the driver will encounter.

The AIBN understands and accepts that there will necessarily be differences between the safety requirements for different sectors, but it also points out that the risk of accidents, injuries and loss of life is higher in road transport than in other transport sectors. At the same time, however, the parties involved in the road transport sector are to a very little extent required to implement costly safety measures⁶⁵, despite the fact that road transport is the form of transport with the most serious accident statistics.

7.4.3.2 *Transport of dangerous goods (ADR transport)*

The investigation has also mapped differences in safety requirements in different sub-sectors of the goods transport industry, including road transport. A review of the statutory requirements in connection with the transport of dangerous goods (ADR transport) has, among other things, shown that one of the objectives of the Regulations relating to Overland Transport of Dangerous Goods is to protect life by preventing accidents. The Regulations also deal with co-liability for leaving dangerous goods in the hands of operators that do not have sufficient knowledge, skills or equipment to carry out the transport in a satisfactory manner.

Statutory requirements also apply to companies that carry out transport of dangerous goods, including in connection with risk assessments, risk management and the use of safety advisers to follow up safety (cf. section 3.6). In this connection, the Norwegian Directorate for Civil Protection (DSB) has stated that a safety adviser must check that the regulatory provisions are complied with, ensure that an enterprise maps risks that can arise in connection with goods transport, check that employees are given appropriate training and carry out investigations, and ensure that measures are implemented in connection with serious accidents. The AIBN would like to see a corresponding focus on safety in connection with the transport of ordinary goods on the road network.

⁶⁵ Askildsen, T.C. & Marskar, E-M. (2015). *NTP Godsanalyse. Delrapport 1: Kartlegging og problemforståelse*. ISBN 978-82-7704-147-6.

The findings also indicate that framework conditions have contributed to a lower risk of accidents in the part of the goods transport industry that constitutes ADR transport by road, compared with other goods transport on the road network (cf. section 3.7). In the AIBN's view, this underpins the positive effect that framework conditions can have on road traffic safety.

In this connection, the AIBN wishes to stress that road traffic safety and operator safety requirements corresponding to those that apply to ADR transport are not part of the legal framework conditions for goods transport by road in Norway that does not constitute dangerous goods.

7.4.4 Political, societal and professional requirements

The thematic investigation has mapped measures and impact efforts that have been implemented in the road transport industry in order to improve safety on Norwegian roads. In that connection, the 'National Plan of Action for Road Safety 2018–2021' has been presented. Among other things, the plan describes road traffic safety measures in the field of 'transportation involving heavy vehicles'. It states that enterprises ordering transport could be followed up after an inspection in the event that serious breaches of working hours regulations and/or generally applicable collective agreements are found. However, the AIBN has noted that road traffic safety is not mentioned as a focus area in this connection (cf. sections 3.3.2 and 7.3).

Moreover, section 3.3 discusses the 'Report on Road Cabotage in Norway', which, among other things, presents a measure for clarifying responsibilities in the transport chain in the field of road traffic and professional transport (cf. section 3.3.3). In this connection, it has been considered whether a provision on strict liability can be introduced to enable buyers of transport services to be held legally and financially liable for breaches of the regulations. The background to this proposal is an assessment that the current legal requirements for co-liability are insufficient.

The AIBN has been informed that neither the Ministry of Transport and Communications nor the NPRA has taken the initiative to implement regulatory amendments based on this proposal.

The AIBN has also been informed that the road transport industry has itself followed up the proposed measure through the 'Tripartite Transport Industry Programme', more specifically through the 'Guide to Ordering Transport Services' (cf. sections 3.3.8 and 3.3.9). The investigation has shown, however, that none of the involved enterprises are familiar with this guide. In this connection, the AIBN believes that the relevant authorities have a potential for improvement as regards distributing and promoting the guide.

The AIBN has also noted that 'road traffic safety' is primarily only referred to in the guide in connection with ADR transport (dangerous goods), where the following is stated:

When ordering dangerous goods, there are some extra requirements that the client must meet. This is important in order to ensure safe transport of dangerous goods, both for road traffic safety and environmental reasons.

Moreover, the guide only includes a few references to road traffic safety in connection with the Regulations relating to Driving and Rest Periods in the EEA and the correct completion of consignment notes. The AIBN believes that the guide should have a stronger focus on road traffic safety assessments and consideration in connection with ordering transport, although it is positive that the guide contains references to ISO 39001 (road traffic safety management systems).

Section 3.3 also mentions the ‘Trygg Trailer’ project (cf. section 3.3.5). In the AIBN’s view, it is positive that the involved enterprises have started work on implementing ‘Trygg Trailer’ in their organisations as a means of checking the condition of vehicles, and as a contribution to increasing safety on the roads. The AIBN underlines, however, that this measure should not replace systematic work on road traffic safety by enterprises ordering transport when selecting suppliers, drawing up contracts, ordering transport assignments and following up suppliers (cf. sections 6.2–6.5), but should be a supplementary measure aimed at increasing road traffic safety.

Section 3.3 also discusses the ‘Fair Transport’ quality assurance programme and the ‘KMOV’ quality system (cf. sections 3.3.10 and 3.3.11). These programmes have been developed by the Norwegian Truck Owners Association (NLF) in order to highlight safe road transport by responsible transport carriers, and to fulfil transport companies’ HSE responsibility for their employees, respectively. The AIBN takes a particularly positive view of the way the ‘Fair Transport’ programme highlights that enterprises ordering transport must take their share of responsibility for ensuring that the transport industry is safe and responsible, and that checking drivers’ competence and developing procedures in connection with road traffic accidents are included as checkpoints in ‘KMOV’.

