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Transport of Dangerous Goods in Sweden

September 2006

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SUMMARY

In order for municipalities to be able to plan their work in the safety field, a survey of the risks for accidents in the municipality must be available. The knowledge required by the municipality includes accurate and up-to-date knowledge about the amounts of dangerous goods that are transported, and the transport routes that are used.

Statistics Sweden (SCB) has carried out a survey of the transport of dangerous goods in Sweden during September 2006. The survey has been commissioned by the Swedish Rescue Services Agency. The survey covers transport by road, rail, sea and air. The survey has been extended in the case of sea transport to show the ports in the Baltic region from which dangerous goods are transported to Sweden, and to which dangerous goods are transported from Sweden.

Information has been collected by questionnaires posted to participants and from databases held by companies and authorities. Participation in the survey has been on a voluntary basis.

The reply frequency for the questionnaires distributed was:

- road: 81%
- rail: 87.5%
- sea: 66.7%
- air: 78.3%

The results are presented in maps and tables, and are available on the website of the Swedish Rescue Services Agency. The results for road and rail transport are available on the website in the form of a web-based map service.

The maps show only tendencies of how transport takes place; they are not to be regarded as “absolute truth”. The results are affected by a number of observational uncertainties and assumptions. One such is the fact that not all companies that transport dangerous goods have participated in the investigation. Seasonal variations may also have affected the result. The results provide an image of the transport flows for a single month, September 2006, and they cannot be scaled up to give annual figures.

1 INTRODUCTION

On 29 June 2006, the Swedish government commissioned (Fö2005/1439/CIV) the Swedish Rescue Services Agency to survey the transport within Sweden of dangerous goods by road, rail, sea, and air, in consultation with a number of agencies. These agencies were: the Swedish Road Administration, Swedish rail administration, the Swedish Civil Aviation Authority, the Swedish Maritime Administration, the Swedish Institute for Transport and Communications Analysis, and the Swedish Radiation Protection Authority.

The results concerning road and rail transport are to be presented to the Ministry of Defence by 1 September 2007, and those concerning air and sea transport by 1 November 2007. The survey should be published in such a manner that municipalities, county administrative boards and others involved can readily make use of the content.

Statistics Sweden (SCB) has carried out a survey of the transport of dangerous goods in Sweden during September 2006. The survey has been commissioned by the Swedish Rescue Services Agency. The survey covers transport by road, rail, sea and in the air. The survey has been extended in the case of sea transport to show the ports in the Baltic region from which dangerous goods are transported to Sweden, and to which dangerous goods are transported from Sweden. The information collected is part of the project “Transport of Dangerous Goods in the Baltic Sea (DaGoB)”, which is part of the EU INTERREG III B programme, the “Baltic Sea Region Neighbourhood Programme”.

Information has been collected by questionnaires posted to participants and from databases held by companies and authorities. Participation in the survey has been on a voluntary basis.

1.1 Background

In order for municipalities to be able to plan their work in the safety field, a survey of the risks for accidents in the municipality must be available. The knowledge required by the municipality includes accurate and up-to-date knowledge about the amounts of dangerous goods that are transported, and the transport routes that are used. Surveys have previously been carried out for road transport during the first quarter of 1994 and the fourth quarter of 1998, and for rail transport during the fourth quarter of 1996. These reports

have been important when authorities and municipalities have carried out risk analysis.

1.2 Aim

The aim of the survey has been to obtain better knowledge concerning the amount of dangerous goods that is transported and the transport routes that are used.

2 ROAD TRANSPORT

2.1 Methods

2.1.1 Data Collection

Information has been principally collected by questionnaires posted to companies that handle dangerous goods in the company's own vehicles. Some information has been collected electronically, from, for example, suppliers of petroleum products.

A total of 3,915 companies took part in the investigation. The selection of companies was taken from the register held by the Swedish Rescue Services Agency of companies with a registered safety advisor, supplemented by 25 companies nominated by the Swedish Radiation Protection Authority. These companies have subsequently been compared with information in the statistical register of vehicles in order to exclude companies that do not possess their own vehicles. Such companies have not carried out the transport under their own control.

The basis of the investigation has been the companies that transported dangerous goods under their own control during September 2006, where the term "under their own control" is used to denote the use of the company's own vehicles. This method has been used in order to obtain as accurate an image as possible of the transport routes by which the goods have been transported.

Most transport of dangerous goods consists of the transport of flammable liquids. For this reason, the six largest suppliers of petroleum products in Sweden were asked to provide information electronically detailing the amounts of diesel, heating oil, petrol and kerosene that had been transported.

The investigation covered September 2006, and 3,909 questionnaires were distributed.

2.1.2 Information requested[1]

The information that the questionnaire requested was:

- the UN number of the goods
- the quantity transported, measured in kg or m3
- nuclides, the total activity and number of packages for the transport of radioactive substances
- location of despatch, including postal code
- location of reception, including postal code, and
- transport routes (whether European road, national trunk road, minor road).

The quantity transported was specified in kg or m3 as follows:

- packages: gross weight (including the packaging)
- tank transport: net weight or volume
- bulk transport: net weight
- explosive substances and articles: net weight of explosive substance.

2.1.3 Limitations

The investigation was carried out subject to the following limitations:

- transport that did not require the vehicle to be marked with an orange-coloured plate, such as transport of limited quantities and transport in accord with 1.1.3.6 I ADR (a maximum of 1,000 points) was not included in the investigation.
- transport of empty, uncleaned, packaging and tanks was not included in the investigation.
- transit transport, where both the consignor and the consignee of the goods were located outside of Sweden, could be investigated.
- companies outside of Sweden were not included in the investigation.
- companies that act solely as consignors, without transporting the goods under their own control, were not included in the investigation.

[1] The questionnaire for road transport is included here in Appendix I.

- companies that transported diesel, heating oil, petrol and kerosene for Hydro, JET, OKQ8, Preem, Shell or Statoil were not included in the investigation, since information about such transport had already been obtained from the companies. Companies that transported goods for the companies listed above as what is known as “collection transport” were, on the other hand, included in the investigation.

2.1.4 Route planning systems

Most answers to the questionnaire contained information about the location of despatch and location of reception. Nearly all companies, 91%, also gave information about transport routes. These companies, however, corresponded to only 20% of the quantity of information collected. This means that approximately 28,000 of the 35,000 entries in the investigation lack information about transport route. The transport routes used by the 80% have been estimated with the aid of a route planning system, Microsoft MapPoint. The route proposed by this system has been used in all cases in which both the location of despatch and the location of reception were known.

A file containing the road numbers proposed by Microsoft MapPoint was created with the aid of an auxiliary programme. This file was subsequently used in the GIS software MapInfo, and the road numbers were compared with the road numbers given in the digital database that the Swedish Road Administration had supplied for this purpose. This resulted in a digital route database, a map database, with a digital representation of the road stretches that are included in each one of the combinations of transport for which information about the route between the locations of despatch and reception was not available. Just over 10,000 digital descriptions were created. These descriptions contained the roads along their entire length – a transport between Gävle and Umeå, for example, would contain the complete E4 from Helsingborg to Haparanda – and thus the information must be limited to the correct stretch. This limitation was carried out in MapInfo, based on a map with all of the 2,000 locations that were present in the material.

The work to define the limited stretches and its examination was carried out mainly manually. The manual processing involved labelling and removing stretches of road that were not included in the route proposed by the route planning system. A criterion for the accuracy of this work was that any remaining errors, such as road links at crossroads, within urban areas, etc.,

should not affect the printed map that was to be produced. The scale used for road maps is 1:2.5 million, while the limiting work was carried out a at scale in the region 1:200,000. Where stretches of road were missing, these were labelled in the map provided by the Swedish Road Administration and then added to the route in the map generated.

This procedure gave a map database with transport routes (stretches) between different despatch and reception locations in the investigation. Information about the total quantities of dangerous goods transported in each class was added to each one of the stretches of road that were included in this database.

2.1.5 Validation of the Method

The credibility of the route planning system was checked by comparing the routes proposed by the system with those that the companies had specified as actual transport route. The comparison was carried out for 1,500 returned questionnaires, which is approximately 20% of the 7,000 replies in which the responding company specified the route selected.

The comparison faced certain difficulties; one such is that different companies have specified partially different route selections between the same locations, while another is that some roads are clearly missing from the route descriptions provided by the companies. The route planning programme Microsoft MapPoint was used for the 1,500 questionnaires for which replies had been received. The routes proposed by the programme were compared manually with the information provided by the companies. The result shows that the routes agree fully in approximately 1,000 replies (67%), while there were minor deviations in approximately 200 cases (13%). The cases in which the deviation was assessed as minor are normally cases in which the information from the company clearly lacks a part of a stretch, or where the deviation is a matter of short stretches. The routes selected differed in approximately 300 questionnaire responses (20%).

Table 1 Examples of comparisons of transport routes

Route	**Route selected by**		**Deviation**
	The company	**Microsoft MapPoint**	
Surahammar - Skövde	252,18,20,49	252,18,20,49	None
Falkenberg - Halmstad	6	6,20	None
Skoghall - Vetlanda	236,18,26,31	236,18,48,47,40,4,31	Minor
Växjö - Landskrona	23,13,113,17	6,20,4,25	Major
Mölndal - Gamleby	40,33,22	6,20,40,4,35,22	Major
Mölndal - Gamleby	40,4,35,22	6,20,40,4,35,22	None

Comments:

- Surahammar - Skövde: no deviation in selected route.
- Falkenberg - Halmstad: Road 6 and Road 20 coincide along the complete stretch. The route selected by Microsoft MapPoint is in practice the same as that selected by the company.
- Skoghall - Vetlanda: Road 26 in the description provided by the company is also known as 48/47, these figures denote the same road. Road 40 and Road 4 are missing from the description given by the company, but the transport must have passed with approximately 10 km of Jönköping.
- Växjö - Landskrona: The route selected by the company was totally different from that selected by Microsoft MapPoint, but fully practical.
- Mölndal - Gamleby: This stretch is present in two cases. The route selected by Microsoft MapPoint and that described by the company are totally different in one case. The route selected by Microsoft MapPoint and that selected by the company are the same in the other case, with the exception of short stretches of Road 20 and Road 6 (a few kilometres).

The results show that the route planning system gives the same or very nearly the same transport routes as that actual route used in 80% of cases. The routes are totally different in the remaining 20% of cases.

This means that a route that agrees well with the actual route taken can be obtained from the route planning system for the 22,000 questionnaire responses that do not specify transport routes (with the exception of routes

through urban areas). Information about transport routes is less reliable for the remaining 6,000 questionnaire replies.

The uncertainty about the transport route is greatest for flammable liquids, since a transport routes has been specified for only 12% of the transports. The route planning system has been used for the remainder. Information about transport routes is available for an average of 84% of the transports for Classes 1, 2.3, 4.2, 4.3, 5.1, 7 and 8. The route planning system has been used for the other 16%. Information about transport routes is available for an average of 35% of the transports for other classes.

The fraction of the total quantity of dangerous goods for which information about the transport routes is available is 10%. The route planning system has been used for the remaining 90%, corresponding to 1,110,000 tonnes. The uncertainty is greatest for flammable liquids: the route planning system has been used for 95% of the transported quantity of dangerous goods. The route planning system has been used for 15% of the transported quantity for Classes 1, 2.3, 4.2, 4.3, 5.1 and 5.2. Information about transport routes is available for an average of 20% of the transported quantity for other classes.

In summary, given the aim of this study, the quality has been assessed as being sufficiently good to use the route planning system in cases in which information about the route selected is not available.

2.2 Results

2.2.1 Degree of Response

Responses were received for 81% of the questionnaires distributed. The suppliers of petroleum products are not included in this figure.

All six suppliers of petroleum products to whom enquiries were addressed supplied information.

A total of 22 companies supplied information electronically.

The replies to the distributed questionnaires showed that just over 63% of the companies had not carried out road transport of dangerous goods during the month of September.

2.2.2 Mapping

Just over 91% of the companies that had carried out transport during September provided information about the transport routes. These companies, however, corresponded to only one fifth of the quantity of information collected. This means that approximately 28,000 of the 35,000 entries in the investigation lack information about transport route. The transport routes have been estimated for this 80% of entries with the aid of a route planning system.

The results from the road investigation are presented by maps that display the principal flows. The flows are shown as total flows, and they show the total quantities of dangerous goods in both directions along each stretch of road. The figures presented for quantities of goods refer to the gross weight for the transport of packages, the net weight for transport by tanks or in bulk, and the net weight of explosive substance for the transport of explosive substances. The quantity of goods has been classified into groups according to the quantity of goods, and colours have been used to display the flows within the various intervals. The road information map published by the Swedish Road Administration forms the basis for storage in the database.

The maps show the quantity in tonnes of dangerous goods that have been transported in various intervals, for each class of dangerous goods. The method used to create intervals of quantity for the road maps gave intervals of equal size. The appearance of the flows depends on the method of defining intervals. It is considered that the use of intervals of equal size gives an appropriate image of the flows. The number of intervals in each map differs, and it has been determined according to the magnitude of the quantity of goods. The map displaying the number of packages of radioactive substances is based upon the definition of three intervals. The intervals used for the map displaying the total quantity of goods and flammable liquids have been rounded off to give two or three significant figures.

One map is also presented for transport within a number of urban areas. These transports concern goods that have been transported within the limits of the relevant urban area. The despatch location and the reception location are the same in these cases. Most of these transports are transports of flammable liquids. Intervals have been defined in the map of transports within urban areas using the equal counts method.

Procedures concerning the transport of kerosene to Arlanda were changed on 1 October 2006. The changes entail a change of method of

transport and despatch location for the kerosene. The transport previously took place by road from Stockholm to Arlanda. The transport after 1 October takes place by rail from Gävle to Arlanda. This report presents both the road transport of kerosene between Stockholm and Arlanda for September, and the transport of kerosene by rail between Gävle and Arlanda during October (48,000 tonnes). See Section 3 below, “Rail Transport”.

The maps present solely the flows of dangerous goods. The dangerous goods classes describe the properties of the dangerous goods. The degree of danger and the quantity transported have not been combined in a weighted manner. This means that it is not possible to draw any conclusions concerning the locations in Sweden at which the risks are highest, based on the flows of dangerous goods.

It is not possible to add the quantities of dangerous goods transported along various stretches on the maps to obtain the total quantity of dangerous goods within one geographical region. This is because the same goods can be recorded on several stretches, and such goods would be counted double if the addition were carried out. The maps may solely be used to obtain an estimate of the quantities of dangerous goods that are transported along individual stretches of road.

2.2.3 Assumptions and Sources of Uncertainty

The maps show tendencies of how transport takes place; they are not to be regarded as “absolute truth”.

The results are affected by a number of assumptions and observational uncertainties.

- It has been difficult for respondents to supply information about transport routes and the selection of routes. One reason for this is that certain companies carry out many transports during a month, and find it difficult to give the route taken by any one transport. The survey has included some companies with large fleets of vehicles. These companies in certain cases have found it difficult to collect and present the information.
- Some companies have provided information for a period shorter than one month, due to the quantity of work involved in providing the information. The information provided has been scaled up to give monthly figures in these cases.

- Not all companies that transport dangerous goods have participated in the investigation. Some large hauliers have decided not to participate in the survey.
- Seasonal variations may also affect the result. The results provide an image of the transport flows for a single month, September 2006, and they cannot be scaled up to give annual figures. Scaling up to give annual figures would require making unjustified assumptions. One such assumption is that the period of the investigation was representative for other periods of the year. Another such assumption is that no changes take place with respect to transport structure during the year, nor does the demand for dangerous goods change.
- An examination by experts from the Swedish Radiation Protection Authority (SSI) has shown that certain information is missing from the investigation with respect to transport of goods in Class 7. The results should therefore be viewed with a certain amount of caution.
- The route planning system may have generated erroneous route choices between the despatch location and the reception location in certain cases.

Table 2 Classes used to present results in the table, figures and maps (The maps are presented in Appendix II)

Class	**Abbreviation in table**
Sum of all classes	Total
1 Explosive substances and articles:	Class 1
2.1 Flammable gases*	Class 2.1
2.2 Non-flammable, non-toxic gases*	Class 2.2
2.3 Toxic gases*	Class 2.3
3 Flammable liquids	Class 3
4.1 Flammable solids, self-reactive substances and solid desensitized explosives	Class 4.1
4.2 Substances liable to spontaneous combustion	Class 4.2
4.3 Substances that in contact with water emit flammable gas	Class 4.3
5.1 Oxidizing substances	Class 5.1
5.2 Organic peroxides	Class 5.2
6.1 Toxic substances	Class 6.1
6.2 Infectious substances	Class 6.2
7 Radioactive materials	Class 7
8 Corrosive substances	Class 8
9 Miscellaneous dangerous substances and articles	Class 9
Sum of all classes – transport within urban areas	Transport within urban areas

*Class 2 is divided into subclasses 2.1, 2.2 and 2.3 for reporting purposes.

Table 3 Quantities transported by road in each class

Class	Weight (tonnes)	Percentage
1	1,100*	0.1
2.1	25,047	1.8
2.2	80,736	5.9
2.3	166	0.0
3	959,953	69.6
4.1	3,630	0.3
4.2	429	0.0
4.3	753	0.1
5.1	8,820	0.6
5.2	46	0.0
6.1	1,694	0.1
6.2	1,819	0.1
7	..**	..
8	172,767	12.5
9	123,163	8.9
Total	**1,380,124**	**100**

*The net weight is given for explosive substances

**Information about the number of packages was requested for transport in Class 7. This information is presented only in the maps in Appendix II.

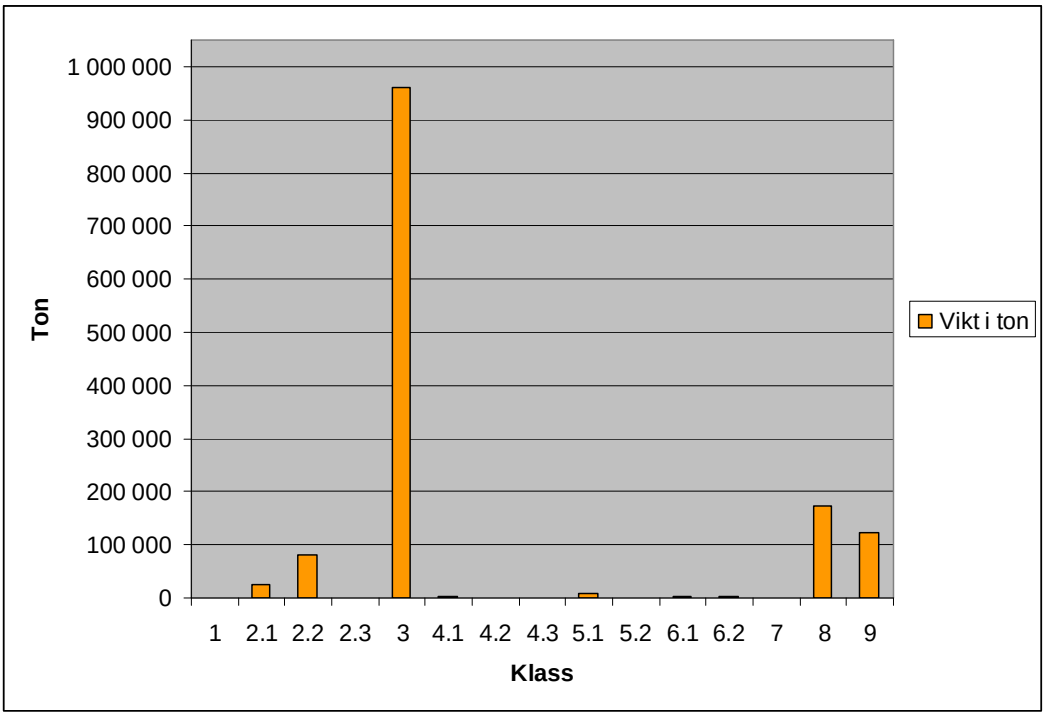


Figure 1 Quantities transported by road in each class

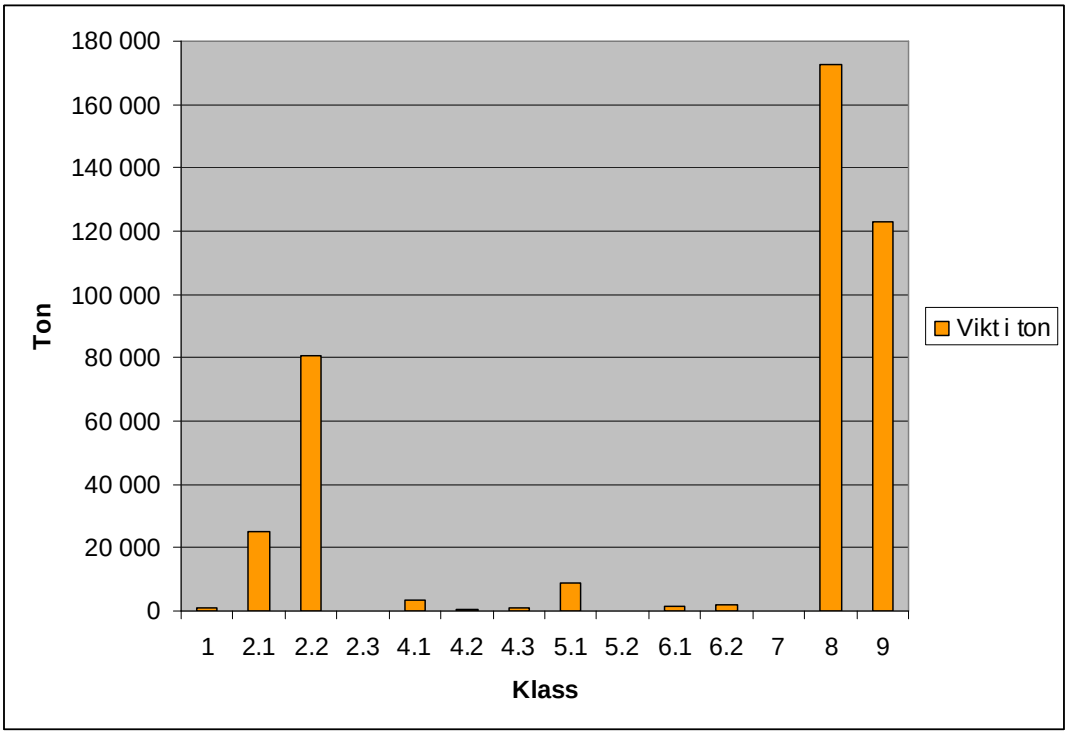


Figure 2 Quantities transported by road in each class, excluding Class 3

2.2.4 Comparison with other sources of information

The figures collected have been compared with delivery statistics from the Swedish Petroleum Institute (SPI) for diesel, heating oil, petrol and kerosene for September 2006. The comparison shows that the investigation has obtained reliable information about the flows of these substances.

Table 4 Comparison with delivery volumes from SPI, September 2006.

Product	**UN no.**	**Delivery volume from SPI (1,000 m3)**	**Quantity of goods transported (1,000 m3)**	**Difference (%)**
Petrol	1,203	454	469	3%
Diesel (including heating oil 1)	1,202	476	487	2%

[1] Source: www.spi.se

3 RAIL TRANSPORT

3.1 Methods

3.1.1 Data Collection

Information has been collected by questionnaires posted to participants and by electronic data collection from databases held by companies. All 16 railway operators active in Sweden have participated in the investigation.

The investigation covered September 2006, and 15 questionnaires were distributed.

3.1.2 Information requested[2]

The information that the questionnaire requested was:

- the UN number of the goods
- the quantity transported, measured in kg or m3
- the total activity, with respect to the transport of radioactive substances
- despatch location
- reception location, and
- transport routes (the line of the railway network).

The quantity transported was specified in kg or m3 as follows:

- packages: gross weight (including the packaging)
- tank transport: net weight or volume
- bulk transport: net weight
- explosive substances and articles: net weight of explosive substance.

3.1.3 Limitations

The investigation was carried out subject to the following limitations:

[2] The questionnaire for rail transport is included here in Appendix I.

- transport of small quantities of dangerous goods, defined as “limited quantities”, was excluded from the investigation in order to reduce the amount of work required from the companies.
- transport of empty, uncleaned, packaging and tanks was not included in the investigation.

3.2 Results

3.2.1 Degree of Response

The degree of response was 87%. It should be noted that information from databases constitutes a large majority of the total information about transports carried out during the month. Approximately 99% of the information comes from databases. Information concerning quantity obtained from databases is given in net weight.

The replies to the distributed questionnaires showed that 75% of these had not carried out rail transport of dangerous goods during the month of September.

3.2.2 Mapping

The results from the rail investigation are presented by maps that display the principal flows. The flows are shows as totals for the two directions, and show the total quantity, measured as net weight in tonnes, for each section of line. The quantity of goods has been classified into groups according to the quantity of goods, and colours have been used to display the flows within the various intervals. The description of the railway network predicted for 2008 published by Swedish Rail Administration forms the basis for storage in the database.

The maps show the quantity in tonnes of dangerous goods that have been transported in various intervals, for each class of dangerous goods. The method used to create intervals of quantity for the rail maps gave intervals of equal size. The appearance of the flows depends on the method of defining intervals. It is considered that the use of intervals of equal size gives an appropriate image of the flows. The number of intervals in each map differs, and it has been determined according to the magnitude of the quantity of

goods. The intervals used for the map displaying the total quantity of goods and displaying Class 3 have been rounded off to give two or three significant figures.

The rail flows for September have been supplemented with the flow of kerosene between Gävle and Arlanda in October. Procedures concerning the transport of kerosene to Arlanda were changed on 1 October 2006. The transport previously took place by road from Stockholm. The transport after 1 October takes place by rail from Gävle. This report presents both the road transport of kerosene between Stockholm and Arlanda for September, and the transport of kerosene by rail between Gävle and Arlanda during October.

The maps present solely the flows of dangerous goods. The dangerous goods classes describe the properties of the dangerous goods. The degree of danger and the quantity transported have not been combined in a weighted manner. This means that it is not possible to draw any conclusions concerning the locations in Sweden at which the risks are highest, based on the flows of dangerous goods.

It is not possible to add the quantities of dangerous goods transported along various stretches on the maps to obtain the total quantity of dangerous goods within one geographical region. This is because the same goods can be recorded on several stretches, and such goods would be counted double if the addition were carried out. The maps may solely be used to obtain an estimate of the quantities of dangerous goods that are transported along individual stretches.

3.2.3 Assumptions and Sources of Uncertainty

The maps show tendencies of how transport takes place; they are not to be regarded as “absolute truth”.

The results are affected by a number of assumptions and observational uncertainties.

- Not all companies that transport dangerous goods have participated in the investigation.
- Seasonal variations may change the result. The results provide an image of the transport flows for a single month, September 2006, and they cannot be scaled up to give annual figures. Scaling up to give annual figures would require making unjustified assumptions. One such assumption is that the period of the investigation was representative for other periods of the year. Another such assumption

is that no changes take place with respect to transport structure during the year, nor does the demand for dangerous goods change.

Table 5 Classes used to present results in the tables, figures and maps (The maps are presented in Appendix III)

Class	**Abbreviation on map**
Sum of all classes	Total
1 Explosive substances and articles	Class 1
2.1 Flammable gases*	Class 2.1
2.2 Non-flammable, non-toxic gases*	Class 2.2
2.3 Toxic gases*	Class 2.3
3 Flammable liquids	Class 3
4.1 Flammable solids, self-reactive substances and solid desensitized explosives	Class 4.1
4.2 Substances liable to spontaneous combustion	Class 4.2
4.3 Substances that in contact with water emit flammable gas	Class 4.3
5.1 Oxidizing substances	Class 5.1
5.2 Organic peroxides	Class 5.2
6.1 Toxic substances	Class 6.1
8 Corrosive substances	Class 8
9 Miscellaneous dangerous substances and articles	Class 9

*Class 2 is divided into subclasses 2.1, 2.2 and 2.3 for reporting purposes.

No transport of substances in Class 6.2, Infectious Substances, took place during September. Only the quantity, measured in tonnes, of substances in Class 7, Radioactive Materials, is specified. No information was received concerning the total activity. The quantity of material in Class 7 transported during September was 27.5 tonnes. This class has not been presented on the map due to reasons of security.

