

## **Freight transport policy and measures in Norway**

*Senior Adviser Hans Silborn, Norwegian Public Roads Administration*

Norway is a sparsely inhabited country with a lot of mountains and fjords and 5 months of winter. We have 3.7 million registered vehicles and 91 450 kilometres of public roads. Of these are 26 800 km national roads. The trunk road network is 8 600 km. The Norwegian Public Roads Administration is a directorate under the Ministry of Transport and Communications.

The main features of the Governments transport policy are presented in the current National Transport Plan for the period 2006-2015.

The Government adopts the following five main goals for transport policy:

- *Fewer fatalities and serious injuries on the roads* and a continued high level of safety in other modes of transport
- *More environmentally sound urban transport* – with reduced dependence on private cars and increased public transport
- *Improved traffic flow in and between regions* in order to promote development of viable districts and growth-oriented housing and labour markets while meeting the transport needs of business and industry
- *A more efficient transport system*, increasing the element of competition in order to bring about the best possible transport provisions for the total investments in transport.
- *A transport system which is accessible for all people*, and a transport service which makes it possible for all people to participate in an active life

These goals are also applicable for freight transport. The third goal is possibly the most important for freight transport. Improved road transport is essential to meet the needs from trade and business. Most of the country's overland transport goes by road, and the road network also plays an important role in linking other forms of transport. Most transport goes by road at one or both ends of its journey.

The Government has a strategy where road toll financing of long, continuous stretches of trunk roads coupled with increased state allocations will provide a basis for a more rapid development of the trunk road network in central areas. In the rural road network maintaining and investments in existing roads will be strengthened. It is also of major importance for rural areas that safe and reliable transport is secured by means of increased investment in rockslide and avalanche prevention and reduction of bottlenecks.

In the National Transport Plan the Government also says that it is an important goal to enable more freight transport to be carried out by sea and rail. Achievement of such a transition involves a considerable challenge. Heavy trends in industrial and social development are pulling in the opposite direction. This is a challenge we share with the rest of Europe. However, there are considerable differences between Norway and the EU as regards both environmental and traffic flow problems. The solutions in Norway must therefore be adapted to Norwegian conditions.

## **Freight transport flows**

Norway exports a lot of oil, gas and fish, but also some industrial products, mainly to EU countries and America. The import to Norway is dominated by consumer goods from Sweden, America, Asia, Germany and Great Britain, but we also import a lot from other EU countries. Our trade with Africa is limited.

About 90 percent of the export and 80 percent of the import are transported by ship. However, the last ten-year period the freight transport crossing the boarder between Norway and Sweden by truck has increased with more than 60 percent. Freight transport by railway over the Norwegian boarder is of less importance.

Regarding domestic freight transport ships transport the same quantity as trucks, measured in ton kilometre. The railway has a small market share over all, but is important on some routes especially between the large cities. About 80 percent of the goods are carried less than 50 kilometres, and on these distances there are no alternatives to the truck.

In terms of tonnage the sea route along the Norwegian west coast is the most important freight transport corridor in Norway. In terms of economic value the road transport corridors to and from Oslo are of equal importance. Oslo is the most important hub in the Norwegian freight transport system.

In the last thirty years freight transport by truck has increased with over 300 percent, while sea transport has increased with about 35 percent and railway transport has been stagnant. The last ten-year period freight transport with heavy vehicles (with maximum loads over 17.5 ton) on the road system has increased with more than 600 percent. According to the forecasts the market share of road transport will continue to increase.

In domestic freight transport there are real competition interfaces between the transport modes only for transport of general cargo on long distances. In general, both sea transport and railway transport gets more important the longer the transport distance is.

## **Transition of freight transport from road to sea and rail**

Is it possible to turn the trends and get freight transport moved from road to sea and rail?

The researchers give us some advices:

- Change the organisation and management of the public transport infrastructure and the means of transport.
- Improve the infrastructure that is connecting harbours and railway terminals to the trunk road system.
- Make provisions for a concentration of cargo in nodes and corridors, so that there is a sufficient cargo basis to set up new intermodal transport services.
- Promote the use of containers or other intermodal loading units.
- Increase the efficiency in freight terminals, sea transport and railway transport.
- Affect the transport costs for long distance truck transport through taxes and fees.
- Improve the information of intermodal transport services.
- Remove bottlenecks in intermodal cross border freight transport

Trade and business in Norway says that the road system is the most important for them. According to a survey about a fourth of firms transporting their goods by truck are able to shift to sea or railway under certain conditions. Therefore business people warn us that increased fees on road transport will lead to higher costs, but with the same modal split as earlier. Instead, they say, you have to make sea and rail transport more attractive.