Moreover, in the AIBN’s view, ‘Fair Transport’, in particular, is an example of the good impact efforts that have been initiated in the road transport industry to increase road traffic safety, since this quality assurance programme includes criteria for the establishment of HSE systems, safety training, a road traffic safety programme, a traffic safety policy, a nonconformity system, written employment contracts and vehicle inspections.

The AIBN is aware, however, that both ‘Fair Transport’ and ‘KMOV’ are currently only available to NLF’s members.

Based on the current industry structure and the weak safety requirements that apply to the road transport industry, the AIBN believes that the road traffic safety level should be increased by implementing relevant measures and impact efforts. In the AIBN’s view, political, societal and professional industry measures could prove useful in this context. However, the AIBN would like to see a stronger focus on road traffic safety in this connection, particularly relating to inspections of enterprises ordering transport and guidelines for ordering transport.

7.4.5 Literature study of professional road transport

A literature study⁶⁶ of the importance of framework conditions for the safety in goods transport by road has been conducted in connection with this thematic investigation (cf. section 3.7). The following are among the findings of the study:

⁶⁶ Nævestad, T-O. (2019). *Sikkerhetseffekter av rammebetingelser: En litteraturstudie av profesjonell veitransport*.

- Operators in the transport industry believe that buyers of transport services and freight forwarders should be held more (legally) accountable for road traffic safety, that there is strong competition in the road transport industry, that safety requirements for public transport are more stringent than for goods transport, and that the safety level and focus on safety in connection with the transport of dangerous goods is much stronger than is the case for other goods transport.
- Operators in the transport industry believe that work-related factors with possible consequences for road traffic safety are not sufficiently covered in the checks and inspections currently carried out of road transport.
- In the aviation, maritime and railway sectors, companies are legally required to introduce safety management systems that facilitate a good safety culture. However, the implementation of safety management systems (such as ISO 39001) is voluntary in the road transport sector.

The AIBN supports the assessment in the literature study that the lower focus on safety culture and safety management in the road sector may be related to the lack of a legal requirement for the establishment of safety management systems.

The literature study also refers to the following:

- Research shows that, to some extent, differences in the safety level between transport sectors could be due to the fact that safety is to a greater extent a competitive advantage in the aviation industry, for example, than is the case for road transport. There are many different operators in the road sector, and it is relatively easy to start up companies in the road transport industry. Price-based tendering, competition for transport assignments and market pressure from buyers of transport services and freight forwarders are also addressed in this connection. The use of subcontractors is discussed in connection with profitability and strong financial pressure.
- The mapping of operator safety within the different transport sectors has shown that the safety requirements that apply to road transport appear to be much less stringent than for rail transport, in particular. Train companies that use the railway network in Norway must meet requirements for a licence and safety certificates, with associated extensive documentation requirements. The train companies also have to document that they have the necessary competence as regards safety, risk, emergency preparedness and use of the Norwegian rail network, and meet the requirement for the establishment of a safety management system.

The AIBN believes that the findings from the literature study underpin the findings from the thematic investigation, including that road traffic safety is not sufficiently covered in inspections carried out in the field of road transport, that the use of subcontractors is related to the industry structure in the road sector, and that the safety requirements that apply to road transport appear to be much less stringent than for other forms of transport.

8. CONCLUDING REMARKS

The purpose of the thematic investigation was to investigate whether road traffic safety is given due consideration by enterprises that order road transport. The investigation and the AIBN's assessments in that connection are intended to identify systemic safety problems⁶⁷ relating to the framework conditions for ordering goods transport by road.

The four road traffic accidents that were investigated occurred despite the fact that safety measures, both technical and operational, had been implemented. There were no causal factors that can be directly linked to the enterprises that ordered the transport assignments. These road traffic accidents nonetheless happened as a result of the drivers losing control of their vehicles, which shows that, at the time of the accident, there were inadequate safety margins between the chosen driving behaviour and the challenges the drivers encountered.

During the investigation process, the involved suppliers have failed to demonstrate that they regard safety training for drivers as a particularly important barrier to road traffic accidents. None of the involved suppliers have documented to the AIBN that the companies' drivers who carry out transport assignments to Norway have undergone practical training in winter driving. Moreover, none of the involved suppliers have documented to the AIBN that systematic road traffic safety work is carried out in the companies.

In the following, the AIBN summarises its findings as regards the emphasis given to road traffic safety by the involved enterprises when selecting suppliers, drawing up contracts, ordering transport assignments and following up suppliers. The AIBN also summarises its findings concerning the emphasis given to road traffic safety in the current regulations for ordering goods transport by road, and in connection with inspections of enterprises ordering transport. Finally, the AIBN's findings concerning safety requirements in the goods transport industry are summarised.

Selection of suppliers

The AIBN finds that it warrants criticism that three of the four enterprises ordering transport did not check whether the supplier in question had an approved operator's licence and the permits required to carry out goods transport before entering into a framework agreement/contract with the supplier in question.

The AIBN also notes with concern that, prior to entering into contracts, none of the involved enterprises emphasised whether the supplier had worked systematically on road traffic safety, and nor did they request accident statistics from the suppliers in question.

The AIBN regards standards for quality, the natural environment, occupational health and safety and road traffic safety as important tools that enterprises ordering transport should use as the basis for selecting suppliers.