Table 6 Quantities transported by rail in each class

Class	Weight (tonnes)	Percentage
1	0.1*	0.0
2.1	23,178	11.1
2.2	814	0.4
2.3	7,750	3.7
3	112,370	53.9
4.1	147	0.1
4.2	120	0.1
4.3	2,385	1.1
5.1	25,039	12.0
5.2	213	0.1
6.1	2,721	1.3
6.2	0	0
7	27.5**	0.0
8	20,966	10.1
9	12,580	6.0
Total	**208,311**	**100**

**The net weight is given for explosive substances*

**No information was received concerning the total activity of material in Class 7.

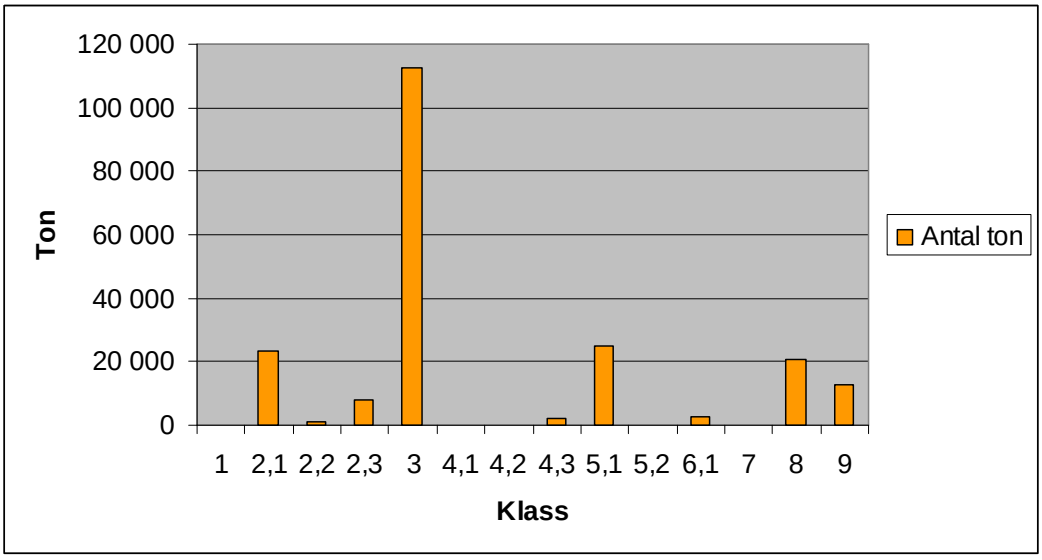


Figure 3 Quantities transported by rail in each class

4 SEA TRANSPORT

4.1 Methods

4.1.1 Data Collection

The information is principally based upon the vessel reporting system (FRS) of the Swedish Maritime Administration. Everything that is loaded or unloaded at Swedish ports, with some exceptions, is to be reported to this system. Twelve shipping companies were exempt from the requirement to report to the vessel reporting system at the time of the investigation, and questionnaires were posted to these companies.

The investigation covered September 2006, and 12 questionnaires were distributed.

4.1.2 Information requested[3]

The information that the questionnaire requested was:

- the UN number of the goods
- the quantity despatched, measured in kg or m3
- the total activity despatched, with respect to the transport of radioactive substances
- the quantity received, measured in kg or m3
- the total activity received, with respect to the transport of radioactive substances
- the despatching port, and
- the receiving port.

The quantity transported was specified in kg or m3 as follows:

- packages: gross weight (including the packaging)
- tank transport: net weight or volume
- bulk transport (tankers excluded): net weight
- explosive substances and articles: net weight of explosive substance.

[3] The questionnaire for sea transport is included here in Appendix I.

4.1.3 Limitations

The investigation was carried out subject to the following limitations:

- tankers have been excluded from the investigation
- transport of empty, uncleaned, packaging and tanks was not included in the investigation.
- dangerous goods that have left Sweden or arrived at Sweden are reported for ports in the Baltic Sea region (excluding Swedish ports).

4.2 Results

4.2.1 Degree of Response

The degree of response was 67% for the questionnaires distributed by post. This figure does not include information obtained from the vessel reporting system. It should be noted that information from the vessel reporting system constitutes a large majority of the total information about sea transport carried out during the month. Approximately 70% of the information comes from the vessel reporting system. Information concerning quantity obtained from the vessel reporting system is given in net weight.

The replies to the distributed questionnaires showed that all of the companies had carried out transport of dangerous goods during September.

4.2.2 Mapping

The results from the investigation are presented by maps that display the ports that have loaded and unloaded dangerous goods. The method used to create intervals of quantity for the maps of ports gave intervals containing equal counts. The appearance of the maps depends on the method of defining intervals. It is considered that the use of intervals of equal counts in this case gives an appropriate image of the flow. Furthermore, each port is presented in tables showing the quantities of dangerous goods loaded, unloaded and in total, and showing the quantities of goods in transit that passed the port. Goods in transit means goods that pass the port without being handled: they are neither loaded nor unloaded in the port.

It should be noted that the results presented do not include transport by tanker ships. One consequence of this is that large quantities of petroleum products are excluded from the results.

Only the quantity, measured in tonnes, of radioactive substances is specified, with the exception of information for individual ports presented in tables. The vessel reporting system does not contain information about total activity. The replies received from the posted questionnaires included information about two transports of radioactive materials, and the total activities of these are presented as a footnote in the tables containing port information.

The maps describe the situation for Swedish ports. Information is also presented for the handling of dangerous goods that have left Sweden or arrived at Sweden to or from ports in the Baltic Sea region. The dangerous goods classes describe the properties of the dangerous goods. The degree of danger and the quantity transported have not been combined in a weighted manner. This means that it is not possible to draw any conclusions concerning the locations in Sweden at which the risks are highest, based on the flows of dangerous goods.

4.2.3 Assumptions and Sources of Uncertainty

The maps and tables show tendencies of how transport takes place; they are not to be regarded as “absolute truth”. The results are affected by a number of assumptions and observational uncertainties.

- Not all shipping companies that transport dangerous goods have participated in the investigation. Some shipping companies have decided not to participate in the survey.
- Not all dangerous goods that have been transported during the period of the investigation have been reported to the vessel reporting system. This was due to the fact that the vessel reporting system was under development at the time.
- Information from the vessel reporting system has been processed to a certain extent. This was due to the fact that the completeness of information for certain variables was not sufficiently high. The quantity of goods, for example, was reported as net weight in all classes, since reporting of the gross weight variable was not complete.
- Seasonal variations may change the result. The results provide an image of the transport flows for a single month, September 2006, and

they cannot be scaled up to give annual figures. Scaling up to give annual figures would require making unjustified assumptions. One such assumption is that the period of the investigation was representative for other periods of the year. Another such assumption is that no changes take place with respect to transport structure during the year, nor does the demand for dangerous goods change.

Table 7 Classes used to present results in the maps tables and figures (Maps and tables are presented in Appendix IV)

Class	**Abbreviation in table**
Sum of all classes	Total
1 Explosive substances and articles	Class 1
2 Gases	Class 2
2.1 Flammable gases*	Class 2.1
2.2 Non-flammable, non-toxic gases*	Class 2.2
2.3 Toxic gases*	Class 2.3
3 Flammable liquids	Class 3
4.1 Flammable solids, self-reactive substances and solid desensitized explosives	Class 4.1
4.2 Substances liable to spontaneous combustion	Class 4.2
4.3 Substances that in contact with water emit flammable gas	Class 4.3
5.1 Oxidizing substances	Class 5.1
5.2 Organic peroxides	Class 5.2
6.1 Toxic substances	Class 6.1
6.2 Infectious substances	Class 6.2
7 Radioactive materials	Class 7
8 Corrosive substances	Class 8
9 Miscellaneous dangerous substances and articles	Class 9

*Results for Class 2 are divided where possible into results for subclasses 2.1, 2.2 and 2.3 for reporting purposes.

Table 8 Quantities of each class handled at ports[4]

Class	Weight (tonnes)	Percentage
1	4,532*	2.9
2**	1,340	0.9
2.1	807	0.5
2.2	3,405	2.2
2.3	690	0.5
3	50,542	32.7
4.1	1,297	0.8
4.2	151	0.1
4.3	1,534	1.0
5.1	35,362	22.9
5.2	1,777	1.2
6.1	8,016	5.2
6.2	0	0
7	327***	0.2
8	25,009	16.2
9	19,913	12.9
Total	**154,702**	**100**

*The net weight is given for explosive substances.

**Quantities are presented for Class 2 in cases where the subclasses are not known.

***Only the quantity, measured in tonnes, of radioactive substances is specified. Activities, measured in Becquerel are not given.

[4] Within the Baltic Sea region: ports in Sweden, Finland, Russia, Estonia, Latvia, Lithuania, Poland, Germany and Denmark.

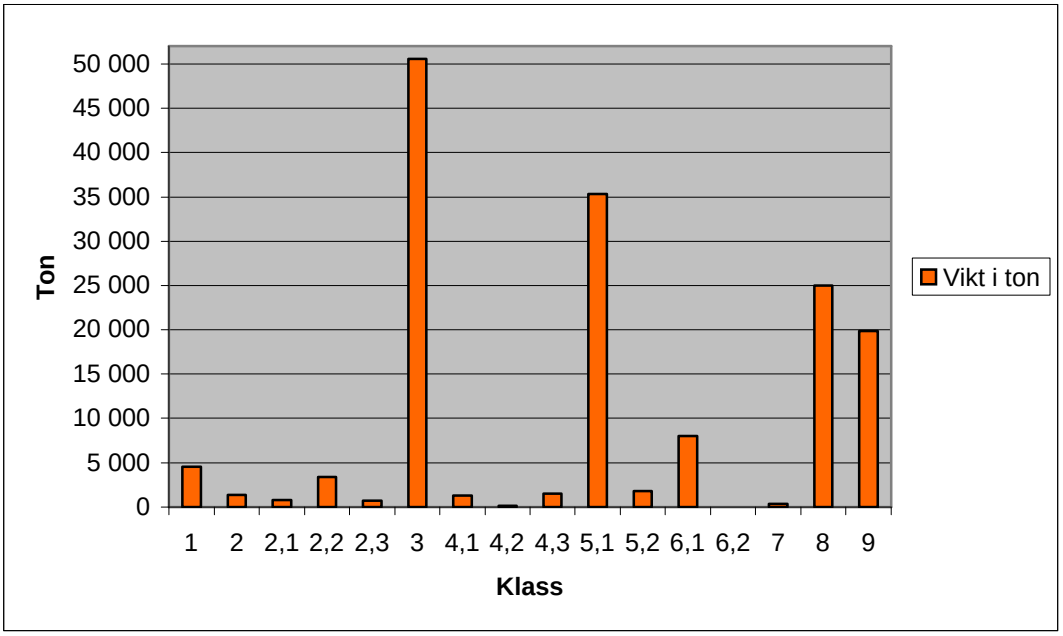


Figure 4 Quantities of each class handled at ports[5]

[5] Within the Baltic Sea region: ports in Sweden, Finland, Russia, Estonia, Latvia, Lithuania, Poland, Germany and Denmark.

5 AIR TRANSPORT

5.1 Methods

5.1.1 Data Collection

Information has been collected by questionnaires posted to 46 air freight companies listed in July 2006 by the Swedish Civil Aviation Authority as being companies with security approval.

The investigation covered September 2006, and 46 questionnaires were distributed.

5.1.2 Information requested[6]

The information that the questionnaire requested was:

- the UN number of the goods
- the quantity despatched, measured in kg or litres
- the quantity received, measured in kg or litres
- nuclides, the total activity and number of containers for the transport of radioactive substances
- the despatching airport, and
- the receiving airport.

The quantity transported was specified in kg or in litres as follows:

- packages: gross weight (including the packaging)
- explosive substances and articles: net weight of explosive substance.

5.1.3 Limitations

The investigation was carried out subject to the following limitations:

- transport denoted by the terms “consumer commodities”, “excepted quantity” and “limited quantity” was not included in the investigation.

[6] The questionnaire for air transport is included here in Appendix I.

- transport of empty, uncleaned, packaging and tanks was not included in the investigation.

5.2 Results

5.2.1 Degree of Response

The degree of response was 78%. The replies to the distributed questionnaires showed that 41% of these had not carried out air transport of dangerous goods during September 2006.

5.2.2 Mapping

The results from the air transport investigation are presented by a map that displays the airports that have despatched and received dangerous goods. Only a few airports have handled dangerous goods and the quantities that have been handled at each airport vary widely. The quantities handled are thus specified exactly on the map. It has not been possible to apply a general method of defining intervals in this map. The intervals have been adapted to be suitable for the magnitudes of the goods that have been handled. The appearance of the map depends on the method of defining intervals. The flows in both directions, outgoing and incoming, have been added, and the map shows the total quantity of dangerous goods handled at each airport.

The map displays solely the quantities of dangerous goods handled at airports. The dangerous goods classes describe the properties of the dangerous goods. The degree of danger and the quantity transported have not been combined in a weighted manner. This means that it is not possible to draw any conclusions concerning the locations in Sweden at which the risks are highest, based on the flows of dangerous goods.

5.2.3 Assumptions and Sources of Uncertainty

The maps and tables show tendencies of how transport takes place; they are not to be regarded as “absolute truth”. The results are affected by a number of assumptions and observational uncertainties.

- Not all air freight companies that handle dangerous goods have participated in the investigation. Some freight companies have decided not to participate in the survey.
- Seasonal variations may change the result. The results provide an image of the transport flows for a single month, September 2006, and they cannot be scaled up to give annual figures. Scaling up to give annual figures would require making unjustified assumptions. One such assumption is that the period of the investigation was representative for other periods of the year. Another such assumption is that no changes take place with respect to transport structure during the year, nor does the demand for dangerous goods change.
- An examination by experts from the Swedish Radiation Protection Authority (SSI) concerning the transport of goods in Class 7 has shown that certain information is missing from the investigation. The results should therefore be viewed with a certain amount of caution.

Table 9 Classes used to present results in a map, tables and figures (Map and tables are presented in Appendix V)

Class	**Abbreviation in table**
Sum of all classes	Total
1 Explosive substances and articles	Class 1
2.1 Flammable gases*	Class 2.1
2.2 Non-flammable, non-toxic gases*	Class 2.2
2.3 Toxic gases*	Class 2.3
3 Flammable liquids	Class 3
4.1 Flammable solids, self-reactive substances and solid desensitized explosives	Class 4.1
4.2 Substances liable to spontaneous combustion	Class 4.2
4.3 Substances that in contact with water emit flammable gas	Class 4.3
5.1 Oxidizing substances	Class 5.1
5.2 Organic peroxides	Class 5.2
6.1 Toxic substances	Class 6.1
6.2 Infectious substances	Class 6.2
7 Radioactive materials	Class 7
8 Corrosive substances	Class 8
9 Miscellaneous dangerous substances and articles	Class 9

*Class 2 is divided into subclasses 2.1, 2.2 and 2.3 for reporting purposes.

Table 10 Quantities of each class handled at Swedish airports

Class	Weight (kg)	Percentage
1	391*	1.4
2.1	2	0.0
2.2	557	1.9
2.3	0	0
3	2,304	8.0
4.1	420	1.5
4.2	181	0.6
4.3	0	0
5.1	2	0.0
5.2	4	0.0
6.1	61	0.2
6.2	2	0.0
7	-**	-
8	4,747	16.4
9	19,964	69.1
Total	**28,882**	**100**

*The net weight is given for explosive substances.

**The total activity in Class 7 was 3,266 GBq, in a total of 237 containers.

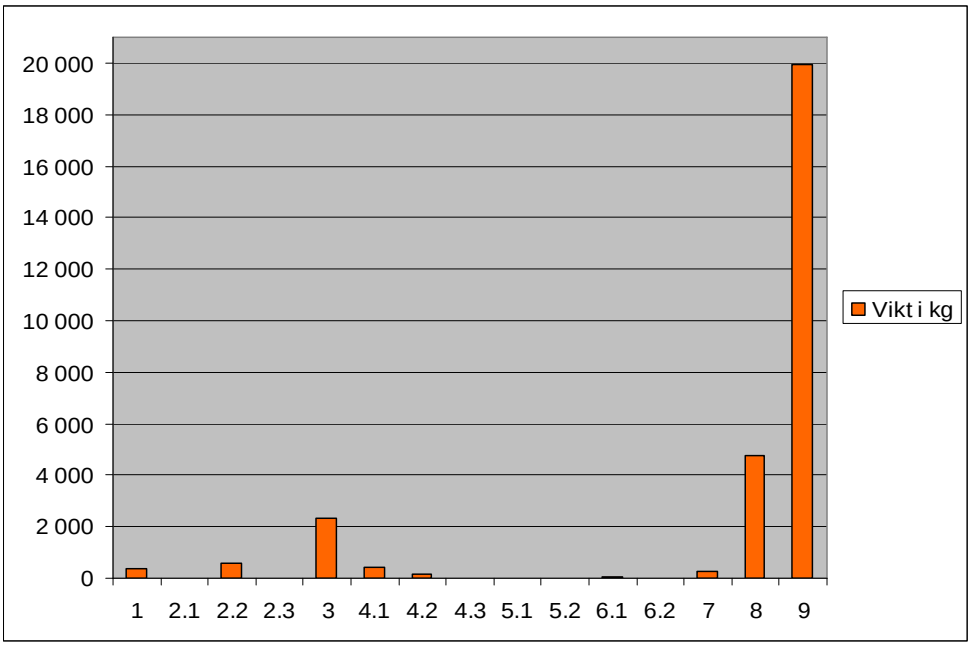


Figure 5 Quantities of each class handled at Swedish airports

APPENDIX I QUESTIONNAIRES

Lämnade uppgifter skyddas enligt 9 kap 4 § sekretesslagen (SFS 1980:100).

Samråd har skett med Näringslivets Regelnämnd (NNR) och Sveriges Kommuner och Landsting (SKL) vid utformningen av denna undersökning.

STATISTIKINSAMLING **Väg**

Transporter av farligt gods september 2006

Enkäten ska skickas in **senast den 1 november 2006** i bifogat svarskuvert eller till adress

Statistiska centralbyrån

RM/TRP – 140a

701 89 ÖREBRO

Vägtransporter av farligt gods – en statistisk undersökning för september 2006

Skicka in enkäten till SCB även om inga transporter av farligt gods har skett under mätperioden.

Ert företag ingår i undersökningen tillsammans med andra företag som transporterar farligt gods.

Undersökningen omfattar endast transporter av farligt gods som kräver att fordonen märks med orangefärgad skylt.

Om ni **endast** agerar som **avsändare** och inte transporterar gods i egen regi omfattas ni inte av undersökningen.

Observera att företag som transporterar dieselolja, eldningsolja, bensin och flygfotogen (UN 1202, UN 1203 och UN 1223) åt Hydro, JET, OKQ8, Preem, Shell och Statoil **inte omfattas** av undersökningen.
Om ni transporterar dieselolja, eldningsolja, bensin och flygfotogen som s.k. **avhämtning** ska dock enkäten fyllas i.

Undantaget gods i denna undersökning
Nedanstående typer av transporter ska **inte** anges i enkäten.

- Transporter som inte kräver att fordonen märks med organgefärgad skylt, exempelvis transport av begränsad mängd och s.k. värdeberäknad mängd ("högst 1 000 poäng"),
- transport av tömda, ej rengjorda förpackningar eller tankar, och
- transittrafik, dvs. där transporten varken har avsändare eller mottagare i Sverige.

Av svarsexemplen på omstående sida framgår hur enkäten ska fyllas i.

Övriga upplysningar kan lämnas på sista sidan.

Vägtransport av farligt gods under september månad 2006

Transporterade ni under september månad 2006, farligt gods som krävde att fordonet var märkt med orangefärgad skylt? *(Se ovan.)*

☐ Ja → **Besvara resten av enkäten**

☐ Nej → **Ange kontaktperson nedan och sänd in enkäten till SCB i bifogat svarskuvert.**

Företagets kontaktperson

Namn	Telefon (även riktnr)
E-post	Mobil

SCB RM/TRP 140a. SCB-Tryck 2006

RÄDDNINGS VERKET

Blankettutgivare	Postadress	Telefon	E-post	Fax
Statistiska centralbyrån Statistics Sweden				
Enheten för transporter	701 89 ÖREBRO	019-17 66 70	farligtgods@scb.se	019-17 65 69

2

EXEMPEL

Rad 01
En tank med 20 000 kg klorgas (UN 1017) har transporterats från Skoghall till Bohus på väg 45.

Rad 02
En tank med 25 000 kg natriumhydroxid (UN 1824) har transporterats från Karlstad till Sveg. Sträckan Karlstad–Ånge har skett på järnväg för vidare vägtransport till Sveg. Observera att endast vägsträckans vägnummer mellan Ånge och Sveg ska anges.

Rad 03
15 000 kg färgburkar i klass 3 (UN 1263) har transporterats från Göteborg till ett antal industrier och färghandlare i Borlänge.

Rad 04–05
Acetylenflaskor (UN 1001) med en total bruttovikt på 13 000 kg har transporterats från Lidingö till en depå i Karlstad. En del av flaskorna, 3 000 kg, har därefter transporterats från Karlstad till en kund i Torsby.

Rad 06
Svavelsyra (UN 1832), 20 m³, transporteras kontinuerligt i tank från Göteborg till Norge. Totalt transporteras under mätperioden 200 m³. Transporten sker på väg och via Svinesund (huvudort Strömstad ska anges).

Rad 07
25 m³ etanollösning (UN 1170) har importerats. Produkten kom in i Sverige i Stenungssund och har transporterats vidare till Halmstad.

Rad nr	Godsets UN-nr	Transporterad mängd ❶ *Uppskattad mängd kan anges om inte exakta värden finns tillgängliga.* Kg	m³	Nuklid/er (klass 7)	Total aktivitet (klass 7) i Becquerel (Bq) med prefix (t.ex. MBq, GBq, TBq)	Antal kollin (klass 7)
	01	02	03	04	05	06
01	1017	20000				
02	1824	25000				
03	1263	15000				
04	1001	13000				
05	1001	3000				
06	1832		200			
07	1170		25			
08	1950	2000				
09	1950	500				
10	1950	600				
11	0336	100				
12	2916			Ir 192	3 500 GBq	1
13	3321			Co60	20 GBq	1
14	2915			Mo 99/Tc 99m	300 GBq	15
15	2915			I 131	72 GBq	18

❶

Här ska transporterad mängd av det aktuella farliga godset anges för den enskilda transporten. Om ni kontinuerligt transporterar en typ av farligt gods till en och samma ort, behöver inte varje försändelse specificeras, utan hela mängden kan anges i en "klumpsumma".

Kolumn 02, 03
Transporterad mängd ska anges i kg eller m³ enligt följande:
– för förpackningar ska bruttovikt (förpackning ingår) anges,
– för transport i tank ska nettovikt eller volym anges,
– för transport i bulk ska nettovikt anges, och
– för exp iva ämnen och föremål ska nettovikt av explosivt ämne anges.

Kolumn 04, 05, 06
För radioaktiva ämnen i klass 7 ska nuklid/er anges i kolumn 04, total aktivitet i Becquerel (Bq) tillsammans med prefix (t.ex. MBq, GBq, TBq) i kolumn 05 samt antal kollin i kolumn 06.

Rad 08–10
Brandfarlig aerosol, 2 000 kg, (UN 1950) har under perioden transporterats mellan Stockholm och Jönköping. Från Jönköping har sedan 500 kg transporterats vidare till Växjö och 600 kg till Borås.

Rad 11
Fyrverkerier (UN 0336) med en total nettovikt explosivt ämne av 100 kg har importerats. Fyrverkerierna kom in i Sverige via Göteborg och transporterades sedan till Linköping.

Rad 12
En gammaradiograferingsutrustning (UN 2916) innehållande 3500 GBq Ir-192 har transporterats i ett kolli av typ B(U) från Örebro till Karlstad.

Rad 13
En 20-fots container innehållande brännbart radioaktivt kontaminerat avfall (UN 3321) har transporterats från Norrköping till Nyköping. Total aktivitet är ca 20 GBq med Co-60 som dominerande nuklid. Containern är klassificerad som kolli av typ IP-2.

Rad 14–15
Radioaktiva nuklider (UN 2915) för medicinsk användning har transporterats regelbundet två gånger per vecka mellan Arlanda flygplats och ett sjukhus i Stockholm. Under perioden har 15 kollin av typ A innehållande vardera 20 GBq Mo-99/Tc-99m och 18 kollin av typ A innehållande vardera 4,0 GBq I-131 transporterats.

❷ Avsändningsort i Sverige		❷ Mottagningsort i Sverige		❸ Transportväg
Postnr	Ort	Postnr	Ort	Europaväg/riksväg/länsväg
07	08	09	10	11
6 6 3 0 1	Skoghall	4 4 5 8 0	Bohus	45
8 4 1 3 1	Ånge	8 4 2 9 1	Sveg	83, 315, 314, 45
4 1 3 2 8	Göteborg	7 8 1 7 1	Borlänge	E20, 50
1 0 5 4 6	Stockholm	6 3 5 4 9	Karlstad	E18
6 3 5 4 9	Karlstad	6 8 5 9 2	Torsby	61, 45
4 1 3 2 8	Göteborg	4 5 2 9 3	Strömstad	E6
4 4 4 3 2	Stenungssund	3 0 2 5 9	Halmstad	E6
1 0 5 4 6	Stockholm	5 5 5 9 4	Jönköping	E4
5 5 5 9 4	Jönköping	3 5 2 4 6	Växjö	E4, 30
5 5 5 9 4	Jönköping	5 0 4 9 4	Borås	40
4 1 3 2 8	Göteborg	5 8 5 9 9	Linköping	40, E4
7 0 2 3 0	Örebro	6 5 3 4 0	Karlstad	E18
6 0 3 6 1	Norrköping	6 1 1 9 1	Nyköping	E4, 219
?	Arlanda	1 0 5 4 6	Stockholm	E4
?	Arlanda	1 0 5 4 6	Stockholm	E4

❷
Här ska uppgift om avsändningsort och mottagningsort lämnas.

Kolumn 07, 08
Avsändningsort i Sverige. Om ni inte känner till postnumret, ange "?". Vid internationell transport där mottagaren finns i Sverige ska den gränsort där godset förs in Sverige anges som avsändningsort.

Kolumn 09, 10
Mottagningsort i Sverige. Om ni inte känner till postnumret, ange "?". Vid internationell transport där avsändaren finns i Sverige ska den gränsort där godset lämnar Sverige anges som mottagningsort.

❸
Här ska transportvägen för den aktuella transporten anges. Om ni inte känner till transportvägen, skriv ett "?". Vi ber er att så långt som möjligt lämna uppgifter om transportvägar, då syftet med undersökningen är att kartlägga flöden av farligt gods.

4

Redovisning av transporter med farligt gods

Den period ni ska lämna uppgifter för är **september** månad **2006**.

Rad nr	Godsets UN-nr	Transporterad mängd ❶ *Uppskattad mängd kan anges om inte exakta värden finns tillgängliga.* Kg	m³	Nuklid/er (klass 7)	Total aktivitet (klass 7) i Becquerel (Bq) med prefix (t.ex. MBq, GBq, TBq)	Antal kollin (klass 7)
	01	02	03	04	05	06
01						
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

❶

Här ska transporterad mängd av det aktuella farliga godset anges för den enskilda transporten. Om ni kontinuerligt transporterar en typ av farligt gods till en och samma ort, behöver inte varje försändelse specificeras, utan hela mängden kan anges i en "klumpsumma".

Kolumn 02, 03
Transporterad mängd ska anges i kg eller m³ enligt följande:
– för förpackningar ska bruttovikt (förpackning ingår) anges
– för transport i tank ska nettovikt eller volym anges
– för transport i bulk ska nettovikt anges och
– för explosiva ämnen och föremål ska nettovikt av explosivt ämne anges.

Kolumn 04, 05, 06
För radioaktiva ämnen i klass 7 ska nuklid/er anges i kolumn 04, total aktivitet i Becquerel (Bq) tillsammans med prefix (t.ex. MBq, GBq, TBq) i kolumn 05 samt antal kollin i kolumn 06.

OBS!

Enkäten kommer att läsas optiskt i en s.k. scanner.
Vi ber er därför att texta så tydligt som möjligt.

	❷ Avsändningsort i Sverige		❷ Mottagningsort i Sverige		❸ Transportväg
	Postnr	Ort	Postnr	Ort	Europaväg/riksväg/länsväg
	07	08	09	10	11
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

❷

Här ska uppgift om avsändningsort och mottagningsort lämnas.