The government's policy is to make provisions for transition to sea and railway transport where this is possible and efficient. Following measures are supporting this policy:

- Investments in railway infrastructure and terminals
- Adopting of a new port structure
- Taxation policy and infrastructure fees
- Feeder trunk roads to important terminals and national harbours
- Implementation of systems for better information flow
- Research and development

### **Investments in railway infrastructure**

The railway system must compete with road transport on reliability, quality, price and flexibility to strengthen its competitiveness. In order to contribute to this the National Transport Plan includes new double tracks and crossing tracks, upgraded carrying capacity and tunnel sections as well as improved railway freight terminals. (The National Railway Administration owns and finances the main infrastructure in these terminals. Norway has 13 railway freight terminals operated mainly by Cargo Net, a partly state owned railway company.) Freight transport shall be given increased priority on the rail system.

### **A new port structure**

The private sector has normally the responsibility for facilities for freight transport, such as terminals, lifting cranes, containers, vehicles, etc. The public sector has the responsibility for road and rail infrastructure, airports and some parts of the sea infrastructure. The municipalities usually own the ports, but a few of them are also private owned. None of them are owned by the state. The state is normally not involved in freight terminals in Norway. However, the state owns the infrastructure in larger railway terminals to be a guarantee for competition for freight transport on rail.

In spite of the lack of responsibility for ports, the Government wishes to provide for development of ports to strengthen sea transport and stimulate commercial and industrial development in the districts. If sea transport is to gain ground in the competition with land transport as regards both price and quality, the ports must have a volume of general cargo and containers that provides a basis for frequent and regular calls by ships. A precondition for success in this is that the handling of general cargo and containers is mainly concentrated in a limited number of ports.

The Government has therefore adopted a new port structure, consisting of ten national ports and other ports. The Government anticipates that the national ports will be developed in such a way that they have a standard and are able to handle a volume of goods permitting regular and frequent calls by ships for purposes of general cargo and containers. Other ports will primary serve local communities and local commerce and industry.

The Government has so far not suggested any new measures to support national ports. One ambition is to give these ports good access to trunk roads and the railway system.

### **Taxation policy and infrastructure fees**

It is necessary to maintain a balance between the desire to provide transport services to commerce and industry and the general public, and the damage to society brought about by transport use. The Government views taxation and fee policy as an important instrument in maintaining such a balance. The Government wants to ensure equal framework conditions for the various transport sectors. Socio-economically appropriate tax and fee structures are an important element of such a policy. This will ensure better correspondence between prices and social transport costs.

Development of the infrastructure of the transport sector is partly financed directly via the fiscal budget, i.e. via the ordinary taxation policy, and partly via user fees. In this area too, the Government will make provisions for the most efficient arrangements.

The choice of the form of financing may have major effects on the competitiveness of the various means of transport. Financing should be viewed in connection with tax policy in relation to the various transport sectors. The Government plans to prepare better analyses with a view to the consequences of the choice of financing structure for infrastructure and services in the transport sector. The work will form part of an overall strategy for meeting the various objectives in the transport area.

There are no specific public subsidies to intermodal transport in Norway, except to the infrastructure in railway freight terminals. Indirectly there are some subsidies to railway transport through the policy of pricing of infrastructure. According to today's policy there are no user fees to pay for investments in the railway infrastructure. Freight transport on rails pays a small amount for the use of the railway infrastructure, but far less than the social costs. This policy is indirectly a way to subsidize railway transport. In opposite, user fees in shipping are higher than the social costs. The current system for pricing sea transport is therefore an obstacle for intermodal transport with sea transport as one part. Heavy road vehicles probably do not pay their fully social costs.

There is a debate in progress of the possibility for the state to support new intermodal transport solutions. The Government has so far not suggested any new measures to support new intermodal transport. However, through Norwegian participation in the EU Marco Polo program the Government hopes it will be possible to make funds available for measures that can assist in reducing market barriers to intermodal transport.