⁶⁷ A systemic safety problem is a risk factor that an organisation or authority has a certain degree of control of and responsibility for. Systemic safety problems usually refer to problems with risk management, barriers or other organisational and management factors, as well as weaknesses in framework conditions that impact on the effectiveness of risk management (cf. section 1.2.2).

The AIBN believes that standards are too little used as a tool when selecting suppliers of road transport services, and that a stronger focus on ISO 39001 among those ordering transport could strengthen suppliers' commitment to road traffic safety work. In addition, industry tools such as 'Fair Transport' and 'KMV' could be used by suppliers of road transport services to strengthen an enterprise's systematic work on road traffic safety⁶⁸.

Contracts with suppliers

The investigation has shown that none of the framework agreements/contracts entered into by the enterprises ordering transport have emphasised road traffic safety.

In the AIBN's view, the findings from the investigation indicate that there is a great potential for improvement in terms of choosing and formulating contractual requirements that to a greater extent take road traffic safety into account, and help to ensure that suppliers of road transport services carry out traffic safety assessments.

Ordering goods transport by road

The investigation has shown that two of the four involved enterprises were not familiar with the subcontractors that performed the transport assignments. The AIBN finds it concerning that, in this link in the transport chain, it is not necessarily regarded as important to have an overview of which supplier is the actual transport carrier.

Findings from the investigation have shown that, in connection with the ordering process, none of the enterprises ordering transport informed their supplier about possible road traffic safety challenges relating to the transport assignment in question.

The AIBN believes that the findings from the investigation show that, in their dealings with suppliers, the involved enterprises do not emphasise road traffic safety measures when ordering transport assignments. The road transport industry thereby fails to utilise the potential contribution of ordering enterprises to the prevention of road traffic accidents, by ensuring that all links in the transport chain focus on road traffic safety.

Follow-up of suppliers

The investigation has shown that none of the involved enterprises carried out audits of the contracted suppliers during the period from contract signature until the respective road traffic accidents occurred. The investigation has also shown that none of the enterprises have carried out spot checks to check whether the supplier in question has complied with the contractual requirements.

Moreover, findings from the investigation show that the ordering enterprises do not regularly audit their suppliers. The investigation has also shown that none of the involved enterprises have established systems for following up subcontractors.

Based on the information collected and the documentation submitted by the involved enterprises, the AIBN cannot see that road traffic safety is a topic in supplier audits.

⁶⁸ These industry tools are currently only available to NLF's members.

There are no statutory requirements that oblige enterprises ordering transport to carry out audits of suppliers of road transport services, or to follow up road traffic safety in connection with supplier audits.

The AIBN believes that, because of the risk associated with transport activities on the roads network, enterprises ordering transport should treat goods transport by road as a separate risk area. This applies to both audits and spot checks, and in particular with respect to goods transport in winter. Risk assessments of road traffic safety should also form the basis for prioritising when selecting suppliers for auditing.

Findings from the investigation therefore show that, based on the assessments of the supplier follow-up carried out by the involved enterprises ordering transport, there is a potential for improvement as regards systematic supplier follow-up.

Regulations

In the AIBN's view, the duty to provide information, the duty to ensure compliance and the duty to contribute are important legal tools for making the road transport industry more professional, since they contribute to holding enterprises ordering transport accountable. However, these duties were not introduced primarily to strengthen road traffic safety.

The investigation has shown that the current regulations do not include a legal requirement that an enterprise ordering transport must contribute to due consideration being given to road traffic safety. In the regulations, the phrase 'road traffic safety' is only referred to in connection with transport assignments and/or goods transport in the Regulations on Working Hours in Road Transport.

The AIBN believes that the findings from the investigation show that the ordering enterprise's responsibility does not have a sufficient basis in the regulations, since the only legal requirements made of enterprises ordering transport are the duty to provide information, the duty to ensure compliance and the duty to contribute. In addition, findings from the investigation also indicate that enterprises ordering transport should to a greater extent be held legally liable for giving due consideration to road traffic safety in connection with road transport when selecting suppliers, drawing up contracts, ordering transport and following up suppliers.

Supervision

In the AIBN's view, the legal authority and supervisory activities of the NPRA and the Norwegian Labour Inspection Authority has the potential to include enterprises ordering transport. This is demonstrated both through their contact with vehicle drivers during roadside inspections and through transport carriers that act as suppliers for transport assignments, in addition to ordinary risk-based inspections by the Norwegian Labour Inspection Authority. However, the investigation has shown that neither the NPRA nor the Norwegian Labour Inspection Authority has legal authority to follow up whether and how enterprises ordering transport give due consideration to road traffic safety in connection with road transport.

Based on the thematic investigation, the AIBN believes it is necessary for the road transport industry, including the executive authorities, to give stronger emphasis to road traffic safety work in connection with goods transport by road. One possible contribution

to this could be to allow Section 2-2 of the Working Environment Act, which concerns an employer's duty towards persons other than own employees, to also apply in the road transport industry by giving enterprises ordering transport greater responsibility for transport assignments, including for giving due consideration to road traffic safety.

Safety requirements

The AIBN believes that findings from the literature study⁶⁹ of the importance of framework conditions for the safety of goods transport by road underpin findings made during the thematic investigation. Taken together, they show, among other things, that road traffic safety is not sufficiently covered in inspections carried out in the field of road transport, that the use of subcontractors is related to the industry structure in the road sector, and that the safety requirements that apply to road transport appear to be much less stringent than for other forms of transport.