Kolumn 07, 08
Avsändningsort i Sverige. Om ni inte känner till postnumret, ange "?". Vid internationell transport där mottagaren finns i Sverige ska den gränsort där godset förs in Sverige anges som avsändningsort.

Kolumn 09, 10
Mottagningsort i Sverige. Om ni inte känner till postnumret, ange "?". Vid internationell transport där avsändaren finns i Sverige ska den gränsort där godset lämnar Sverige anges som mottagningsort.

❸

Här ska transportvägen för den aktuella transporten anges. Om ni inte känner till transportvägen, skriv ett "?". Vi ber er att så långt som möjligt lämna uppgifter om transportvägar, då syftet med undersökningen är att kartlägga flöden av farligt gods.

8

Övriga upplysningar

Lämnade uppgifter skyddas enligt 9 kap 4 § sekretesslagen (SFS 1980:100).

Samråd har skett med Näringslivets Regelnämnd (NNR) och Sveriges Kommuner och Landsting (SKL) vid utformningen av denna undersökning.

STATISTIKINSAMLING **Järnväg**

Transporter av farligt gods september 2006

Enkäten ska skickas in **senast den 1 november 2006** i bifogat svarskuvert eller till adress

Statistiska centralbyrån

RM/TRP – 140b

701 89 ÖREBRO

Järnvägstransporter av farligt gods – en statistisk undersökning för september 2006

Skicka in enkäten till SCB även om inga transporter av farligt gods har skett under mätperioden.

Ert företag ingår i undersökningen tillsammans med andra järnvägsföretag som transporterar farligt gods.

Undersökningen omfattar endast transporter av farligt gods som kräver att vagnarna märks med orangefärgad skylt.

Er medverkan i undersökningen är mycket värdefull för att vi skall få fram ett underlag som stämmer överens med verkligheten så bra som möjligt.

Undantaget gods i denna undersökning
Nedanstående typer av transporter ska **inte** tas med i enkäten.

– transport av s.k. begränsad mängd, och
– transport av tömda, ej rengjorda förpackningar eller tankar.

Svarsexempel
Av svarsexemplen på omstående sida framgår hur enkäten ska fyllas i.

Övriga upplysningar kan lämnas på sista sidan.

Järnvägtransport av farligt gods under september månad 2006

Transporterade ni under september månad 2006, farligt gods som krävde att vagnen var märkt med organgefärgad skylt?

☐ Ja → **Besvara resten av enkäten**

☐ Nej → **Ange kontaktperson nedan och sänd in enkäten till SCB i bifogat svarskuvert.**

Företagets kontaktperson

Namn	Telefon (även riktnr)
E-post	Mobil

SCB RM/TRP 140b. SCB-Tryck 2006

RÄDDNINGS VERKET

Blankettutgivare	Postadress	Telefon	E-post	Fax
Statistiska centralbyrån Statistics Sweden				
Enheten för transporter	**701 89 ÖREBRO**	**019-17 66 70**	**farligtgods@scb.se**	**019-17 65 69**

2

EXEMPEL

Rad 01
Tre cisternvagnar om vardera 60 000 kg och totalt 180 000 kg klorgas (UN 1017) har transporterats från Skoghall till Bohus.

Rad 02
En tankcontainer med 25 m³ natriumhydroxid (UN 1824) har transporterats på en tvåaxlig vagn från Norge till Uleåborg i Finland. I Sverige har vagnen transporterats från Riksgränsen till Haparanda.

Rad 03
15 000 kg färgburkar i klass 3 (UN 1263) har transporterats från Stockholm till Umeå. En del av denna sträcka har skett på väg, resten av transporten har skett på järnväg, i s.k. kombitransport. Järnvägstransporten har skett från Sundsvall till Umeå.
Observera att endast järnvägssträckan Sundsvall–Umeå ska redovisas.

Rad 04
Svavelsyra om 20 000 kg (UN 1832) transporteras kontinuerligt i en tankcontainer från Göteborg till Norge. Totalt har under perioden 240 000 kg transporterats.

Rad 05
En cisternvagn med fluorvätesyra (UN 1790) med volymen 40 m³ har transporterats från Tyskland till Norrköping. I Sverige har cisternvagnen transporterats från Malmö till Norrköping.

Rad 06
En 20-fots container innehållande brännbart radioaktivt kontaminerat avfall (UN 3321) har transporterats från Trelleborg till Norrköping via Malmö. Total aktivitet är ca 20 GBq med Co-60 som dominerande nuklid. Containern är klassificerad som kolli av typ IP-2.

Rad nr	Godsets UN-nr	**Transporterad mängd** ❶ *Uppskattad mängd kan anges om inte exakta värden finns tillgängliga.*			**Avsändningsort** ❷
		Kg	**m³**	**Total aktivitet** (klass 7) i Becquerel (Bq) med prefix (t.ex. MBq, GBq, TBq)	**Ortnamn**
	01	02	03	04	05
01	1017	180000			Skoghall
02	1824		25		Riksgränsen
03	1263	15000			Sundsvall
04	1832	240000			Göteborg
05	1790		40		Malmö
06	3321			20 GBq	Trelleborg

❶

Här ska transporterad mängd av det aktuella farliga godset anges för den enskilda transporten. Om ni kontinuerligt transporterar en typ av farligt gods till en och samma ort, behöver inte varje försändelse specificeras, utan hela mängden kan anges i en "klumpsumma".

Kolumn 02, 03
Transporterad mängd ska anges i kg eller m³ enligt följande:
– för förpackningar ska bruttovikt (förpackning ingår) anges,
– för transport i tank ska nettovikt eller volym anges,
– för transport i bulk ska nettovikt anges, och
– för explosiva ämnen och föremål ska nettovikt av explosivt ämne anges.

Kolumn 04
För radioaktiva ämnen i klass 7 ska total aktivitet i Becquerel (Bq) tillsammans med prefix (t.ex. MBq, GBq, TBq) anges.

3

	Mottagningsort ❷	Transportväg ❷
	Ortnamn	Banor på järnvägsnätet
	06	07
01	Bohus	Värmlandsbanan, Norge/Vänernbanan
02	Haparanda	Malmbanan, Haparandabanan
03	Umeå	Mittbanan, Norra stambanan, Stambanan genom övre Norrland, Vännäs-Holmsund
04	Strömstad	Norge/Vänernbanan
05	Norrköping	Södra stambanan
06	Norrköping	Kontinentalbanan, Södra stambanan

❷

Kolumn 05
Avsändningsort i Sverige. Vid transittrafik genom Sverige ska den gränsort där godset förs in i Sverige anges som avsändningsort.

Kolumn 06
Mottagningsort i Sverige. Vid transittrafik genom Sverige ska den gränsort där godset lämnar Sverige anges som mottagningort.

Kolumn 07
Här anges vilken/vilka banor på järnsvägsnätet som har använts vid transporten.

4

Redovisning av transporter med farligt gods

Den period ni ska lämna uppgifter för är **september** månad **2006**.

Rad nr	Godsets UN-nr	Transporterad mängd ❶ *Uppskattad mängd kan anges om inte exakta värden finns tillgängliga.*			Avsändningsort ❷
		Kg	m^3	Total aktivitet (klass 7) i Becquerel (Bq) med prefix (t.ex. MBq, GBq, TBq)	Ortnamn
	01	02	03	04	05
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

❶

Här ska transporterad mängd av det aktuella farliga godset anges för den enskilda transporten. Om ni kontinuerligt transporterar en typ av farligt gods till en och samma ort, behöver inte varje försändelse specificeras, utan hela mängden kan anges i en "klumpsumma".

Kolumn 02, 03
Transporterad mängd ska anges i kg eller m^3 enligt följande:
– för förpackningar ska bruttovikt (förpackning ingår) anges,
– för transport i tank ska nettovikt eller volym anges,
– för transport i bulk ska nettovikt anges, och
– för explosiva ämnen och föremål ska nettovikt av explosivt ämne anges.

Kolumn 04
För radioaktiva ämnen i klass 7 ska total aktivitet i Becquerel (Bq) tillsammans med prefix (t.ex. MBq, GBq, TBq) anges.

5

OBS!

Enkäten kommer att läsas optiskt i en s.k. scanner.
Vi ber er därför att texta så tydligt som möjligt.

	Mottagningsort ❷	**Transportväg** ❷
	Ortnamn	Banor på järnvägsnätet
	06	07
01		
02		
03		
04		
05		
06		
07		
08		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

❷

Kolumn 05
Avsändningsort i Sverige. Vid transittrafik genom Sverige ska den gränsort där godset förs in i Sverige anges som avsändningsort.

Kolumn 06
Mottagningsort i Sverige. Vid transittrafik genom Sverige ska den gränsort där godset lämnar Sverige anges som mottagningort.

Kolumn 07
Här anges vilken/vilka banor på järnsvägsnätet som har använts vid transporten.

8

Övriga upplysningar

Lämnade uppgifter skyddas enligt 9 kap 4 § sekretesslagen (SFS 1980:100).

Samråd har skett med Näringslivets Regelnämnd (NNR) och Sveriges Kommuner och Landsting (SKL) vid utformningen av denna undersökning.

STATISTIKINSAMLING **Sjö**

Transporter av farligt gods september 2006

Enkäten ska skickas in **senast den 1 november 2006** i bifogat svarskuvert eller till adress

Statistiska centralbyrån

RM/TRP – 140c

701 89 ÖREBRO

Sjötransporter av farligt gods – en statistisk undersökning för september 2006

Skicka in enkäten till SCB även om inga transporter av farligt gods har skett under mätperioden.

Ert rederi ingår i undersökningen tillsammans med andra rederier som transporterar farligt gods.

Från och med den 1 december 2005 har Sjöfartsverket tagit i bruk en ny databas, Fartygsrapporteringssystemet (FRS). Till denna databas ska de flesta rederier rapportera avgående och ankommande gods. Databasen innehåller även information om farligt gods (förpackat farligt gods).

Alla rederier som är undantagna från kravet att rapportera till FRS erbjuds att delta i denna undersökning.

Er medverkan i undersökningen är mycket värdefull för att vi skall få fram ett underlag som stämmer överens med verkligheten så bra som möjligt.

Undantaget gods i denna undersökning
Nedanstående typer av transporter ska **inte** tas med i enkäten.

– transport av farligt gods i tankfartyg, och
– transport av tömda, ej rengjorda förpackningar eller tankar.

Svarsexempel
Av svarsexemplen på omstående sida framgår hur enkäten ska fyllas i.

Övriga upplysningar kan lämnas på sista sidan.

Sjötransport av farligt gods under september månad 2006

Transporterade ni under september månad 2006, farligt gods?

☐ Ja → **Besvara resten av enkäten.**

☐ Nej → **Ange kontaktperson nedan och sänd in enkäten till SCB i bifogat svarskuvert.**

Företagets kontaktperson

Namn	Telefon (även riktnr)
E-post	Mobil

SCB RM/TRP 140c. SCB-Tryck 2006

RÄDDNINGS VERKET

Blanketutgivare: Statistiska centralbyrån, Statistics Sweden
Enheten för transporter

Postadress: 701 89 ÖREBRO
Telefon: 019-17 66 70
E-post: farligtgods@scb.se
Fax: 019-17 65 69

2

EXEMPEL

Rad 01
En tankcontainer med 22 500 kg svaveldioxid (UN 1079) har transporterats från Stockholms hamn till Tallinn.

Rad 02
En tankcontainer med 20 000 kg isobutyraldehyd (UN 2045) har transporterats från Travemünde till Trelleborg.

Rad 03
En tankcontainer med 26 000 kg väteperoxid (UN 2014) har transporterats från Göteborgs hamn till Rotterdam.

Rad 04
En tankcontainer med 30 000 m³ klorättikssyra (UN 1750) har transporterats från Helsingfors till Stockholm.

Rad 05
En trailer med 2 000 kg fluorvätesyra, klass 5.1 (UN 1790), har transporterats från Göteborgs hamn till Newcastle.

Rad 06
En trailer med fyrverkerier (UN 0336) med en total nettovikt explosivt ämne av 500 kg har transporterats från Umeå hamn till Vasa.

Rad 07
Ett kolli av typ B(U) innehållande 74 TBq Cs-137 (UN 2916) anländer till Göteborgs hamn från Canada.

Rad nr	Godsets UN-nr	**Avsänd mängd** ❶ *Uppskattad mängd kan anges om inte exakta värden finns tillgängliga.* Kg	m³	**Total aktivitet** (klass 7) i Becquerel (Bq) med prefix (t.ex. MBq, GBq, TBq)
	01	02	03	04
01	1079	22500		
02	2045	20000		
03	2014	26000		
04	1750		30000	
05	1790	2000		
06	0336	500		
07	2916			74 TBq

❶
Här ska transporterad mängd av det aktuella farliga godset anges för den enskilda transporten. Om ni kontinuerligt transporterar en typ av farligt gods till en och samma ort, behöver inte varje försändelse specificeras, utan hela mängden kan anges i en "klumpsumma".

Kolumn 02, 03
Mängden ska anges i kg eller m³ enligt följande:
– för förpackningar ska bruttovikt (förpackning ingår) anges,
– för transport i tank ska nettovikt eller volym anges,
– för transport i bulk (tankfartyg omfattas inte) ska nettovikt anges, och
– för explosiva ämnen och föremål ska nettovikt av explosivt ämne anges.

Kolumn 04
För radioaktiva ämnen i klass 7 ska total aktivitet i Becquerel (Bq) tillsammans med prefix (t.ex. MBq, GBq, TBq).

	Avsändande hamn ❷	Mottagande hamn ❷
	05	06
01	Stockholm	Tallinn
02	Travemünde	Trelleborg
03	Göteborg	
04	Helsingfors	Stockholm
05	Göteborg	
06	Umeå	Vasa
07		Göteborg

❷

Kolumn 05, 06
Här ska uppgift om avsändande hamn och mottagande hamn lämnas.
Avsändande hamn och mottagande hamn behöver **endast** anges om denna ligger i Sverige eller i Östersjöområdet (Danmark, Finland, Estland, Lettland, Litauen, Polen, Ryssland och Tyskland).

4

Redovisning av transporter med farligt gods

Den period ni ska lämna uppgifter för är **september** månad **2006**.

Rad nr	Godsets UN-nr	Avsänd mängd ❶ *Uppskattad mängd kan anges om inte exakta värden finns tillgängliga.*		
		Kg	m^3	**Total aktivitet** (klass 7) i Becquerel (Bq) med prefix (t.ex. MBq, GBq, TBq)
	01	02	03	04
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

❶

Här ska transporterad mängd av det aktuella farliga godset anges för den enskilda transporten. Om ni kontinuerligt transporterar en typ av farligt gods till en och samma ort, behöver inte varje försändelse specificeras, utan hela mängden kan anges i en "klumpsumma".

Kolumn 02, 03
Mängden ska anges i kg eller m^3 enligt följande:
- för förpackningar ska bruttovikt (förpackning ingår) anges,
- för transport i tank ska nettovikt eller volym anges,
- för transport i bulk (tankfartyg omfattas inte) ska nettovikt anges, och
- för explosiva ämnen och föremål ska nettovikt av explosivt ämne anges.

Kolumn 04
För radioaktiva ämnen i klass 7 ska total aktivitet i Becquerel (Bq) tillsammans med prefix (t.ex. MBq, GBq, TBq).

OBS!

Enkäten kommer att läsas optiskt i en s.k. scanner.
Vi ber er därför att texta så tydligt som möjligt.

	Avsändande hamn ❷	**Mottagande hamn** ❷
	05	06
01		
02		
03		
04		
05		
06		
07		
08		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

❷

Kolumn 05, 06
Här ska uppgift om avsändande hamn och mottagande hamn lämnas.
Avsändande hamn och mottagande hamn behöver **endast** anges om denna ligger i Sverige eller i Östersjöområdet (Danmark, Finland, Estland, Lettland, Litauen, Polen, Ryssland och Tyskland).

8

Övriga upplysningar

Lämnade uppgifter skyddas enligt 9 kap 4 § sekretesslagen (SFS 1980:100).

Samråd har skett med Näringslivets Regelnämnd (NNR) och Sveriges Kommuner och Landsting (SKL) vid utformningen av denna undersökning.

STATISTIKINSAMLING **Flyg**

Transporter av farligt gods september 2006

Enkäten ska skickas in **senast den 1 november 2006** i bifogat svarskuvert eller till adress

Statistiska centralbyrån

RM/TRP – 140d

701 89 ÖREBRO

Flygtransporter av farligt gods – en statistisk undersökning för september 2006

Skicka in enkäten till SCB även om inga transporter av farligt gods har skett under mätperioden.

Ert företag ingår i undersökningen tillsammans med andra speditörer som förmedlar transporter av farligt gods.

Er medverkan i undersökningen är mycket värdefull för att vi skall få fram ett underlag som stämmer överens med verkligheten så bra som möjligt.

Undantaget gods i denna undersökning
Nedanstående typer av försändelser ska **inte** tas med i enkäten.

– transport av s.k. "consumer commodities", "excepted quantity" och "limited quantity", och
– transport av tömda, ej rengjorda förpackningar eller tankar.

Svarsexempel
Av svarsexemplen på omstående sida framgår hur enkäten ska fyllas i.

Övriga upplysningar kan lämnas på sista sidan.

Flygtransport av farligt gods under september månad 2006

Transporterade ni under september månad 2006, farligt gods?

☐ Ja → **Besvara resten av enkäten**

☐ Nej → **Ange kontaktperson nedan och sänd in enkäten till SCB i bifogat svarskuvert.**

Företagets kontaktperson

Namn	Telefon (även riktnr)
E-post	Mobil

SCB RM/TRP 140d. SCB-Tryck 2006

RÄDDNINGS VERKET

Blankettutgivare	Postadress	Telefon	E-post	Fax
Statistiska centralbyrån Statistics Sweden				
Enheten för transporter	701 89 ÖREBRO	019-17 66 70	farligtgods@scb.se	019-17 65 69

2

EXEMPEL

Rad 01
Ett fat med 20 kg natriumhydroxid (UN 1824) har skickats från Stockholm till England.

Rad 02
15 liter etanollösning (UN 1170) har skickats till Göteborg.

Rad 03
500 kg färg i klass 3 (UN 1263) har skickats från USA till Malmö.

Rad 04
En dunk med 20 kg väteperoxid (UN 2014) har skickats från Malmö till Frankrike.

Rad 05
En låda med signalbloss (UN 0373) med 2 kg nettovikt av explosivt ämne har skickats från Göteborg till Stockholm.

Rad 06
20 stycken kollin av typ A (UN 2915) innehållande vardera 20 GBq Mo-99/Tc-99m har skickats från Holland till Stockholm.

Rad 07
Ett kolli av typ B(U) (UN 2916) innehållande 100 TBq (100 000 GBq) Co-60 har skickats från Stockholm till England.

		Avsänd mängd. *Uppskattad mängd kan anges om inte exakta värden finns tillgängliga.* ❶					**Mottagen mängd** ❷	
Rad nr	**Godsets UN-nr**	**Kg**	**Liter**	**Nuklid/er** (klass 7)	**Total aktivitet** (klass 7) i Becquerel (Bq) med prefix (t.ex. MBq, GBq, TBq)	**Antal kollin** (klass 7)	**Kg**	**Liter**
	01	02	03	04	05	06	07	08
01	1824	20						
02	1170							15
03	1263						500	
04	2014	20						
05	0373	2						
06	2915							
07	2916			Co 60	100 TBq	1		

❶

Här ska **avsänd** mängd av det aktuella farliga godset anges för den enskilda transporten. Om ni kontinuerligt avsänder en typ av farligt gods behöver inte varje försändelse specificeras, utan hela mängden kan anges i en "klumpsumma".

Kolumn 02, 03
Avsänd mängd ska anges i kg i bruttovikt (förpackningen ingår) eller i liter. För transport av explosiva ämnen och föremål i klass 1 skall **nettovikt av explosivt ämne anges.**

Kolumn 04, 05, 06
För radioaktiva ämnen i klass 7 ska nuklid/er anges i kolumn 04, total aktivitet i Becquerel (Bq) tillsammans med prefix (t.ex. MBq, GBq, TBq) i kolumn 05 samt antal kollin i kolumn 06.

	Mottagen mängd (forts)			**Flygplats i Sverige** ❸	
	Nuklid/er (klass 7)	**Total aktivitet** (klass 7) i Becquerel (Bq) med prefix (t.ex. MBq, GBq, TBq)	**Antal kollin** (klass 7)	**Avsändande flygplats**	**Mottagande flygplats**
	09	10	11	12	13
01				Stockholm - Arlanda	
02					Göteborg - Landvetter
03					Malmö - Sturup
04				Malmö - Sturup	
05				Göteborg - Landvetter	Stockholm - Arlanda
06	Mo99/Tc99m	400 GBq	2 0		Stockholm - Arlanda
07				Stockholm - Arlanda	

❷

Här ska **mottagen** mängd av det aktuella farliga godset anges för den enskilda transporten. Om ni kontinuerligt mottager en typ av farligt gods behöver inte varje försändelse specificeras, utan hela mängden kan anges i en "klumpsumma".

Kolumn 07, 08
Mottagen mängd ska anges i kg i bruttovikt (förpackningen ingår) eller i liter. För transport av explosiva ämnen och föremål i klass 1 skall **nettovikt av explosivt ämne anges.**

Kolumn 09, 10, 11
För radioaktiva ämnen i klass 7 ska nuklid/er anges i kolumn 09, total aktivitet i Becquerel (Bq) tillsammans med prefix (t.ex. MBq, GBq, TBq) i kolumn 10 samt antal kollin i kolumn 11.

❸

Kolumn 12, 13
Här ska uppgift om avsändande flygplats och mottagande flygplats anges.

4

Redovisning av transporter med farligt gods

Den period ni ska lämna uppgifter för är **september** månad **2006**.

Rad nr	Godsets UN-nr	**Avsänd mängd.** *Uppskattad mängd kan anges om inte exakta värden finns tillgängliga.* ❶					**Mottagen mängd** ❷	
		Kg	**Liter**	**Nuklid/er** (klass 7)	**Total aktivitet** (klass 7) i Becquerel (Bq) med prefix (t.ex. MBq, GBq, TBq)	**Antal kollin** (klass 7)	**Kg**	**Liter**
	01	02	03	04	05	06	07	08
01								
02								
03								
04								
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

❶

Här ska **avsänd** mängd av det aktuella farliga godset anges för den enskilda transporten. Om ni kontinuerligt avsänder en typ av farligt gods behöver inte varje försändelse specificeras, utan hela mängden kan anges i en "klumpsumma".

Kolumn 02, 03
Avsänd mängd ska anges i kg i bruttovikt (förpackningen ingår) eller i liter. För transport av explosiva ämnen och föremål i klass 1 skall **nettovikt av explosivt ämne anges.**

Kolumn 04, 05, 06
För radioaktiva ämnen i klass 7 ska nuklid/er anges i kolumn 04, total aktivitet i Becquerel (Bq) tillsammans med prefix (t.ex. MBq, GBq, TBq) i kolumn 05 samt antal kollin i kolumn 06.

OBS!

Enkäten kommer att läsas optiskt i en s.k. scanner.
Vi ber er därför att texta så tydligt som möjligt.

	Mottagen mängd (forts)			**Flygplats i Sverige** ❸	
	Nuklid/er (klass 7)	**Total aktivitet** (klass 7) i Becquerel (Bq) med prefix (t.ex. MBq, GBq, TBq)	**Antal kollin** (klass 7)	**Avsändande flygplats**	**Mottagande flygplats**
	09	10	11	12	13
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

❷

Här ska **mottagen** mängd av det aktuella farliga godset anges för den enskilda transporten. Om ni kontinuerligt mottager en typ av farligt gods behöver inte varje försändelse specificeras, utan hela mängden kan anges i en "klumpsumma".

Kolumn 07, 08
Mottagen mängd ska anges i kg i bruttovikt (förpackningen ingår) eller i liter. För transport av explosiva ämnen och föremål i klass 1 skall **nettovikt av explosivt ämne anges.**

Kolumn 09, 10, 11
För radioaktiva ämnen i klass 7 ska nuklid/er anges i kolumn 09, total aktivitet i Becquerel (Bq) tillsammans med prefix (t.ex. MBq, GBq, TBq) i kolumn 10 samt antal kollin i kolumn 11.

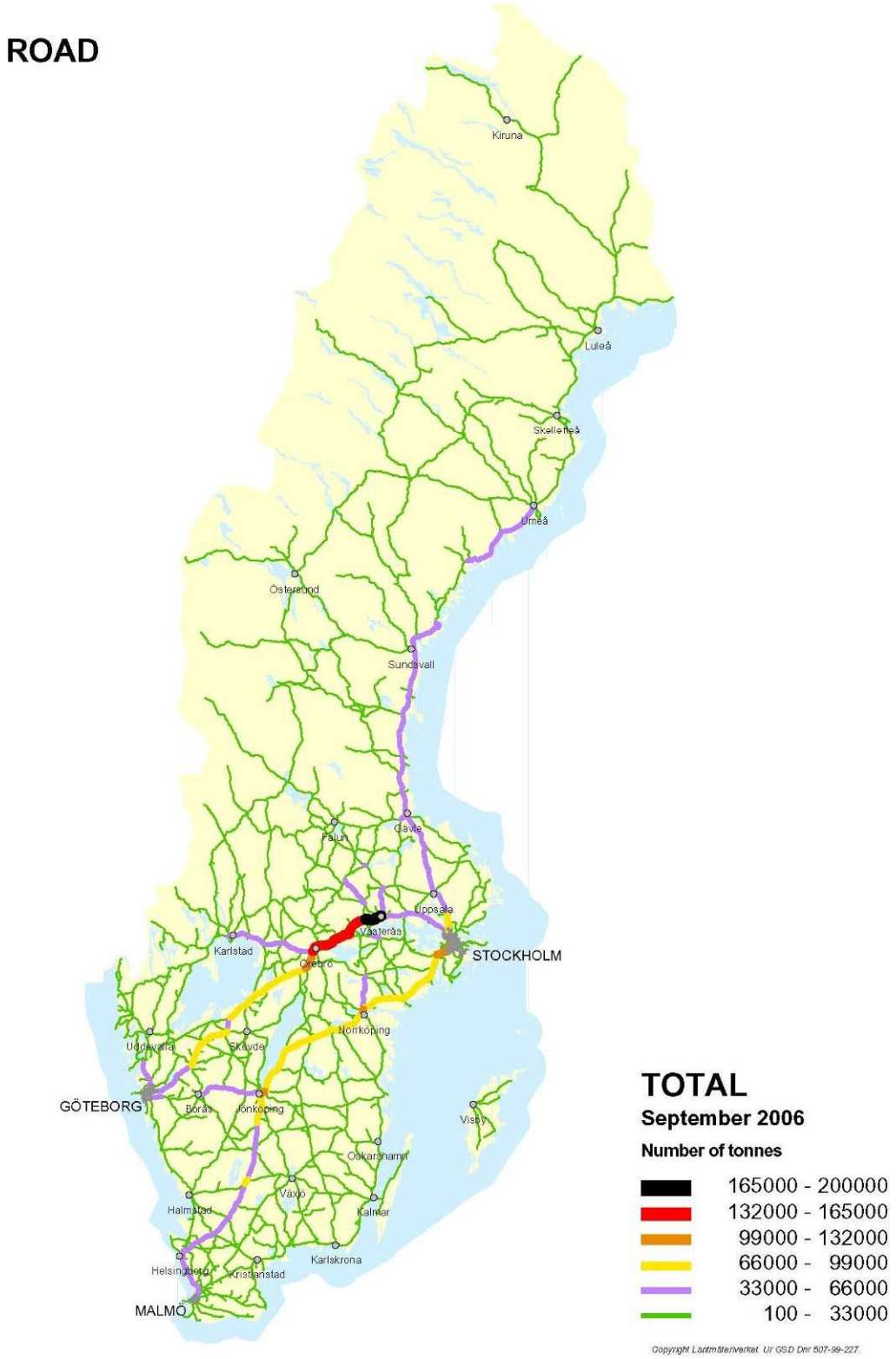
❸

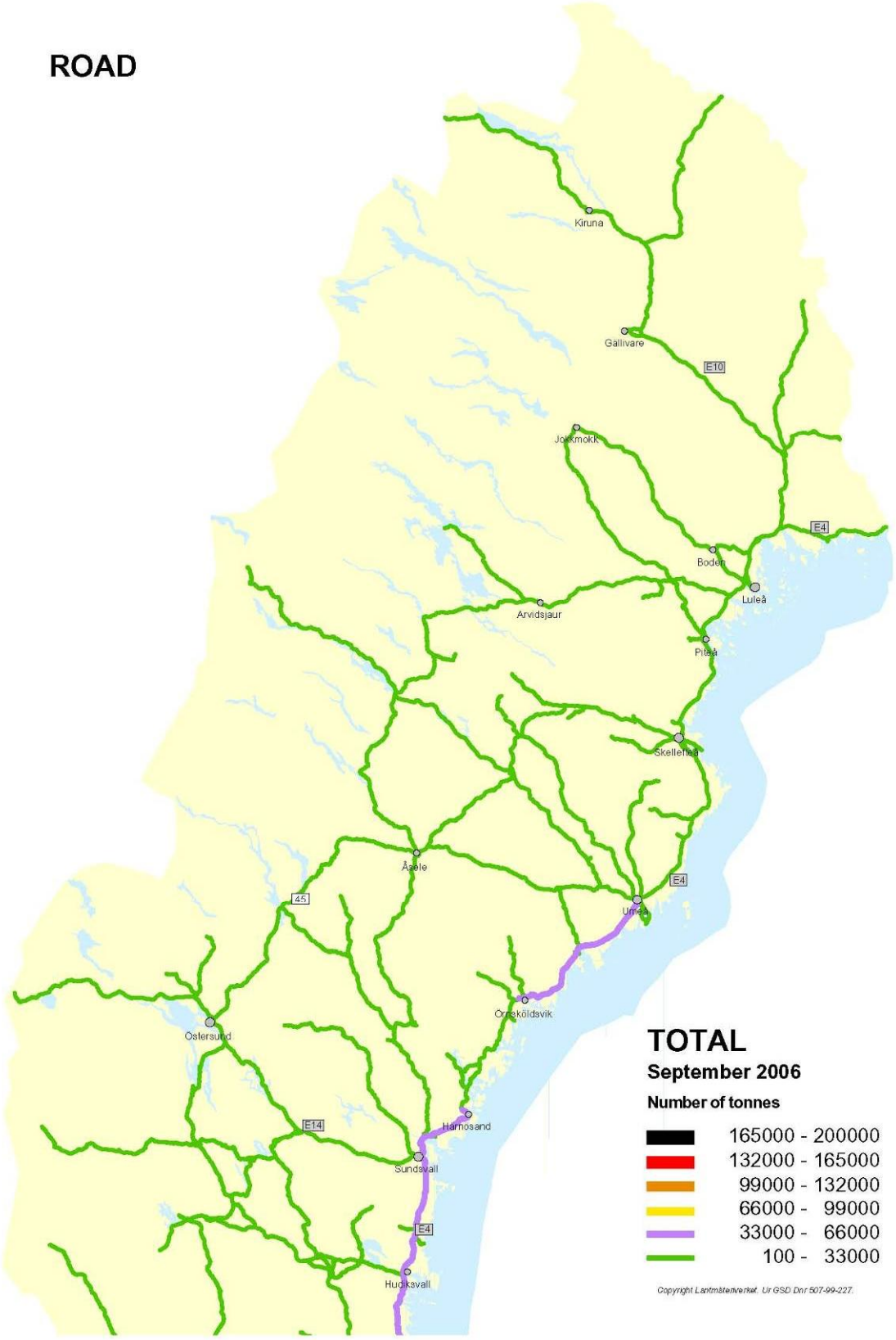
Kolumn 12, 13
Här ska uppgift om avsändande flygplats och mottagande flygplats anges.