### **Feeder trunk roads to important terminals and national harbours**

It is an ambition to give important ports and other freight terminals good connection with the trunk road system. This is not considered as a large problem in Norway today. However, it is a debate between road authorities and the Coastal Administration about the extent of this problem.

## **Implementation of systems for better information flow**

An important contribution involves providing for information flow between the various transport sectors and with transport users. In cooperation between users, researchers and the administration, a joint framework is being developed for data interchange in the transport system (ARKTRANS). The Ministry of Transport and Communications anticipates that this will be implemented when the various players develop electronic services in the transport sector.

## **Research and development**

Both the Government and the transport authorities support research and development to strengthen intermodal freight transport.

The Norwegian Public Roads Administration has, together with the Rail Administration and Coastal Administration, supported a project at Institute of Transport Economics about general cargo terminals in Norway. This project shows that existing terminal structure is not efficient enough.

The transport authorities, with funds also from the Norwegian Research Board, have this year started a large project to analyse the efficiency in individual general cargo terminals in Norway and present best practise. A few international freight terminals are also joining the project. The result from this project will be presented in 2006.

## **Providing freight transport on the national road network**

The National Transport Plan gives priority to the trunk road system. The most important parts will be given a standard according to the highway standards & specifications, while parts with less traffic will get a lower standard that however still is acceptable for truck transport. Maintenance and operation will continued be of high quality. It should be possible to travel safe and fast also in wintertime. We prioritize measures that can contribute to good regularity for truck transport.

The Norwegian Public Roads Administration (NPRA) has to adept our measures to the increased use of heavy vehicles on the roads. We are now considering an expansion of maximal loads on national roads from 50 to 56 ton. This can not be done without improvements of some of our bridges.

Many of our tunnels are also obstacles for truck transport. They are built with headroom of minimum 4.0 metres, but a lot of trucks are higher than that. We therefore consider an enlargement of tunnel sections in tunnels, which are of special importance for freight transport.

On the web site of the NPRA there is a lot of information that could be of great value for freight transport:

- Weather reports
- Information of any problems on the state roads, such as closed roads, roads with reduced mobility caused by for example bad weather, accidents, construction or maintenance work, etc.

- A tool for calculating the shortest and fastest route between to points
- Information of laws and regulations for freight transport in Norway
- Information for foreign truck drivers about how to handle winter conditions in Norway, and what equipment is required

In large urban areas NPRA monitors the traffic situation on the trunk road network by cameras. Therefore it is easy to re-route the traffic, inform the drivers by the radio and web site or carry through other measures to solve the immediate problem. NPRA also monitors important tunnels to ensure safety for the road-users.

Distribution of goods in urban areas demands a special approach. NPRA wants to contribute to good connections between the trunk road network and the most important ports and freight terminals. The main problem for the distribution traffic is congestion and low accessibility to delivery places. Delivery trucks have to compete on accessible street space with public transport, private cars, parking plots, pedestrian areas and bicycle lanes. Many shops and department stores have very bad conditions for supplying of goods. In addition there is low knowledge and interest in distribution of goods among city planners. Therefore NPRA is working with a new guidance for supplying of goods in urban areas.

About 250-300 people are killed in road traffic in Norway every year. The number of accidents is going down, whilst the traffic is going up. Compared with other countries we have a high traffic safety standard, but the Vision Zero is nevertheless the basis for all traffic safety work. Trucks are involved in about 9 percent of all road accidents with casualties in Norway.

The Norwegian Public Roads Administration (NPRA) is now working with some special challenges due to freight transport on the roads.

- Driving behaviour – by training, control and campaigns
- Securing of cargo – by control and enforcement
- ADR goods – by control and enforcement
- Fire, especially in tunnels – by preventing measures

The NPRA is carrying through a lot of control measures concerning freight transport during the year. We control trucks randomly on the road and the safety standard of trucks periodical on workshops. We also control the fulfilment of the regulations of time of rest for truck drivers, by controls both in companies and on the road.

In one year NPRA is carrying through about

- 250 000 controls of trucks on the road
- 140 000 controls on the road of resting times for truck drivers
- 100 000 controls in companies of resting times for truck drivers

In wintertime controls of trucks on the road shows that especially foreign trucks not are adequate equipped for the Norwegian winter. A lot of foreign trucks are for example not equipped with chains, which is necessary in Norway in wintertime.