The investigation has shown that operator safety requirements corresponding to the requirements made of operators carrying out goods transport in the Norwegian rail network are not part of the legal framework conditions for goods transport by road in Norway. Moreover, requirements for road traffic safety corresponding to those that apply to ADR transport are not part of the legal framework conditions for goods transport by road in Norway that does not constitute dangerous goods.

The AIBN finds it a cause for concern that safety requirements relating to goods transport appear to be significantly less stringent for road transport than for other forms of transport. Based on the current industry structure and the weak safety requirements that apply to the road transport industry, the AIBN believes that the road traffic safety level should be increased by implementing relevant measures and impact efforts. In the AIBN's view, political, societal and professional industry measures could prove useful in this context.

⁶⁹ Nævestad, T-O. (2019). *Sikkerhetseffekter av rammebetingelser: En litteraturstudie av profesjonell veitransport.*

9. CONCLUSION

Traditionally, work-related road traffic safety measures have targeted drivers (the micro-level) more than organisations (the meso-level) and framework conditions (the macro-level).

However, the safety level in the road transport sector is influenced by the requirements set by those ordering transport assignments. For example, enterprises ordering transport can make contractual requirements of transport carriers that will affect drivers, for instance through safety training and road traffic safety policies.

Through the thematic investigation, the AIBN has made an analytical choice to focus on relevant framework conditions that govern goods transport by road, and on how consideration is given to road traffic safety as a result of these conditions and by enterprises ordering road transport.

The AIBN believes that findings in this investigation indicates that framework conditions influence road traffic safety. Based on the findings in the thematic investigation, it should be possible to further increase the safety level in the road transport sector by introducing road traffic safety measures relating to regulations, supervision and safety requirements, and to the implementation of relevant measures by the transport industry.

The findings in the thematic investigation also underpin that there is a great potential for improvement relating to whether those ordering transport assignments give due consideration to road traffic safety when selecting suppliers, drawing up contracts, ordering transport and following up suppliers. However, the AIBN regards it as decisive that enterprises ordering transport assignments themselves take responsibility for and follow up safety in connection with road transport.

Safe transport by road is desirable for both safety and efficiency reasons. In the AIBN's opinion, road traffic safety should be regarded as a quality advantage and competitive advantage, in addition to a social responsibility. The AIBN therefore believes that it is necessary to increase the safety level in the road transport sector by getting all parties in the transport chain – from the enterprise ordering transport to the driver – to focus more on road traffic safety.

10. SAFETY RECOMMENDATION

The Accident Investigation Board Norway (AIBN) issues the following safety recommendation⁷⁰:

Safety recommendation ROAD No 2020/02T

Based on four serious road traffic accidents that occurred in winter 2019, the AIBN has mapped the parties involved in the ordering and performance of the transport assignments carried out by the heavy goods vehicles in question. The thematic investigation has focused in particular on attitudes to, and activities relating to, road traffic safety among the parties ordering transport assignments. The overarching framework conditions for ordering goods transport by road have also been examined. The findings in the investigation underpin that there is a great potential for improvement as regards giving due consideration to road traffic safety both when ordering transport assignments and through overarching framework conditions. Based on the thematic investigation, the AIBN sees a need for all parties in the transport chain to give stronger emphasis to traffic safety work in connection with goods transport by road.

The Accident Investigation Board Norway (AIBN) recommends that NHO Logistikk og Transport (the Norwegian Logistics and Freight Association) initiate and coordinate impact efforts aimed at improving road traffic safety in connection with goods transport by road in Norway.

Accident Investigation Board Norway

Lillestrøm, 27 April 2020

⁷⁰ The investigation report is submitted to the Ministry of Transport and Communications, which will take the necessary steps to ensure that due consideration is given to the safety recommendations, cf. the Regulations of 30 June 2005 on Public Investigation and Notification of Traffic Accidents etc. Section 14.

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APPENDICES

Appendix A: Factual information about four accidents involving heavy goods vehicles

Appendix B: Assessment of the sequences of events

APPENDIX A – FACTUAL INFORMATION ABOUT FOUR ACCIDENTS INVOLVING HEAVY GOODS VEHICLES

INTRODUCTION

The following sections describe key aspects of the four road traffic accidents included in the thematic investigation, including the sequence of events, scope of injuries/damage, weather and driving conditions and technical information about the vehicles. The AIBN has obtained factual information about the road traffic accidents from the police, the NPRA and affected parties.

ROAD TRAFFIC ACCIDENT ON THE E8 ROAD NEAR NORDKJOSBOTN IN TROMS, 7 JANUARY 2019

Sequence of events

On Monday 7 January, a heavy goods vehicle was heading from Tromsø in the direction of Vollan on the E8 road. A passenger car was travelling in the opposite direction. Approximately one kilometre northwest of Nordkjosbotn, as the heavy goods vehicle was going downhill, the trailer started to skid, entered the opposite lane and collided with an oncoming passenger car. Witnesses have described that the tractor unit also skidded prior to the collision.

The collision pushed the passenger car off the roadway onto the side terrain on the right-hand side of the road. The heavy goods vehicle came to a stop next to the roadway approximately 680 metres from the passenger car's final position. The driver has stated that he was unable to stop the vehicle sooner because of the local driving conditions.