8

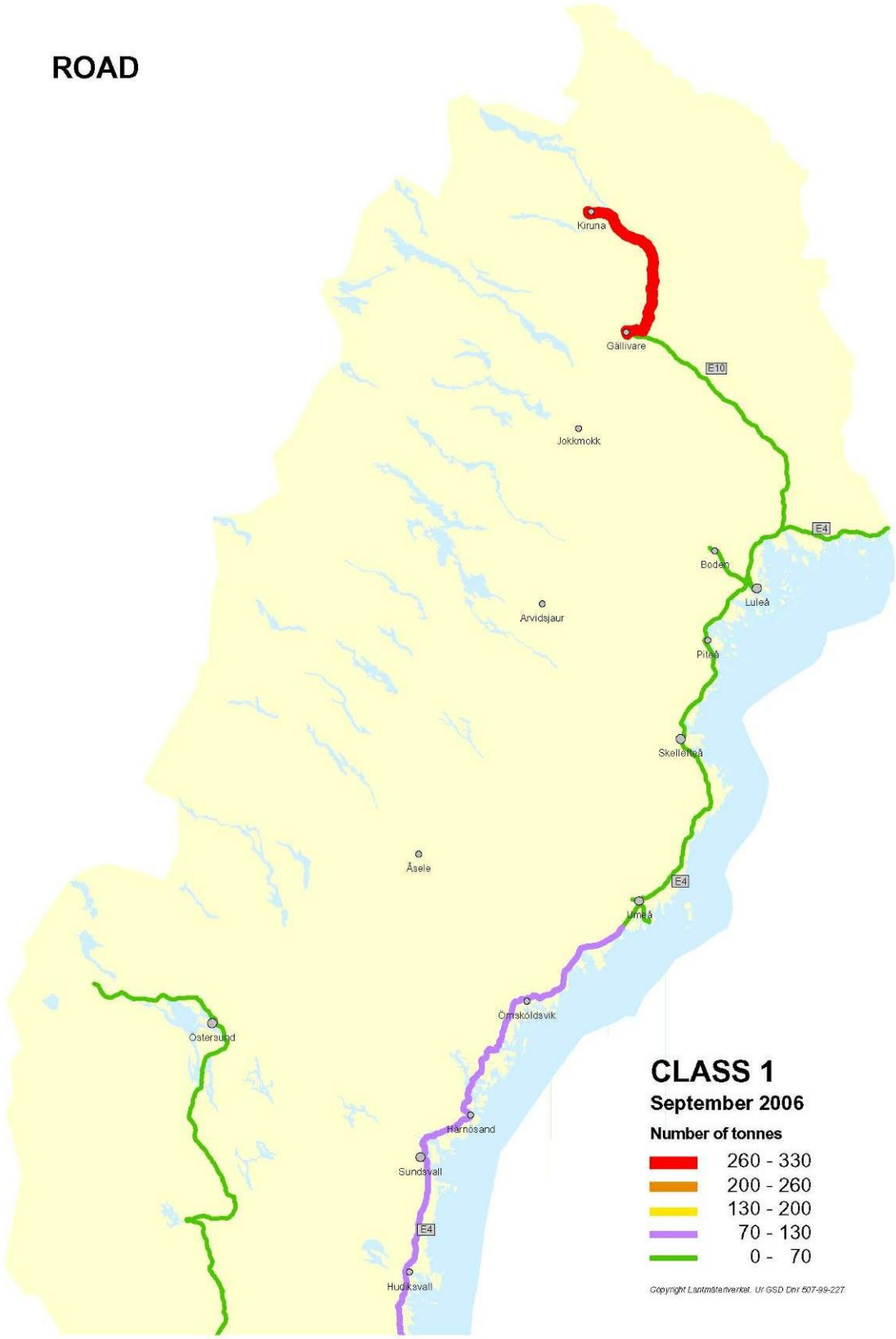
Övriga upplysningar

APPENDIX II ROAD MAPS


ROAD
Kiruna
Luleå
Skellefteå
Umeå
Östersund
Sundsvall
Gävle
Falun
Uppsala
Västerås
Karlstad
Örebro
STOCKHOLM
Norrköping
Uddevalla
Skövde
GÖTEBORG
Borås
Jönköping
Visby
Oskarshamn
Växjö
Halmstad
Kalmar
Karlskrona
Helsingborg
Kristianstad
MALMÖ
TOTAL
September 2006
Number of tonnes
165000 - 200000
132000 - 165000
99000 - 132000
66000 - 99000
33000 - 66000
100 - 33000
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Kiruna
Gällivare
E10
Jokkmokk
E4
Boden
Luleå
Arvidsjaur
Piteå
Skellefteå
Åsele
E4
45
Umeå
Örnsköldsvik
Östersund
E14
Härnosand
Sundsvall
E4
Hudiksvall
TOTAL
September 2006
Number of tonnes
165000 - 200000
132000 - 165000
99000 - 132000
66000 - 99000
33000 - 66000
100 - 33000
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Sandviken
Falun
Borlänge
Ludvika
Avesta
Fagersta
Sala
Uppsala
Norrtälje
Arvika
Västerås
Enköping
Upplands Väsby
STOCKHOLM
Karlstad
Kristinehamn
Karlskoga
Örebro
Arboga
Eskilstuna
Strängnäs
Södertälje
Kumla
Katrineholm
Nynäshamn
Nyköping
Oxelösund
Finspång
Norrköping
Mariestad
Motala
Linköping
Skövde
Mjölby
Uddevalla
Trollhättan
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Västervik
Visby
Kungsbacka
Växjö
Oskarshamn
Värnamo
Varberg
Falkenberg
Ljungby
Halmstad
Nybro
Kalmar
Ängelholm
Höganäs
Hässleholm
Karlshamn
Ronneby
Karlskrona
Helsingborg
Kristianstad
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
TOTAL
September 2006
Number of tonnes
165000 - 200000
132000 - 165000
99000 - 132000
66000 - 99000
33000 - 66000
100 - 33000
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Kiruna
Gällivare
E10
Jokkmokk
E4
Boden
Luleå
Arvidsjaur
Piteå
Skellefteå
Åsele
E4
Umeå
Örnsköldsvik
Östersund
Härnösand
Sundsvall
E4
Hudiksvall
CLASS 1
September 2006
Number of tonnes
260 - 330
200 - 260
130 - 200
70 - 130
0 - 70
Copyright Lantmäteriverket, Ur GSD Dnr 507-99-227

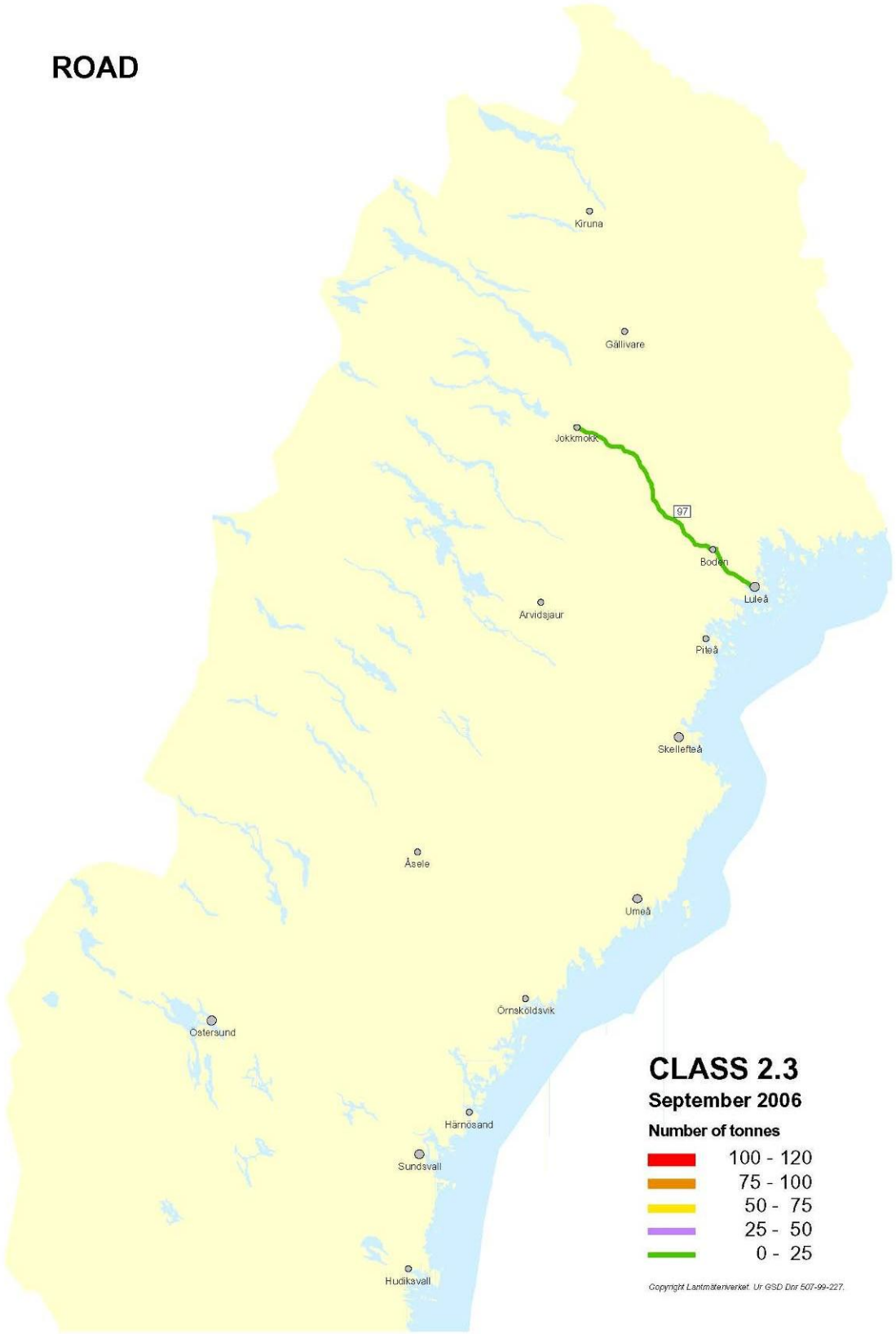

ROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Sandviken
Falun
Borlänge
Ludvika
Avesta
Fagersta
Sala
Uppsala
Norrtälje
Arvika
Västerås
Enköping
Upplands-Väsby
STOCKHOLM
Karlstad
Kristinehamn
Örebro
Arboga
Strängnäs
Södertälje
Kumla
Katrineholm
Nynäshamn
Nyköping
Oxelösund
Mariestad
Finspång
Norrköping
Motala
Linköping
Mjölby
Skövde
Falköping
Uddevalla
Trollhättan
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Västervik
Visby
Kungsbacka
Vetlanda
Oskarshamn
Värnamo
Varberg
Falkenberg
Ljungby
Växjö
Halmstad
Nybro
Kalmar
Ängelholm
Höganäs
Hässleholm
Karlshamn
Ronneby
Karlskrona
Helsingborg
Kristianstad
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 1
September 2006
Number of tonnes
260 - 330
200 - 260
130 - 200
70 - 130
0 - 70
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Kiruna
Gällivare
E10
Jokkmokk
Boden
Luleå
Arvidsjaur
Piteå
Skellefteå
Åsele
E4
45
Umeå
Örnsköldsvik
Östersund
Härnösand
Sundsvall
E4
Hudiksvall
CLASS 2.1
September 2006
Number of tonnes
7400 - 9200
5500 - 7400
3700 - 5500
1800 - 3700
0 - 1800
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

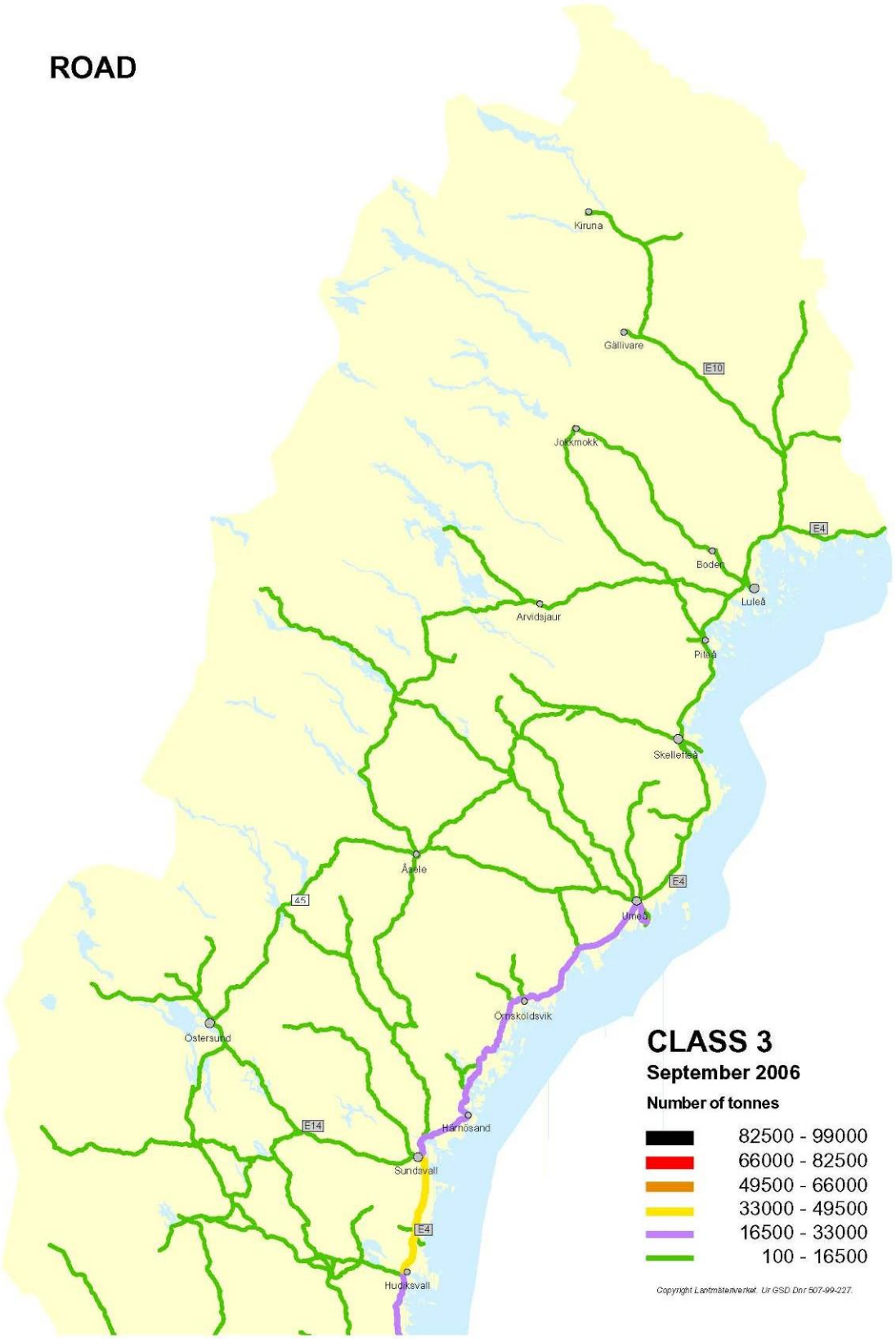

ROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Falun
Borlänge
Sandviken
Gävle
Ludvika
Avesta
Fagersta
Sala
Uppsala
Norrtälje
Arvika
Västerås
Enköping
Upplands-Väsby
Karlstad
Kristinehamn
Karlskoga
Örebro
Arboga
Köping
Eskilstuna
Strängnäs
STOCKHOLM
Södertälje
Kumla
Katrineholm
Nynäshamn
Nyköping
Oxelösund
Finspång
Norrköping
Motala
Linköping
Mjölby
Skövde
Lidköping
Mariestad
Uddevalla
Trollhättan
Falköping
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Tranås
Nässjö
Västervik
Visby
Kungsbacka
Vetlanda
Värnamo
Oskarshamn
Varberg
Falkenberg
Ljungby
Växjö
Nybro
Kalmar
Halmstad
Ängelholm
Höganäs
Hässleholm
Kristianstad
Karlshamn
Ronneby
Karlskrona
Helsingborg
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 2.1
September 2006
Number of tonnes
7400 - 9200
5500 - 7400
3700 - 5500
1800 - 3700
0 - 1800
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Kiruna
Gällivare
E10
Jokkmokk
E4
Boden
Luleå
Arvidsjaur
Piteå
Skellefteå
Åsele
E4
Umeå
Örnsköldsvik
Östersund
E14
Härnösand
Sundsvall
E4
Hudiksvall
CLASS 2.2
September 2006
Number of tonnes
17600 - 22200
13200 - 17600
8800 - 13200
4400 - 8800
0 - 4400
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Falun
Borlänge
Sandviken
Gävle
Ludvika
Avesta
Fagersta
Sala
Uppsala
Norrtälje
Arvika
Västerås
Enköping
Köping
Arboga
Eskilstuna
Strängnäs
Upplands Väsby
STOCKHOLM
Södertälje
Karlstad
Kristinehamn
Karlskoga
Örebro
Kumla
Katrineholm
Nynäshamn
Nyköping
Oxelösund
Finspång
Norrköping
Motala
Linköping
Mjölby
Lidköping
Skövde
Mariestad
Uddevalla
Trollhättan
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Västervik
Visby
Kungsbacka
Vetlanda
Oskarshamn
Värnamo
Varberg
Falkenberg
Ljungby
Växjö
Nybro
Kalmar
Halmstad
Hässleholm
Kristianstad
Karlshamn
Ronneby
Karlskrona
Ängelholm
Höganäs
Helsingborg
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 2.2
September 2006
Number of tonnes
17600 - 22200
13200 - 17600
8800 - 13200
4400 - 8800
0 - 4400
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Kiruna
Gällivare
Jokkmokk
97
Boden
Luleå
Arvidsjaur
Piteå
Skellefteå
Åsele
Umeå
Örnsköldsvik
Östersund
Härnösand
Sundsvall
Hudiksvall
CLASS 2.3
September 2006
Number of tonnes
100 - 120
75 - 100
50 - 75
25 - 50
0 - 25
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Sandviken
Falun
Borlänge
Ludvika
Avesta
Fagersta
Sala
Uppsala
Norrtälje
Arvika
Västerås
Enköping
Upplands-Väsby
STOCKHOLM
Köping
Arboga
Eskilstuna
Strängnäs
Karlstad
Kristinehamn
Karlskoga
Örebro
Kumla
Södertälje
Katrineholm
Nynäshamn
Nyköping
Oxelösund
Finspång
Norrköping
Motala
Linköping
Mjölby
Lidköping
Skövde
Falköping
Tranås
Uddevalla
Trollhättan
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Västervik
Visby
Kungsbacka
Vetlanda
Oskarshamn
Varberg
Värnamo
Falkenberg
Ljungby
Växjö
Nybro
Kalmar
Halmstad
Ängelholm
Höganäs
Hässleholm
Karlshamn
Ronneby
Karlskrona
Helsingborg
Kristianstad
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 2.3
September 2006
Number of tonnes
100 - 120
75 - 100
50 - 75
25 - 50
0 - 25
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Kiruna
Gällivare
E10
Jokkmokk
E4
Boden
Luleå
Arvidsjaur
Piteå
Skellefteå
Åpele
45
E4
Umeå
Örnsköldsvik
Östersund
E14
Härnösand
Sundsvall
E4
Hudiksvall
CLASS 3
September 2006
Number of tonnes
82500 - 99000
66000 - 82500
49500 - 66000
33000 - 49500
16500 - 33000
100 - 16500
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
CLASS 3
September 2006
Number of tonnes
82500 - 99000
66000 - 82500
49500 - 66000
33000 - 49500
16500 - 33000
100 - 16500
STOCKHOLM
GÖTEBORG
MALMÖ
Hudiksvall
Söderhamn
Bollnäs
Mora
Gävle
Sandviken
Falun
Borlänge
Ludvika
Avesta
Fagersta
Sala
Uppsala
Norrtälje
Arvika
Karlstad
Kristinehamn
Karlskoga
Örebro
Kumla
Arboga
Köping
Västerås
Enköping
Eskilstuna
Strängnäs
Södertälje
Nynäshamn
Nyköping
Oxelösund
Katrineholm
Finspång
Norrköping
Motala
Mjölby
Linköping
Skövde
Mariestad
Lidköping
Uddevalla
Trollhättan
Falköping
Kungälv
Alingsås
Borås
Tranås
Jönköping
Nässjö
Vetlanda
Värnamo
Gislaved
Gnosjö
Växjö
Oskarshamn
Västervik
Visby
Kalmar
Nybro
Karlskrona
Ronneby
Karlshamn
Kristianstad
Hässleholm
Helsingborg
Landskrona
Eslöv
Lund
Ängelholm
Höganäs
Kungsbacka
Varberg
Falkenberg
Halmstad
Trelleborg
Ystad
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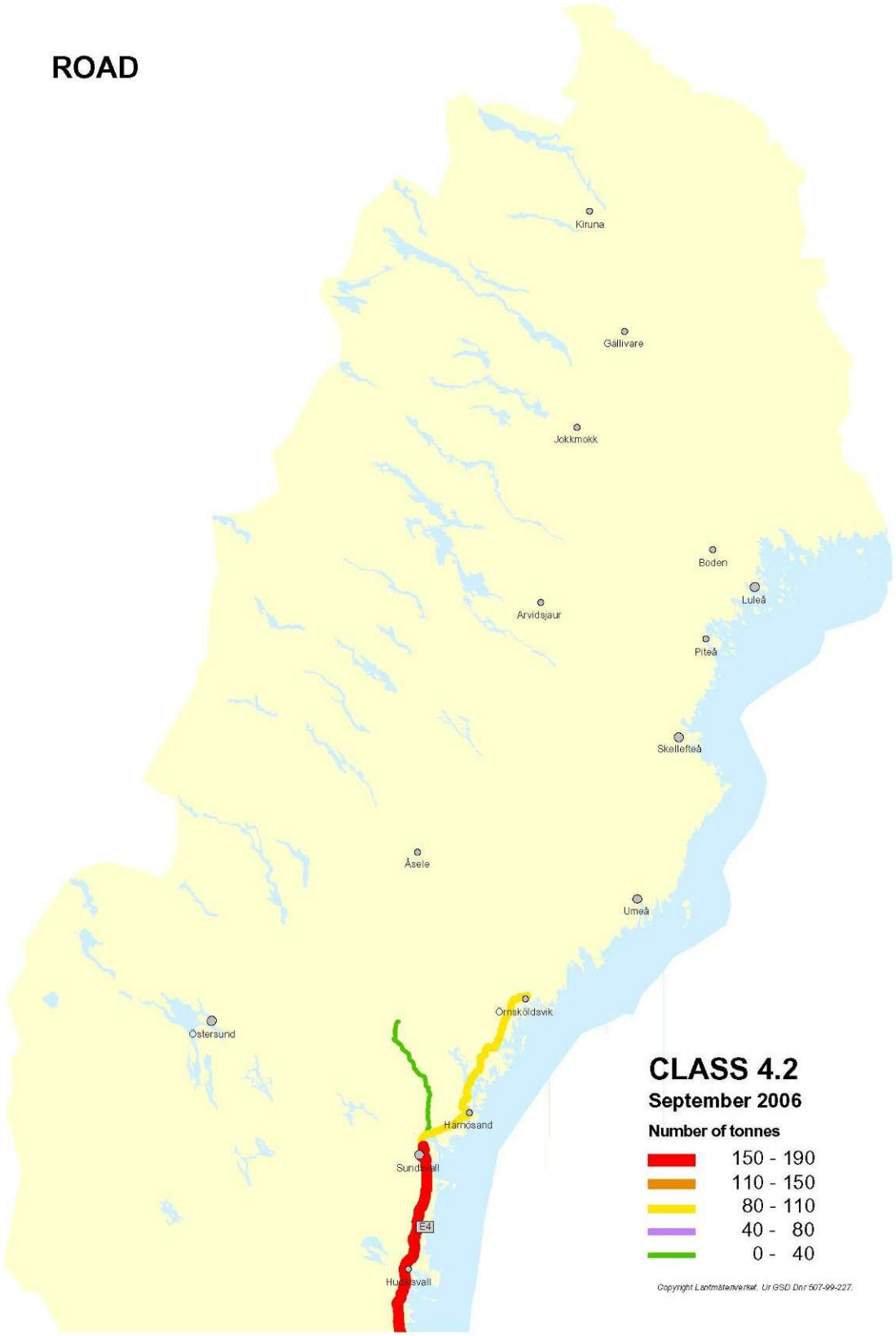
ROAD
Kiruna
Gällivare
E10
Jokkmokk
E4
Boden
Luleå
Arvidsjaur
Piteå
Skellefteå
Åsele
45
E4
Umeå
Örnsköldsvik
Östersund
E14
Härnösand
Sundsvall
E4
Hudiksvall
CLASS 4.1
September 2006
Number of tonnes
1080 - 1360
810 - 1080
540 - 810
270 - 540
0 - 270
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
E4
Hudiksvall
Bollnäs
Söderhamn
Ljusdal
45
80
Gävle
Sandviken
Falun
Borlänge
E4
Ludvika
Avesta
Fagersta
Sala
Uppsala
Norrtälje
Arvika
E18
E20
Västerås
Enköping
Upplands Väsby
Karlstad
E18
Köping
Arboga
Eskilstuna
Strängnäs
STOCKHOLM
Kristinehamn
Karlskoga
Örebro
Kumla
52
Södertälje
45
Katrineholm
E4
Nynäshamn
E20
Nyköping
Hallsberg
Finspång
Oxelösund
E6
Norrköping
Motala
Lidköping
Skövde
Linköping
Mjölby
Falköping
Tranås
Alingsås
40
GÖTEBORG
Borås
Jönköping
Västervik
Nässjö
Ystad
Vetlanda
E6
E20
E4
Oskarshamn
Värnamo
22
Växjö
Ljungby
Nybro
Kalmar
Halmstad
30
28
Ängelholm
Höganas
Hässleholm
Karlshamn
Ronneby
Karlskrona
Helsingborg
Kristianstad
Landskrona
Eslöv
22
Lund
MALMÖ
Trelleborg
Ystad
CLASS 4.1
September 2006
Number of tonnes
1080 - 1360
810 - 1080
540 - 810
270 - 540
0 - 270
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Kiruna
Gällivare
Jokkmokk
Boden
Luleå
Arvidsjaur
Piteå
Skellefteå
Åsele
Umeå
Örnsköldsvik
Östersund
Härnosand
Sundsvall
E4
Hudiksvall
CLASS 4.2
September 2006
Number of tonnes
150 - 190
110 - 150
80 - 110
40 - 80
0 - 40
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