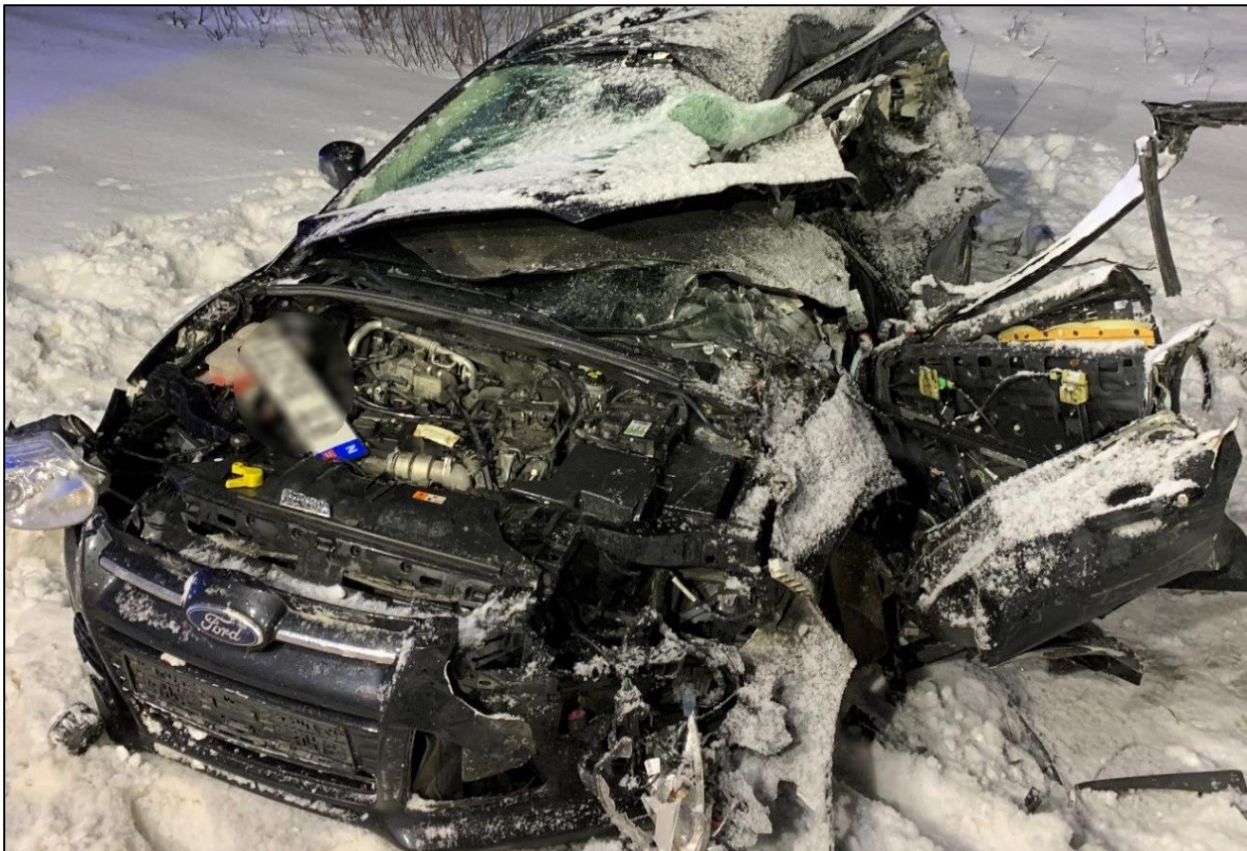


Figure 1: The passenger car sustained extensive damage in the collision with the heavy goods vehicle. Photo: The police

Personal injuries and material damage

The passenger car sustained extensive material damage, with the worst damage being to the front and along the left-hand side of the vehicle (cf. Figure 1). The driver of the passenger car, a 22-year-old man, was critically injured in the accident, and was transferred by ambulance to the University Hospital of Northern Norway. He was wearing a seatbelt when the accident occurred. On 21 March 2019, the driver of the passenger car died as a result of the injuries he sustained in the collision.

Weather and driving conditions

Response personnel who arrived on the scene of the accident described the roadway as very slippery. The weather conditions were variable, with wind and precipitation in the form of snow. The police have stated that the air temperature when they arrived on the scene was 0 °C. The police measured the friction at the scene of the accident to between 0.15 and 0.2.

Speed

Tachograph data show that the heavy goods vehicle was travelling at a speed of between 84 and 91⁷¹ km/h during the final 30 seconds before the collision. During this period, the heavy goods vehicle had travelled about 670 metres, at an average speed of approximately 87 km/h. According to the NPRA's expert report, based on tachograph data, the vehicle was travelling at a speed of 88⁷⁰ km/h at the time of impact.

The section of road had signs showing a special speed limit of 90 km/h, while the maximum permitted speed limit for the heavy goods vehicle was 80 km/h⁷².

Heavy goods vehicle driver

The driver of the heavy goods vehicle, a Lithuanian national, was 56 years old at the time of the accident. He had been performing transport assignments to other countries since 1993, and to and from Norway for about five years, in both summer and winter. The driver sustained no physical injuries in the accident. He was not wearing a seatbelt when the accident occurred.

The NPRA's expert report concludes that provisions on driving and rest periods were met at the time of the accident.

Vehicle and load

The heavy goods vehicle consisted of a triple-axle Volvo FH 12 tractor unit with a double-axle Krone ZZ trailer, both registered in Lithuania. The tractor unit's odometer reading when it was inspected after the accident was 606,851 km.

At the time of the accident, both the tractor unit and the trailer were equipped with winter tyres of the 'M+S' type ('Mud and Snow'). The tyres on the tractor unit were inspected by the police and found to be of good quality and in good condition. The tyres on the trailer were considered to be

⁷¹ The margin of error of the registered speed is +/- 6 km/h.

⁷² Section 13(4) of the Regulations of 21 March No 747 relating to pedestrian and vehicle traffic (the Traffic Rules) states as follows: 'On sections of road subject to a special speed limit exceeding 80 km per hour, the maximum speed limit for motor vehicles with a maximum authorised mass exceeding 3,500 kg and motor vehicles with a trailer is 80 km per hour'.

unsuited for driving on snow and ice-covered roads, as only the foremost pair of dual wheels had lengthwise grooves. The driver had not fitted the tyres with snow chains at the time of the accident.

The NPRA wrote the following in its expert report about the trailer's tyres:

The tyres on the centre-axle trailer were of varying condition and suitability given the road conditions on the day of the accident. However, all the tyres on the tractor unit and the centre-axle trailer meet the regulatory requirements for vehicles exceeding 3,500 kg (Section 1-4 of the Regulations on the Use of Vehicles).

(...) The tyres are approved and satisfy the requirements for winter use; however, given the road conditions at the time of the accident, the tyres are unsuited for use without additional securing, for example with snow chains.

The trailer was not loaded at the time of the accident, and the heavy goods vehicle weighed a total of 20,200 kg. The NPRA did not find any faults or defects when inspecting the condition of the vehicle.



Figure 2: Damage to the left-hand side of the trailer. The red circle marks the point of impact with the passenger car. Photo: The NPRA

ROAD TRAFFIC ACCIDENT ON THE RV 3 ROAD NEAR STOR-ELVDAL IN HEDMARK, 2 FEBRUARY 2019

Sequence of events

On Saturday 2 February 2019, a heavy goods vehicle was travelling south along the RV 3 road near Stor-Elvdal. A snow clearance vehicle was travelling in the opposite direction. In a right-hand bend near Messelt, the driver lost control of the heavy goods vehicle, which entered the opposite lane and hit the crash barrier on the left-hand side of the road. After hitting the crash barrier, the vehicle continued in the opposite lane for approximately 15 metres before colliding with the oncoming snow clearance vehicle. The point of impact was on the latter vehicle's side of the road.

The crash was so powerful that the plough of the snow clearance vehicle was straightened out, thereby acting as a ramp for the heavy goods vehicle, which ran up into the driver's cab of the snow clearance vehicle. The collision pushed the snow clearance vehicle several metres backwards, and into the opposite lane (cf. Figure 3).

After the collision, the heavy goods vehicle came to a stop with its front in the opposite lane, approximately 18 metres from the point of impact. Another heavy goods vehicle travelling south ran into the stationary heavy goods vehicle, and then continued past the accident site without stopping. Then, another four vehicles (three lorries and a passenger car) either ran off the road or into each other at the accident site.



Figure 3: The final positions of the vehicles involved. Photo: The police

Personal injuries and material damage

The snow clearance vehicle sustained extensive material damage, with the worst damage being to the front and the driver's cab (cf. Figure 4). The top of the driver's cab was split in two in the collision, and the NPRA concluded in its expert report that there was no survival space in the driver's seat.

The driver of the snow clearance vehicle, a 45-year-old man, was thrown out of the driver's cab and was left lying on the road under the heavy goods vehicle. He was transferred to the trauma unit at Hamar Hospital by ambulance helicopter, with extensive injuries to the left side of his body. In its expert report, the NPRA concluded that the driver of the snow clearance vehicle was not wearing a seatbelt at the time of the accident.



Figure 4: The snow clearance vehicle sustained extensive damage in the collision with the heavy goods vehicle. Photo: The police

Weather and driving conditions

Response personnel who arrived on the scene of the accident described the roadway as snow-covered and very slippery. The first ambulance helicopter requisitioned to the accident site was forced to interrupt its flight because of the challenging weather in the area, with poor visibility and precipitation in the form of snow. The police have stated that the air temperature when they arrived on the scene was -8°C . The NPRA measured the friction at the accident site to 0.2.

Speed

Tachograph data show that the heavy goods vehicle that entered the opposite lane was travelling at a maximum speed of 88^{73} km/h approximately ten seconds before the collision. According to the NPRA's expert report, based on tachograph data, the heavy goods vehicle was probably travelling at a speed of at least 79^{72} km/h when it entered the bend before the accident site, and a speed of at

⁷³ The margin of error of the registered speed is ± 6 km/h.

least 35⁷² km/h at the time of impact. The NPRA has calculated the maximum critical curve speed⁷⁴ at the time of the accident to 70 km/h. The speed limit on the section of road in question was 80 km/h.

Heavy goods vehicle driver

The driver of the heavy goods vehicle, a Ukrainian national, was 31 years old at the time of the accident. He had been driving heavy goods vehicles since 2016, and performing transport assignments in Norway for about a year. The driver sustained no physical injuries in the accident. He was not wearing a seatbelt when the accident occurred.

At the time of the accident, the driver had been driving without interruption for 43 minutes. The driver had taken his daily rest before he started driving that day. The NPRA's expert report concludes that provisions on driving and rest periods were met at the time of the accident.

Vehicle and load

The heavy goods vehicle consisted of a triple-axle Volvo FH tractor unit with a triple-axle Krone SDP 27 trailer. The tractor unit was registered in Poland and the trailer in Denmark.