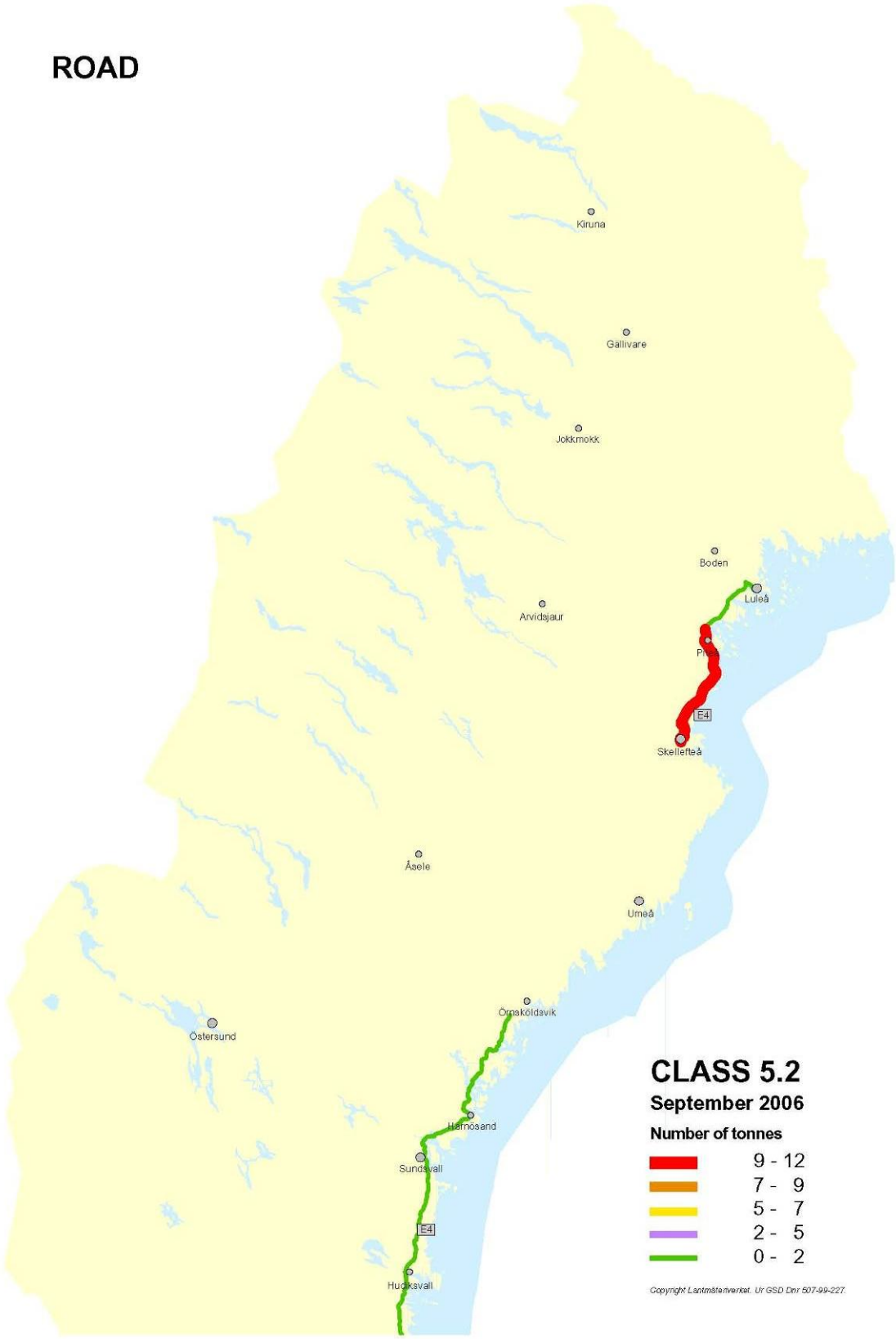

ROAD
E4
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Sandviken
Falun
Borlänge
E4
Ludvika
Avesta
50
Fagersta
Sala
Uppsala
Norrtälje
Arvika
Västerås
Enköping
Köping
Upplands-Väsby
STOCKHOLM
E18
Karlstad
Karlskoga
Kristinehamn
Arboga
Eskilstuna
Strängnäs
Örebro
Södertälje
Kumla
45
Katrineholm
E4
Nynäshamn
E20
Nyköping
Mariestad
Finspång
Oxelösund
Lidköping
Norrköping
Motala
Uddevalla
Skövde
Linköping
Trollhättan
Mjölby
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Västervik
Nässjö
Visby
Kungsbacka
E6
E20
Vetlanda
E4
Oskarshamn
Värnamo
Varberg
Falkenberg
Växjö
Ljungby
Nybro
Halmstad
Kalmar
Ängelholm
Höganäs
Karlshamn
Ronneby
Karlskrona
Hässleholm
Helsingborg
Kristianstad
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 4.2
September 2006
Number of tonnes
150 - 190
110 - 150
80 - 110
40 - 80
0 - 40
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Kiruna
Gällivare
Jokkmokk
Boden
Luleå
Arvidsjaur
Piteå
Skellefteå
Åsele
E4
Umeå
Örnsköldsvik
Östersund
Härnösand
Sundsvall
E4
Hudiksvall
CLASS 4.3
September 2006
Number of tonnes
340 - 420
260 - 340
170 - 260
90 - 170
0 - 90
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
E4
Hudiksvall
Bollnäs
Söderhamn
Mora
Falun
Borlänge
Sandviken
Gävle
E4
Ludvika
Avesta
67
Fagersta
Sala
Uppsala
Norrtälje
Arvika
E18
Västerås
Enköping
Upplands-Väsby
STOCKHOLM
Karlstad
Kristinehamn
E18
Karlskoga
Örebro
Arboga
E20
Eskilstuna
Strängnäs
Södertälje
Kumla
Katrineholm
E4
Nynäshamn
E20
Nyköping
Oxelösund
E6
Mariestad
Finspång
Norrköping
Motala
Lidköping
Skövde
Linköping
Uddevalla
Trollhättan
Mjölby
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Västervik
Visby
Kungsbacka
E6
E20
E4
Vetlanda
Oskarshamn
Värnamo
Varberg
Falkenberg
Växjö
Ljungby
Nybro
Kalmar
Halmstad
Ängelholm
Höganäs
Hässleholm
Karlshamn
Ronneby
Karlskrona
Helsingborg
Kristianstad
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 4.3
September 2006
Number of tonnes
340 - 420
260 - 340
170 - 260
90 - 170
0 - 90
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Kiruna
Gällivare
E10
Jokkmokk
Boden
Kalix
Luleå
Arvidsjaur
Piteå
Skellefteå
Åsele
E4
Umeå
Örnsköldsvik
Östersund
E14
Härnösand
Sundsvall
E4
Hudiksvall
CLASS 5.1
September 2006
Number of tonnes
1960 - 2440
1470 - 1960
980 - 1470
490 - 980
0 - 490
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
45
Falun
Borlänge
Gävle
Sandviken
E4
Ludvika
Avesta
Fagersta
Sala
Uppsala
Norrtälje
Arvika
E18
E20
Västerås
Enköping
Karlstad
Köping
Upplands-Väsby
STOCKHOLM
Kristinehamn
Karlskoga
Arboga
Eskilstuna
Strängnäs
Örebro
Södertälje
52
Kumla
Katrineholm
Nynäshamn
Nyköping
Oxelösund
Finspång
Norrköping
Motala
Linköping
Skövde
Mölby
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Västervik
Visby
Kungsbacka
Vetlanda
Oskarshamn
Värnamo
Varberg
31
22
Falkenberg
Växjö
25
Ljungby
Nybro
Kalmar
Halmstad
Ängelholm
Höganäs
Hässleholm
Karlshamn
Ronneby
Karlskrona
Helsingborg
Kristianstad
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 5.1
September 2006
Number of tonnes
1960 - 2440
1470 - 1960
980 - 1470
490 - 980
0 - 490
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227

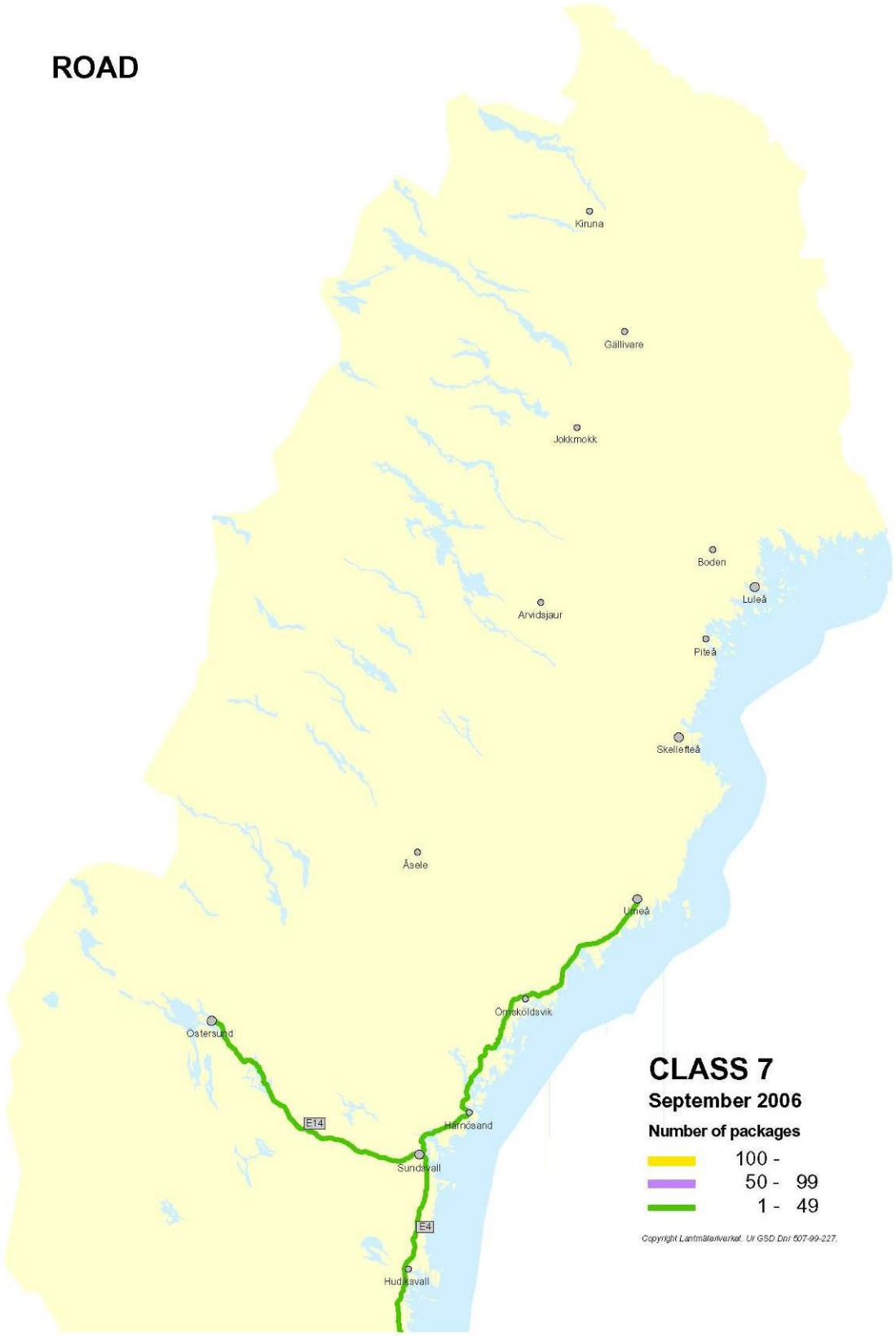

ROAD
Kiruna
Gällivare
Jokkmokk
Boden
Luleå
Arvidsjaur
E4
Skellefteå
Åsele
Umeå
Örnsköldsvik
Östersund
Härnösand
Sundsvall
E4
Hudiksvall
CLASS 5.2
September 2006
Number of tonnes
9 - 12
7 - 9
5 - 7
2 - 5
0 - 2
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
E4
Hudiksvall
Bollnäs
Söderhamn
Mora
Falun
Borlänge
Gävle
Sandviken
Ludvika
Avesta
67
Fagersta
Sala
Uppsala
Norrtälje
Arvika
E18
E20
Västerås
Enköping
Upplands Väsby
STOCKHOLM
Karlstad
Kristinehamn
Karlskoga
Örebro
Arboga
Eskilstuna
Strängnäs
Södertälje
Kumla
45
Katrineholm
Nynäshamn
E20
Nyköping
E6
Hallsberg
Finspång
Oxelösund
Norrköping
Lidköping
Motala
Skövde
Linköping
Uddevalla
Trollhättan
Mjölby
Falköping
Tranås
Kungälv
Alingsås
40
GÖTEBORG
Borås
Jönköping
33
Nässjö
Västervik
Visby
Kungsbacka
Vetlanda
E4
Oskarshamn
Värnamo
Varberg
E6
E20
Falkenberg
Växjö
Ljungby
Nybro
Kalmar
Halmstad
Ängelholm
Höganäs
Hässleholm
Karlshamn
Ronneby
Karlskrona
Helsingborg
Kristianstad
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 5.2
September 2006
Number of tonnes
9 - 12
7 - 9
5 - 7
2 - 5
0 - 2
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Kiruna
Gällivare
E10
Jokkmokk
E4
Boden
45
Luleå
Arvidsjaur
Piteå
Skellefteå
Åsele
E4
45
Umeå
90
Örnsköldsvik
Östersund
CLASS 6.1
September 2006
Number of tonnes
340 - 430
260 - 340
170 - 260
90 - 170
0 - 90
E14
Härnösand
Sundsvall
E4
Hudiksvall
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Sandviken
Falun
Borlänge
Ludvika
Avesta
Fagersta
Sala
Uppsala
Norrtälje
Arvika
Västerås
Enköping
Karlstad
Kristinehamn
Karlskoga
Köping
Arboga
Eskilstuna
Strängnäs
Upplands-Väsby
STOCKHOLM
Södertälje
Örebro
Kumla
Katrineholm
Nynäshamn
Nyköping
Oxelösund
Mariestad
Finspång
Norrköping
Motala
Linköping
Mjölby
Lidköping
Skövde
Uddevalla
Trollhättan
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Västervik
Visby
Kungsbacka
Vetlanda
Varberg
Värnamo
Oskarshamn
Falkenberg
Ljungby
Växjö
Halmstad
Nybro
Kalmar
Ängelholm
Höganäs
Hässleholm
Karlshamn
Ronneby
Karlskrona
Helsingborg
Kristianstad
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
E4
E6
E18
E20
45
40
52
30
28
22
CLASS 6.1
September 2006
Number of tonnes
340 - 430
260 - 340
170 - 260
90 - 170
0 - 90
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Kiruna
Gällivare
E10
Jokkmokk
E4
Boden
Luleå
Arvidsjaur
95
Piteå
Skellefteå
Åsele
E4
Umeå
90
Örnsköldsvik
Östersund
E14
Härnösand
Sundsvall
E4
Hudiksvall
CLASS 6.2
September 2006
Number of tonnes
570 - 710
430 - 570
280 - 430
140 - 280
0 - 140
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Kiruna
Gällivare
Jokkmokk
Boden
Luleå
Arvidsjaur
Piteå
Skellefteå
Åsele
Umeå
Örnsköldsvik
Östersund
E14
Härnösand
Sundsvall
E4
Hudiksvall
CLASS 7
September 2006
Number of packages
100 -
50 - 99
1 - 49
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

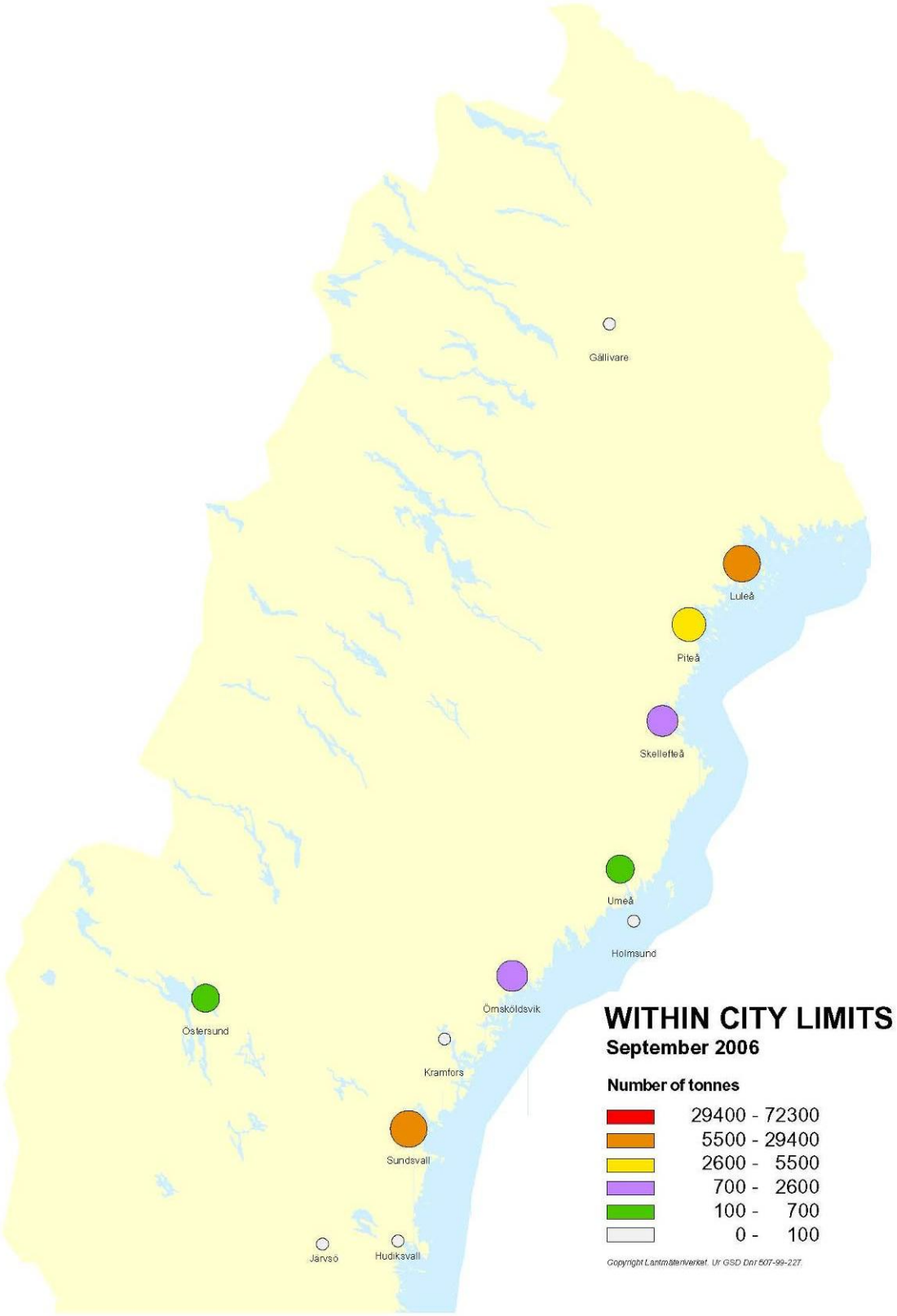

ROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Falun
Sandviken
Gävle
Borlänge
Ludvika
Avesta
Fagersta
Sala
Uppsala
Norrtälje
Arvika
Västerås
Enköping
Upplands-Väsby
STOCKHOLM
Karlstad
Kristinehamn
Karlskoga
Köping
Arboga
Eskilstuna
Strängnäs
Örebro
Södertälje
Kumla
Katrineholm
Nynäshamn
Nyköping
Oxelösund
Finspång
Norrköping
Motala
Linköping
Mjölby
Lidköping
Skövde
Mariestad
Uddevalla
Trollhättan
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Västervik
Visby
Kungsbacka
Vetlanda
Oskarshamn
Värnamo
Varberg
Falkenberg
Ljungby
Växjö
Nybro
Kalmar
Halmstad
Ängelholm
Höganäs
Hässleholm
Kristianstad
Helsingborg
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
Karlshamn
Ronneby
Karlskrona
CLASS 7
September 2006
Number of packages
100 -
50 - 99
1 - 49
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

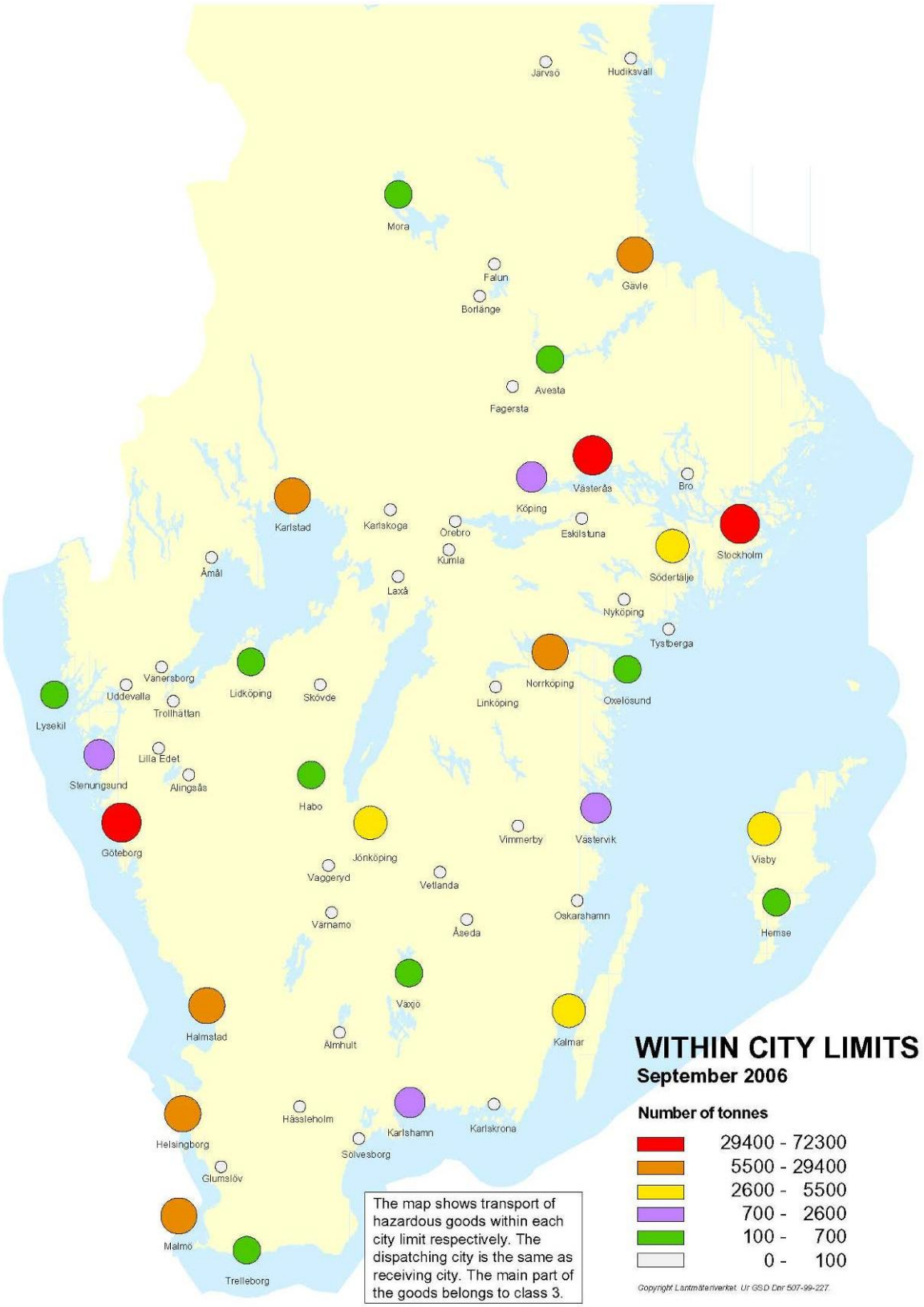

ROAD
Kiruna
Gällivare
E10
Jokkmokk
E4
Boden
Luleå
Arvidsjaur
Piteå
Skellefteå
Åsele
45
E4
Umeå
Örnsköldsvik
Östersund
E14
Härnösand
Sundsvall
E4
Hudiksvall
CLASS 8
September 2006
Number of tonnes
46400 - 58000
34800 - 46400
23200 - 34800
11600 - 23200
0 - 11600
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


ROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Falun
Borlänge
Sandviken
Gävle
Ludvika
Avesta
Fagersta
Sala
Uppsala
Norrtälje
Arvika
Karlstad
Kristinehamn
Karlskoga
Örebro
Kumla
Arboga
Eskilstuna
Strängnäs
Västerås
Enköping
Upplands Väsby
STOCKHOLM
Södertälje
Nynäshamn
Katrineholm
Nyköping
Oxelösund
Finspång
Norrköping
Motala
Mjölby
Linköping
Vadstena
Skövde
Falköping
Mariestad
Lidköping
Uddevalla
Trollhättan
Kungälv
Alingsås
GÖTEBORG
Borås
Tranås
Jönköping
Nässjö
Vetlanda
Västervik
Visby
Kungsbacka
Varberg
Falkenberg
Värnamo
Oskarshamn
Växjö
Ljungby
Halmstad
Nybro
Kalmar
Ängelholm
Höganäs
Helsingborg
Hässleholm
Kristianstad
Karlshamn
Ronneby
Karlskrona
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
E4
E6
E18
E20
45
80
40
52
22
30
28
CLASS 8
September 2006
Number of tonnes
46400 - 58000
34800 - 46400
23200 - 34800
11600 - 23200
0 - 11600
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

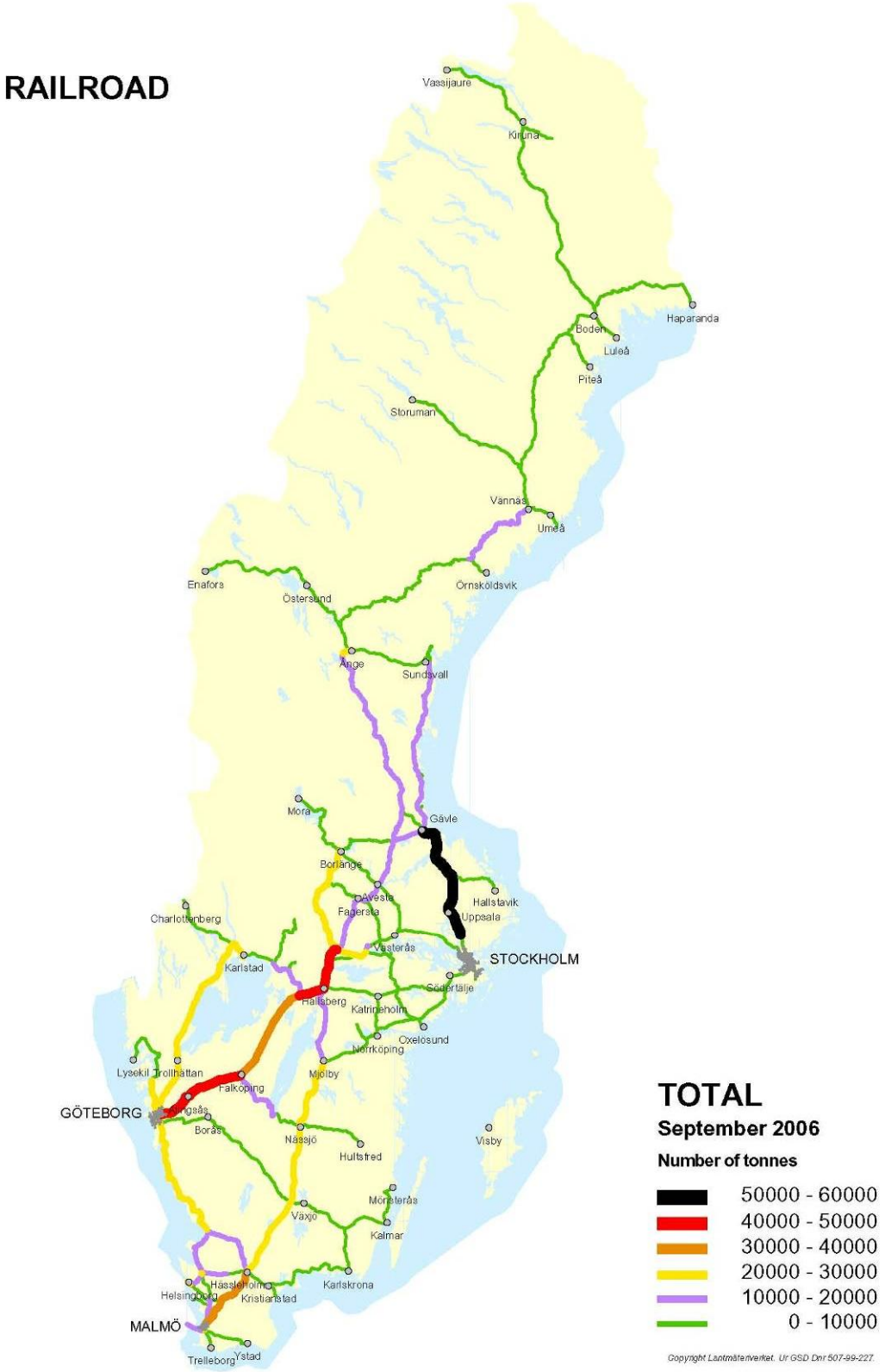

ROAD
Kiruna
Gällivare
E10
Jokkmokk
E4
Boden
Luleå
Arvidsjaur
Piteå
Skellefteå
Åsele
E4
Umeå
Örnsköldsvik
Östersund
45
E14
Härnosand
Sundsvall
E4
Hudiksvall
CLASS 9
September 2006
Number of tonnes
46000 - 57600
34500 - 46000
23000 - 34500
11500 - 23000
0 - 11500
Copyright Lantmäteiverket. Ur GSD Dnr 507-99-227.

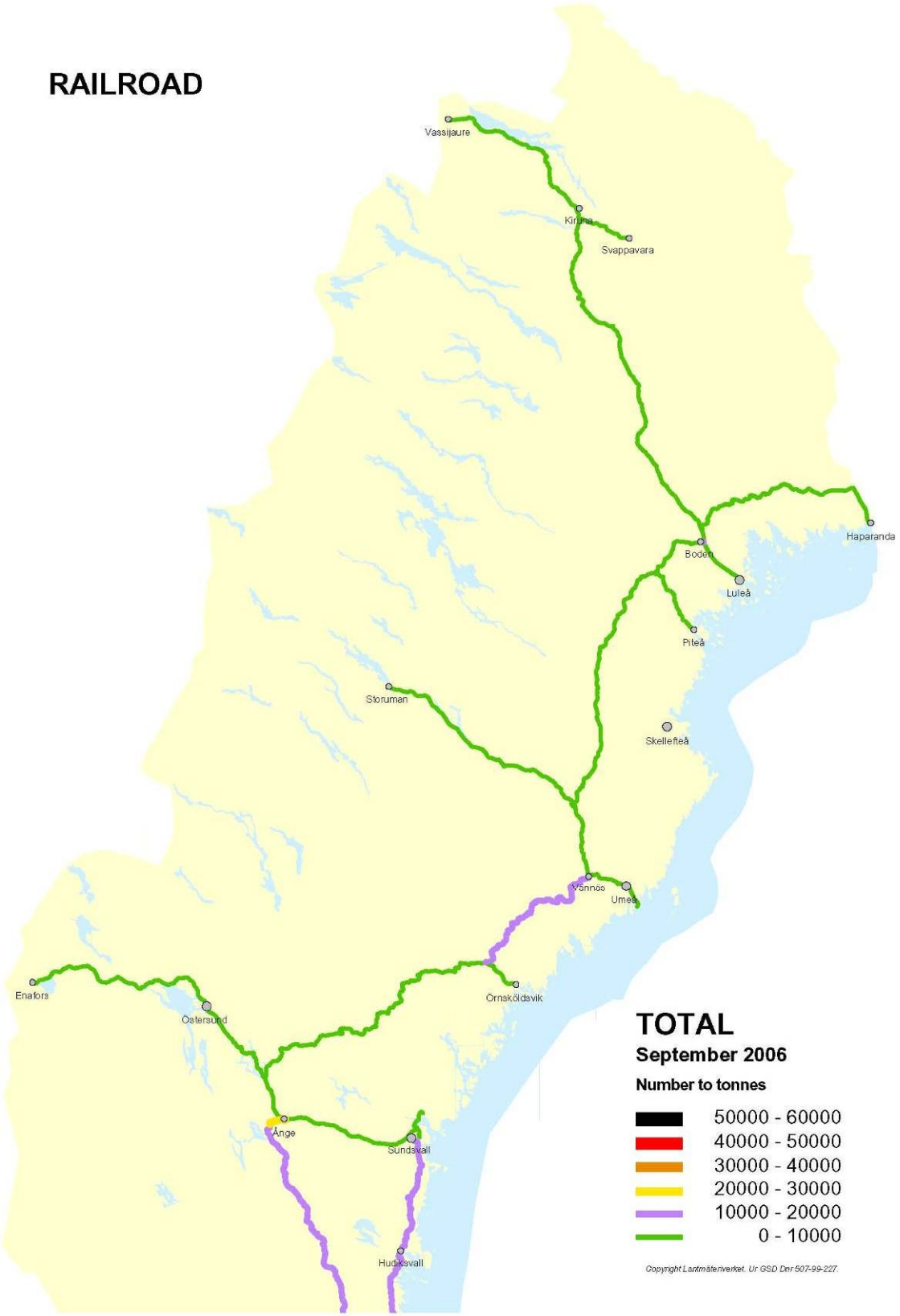

ROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
45
80
Falun
Borlänge
Sandviken
Gävle
E4
Ludvika
Avesta
Fagersta
Sala
Uppsala
Norrtälje
Arvika
E18
E20
Västerås
Enköping
Upplands-Väsby
STOCKHOLM
Karlstad
Köping
Arboga
Eskilstuna
Strängnäs
Kristinehamn
Karlskoga
Örebro
Kumla
Södertälje
52
Katrineholm
Nynäshamn
Nyköping
Oxelösund
Finspång
Norrköping
Motala
Linköping
Mjölby
Lidköping
Skövde
Uddevalla
Trollhättan
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Västervik
Visby
Kungsbacka
Vetlanda
Oskarshamn
Värnamo
Varberg
Falkenberg
Ljungby
Växjö
Nybro
Kalmar
Halmstad
22
30
28
Ängelholm
Höganäs
Hässleholm
Karlshamn
Ronneby
Karlskrona
Helsingborg
Kristianstad
Landskrona
Lund
MALMÖ
Trelleborg
Ystad
CLASS 9
September 2006
Number of tonnes
46000 - 57600
34500 - 46000
23000 - 34500
11500 - 23000
0 - 11500
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

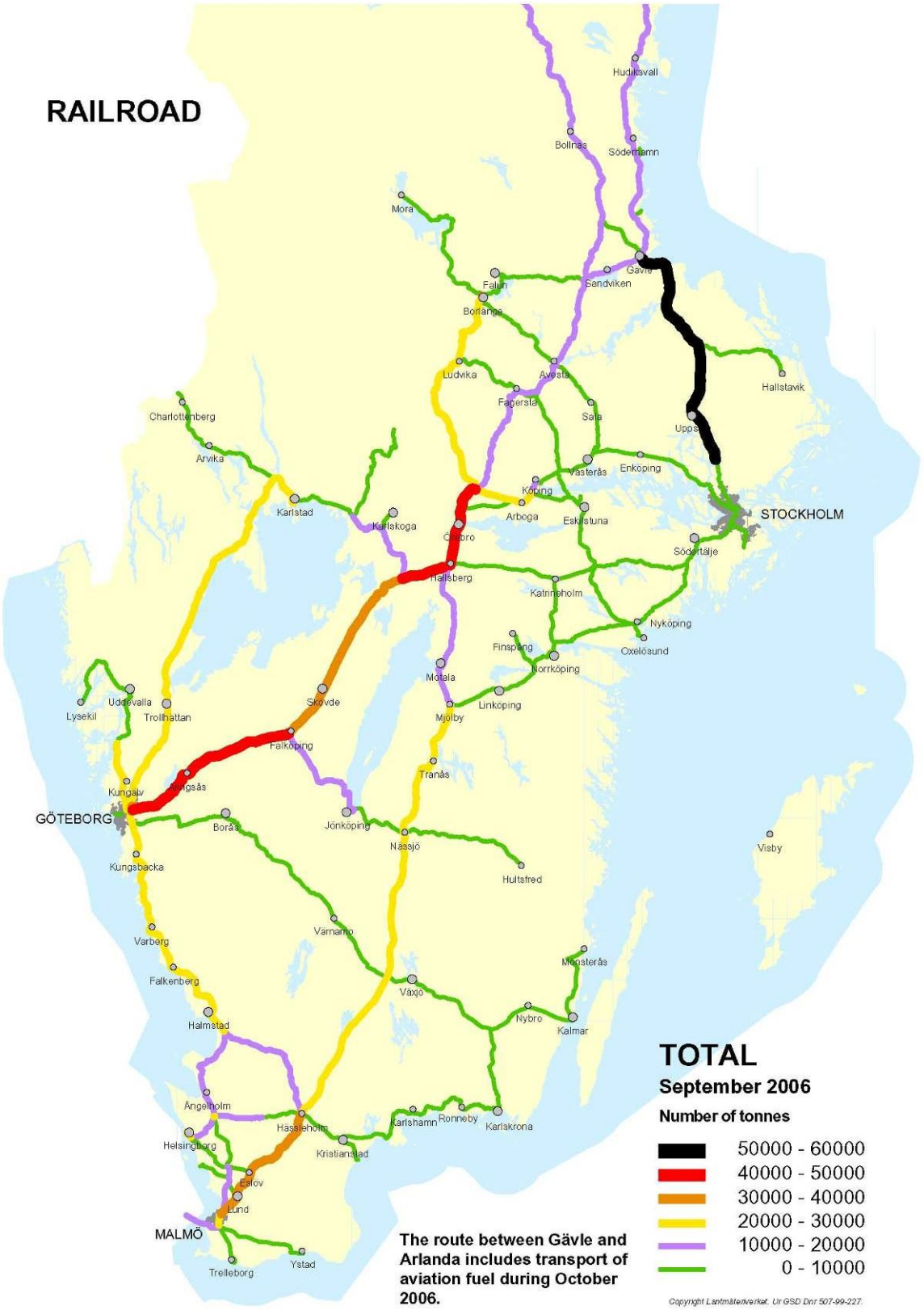

Gällivare
Luleå
Piteå
Skellefteå
Umeå
Holmsund
Örnsköldsvik
Östersund
Kramfors
Sundsvall
Järvsö
Hudiksvall
WITHIN CITY LIMITS
September 2006
Number of tonnes
29400 - 72300
5500 - 29400
2600 - 5500
700 - 2600
100 - 700
0 - 100
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

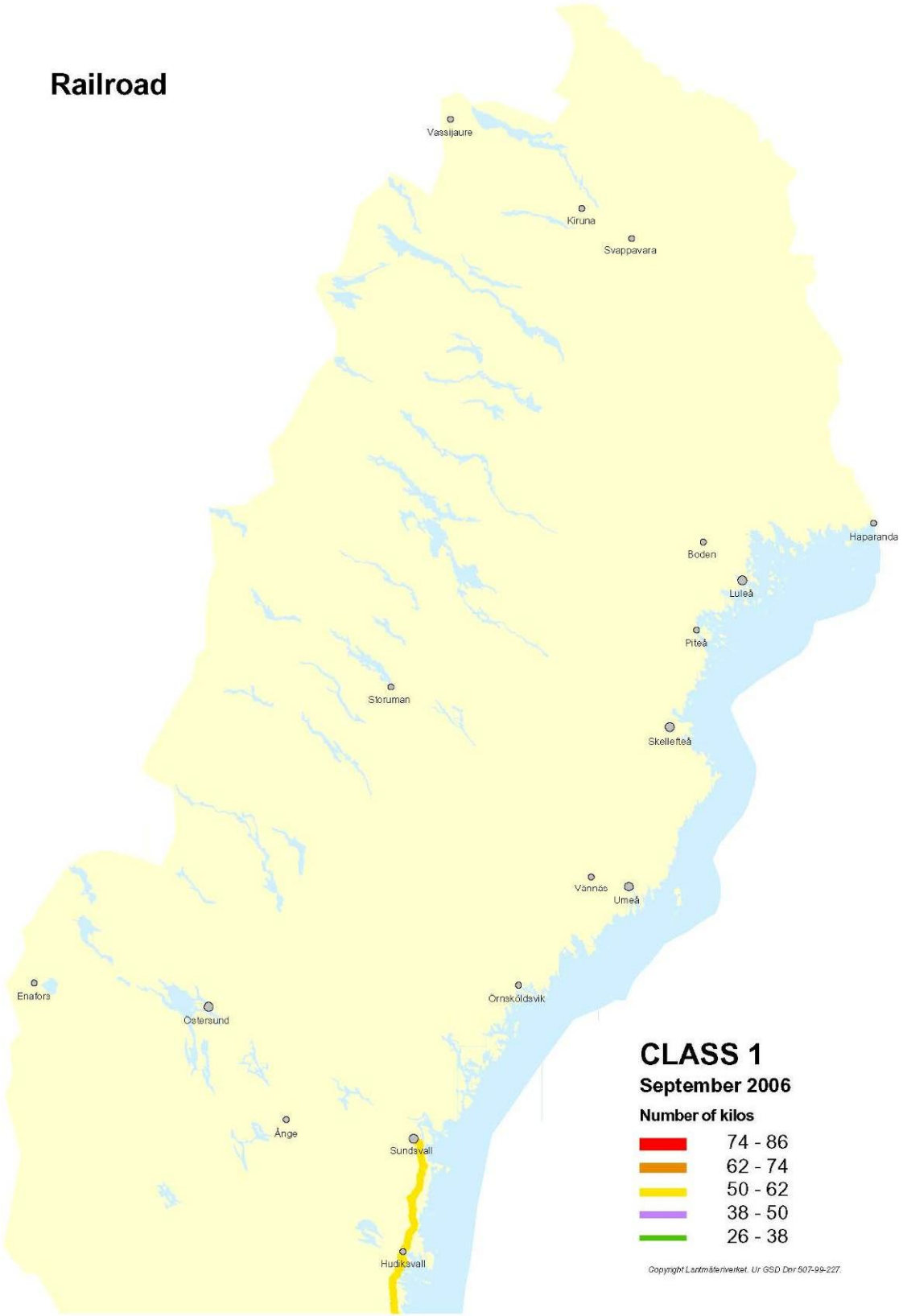

Järvsö
Hudiksvall
Mora
Falun
Borlänge
Gävle
Avesta
Fagersta
Västerås
Köping
Bro
Karlstad
Karlskoga
Örebro
Eskilstuna
Stockholm
Kumla
Åmål
Laxå
Södertälje
Nyköping
Tystberga
Vänersborg
Uddevalla
Trollhättan
Lidköping
Skövde
Norrköping
Linköping
Oxelösund
Lysekil
Lilla Edet
Stenungsund
Alingsås
Habo
Göteborg
Jönköping
Vimmerby
Västervik
Visby
Vaggeryd
Vetlanda
Oskarshamn
Värnamo
Åseda
Hemse
Växjö
Halmstad
Almhult
Kalmar
Hässleholm
Karlshamn
Karlskrona
Helsingborg
Sölvesborg
Glumslöv
Malmö
Trelleborg
The map shows transport of hazardous goods within each city limit respectively. The dispatching city is the same as receiving city. The main part of the goods belongs to class 3.
WITHIN CITY LIMITS
September 2006
Number of tonnes
29400 - 72300
5500 - 29400
2600 - 5500
700 - 2600
100 - 700
0 - 100
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

APPENDIX III RAIL MAPS


RAILROAD
Vassijaure
Kiruna
Haparanda
Boden
Luleå
Piteå
Storuman
Vännäs
Umeå
Örnsköldsvik
Enafors
Östersund
Ånge
Sundsvall
Mora
Gävle
Borlänge
Avesta
Fagersta
Hallstavik
Uppsala
Charlottenberg
Karlstad
Västerås
STOCKHOLM
Södertälje
Hallsberg
Katrineholm
Oxelösund
Norrköping
Lysekil
Trollhättan
Falköping
Mjölby
GÖTEBORG
Borås
Nässjö
Hultsfred
Visby
Mönsterås
Växjö
Kalmar
Karlskrona
Hässleholm
Helsingborg
Kristianstad
MALMÖ
Trelleborg
Ystad
TOTAL
September 2006
Number of tonnes
50000 - 60000
40000 - 50000
30000 - 40000
20000 - 30000
10000 - 20000
0 - 10000
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Vassijaure
Kiruna
Svappavara
Haparanda
Boden
Luleå
Piteå
Storuman
Skellefteå
Vännäs
Umeå
Örnsköldsvik
Enafors
Östersund
Ånge
Sundsvall
Hudiksvall
TOTAL
September 2006
Number to tonnes
50000 - 60000
40000 - 50000
30000 - 40000
20000 - 30000
10000 - 20000
0 - 10000
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Falun
Sandviken
Borlänge
Ludvika
Avesta
Hallstavik
Fagersta
Sala
Uppsala
Charlottenberg
Arvika
Västerås
Enköping
Köping
Karlstad
Arboga
Eskilstuna
STOCKHOLM
Karlskoga
Örebro
Södertälje
Hallsberg
Katrineholm
Nyköping
Finspång
Oxelösund
Norrköping
Motala
Lysekil
Uddevalla
Trollhättan
Skövde
Linköping
Mjölby
Falköping
Tranås
Kungälv
Borås
GÖTEBORG
Jönköping
Nässjö
Visby
Kungsbacka
Hultsfred
Värnamo
Varberg
Mönsterås
Falkenberg
Växjö
Nybro
Halmstad
Kalmar
Ängelholm
Karlshamn
Ronneby
Karlskrona
Hässleholm
Helsingborg
Kristianstad
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
The route between Gävle and Arlanda includes transport of aviation fuel during October 2006.
TOTAL
September 2006
Number of tonnes
50000 - 60000
40000 - 50000
30000 - 40000
20000 - 30000
10000 - 20000
0 - 10000
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


Railroad
Vassijaure
Kiruna
Svappavara
Haparanda
Boden
Luleå
Piteå
Storuman
Skellefteå
Vännäs
Umeå
Enafors
Östersund
Örnsköldsvik
Ånge
Sundsvall
Hudiksvall
CLASS 1
September 2006
Number of kilos
74 - 86
62 - 74
50 - 62
38 - 50
26 - 38
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

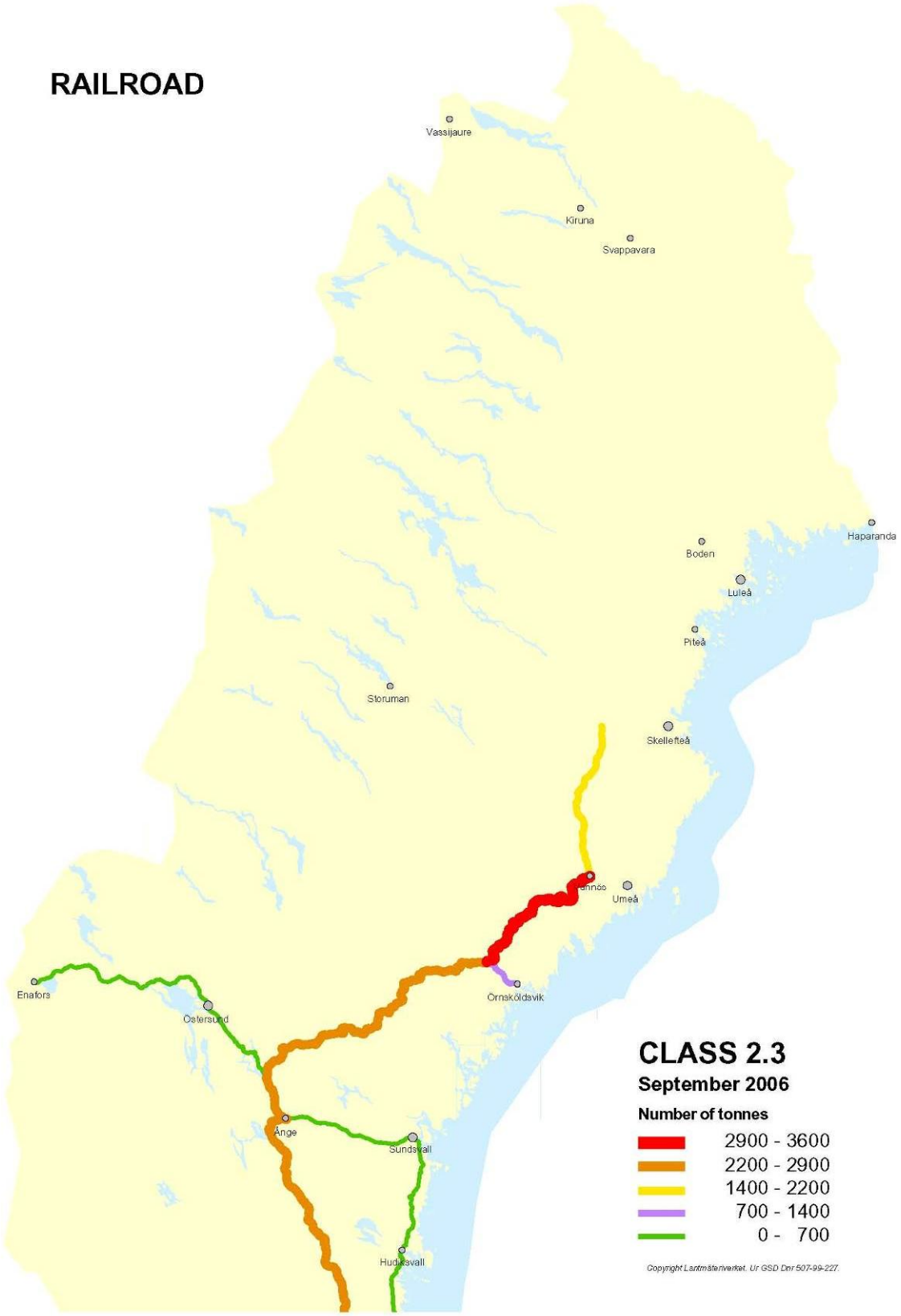

RAILROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Sandviken
Falun
Borlänge
Ludvika
Avesta
Hallstavik
Fagersta
Sala
Uppsala
Charlottenberg
Arvika
Västerås
Enköping
Köping
Karlstad
Arboga
Eskilstuna
STOCKHOLM
Kristinehamn
Örebro
Södertälje
Hallsberg
Katrineholm
Nyköping
Finspång
Oxelösund
Norrköping
Motala
Lysekil
Uddevalla
Skövde
Linköping
Trollhättan
Falköping
Alingsås
Kungälv
GÖTEBORG
Borås
Jönköping
Visby
Kungsbacka
Hultsfred
Varberg
Värnamo
Mönsterås
Falkenberg
Växjö
Halmstad
Nybro
Kalmar
Ängelholm
Karlshamn
Ronneby
Karlskrona
Helsingborg
Kristianstad
Landskrona
Lund
MALMÖ
Trelleborg
Ystad
CLASS 1
September 2006
Number of kilos
74 - 86
62 - 74
50 - 62
38 - 50
26 - 38
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Vassijaure
Kiruna
Svappavara
Haparanda
Boden
Luleå
Piteå
Storuman
Skellefteå
Vännäs
Umeå
Örnsköldsvik
Enafors
Östersund
Ånge
Sundsvall
Hudiksvall
CLASS 2.1
September 2006
Number of tonnes
20800 - 26100
15600 - 20800
10400 - 15600
5200 - 10400
0 - 5200
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Sandviken
Falun
Borlänge
Ludvika
Avesta
Hallstavik
Fagersta
Sala
Uppsala
Charlottenberg
Arvika
Västerås
Enköping
Köping
Karlstad
Arboga
Eskilstuna
STOCKHOLM
Karlskoga
Örebro
Södertälje
Katrineholm
Nyköping
Finspång
Oxelösund
Norrköping
Motala
Uddevalla
Lysekil
Trollhättan
Skövde
Linköping
Mjölby
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Visby
Kungsbacka
Hultsfred
Värnamo
Varberg
Mönsterås
Falkenberg
Växjö
Nybro
Halmstad
Kalmar
Ängelholm
Karlshamn
Karlskrona
Hässleholm
Helsingborg
Kristianstad
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 2.1
September 2006
Number of tonnes
20800 - 26100
15600 - 20800
10400 - 15600
5200 - 10400
0 - 5200
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Vassijaure
Kiruna
Svappavara
Haparanda
Boden
Luleå
Piteå
Storuman
Skellefteå
Vännäs
Umeå
Örnsköldsvik
Enafors
Östersund
Ånge
Sundsvall
Hudiksvall
CLASS 2.2
September 2006
Number of tonnes
370 - 450
280 - 370
200 - 280
110 - 200
20 - 110
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