The heavy goods vehicle was equipped with studless winter tyres at the time of the accident. The tractor unit was equipped with winter tyres of the '3PMSF' type ('Three-Peak Mountain Snowflake'), and the trailer with winter tyres of the 'M+S' type ('Mud and Snow'). In the police's assessment, some of the tyres were worn, but the NPRA's expert report described the tread depth of all tyres as in accordance with the applicable requirements. The driver had not fitted the tyres with snow chains at the time of the accident.

When inspecting the condition of the vehicle, the NPRA found several faults with the trailer's brakes. There was no friction coating on the brake pads, the third axle on the left-hand side had no braking power, and the braking power of the trailer did not meet retardation requirements. The NPRA nonetheless concluded in its expert report that the brake faults did not contribute to the accident, since the lack of friction on the road meant that it was not possible to achieve full braking power.

The trailer was loaded with goods with a total weight of 24 tonnes at the time of the accident. In its expert report, the NPRA stated that the load had not been displaced when the vehicle was inspected after the accident, and that the load securing was approved.

ROAD TRAFFIC ACCIDENT ON THE E10 ROAD NEAR BJERKVIK IN NORDLAND, 15 FEBRUARY 2019

Sequence of events

On Friday 15 January 2019, a heavy goods vehicle was travelling on the E10 road in the direction of Bjerkevik. A passenger car with three occupants was travelling in the opposite direction. Just west of Bjerkevik, as the heavy goods vehicle was travelling downhill, the trailer started to skid, entered the opposite lane and collided with the oncoming passenger car.

⁷⁴ The maximum speed the heavy goods vehicle could drive through the bend before the accident site without entering the opposite lane.

After the collision, the passenger car came to a stop in its own lane, partly in/along the roadway, while the heavy goods vehicle jack-knifed and ended up partly outside the roadway approximately 50–100 metres from where the passenger car ended up (cf. Figure 5).

Personal injuries and material damage

The passenger car sustained extensive material damage, with the worst damage being to the front and along the left-hand side of the vehicle (cf. Figure 6). The driver of the passenger car, a 59-year-old man, was seriously injured in the accident, and the two passengers sustained minor injuries. All three were transferred to Narvik Hospital by ambulance. Both of the drivers involved in the accident were wearing seatbelts.



Figure 5: The heavy goods vehicle came to a stop partly outside the roadway. Photo: The police



Figure 6: The passenger car sustained extensive damage in the collision with the heavy goods vehicle.
Photo: The police

Weather and driving conditions

Response personnel who arrived on the scene of the accident described the roadway as ice-covered and very slippery. The police have stated that the air temperature when they arrived on the scene was 0 °C. Neither the police nor the NPRA carried out friction measurements at the site.

Speed

Tachograph data show that the heavy goods vehicle was travelling at a speed of between 65 and 80⁷⁵ km/h during the final 53 seconds before the collision. During this time period, the heavy goods vehicle had travelled about 1,054 metres, at an average speed of approximately 72 km/h. According to the NPRA's expert report, based on tachograph data, the vehicle was probably travelling at a speed of 57⁷⁴ km/h at the time of impact. Tachograph data also show that the driver of the vehicle reduced the speed from 80 to 57⁷⁴ km/h during the last nine seconds before the collision.

The speed limit on the section of road in question was 80 km/h.

Heavy goods vehicle driver

The driver of the heavy goods vehicle, a Ukrainian national, was 39 years old at the time of the accident. He had been driving heavy goods vehicles since 2006, and had previously performed transport assignments to and from Norway, but not in Northern Norway. The driver sustained no

⁷⁵ The margin of error of the registered speed is +/- 6 km/h.

physical injuries in the accident. The police have not documented whether he was wearing a seatbelt at the time of the accident.

Neither the police nor the NPRA checked the driver's driving and rest periods in connection with the accident. The AIBN has requested raw data on the driver's registered working hours from the transport company. Despite repeated requests from the AIBN, the transport company has not submitted this data.

Vehicle and load

The heavy goods vehicle consisted of a triple-axle Volvo FH D3 tractor unit with a triple-axle Krone trailer, both registered in Lithuania. The vehicle was equipped with winter tyres at the time of the accident, and the police have found the tyres to be in good condition. The tractor unit was equipped with studded winter tyres, and the tread depth on all tyres was in accordance with the applicable requirements. The trailer was equipped with tyres of the 'M+S' type ('Mud and Snow') with lengthwise grooves. The driver had not fitted the tyres with snow chains at the time of the accident.

The trailer was not carrying a load at the time of the accident.

ROAD TRAFFIC ACCIDENT ON THE E134 ROAD NEAR HØYDALSMO IN TELEMARK, 12 MARCH 2019

Sequence of events

On Tuesday 12 March 2019, a heavy goods vehicle was travelling on the E134 road in the direction of Åmot. A passenger car was travelling in the opposite direction. Roadworks were being carried out on the section of road in question, and a temporary diversion route had been put in place along the new road. The route was S-shaped, with a right-hand bend followed by a left-hand bend, when viewed in the heavy goods vehicle's direction of travel. Near the exit to Kvålsgrønd, as the heavy goods vehicle was going round the right-hand bend, the trailer started to skid, entered the opposite lane and collided with an oncoming passenger car. After the collision, the passenger car remained partly in/alongside its own lane, while the heavy goods vehicle came to a stop on the side of the roadway in its own lane.