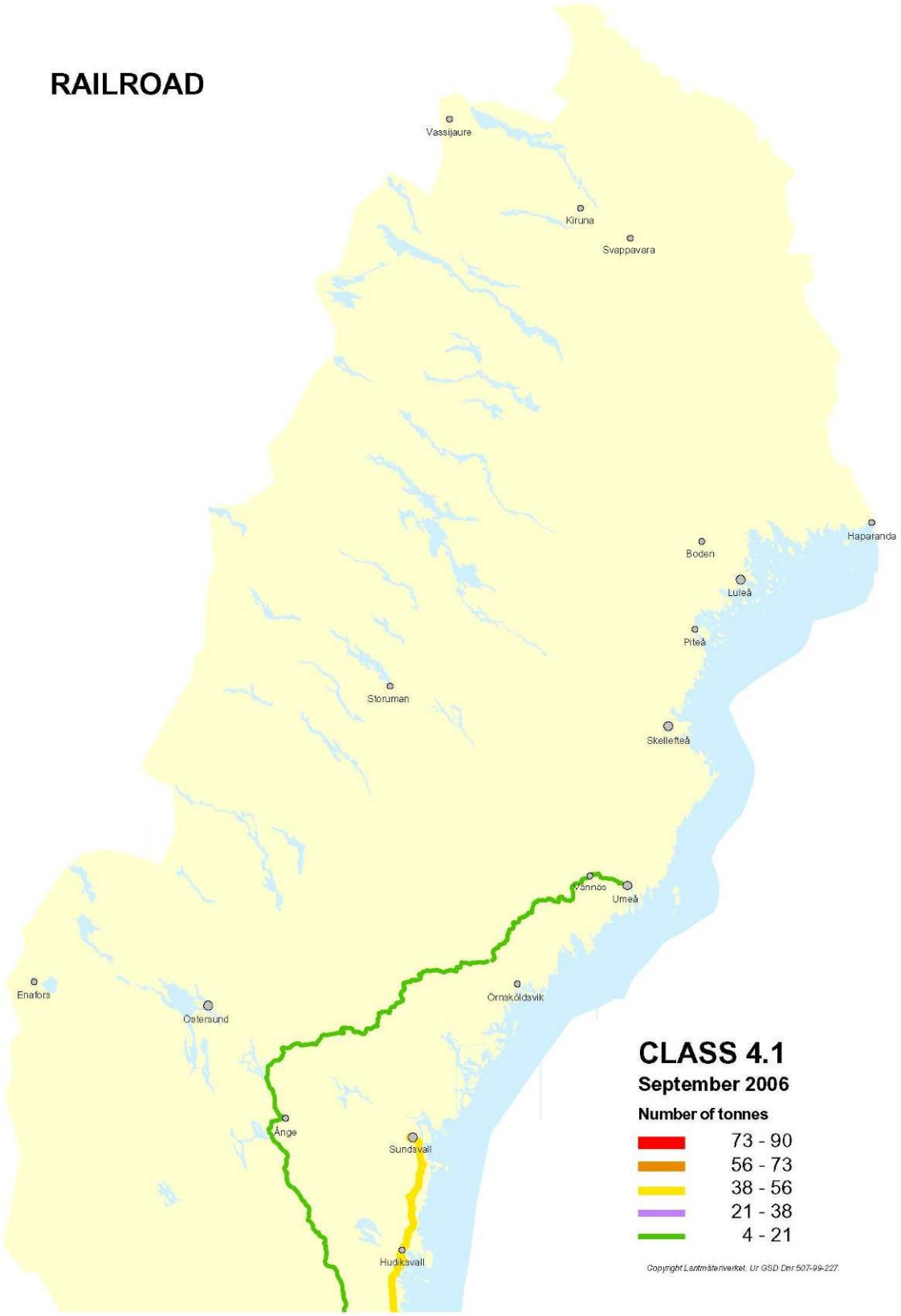

RAILROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Falun
Sandviken
Borlänge
Ludvika
Avesta
Hallstavik
Fagersta
Sala
Charlottenberg
Uppsala
Arvika
Västerås
Enköping
Köping
Karlstad
Arboga
Eskilstuna
STOCKHOLM
Karlskoga
Örebro
Södertälje
Hallsberg
Katrineholm
Nyköping
Finspång
Oxelösund
Norrköping
Motala
Uddevalla
Skövde
Linköping
Lysekil
Trollhättan
Mjölby
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Visby
Kungsbacka
Hultsfred
Varberg
Värnamo
Mönsterås
Falkenberg
Växjö
Halmstad
Nybro
Kalmar
Ängelholm
Karlshamn
Karlskrona
Hässleholm
Helsingborg
Kristianstad
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 2.2
September 2006
Number of tonnes
370 - 450
280 - 370
200 - 280
110 - 200
20 - 110
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Vassijaure
Kiruna
Svappavara
Haparanda
Boden
Luleå
Piteå
Storuman
Skellefteå
Umeå
Örnsköldsvik
Enafors
Östersund
Ånge
Sundsvall
Hudiksvall
CLASS 2.3
September 2006
Number of tonnes
2900 - 3600
2200 - 2900
1400 - 2200
700 - 1400
0 - 700
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

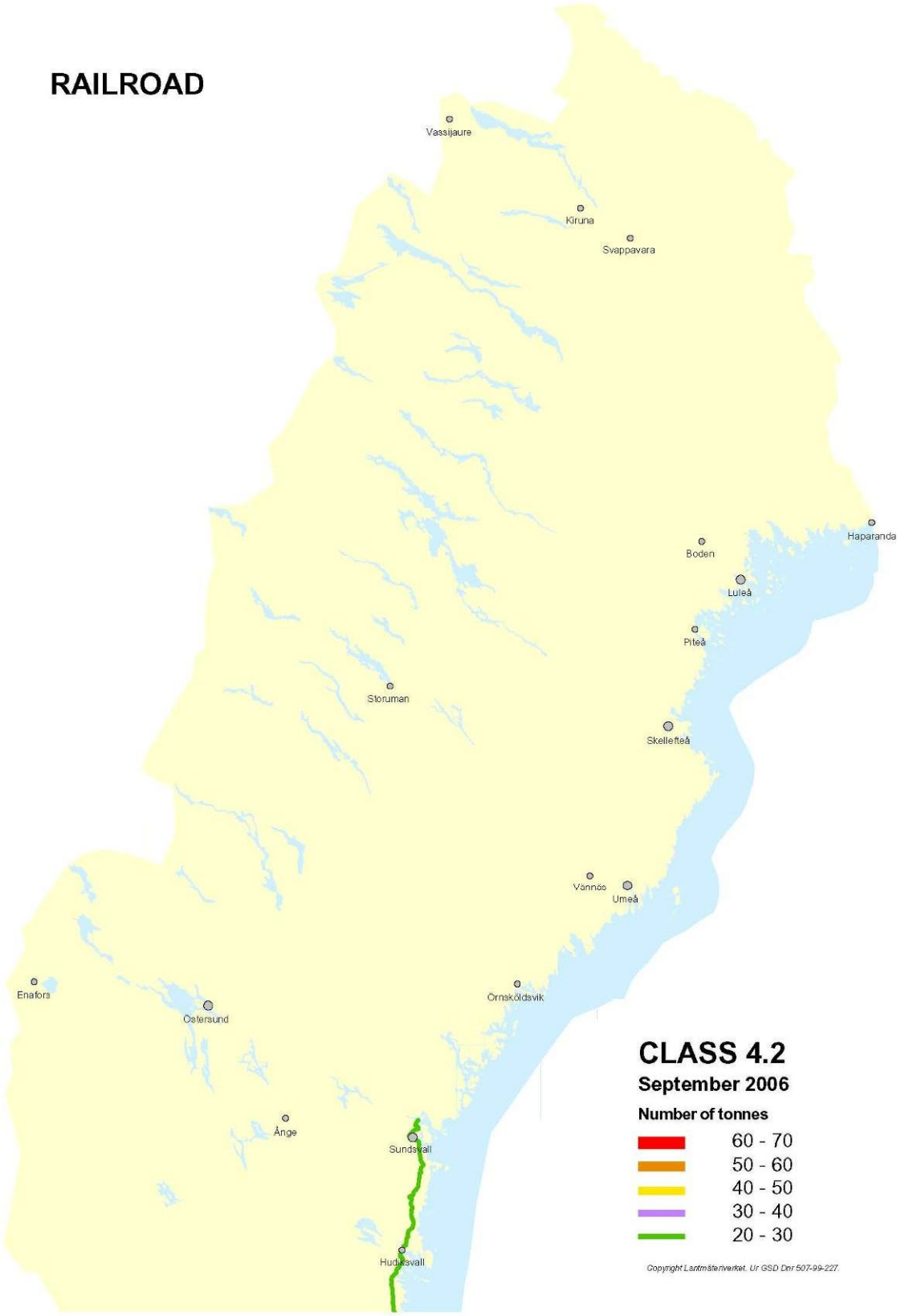

RAILROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Falun
Sandviken
Borlänge
Ludvika
Hallstavik
Charlottenberg
Arvika
Uppsala
Enköping
Västerås
Karlstad
Arboga
Eskilstuna
STOCKHOLM
Karlskoga
Södertälje
Katrineholm
Nyköping
Finspång
Oxelösund
Norrköping
Linköping
Lysekil
Uddevalla
Trollhättan
Skövde
Falköping
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Visby
Kungsbacka
Hultsfred
Varberg
Värnamo
Falkenberg
Växjö
Mönsterås
Halmstad
Nybro
Kalmar
Ängelholm
Karlshamn
Karlskrona
Helsingborg
Kristianstad
Landskrona
MALMÖ
Trelleborg
Ystad
CLASS 2.3
September 2006
Number of tonnes
2900 - 3600
2200 - 2900
1400 - 2200
700 - 1400
0 - 700
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Vassijaure
Kiruna
Svappavara
Haparanda
Boden
Luleå
Piteå
Storuman
Skellefteå
Vännäs
Umeå
Örnsköldsvik
Enafors
Östersund
Ånge
Sundsvall
Hudiksvall
CLASS 3
September 2006
Number of tonnes
43500 - 52000
34800 - 43500
26100 - 34800
17400 - 26100
8700 - 17400
0 - 8700
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

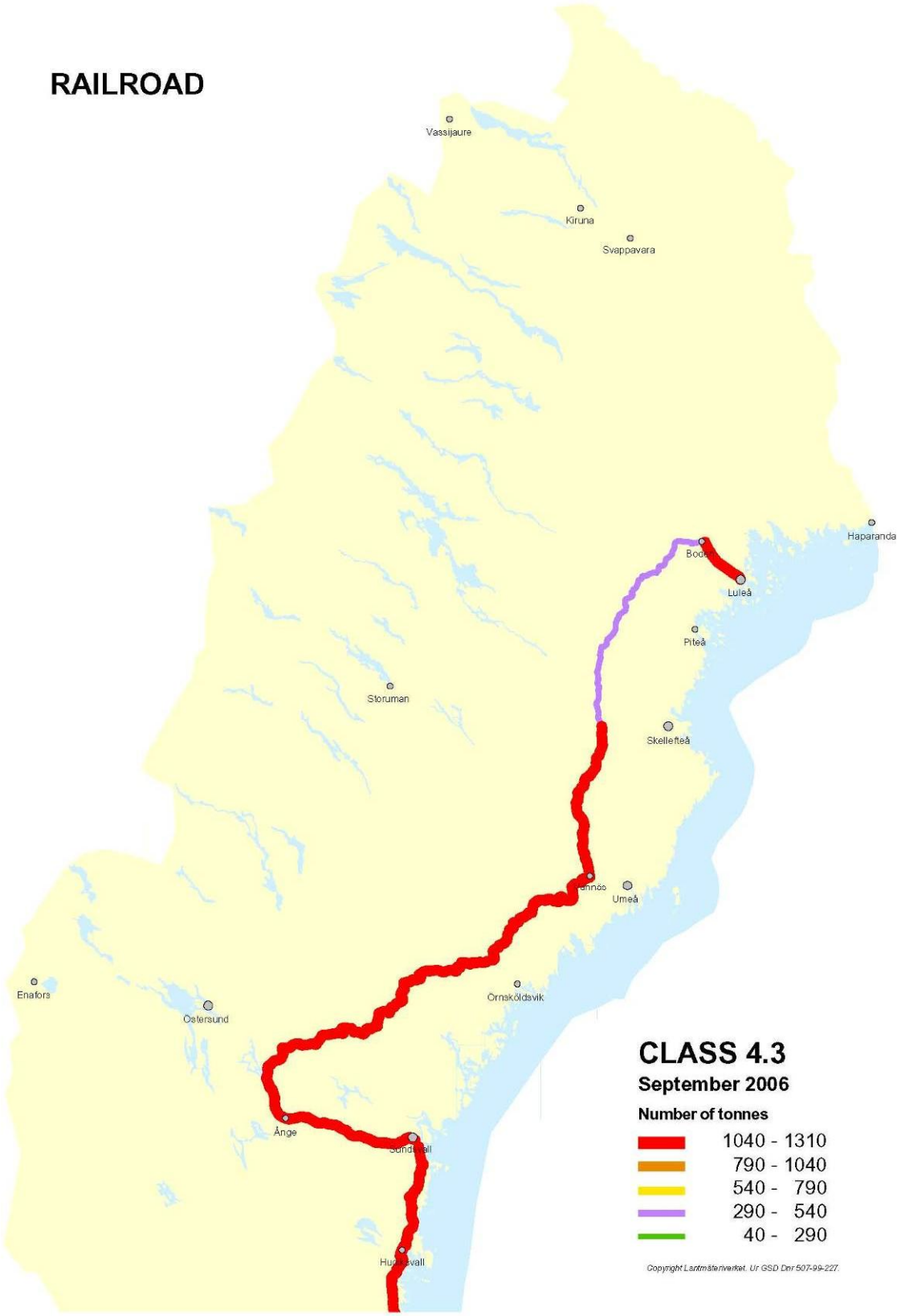

RAILROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Falun
Sandviken
Borlänge
Ludvika
Avesta
Hallstavik
Fagersta
Sala
Uppsala
Charlottenberg
Arvika
Enköping
Västerås
Köping
Karlstad
Arboga
Eskilstuna
STOCKHOLM
Kristinehamn
Örebro
Södertälje
Hallsberg
Katrineholm
Nyköping
Finspång
Oxelösund
Norrköping
Motala
Lysekil
Uddevalla
Skövde
Linköping
Trollhättan
Mjölby
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Visby
Kungsbacka
Hultsfred
Värnamo
Varberg
Mönsterås
Falkenberg
Växjö
Nybro
Halmstad
Kalmar
Ängelholm
Hässleholm
Karlshamn
Karlskrona
Helsingborg
Kristianstad
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
The route between Gävle and Arlanda includes transport of aviation fuel during October 2006.
CLASS 3
September 2006
Number of tonnes
43500 - 52000
34800 - 43500
26100 - 34800
17400 - 26100
8700 - 17400
0 - 8700
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Vassijaure
Kiruna
Svappavara
Haparanda
Boden
Luleå
Piteå
Storuman
Skellefteå
Vännäs
Umeå
Enafors
Östersund
Örnsköldsvik
Ånge
Sundsvall
Hudiksvall
CLASS 4.1
September 2006
Number of tonnes
73 - 90
56 - 73
38 - 56
21 - 38
4 - 21
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Falun
Borlänge
Sandviken
Ludvika
Avesta
Hallstavik
Fagersta
Sala
Uppsala
Charlottenberg
Arvika
Enköping
Västerås
Köping
Karlstad
Arboga
Eskilstuna
STOCKHOLM
Karlskoga
Örebro
Södertälje
Hallsberg
Katrineholm
Nyköping
Finspång
Oxelösund
Norrköping
Motala
Uddevalla
Lysekil
Trollhättan
Linköping
Mjölby
Falköping
Tranås
Kungälv
GÖTEBORG
Borås
Jönköping
Nässjö
Visby
Kungsbacka
Hultsfred
Varberg
Värnamo
Mönsterås
Falkenberg
Växjö
Halmstad
Nybro
Kalmar
Ängelholm
Karlshamn
Karlskrona
Hässleholm
Helsingborg
Kristianstad
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 4.1
September 2006
Number of tonnes
73 - 90
56 - 73
38 - 56
21 - 38
4 - 21
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Vassijaure
Kiruna
Svappavara
Haparanda
Boden
Luleå
Piteå
Storuman
Skellefteå
Vännäs
Umeå
Enafors
Östersund
Örnsköldsvik
Ånge
Sundsvall
Hudiksvall
CLASS 4.2
September 2006
Number of tonnes
60 - 70
50 - 60
40 - 50
30 - 40
20 - 30
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Falun
Sandviken
Borlänge
Ludvika
Avesta
Hallstavik
Fagersta
Sala
Charlottenberg
Uppsala
Arvika
Västerås
Enköping
Köping
Karlstad
Arboga
Eskilstuna
STOCKHOLM
Karlskoga
Örebro
Södertälje
Hallsberg
Katrineholm
Nyköping
Finspång
Oxelösund
Norrköping
Motala
Lysekil
Uddevalla
Trollhättan
Skövde
Linköping
Mjölby
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Visby
Kungsbacka
Hultsfred
Varberg
Värnamo
Mönsterås
Falkenberg
Växjö
Halmstad
Nybro
Kalmar
Ängelholm
Karlshamn
Karlskrona
Hässleholm
Helsingborg
Kristianstad
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 4.2
September 2006
Number of tonnes
60 - 70
50 - 60
40 - 50
30 - 40
20 - 30
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Vassijaure
Kiruna
Svappavara
Haparanda
Luleå
Piteå
Storuman
Skellefteå
Umeå
Örnsköldsvik
Enafors
Östersund
Ånge
CLASS 4.3
September 2006
Number of tonnes
1040 - 1310
790 - 1040
540 - 790
290 - 540
40 - 290
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Bollnäs
Mora
Falun
Borlänge
Ludvika
Charlottenberg
Arvika
Karlstad
Karlskoga
Hallstavik
Uppsala
Enköping
Eskilstuna
STOCKHOLM
Södertälje
Katrineholm
Nyköping
Oxelösund
Finspång
Norrköping
Motala
Linköping
Mjölby
Skövde
Uddevalla
Lysekil
Trollhättan
Falköping
Alingsås
Kungälv
GÖTEBORG
Borås
Jönköping
Nässjö
Tranås
Kungsbacka
Hultsfred
Visby
Varberg
Värnamo
Falkenberg
Växjö
Mönsterås
Halmstad
Nybro
Kalmar
Ängelholm
Hässleholm
Karlshamn
Karlskrona
Helsingborg
Kristianstad
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 4.3
September 2006
Number of tonnes
1040 - 1310
790 - 1040
540 - 790
290 - 540
40 - 290
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Vassijaure
Kiruna
Svappavara
Haparanda
Boden
Luleå
Piteå
Storuman
Skellefteå
Vännäs
Umeå
Enafors
Östersund
Örnsköldsvik
Ånge
Sundsvall
Hudiksvall
CLASS 5.1
September 2006
Number of tonnes
9200 - 11600
6900 - 9200
4600 - 6900
2300 - 4600
0 - 2300
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Falun
Sandviken
Borlänge
Ludvika
Avesta
Hallstavik
Fagersta
Sala
Uppsala
Charlottenberg
Arvika
Enköping
Västerås
Köping
Karlstad
Arboga
Eskilstuna
STOCKHOLM
Kristinehamn
Örebro
Södertälje
Hallsberg
Katrineholm
Nyköping
Finspång
Oxelösund
Norrköping
Motala
Skövde
Linköping
Mjölby
Lysekil
Uddevalla
Trollhättan
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Visby
Kungsbacka
Hultsfred
Värnamo
Varberg
Mönsterås
Falkenberg
Växjö
Nybro
Kalmar
Halmstad
Ängelholm
Karlshamn
Karlskrona
Helsingborg
Kristianstad
MALMÖ
Trelleborg
Ystad
CLASS 5.1
September 2006
Number of tonnes
9200 - 11600
6900 - 9200
4600 - 6900
2300 - 4600
0 - 2300
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Vassijaure
Kiruna
Svappavara
Haparanda
Boden
Luleå
Piteå
Storuman
Skellefteå
Vännäs
Umeå
Enafors
Östersund
Örnsköldsvik
Ånge
Sundsvall
Hudiksvall
CLASS 5.2
September 2006
Number of tonnes
160 - 190
120 - 160
90 - 120
50 - 90
10 - 50
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Falun
Sandviken
Borlänge
Ludvika
Avesta
Hallstavik
Fagersta
Sala
Charlottenberg
Uppsala
Arvika
Västerås
Enköping
Köping
Karlstad
Arboga
Eskilstuna
STOCKHOLM
Karlskoga
Örebro
Södertälje
Hallsberg
Katrineholm
Nyköping
Finspång
Oxelösund
Motala
Skövde
Linköping
Lysekil
Uddevalla
Trollhättan
Falköping
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Visby
Kungsbacka
Hultsfred
Värnamo
Varberg
Mönsterås
Falkenberg
Växjö
Nybro
Halmstad
Kalmar
Ängelholm
Karlshamn
Karlskrona
Helsingborg
Kristianstad
MALMÖ
Trelleborg
Ystad
CLASS 5.2
September 2006
Number of tonnes
160 - 190
120 - 160
90 - 120
50 - 90
10 - 50
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Vassijaure
Kiruna
Svappavara
Haparanda
Boden
Luleå
Piteå
Storuman
Skellefteå
Vännäs
Umeå
Enafors
Östersund
Örnsköldsvik
Ånge
Sundsvall
Hudiksvall
CLASS 6.1
September 2006
Number of tonnes
1840 - 2280
1380 - 1840
920 - 1380
460 - 920
0 - 460
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.


RAILROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Falun
Sandviken
Borlänge
Ludvika
Avesta
Hallstavik
Fagersta
Sala
Charlottenberg
Uppsala
Arvika
Västerås
Enköping
Köping
Karlstad
Arboga
Eskilstuna
STOCKHOLM
Karlskoga
Örebro
Södertälje
Hallsberg
Katrineholm
Nyköping
Finspång
Oxelösund
Norrköping
Motala
Uddevalla
Skövde
Linköping
Lysekil
Trollhättan
Mjölby
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Visby
Kungsbacka
Hultsfred
Värnamo
Varberg
Mönsterås
Falkenberg
Växjö
Nybro
Halmstad
Kalmar
Ängelholm
Karlshamn
Karlskrona
Helsingborg
Kristianstad
Landskrona
MALMÖ
Trelleborg
Ystad
CLASS 6.1
September 2006
Number of tonnes
1840 - 2280
1380 - 1840
920 - 1380
460 - 920
0 - 460
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

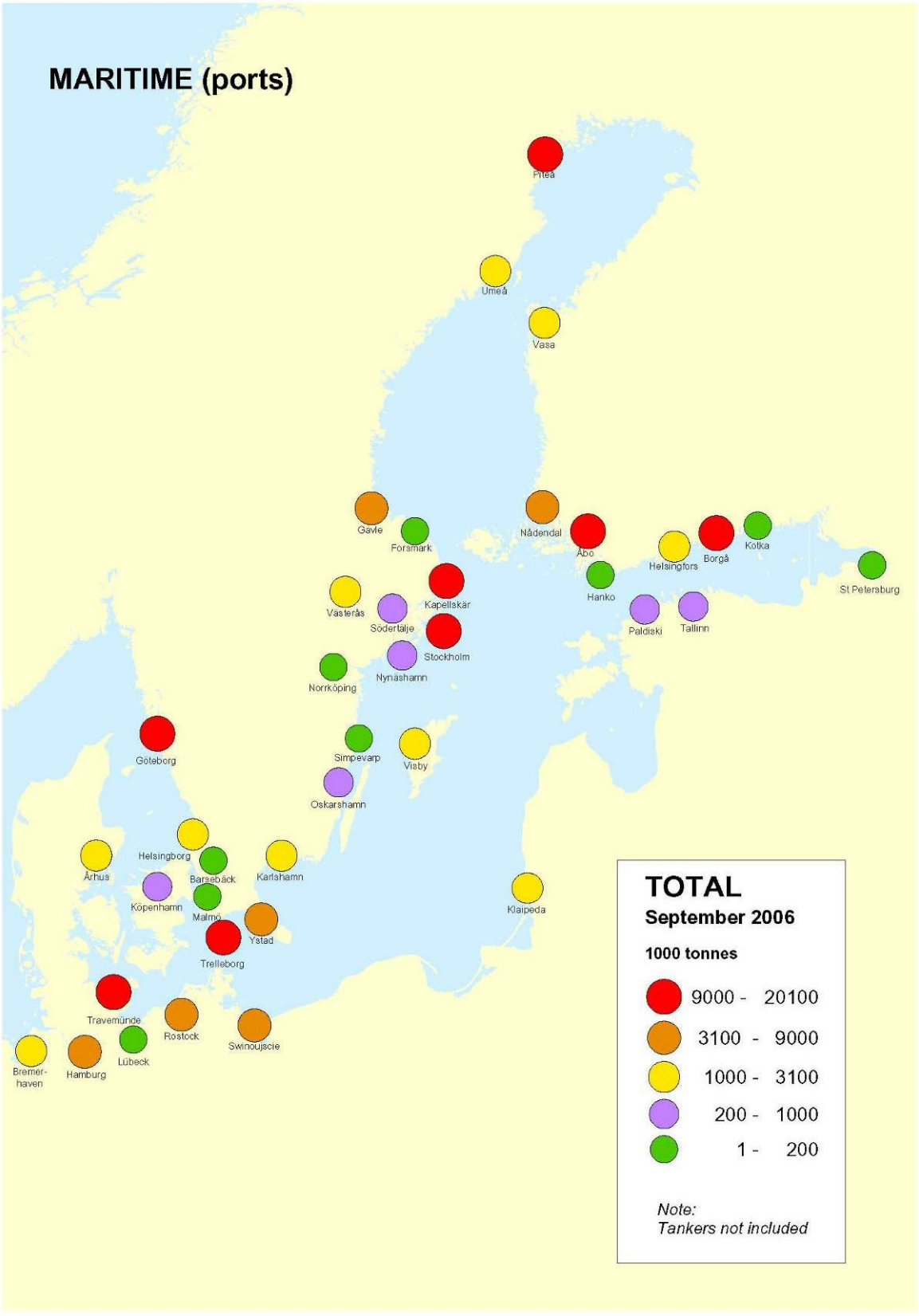

RAILROAD
Vassijaure
Kiruna
Svappavara
Haparanda
Boden
Luleå
Piteå
Storuman
Skellefteå
Vännäs
Umeå
Örnsköldsvik
Enafors
Östersund
Ånge
Sundsvall
Hudiksvall
CLASS 8
September 2006
Number of tonnes
13600 - 16800
10200 - 13600
6800 - 10200
3400 - 6800
0 - 3400
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

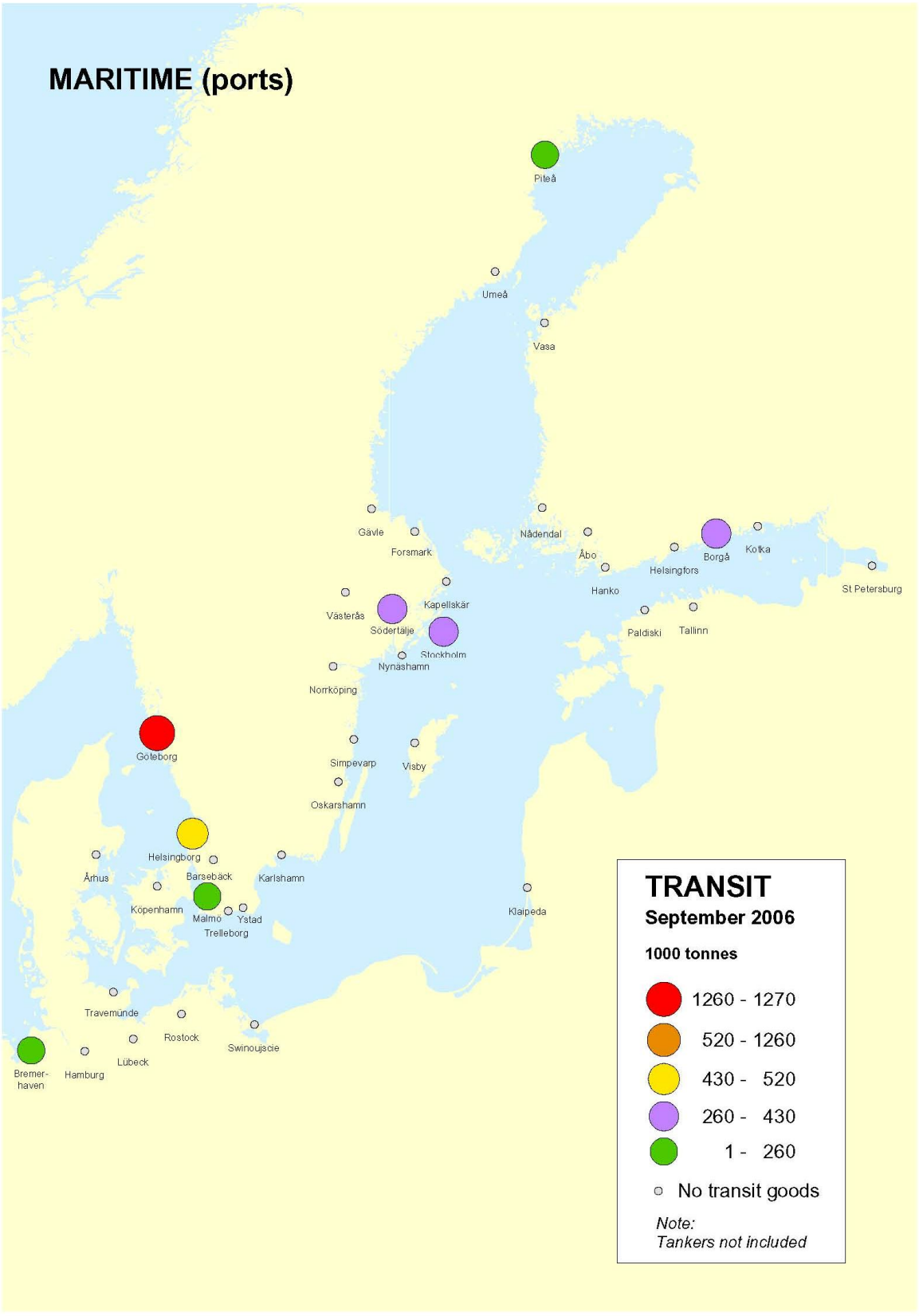

RAILROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Gävle
Falun
Sandviken
Borlänge
Ludvika
Avesta
Hallstavik
Fagersta
Sala
Charlottenberg
Uppsala
Arvika
Västerås
Enköping
Köping
Karlstad
Arboga
Eskilstuna
STOCKHOLM
Kristinehamn
Örebro
Södertälje
Hallsberg
Katrineholm
Nyköping
Finspång
Oxelösund
Norrköping
Motala
Skövde
Linköping
Lysekil
Uddevalla
Trollhättan
Mjölby
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Visby
Kungsbacka
Hultsfred
Värnamo
Varberg
Mönsterås
Falkenberg
Växjö
Nybro
Halmstad
Kalmar
Ängelholm
Karlshamn
Karlskrona
Hässleholm
Helsingborg
Kristianstad
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 8
September 2006
Number of tonnes
13600 - 16800
10200 - 13600
6800 - 10200
3400 - 6800
0 - 3400
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