Personal injuries and material damage

The passenger car sustained extensive material damage, with the worst damage being to the front (cf. Figure 7). The driver, a 37-year-old man, was seriously injured in the accident. He was taken by ambulance to the trauma unit at Skien Hospital with a punctured lung and broken ribs. The one passenger in the car sustained no injuries in the collision. Both the driver and the passenger were wearing seatbelts.



Figure 7: The front of the passenger car sustained extensive damage in the collision with the heavy goods vehicle. Photo: The police

Weather and driving conditions

Response personnel who arrived on the scene of the accident described the roadway as very slippery, and it was snowing in the area. The police have stated that the air temperature when they arrived was 0 °C. Neither the police nor the NPRA carried out friction measurements at the site.



Figure 8: Driving conditions at the scene of the accident, seen from the heavy goods vehicle's direction of travel. Photo: The police

Speed

Tachograph data show that the heavy goods vehicle was travelling at a speed of between 60 and 67⁷⁶ km/h during the final 20 seconds before the collision. It has not been possible to ascertain the vehicle's speed at the time of the collision, but tachograph data indicate an impact speed of between 38 and 48 km/h.

A temporary speed limit of 50 km/h was in force on the section of road in question.

Heavy goods vehicle driver

The driver of the heavy goods vehicle, a Norwegian national, was 39 years old at the time of the accident. He had been driving heavy goods vehicles since 2000, and had been performing transport assignments in Norway for as many years. The driver sustained no physical injuries in the accident. The driver has informed the AIBN that he was wearing a seatbelt when the accident occurred.

Neither the police nor the NPRA checked the driver's driving and rest periods in connection with the accident. The transport company in question has not responded to the AIBN's repeated requests for documentation of the driver's registered working hours.

⁷⁶ The margin of error of the registered speed is +/- 6 km/h.

Vehicle and load

The heavy goods vehicle consisted of a triple-axle Volvo FH 12 tractor unit with a triple-axle Schmitz Cargobull trailer, both registered in Norway. The tractor unit's odometer reading when it was inspected after the accident was 55,515 km.

The heavy goods vehicle was equipped with studless winter tyres, but the driver had not fitted the tyres with snow chains at the time of the accident. The NPRA wrote the following in its expert report about the tyres on the heavy goods vehicle:

The tyres on the tractor unit and the semitrailer had the right winter tyre marking.

The tread depth on the [tractor unit's] front wheels was measured to 9 mm. The tread depth of the primary grooves on the driving axle was between 8 and 10 mm. Although this is satisfactory seen in relation to the regulations, these tyres are not good for driving under difficult conditions.

The NPRA did not find any faults or defects when inspecting the condition of the vehicle.

At the time of the accident, the trailer was loaded with letters and parcels, estimated by the transport carrier to weigh a maximum of eight tonnes in total. The NPRA's expert report stated that the load securing was satisfactory.

APPENDIX B – ASSESSMENT OF THE SEQUENCES OF EVENTS

The four road traffic accidents happened as a result of the drivers, for various reasons, losing control of their vehicles, leading to the heavy goods vehicles entering the opposite lane in whole or in part and subsequently colliding with an oncoming vehicle.

In all four accidents, the weather and driving conditions at the scene of the accident were very challenging. At the same time, analyses of tachograph data have shown that the heavy goods vehicles were travelling at high speed prior to the collisions with the oncoming vehicles, especially seen in relation to the prevailing weather and road conditions. In two of the cases, the heavy goods vehicles were also travelling at a speed exceeding the speed limit at the time of the collision. Although the speed is directly attributable to the drivers' driving behaviour, the AIBN also considers the choice of speed to be a symptom of systemic safety problems⁷⁷, since factors relating to the transport system may impact drivers' risk behaviour (Nævestad, 2019).

Both Norwegian and foreign drivers and vehicles were involved in the four road traffic accidents in question. The investigation has shown that age, general driving experience and experience of driving in Norway in winter are factors that have varied between the four drivers involved. The technical factors involved in the accidents can be summarised as follows: the tractor units were all triple-axle vehicles, the trailers were either double or triple-axle vehicles, and the tyres on all the heavy goods vehicles were in accordance with the applicable requirements. However, none of the heavy goods vehicles were equipped with snow chains at the time of the accident.

None of the drivers had chosen to use snow chains prior to the collisions, despite demanding driving conditions. The AIBN does not rule out that the use of snow chains could have reduced the likelihood of the drivers losing control of their vehicles. At the same time, the AIBN also considers this factor to be a symptom of systemic safety problems, as both the enterprises ordering transport and the transport companies can specify conditions for the use of safety equipment on heavy goods vehicles in winter, in connection with the ordering and planning of transport assignments.

In this thematic investigation, the AIBN has chosen to look at the behaviour of the drivers involved in the four accidents from a system perspective, and the same perspective should form the basis for measures to reduce high-risk behaviour. Differences between the drivers (including length of driving experience), and similarities in the technical specifications of the heavy goods vehicles involved, also underpin the need for considering road traffic safety in light of both organisational and systemic factors, as assessed in Chapters 4–7 of this report.

⁷⁷ A systemic safety problem is a risk factor that an organisation or authority has a certain degree of control of and responsibility for. Systemic safety problems usually refer to problems with risk management, barriers or other organisational and management factors, as well as weaknesses in framework conditions that impact on the effectiveness of risk management (cf. section 1.2.2).