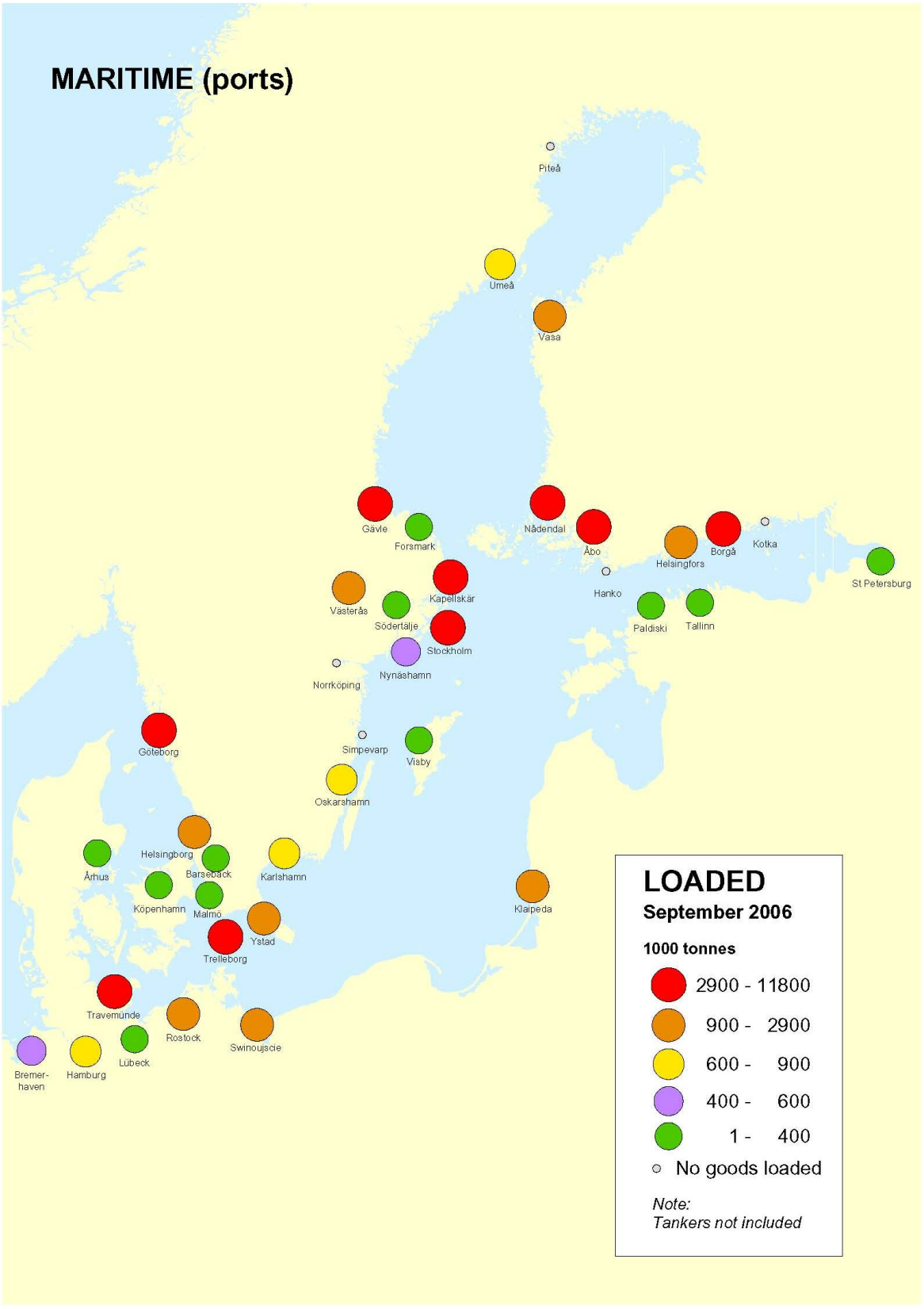

RAILROAD
Vassijaure
Kiruna
Svappavara
Haparanda
Boden
Luleå
Piteå
Storuman
Skellefteå
Vännäs
Umeå
Enafors
Östersund
Örnsköldsvik
Ånge
Sundsvall
Hudiksvall
CLASS 9
September 2006
Number of tonnes
7700 - 9700
5800 - 7700
3900 - 5800
1900 - 3900
0 - 1900
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

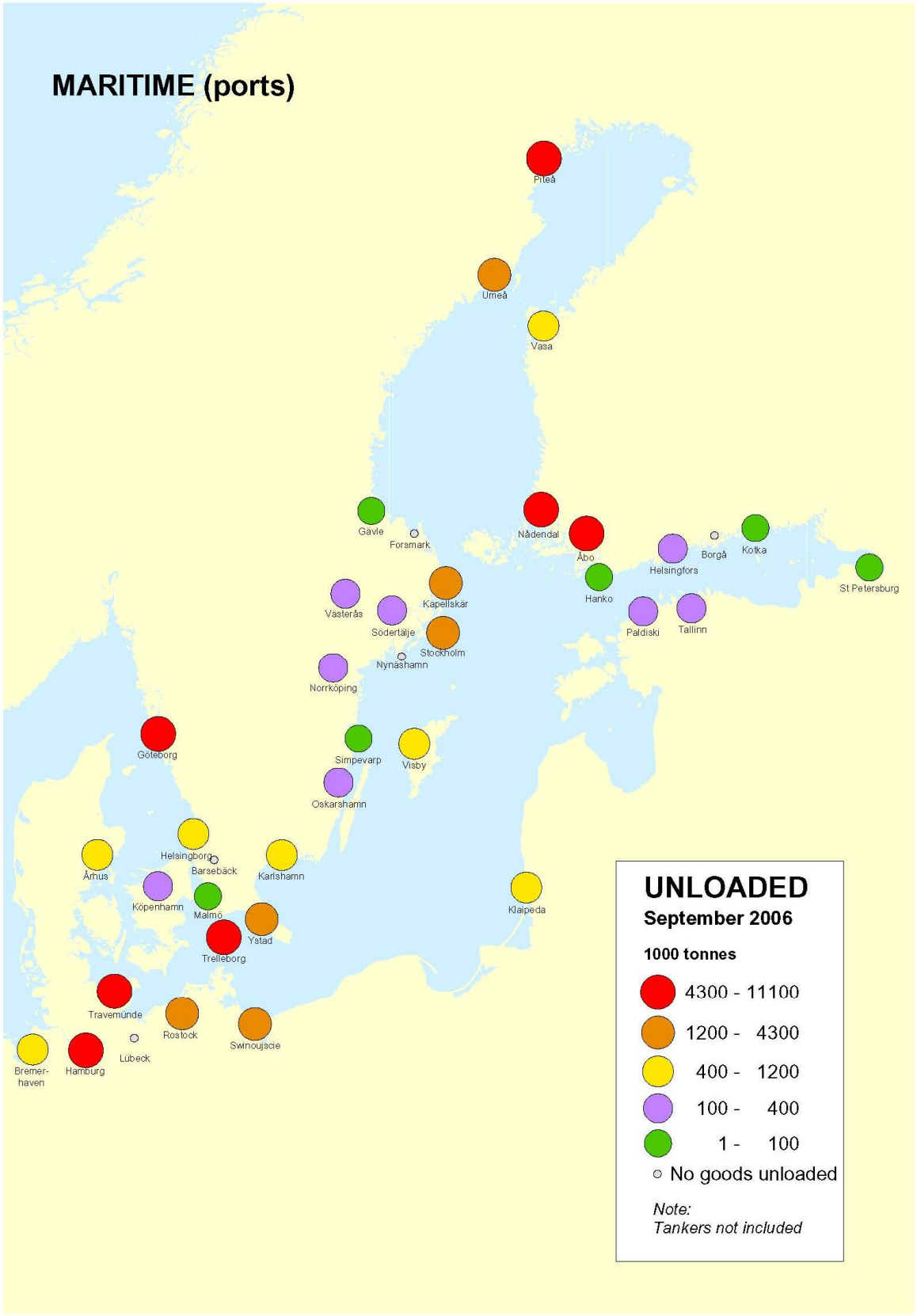

RAILROAD
Hudiksvall
Bollnäs
Söderhamn
Mora
Falun
Sandviken
Gävle
Borlänge
Avesta
Hallstavik
Fagersta
Sala
Uppsala
Charlottenberg
Arvika
Enköping
Västerås
Köping
Karlstad
Arboga
Eskilstuna
STOCKHOLM
Karlskoga
Örebro
Södertälje
Hallsberg
Katrineholm
Nyköping
Finspång
Oxelösund
Norrköping
Motala
Skövde
Uddevalla
Lysekil
Trollhättan
Linköping
Mjölby
Falköping
Tranås
Kungälv
Alingsås
GÖTEBORG
Borås
Jönköping
Nässjö
Visby
Kungsbacka
Hultsfred
Värnamo
Varberg
Mönsterås
Falkenberg
Växjö
Nybro
Halmstad
Kalmar
Ängelholm
Karlshamn
Karlskrona
Hässleholm
Helsingborg
Kristianstad
Landskrona
Eslöv
Lund
MALMÖ
Trelleborg
Ystad
CLASS 9
September 2006
Number of tonnes
7700 - 9700
5800 - 7700
3900 - 5800
1900 - 3900
0 - 1900
Copyright Lantmäteriverket. Ur GSD Dnr 507-99-227.

APPENDIX IV MAPS AND TABLES FOR SEA TRANSPORT


MARITIME (ports)
Piteå
Umeå
Vasa
Gävle
Foramark
Nådendal
Åbo
Hanko
Helsingfors
Borgå
Kotka
St Petersburg
Paldiski
Tallinn
Västerås
Södertälje
Kapellskär
Stockholm
Nynäshamn
Norrköping
Göteborg
Simpevarp
Visby
Oskarshamn
Helsingborg
Barsebäck
Karlshamn
Århus
Köpenhamn
Malmö
Ystad
Trelleborg
Klaipeda
Travemünde
Rostock
Swinoujscie
Lübeck
Bremer-haven
Hamburg
TOTAL
September 2006
1000 tonnes
9000 - 20100
3100 - 9000
1000 - 3100
200 - 1000
1 - 200
Note:
Tankers not included


MARITIME (ports)
Piteå
Umeå
Vasa
Gävle
Forsmark
Nådendal
Åbo
Hanko
Borgå
Kotka
Helsingfors
St Petersburg
Paldiski
Tallinn
Västerås
Kapellskär
Södertälje
Stockholm
Nynäshamn
Norrköping
Göteborg
Simpevarp
Visby
Oskarshamn
Helsingborg
Åhus
Barsebäck
Karlshamn
Köpenhamn
Malmo
Ystad
Trelleborg
Klaipeda
Travemünde
Rostock
Swinoujscie
Lübeck
Bremer-haven
Hamburg
TRANSIT
September 2006
1000 tonnes
1260 - 1270
520 - 1260
430 - 520
260 - 430
1 - 260
No transit goods
Note:
Tankers not included


MARITIME (ports)
Piteå
Umeå
Vasa
Gävle
Forsmark
Nådendal
Åbo
Hanko
Helsingfors
Borgå
Kotka
St Petersburg
Paldiski
Tallinn
Västerås
Södertälje
Kapellskär
Stockholm
Nynäshamn
Norrköping
Simpevarp
Visby
Oskarshamn
Göteborg
Helsingborg
Barseback
Karlshamn
Århus
Köpenhamn
Malmö
Ystad
Trelleborg
Klaipeda
Travemünde
Rostock
Swinoujscie
Lübeck
Hamburg
Bremer-haven
LOADED
September 2006
1000 tonnes
2900 - 11800
900 - 2900
600 - 900
400 - 600
1 - 400
No goods loaded
Note:
Tankers not included


MARITIME (ports)
Piteå
Umeå
Vasa
Gävle
Forsmark
Nådendal
Åbo
Hanko
Helsingfors
Borgå
Kotka
St Petersburg
Paldiski
Tallinn
Västerås
Södertälje
Kapellskär
Stockholm
Nynäshamn
Norrköping
Göteborg
Simpevarp
Visby
Oskarshamn
Helsingborg
Barsebäck
Karlshamn
Århus
Köpenhamn
Malmö
Ystad
Trelleborg
Klaipeda
Travemünde
Rostock
Swinoujscie
Lübeck
Bremer-haven
Hamburg
UNLOADED
September 2006
1000 tonnes
4300 - 11100
1200 - 4300
400 - 1200
100 - 400
1 - 100
No goods unloaded
Note:
Tankers not included

A. Tables for Swedish ports

Barsebäck

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	-	-	-	-	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	-	-	-	-
5.2	-	-	-	-	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	14**	-	14	100	-
8	-	-	-	-	-
9	-	-	-	-	-
Totalt	**14**	**-**	**14**	**100**	**-**

** Total aktivitet för Class 7 var 506 036 000 GBq.

Göteborg

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	62	699	754	3.8	67
2*	13	3	16	0.1	0.7
2.1	10	21	31	0.2	0
2.2	92	48	573	2.9	26
2.3	1	-	1	0.0	2
3	2 066	2 15	4 220	21.0	996
4.1	198	110	308	1.5	0
4.2	2	68	70	0.4	-
4.3	34	3	37	0.2	-
5.1	3 699	89	3 788	18.9	0.4
5.2	88	54	142	0.7	-
6.1	616	203	819	4.1	27
6.2	-	-	-	-	-
7	-	-	-	-	-
8	3 402	2 262	5 664	28.2	165
9	1 505	2 146	3 651	18.2	38
Totalt	**11 788**	**8 286**	**20 074**	**100**	**1 262**

Forsmark

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	-	-	-	-	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	-	-	-	-
5.2	-	-	-	-	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	6**	-	6	100	-
8	-	-	-	-	-
9	-	-	-	-	-
Totalt	**6**	**-**	**6**	**100**	**-**

** Total activity for Class 7 was 180 574 000 GBq.

Helsingborg

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	2	-	2	0.1	-
2*	0	17	17	0.8	0
2.1	1	1	2	0.1	10
2.2	9	2	11	0.5	-
2.3	27	7	34	1.6	-
3	81	29	111	5.2	81
4.1	-	1	1	0.0	-
4.2	-	3	3	0.1	-
4.3	-	-	-	-	-
5.1	392	-	392	18.4	92
5.2	5	0	5	0.3	-
6.1	1	102	102	4.8	10
6.2	-	-	-	-	-
7	-	-	-	-	-
8	312	57	370	17.3	99
9	848	236	1 083	50.8	224
Totalt	**1 679**	**455**	**2 134**	**100**	**516**

Gävle

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	-	31	31	0.8	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	20	-	20	0.5	-
5.1	3 667	-	3 667	92.7	-
5.2	-	-	-	-	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	240	-	240	6.1	-
Totalt	**3 927**	**31**	**3 958**	**100**	**-**

Kapellskär

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	8	76	85	0.9	-
2*	36	24	60	0.7	-
2.1	88	167	256	2.8	-
2.2	194	257	451	5.0	-
2.3	2	228	230	2.6	-
3	2 052	653	2 705	30.0	-
4.1	42	16	58	0.6	-
4.2	4	-	4	0.1	-
4.3	116	170	285	3.8	-
5.1	1 171	1 064	2 234	24.8	-
5.2	10	494	504	5.6	-
6.1	21	295	507	5.6	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	854	228	1 082	12.0	-
9	150	406	555	6.2	-
Totalt	**4 939**	**4 079**	**9 018**	**100**	**-**

* Quantities are presented for Class 2 in cases where the subclasses are not known.

Karlshamn

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	11	-	11	0.7	-
2.3	-	-	-	-	-
3	342	-	342	22.1	-
4.1	0	-	0	0.0	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	-	-	-	-
5.2	0	-	0	0.0	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	182	-	182	11.7	-
9	82	934	1 016	65.5	-
Totalt	**617**	**934**	**1 552**	**100**	**-**

Nynäshamn

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	-	-	-	-	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	-	-	-	-
5.2	-	-	-	-	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	420	-	420	100	-
Totalt	**420**	**-**	**420**	**100**	**-**

Malmö

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	4	-	4	4.3	0.1
2.1	-	-	-	-	-
2.2	5	-	5	6.0	-
2.3	-	-	-	-	-
3	34	11	45	53.4	2
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	-	-	-	-
5.2	-	-	-	-	20
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	14	0	14	16.7	84
9	17	-	17	19.7	151
Totalt	**74**	**11**	**84**	**100**	**257**

Oskarshamn

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	10	3	13	1.5	-
2*	-	-	-	-	-
2.1	27	20	47	5.4	-
2.2	106	34	140	16.1	-
2.3	13	-	13	1.5	-
3	215	16	232	26.6	-
4.1	0	-	0	0.0	-
4.2	0	0	0	0.0	-
4.3	-	-	-	-	-
5.1	84	-	84	9.7	-
5.2	2	-	2	0.2	-
6.1	12	2	14	1.6	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	248	22	271	31.0	-
9	52	3	56	6.4	-
Totalt	**769**	**102**	**871**	**100**	**-**

Norrköping

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	-	-	-	-	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	-	-	-	-
5.2	-	-	-	-	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	139	139	100	-
8	-	-	-	-	-
9	-	-	-	-	-
Totalt	**-**	**139**	**139**	**100**	**-**

Piteå

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3		11 037	11 037	99.6	
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	-	-	-	-
5.2	-	-	-	-	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	8
9	-	49	49	0.4	-
Totalt	**-**	**11 086**	**11 086**	**100**	**8**

***** Quantities are presented for Class 2 in cases where the subclasses are not known.

Simpevarp

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	-	-	-	-	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	-	-	-	-
5.2	-	-	-	-	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	20**	20	100	-
8	-	-	-	-	-
9	-	-	-	-	-
Totalt	**-**	**20**	**20**	**100**	**-**

** Total activity for Class 7 was 686 610 000 GBq.

Trelleborg

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	1	41	42	0.3	-
2*	0	189	189	1.2	-
2.1	10	71	81	0.5	-
2.2	19	219	238	1.5	-
2.3	48	4	51	0.3	-
3	1 781	2 299	4 080	25.4	-
4.1	38	74	111	0.7	-
4.2	0	5	5	0.0	-
4.3	25	19	45	0.3	-
5.1	3 885	115	4 000	24.9	-
5.2	135	54	189	1.2	-
6.1	496	649	1 145	7.1	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	1 622	2 183	3 805	23.7	-
9	801	1 261	2 063	12.9	-
Totalt	**8 862**	**7 184**	**16 045**	**100**	**-**

Stockholm

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	1	1 576	1 577	14.7	-
2*	79	22	100	0.9	-
2.1	2		2	0.0	-
2.2	113	202	314	2.9	-
2.3	-	-	-	-	-
3	1 323	943	2 266	21.1	31
4.1	5	30	35	0.3	-
4.2	0	-	0	0.0	-
4.3	-	0	0	0.0	-
5.1	1 368	1	1 370	12.7	186
5.2	0	-	0	0.0	-
6.1	1 352	0	1 352	12.6	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	1 703	252	1 954	18.2	-
9	723	1 057	1 779	16.6	45
Totalt	**6 668**	**4 082**	**10 750**	**100**	**262**

Umeå

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	277	277	9.0	-
2.1	-	-	-	-	-
2.2	-	220	220	7.1	-
2.3	-	-	-	-	-
3	-	53	53	1.7	-
4.1	-	260	260	8.4	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	554	1 441	1 995	64.6	-
5.2	-	-	-	-	-
6.1	34	-	34	1.1	-
6.2	-	-	-	-	-
7	-	5	5	0.0	-
8	-	4	4	0.1	-
9	70	175	245	7.9	-
Totalt	**658**	**2 430**	**3 088**	**100**	**-**

Södertälje

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	-	-	-	-	45
4.1	-	-	-	-	-
4.2	-	21	21	10.2	-
4.3	-	82	82	38.8	81
5.1	-	-	-	-	278
5.2	-	-	-	-	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	8	100	108	51.1	-
9	-	-	-	-	25
Totalt	**8**	**204**	**212**	**100**	**429**

Visby

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	3	10	13	1.0	-
2*	-	-	-	-	-
2.1	20	27	47	3.6	-
2.2	34	106	140	10.9	-
2.3	-	13	13	1.0	-
3	16	215	232	17.9	-
4.1	-	0	0	0.0	-
4.2	0	0	0	0.0	-
4.3	-	-	-	-	-
5.1	-	84	84	6.5	-
5.2	-	2	2	0.2	-
6.1	2	12	14	1.1	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	22	248	271	21.0	-
9	3	472	476	36.8	-
Totalt	**102**	**1 189**	**1 291**	**100**	**-**

***** Quantities are presented for Class 2 in cases where the subclasses are not known.

Västerås

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	17	0	17	0.7	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	-	-	-	-	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	82	82	3.6	-
5.1	2 176	-	2 176	94.7	-
5.2	-	-	-	-	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	-	24	24	1.1	-
Totalt	**2 193**	**106**	**2 299**	**100**	**-**

Ystad

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	6	128	134	3.2	-
2*	5	2	7	0.2	-
2.1	-	-	-	-	-
2.2	8	8	17	0.4	-
2.3	1	14	15	0.4	-
3	999	663	1 661	39.9	-
4.1	2	10	13	0.3	-
4.2	-	-	-	-	-
4.3	191	42	234	5.6	-
5.1	485	-	485	11.6	-
5.2	45	-	45	1.1	-
6.1	134	111	246	5.9	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	224	735	960	23.1	-
9	299	47	346	8.3	-
Totalt	**2 401**	**1 761**	**4 161**	**100**	**-**

***** Quantities are presented for Class 2 in cases where the subclasses are not known.

B. Tables for foreign ports

Borgå

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	10 991	-	10 991	100	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	-	-	-	-
5.2	-	-	-	-	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	-	-	-	-	-
Totalt	**10 991**	**-**	**10 991**	**100**	-

Hanko

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	-	-	-	-	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	-	-	-	-
5.2	-	19	19	100	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	-	-	-	-	-
Totalt	**-**	**19**	**19**	**100**	**-**

Bremerhaven

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	16	16	1,0	-
2*	1	0	1	0.1	-
2.1	-	-	-	-	-
2.2	0	0	0	0.0	-
2.3	-	-	-	-	-
3	66	47	113	6.7	-
4.1	-	26	26	1.6	-
4.2	-	-	-	-	-
4.3	-	20	20	1.2	-
5.1	4	284	288	17.0	-
5.2	12	16	28	1.7	-
6.1	17	77	94	5.6	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	77	345	422	25.0	85
9	414	265	678	40.2	10
Totalt	**591**	**1 097**	**1 687**	**100**	**95**

Helsingfors

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	405	-	405	26.5	-
2*	10	17	27	1.7	-
2.1	-	-	-	-	-
2.2	18	21	39	2.6	-
2.3	-	-	-	-	-
3	121	294	416	27.2	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	1	1	0.1	-
5.2	-	-	-	-	-
6.1	-	0	0	0.0	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	0	49	49	3.2	-
9	585	9	594	38.8	-
Totalt	**1 139**	**391**	**1 530**	**100**	**-**

Hamburg

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	13	27	40	0.5	-
2*	1	13	14	0.2	-
2.1	-	-	-	-	-
2.2	-	1	1	0.0	-
2.3	-	-	-	-	-
3	73	381	453	5.3	-
4.1	0	9	9	0.1	-
4.2	34	-	34	0.4	-
4.3	163	-	163	1.9	-
5.1	41	4 538	4 579	53.5	-
5.2	41	35	76	0.9	-
6.1	78	316	394	4.6	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	140	1 620	1 760	20.6	-
9	28	1 008	1 036	12.1	-
Totalt	**611**	**7 948**	**8 559**	**100**	**-**

Klaipeda

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	11	11	0.7	-
2.3	-	-	-	-	-
3	-	342	342	22.1	-
4.1	-	0	0	0.0	-
4.2	-	-	-	-	-
4.3	0	-	0	0.0	-
5.1	-	-	-	-	-
5.2	-	0	0	0.0	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	-	182	182	11.7	-
9	934	82	1 016	65.5	-
Totalt	**934**	**617**	**1 552**	**100**	**-**

***** Quantities are presented for Class 2 in cases where the subclasses are not known.

Kotka

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	0	0	0.4	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	-	0	0	0.7	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	3	3	5.4	-
5.1	-	0	0	0.0	-
5.2	-	0	1	1.3	-
6.1	-	0	0	0.0	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	-	46	46	92.1	-
9	-	0	0	0.0	-
Totalt	**-**	**45**	**50**	**100**	**-**

Nådendal

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	0	8	8	0.1	-
2*	7	32	39	0.5	-
2.1	167	88	256	3.1	-
2.2	254	192	446	5.4	-
2.3	228	2	230	2.8	-
3	599	1 773	2 372	28.8	-
4.1	16	42	58	0.7	-
4.2	-	4	4	0.1	-
4.3	166	116	282	3.4	-
5.1	1 064	1 171	2 234	27.2	-
5.2	494	10	503	6.1	-
6.1	295	211	507	6.2	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	226	-	226	2.7	-
9	367	699	1 066	13.0	-
Totalt	**3 883**	**4 347**	**8 231**	**100**	**-**

Köpenhamn

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	0	0	0.0	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	-	3	3	1.1	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	-	-	-	-
5.2	-	-	-	-	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	-	18	18	6.8	-
9	-	242	242	92.0	-
Totalt	**-**	**263**	**263**	**100**	**-**

Paldiski

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	15	0	15	5.3	-
2.1	-	-	-	-	-
2.2	-	2	2	0.8	-
2.3	-	-	-	-	-
3	24	212	237	84.2	-
4.1	-	-	-	-	-
4.2	-	1	1	0.2	-
4.3	4	-	4	1.3	-
5.1	-	-	-	-	-
5.2	-	0	0	0.1	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	-	21	21	7.3	-
9	-	2	2	0.8	-
Totalt	**43**	**238**	**281**	**100**	**-**

Lübeck

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	-	-	-	-	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	-	-	-	-
5.2	20	-	20	30.1	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	46	-	46	69.9	-
9	-	-	-	-	-
Totalt	**66**	**-**	**66**	**100**	**-**

Riga

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	-	1	1	100	
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	-	-	-	-
5.2	-	-	-	-	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	-	-	-	-	-
Totalt	**-**	**1**	**1**	**100**	**-**

***** Quantities are presented for Class 2 in cases where the subclasses are not known.

Rostock

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	17	0	18	0.4	-
2*	16	-	16	0.4	-
2.1	17	0	17	0.4	-
2.2	17	1	18	0.4	-
2.3	-	-	-	-	-
3	108	151	259	6.3	-
4.1	9	1	10	0.2	-
4.2	-	-	-	-	-
4.3	17	1	18	0.4	-
5.1	47	1 553	1 600	38.7	-
5.2	0	131	131	3.2	-
6.1	263	113	376	9.1	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	514	794	1 308	31.6	-
9	164	202	366	8.9	-
Totalt	**1 189**	**2 949**	**4 138**	**100**	**-**

Tallinn

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	5	0	5	1.7	-
2.1	-	-	-	-	-
2.2	-	18	18	6.1	-
2.3	-	-	-	-	-
3	7	116	123	42.0	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	7	-	7	2.5	-
5.2	-	-	-	-	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	-	45	45	15.4	-
9	76	19	95	32.4	-
Totalt	**96**	**198**	**293**	**100**	**-**

St Petersburg

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	-	-	-	-
2.2	-	-	-	-	-
2.3	-	-	-	-	-
3	-	10	10	6.9	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	-	-	-	-
5.2	-	-	-	-	-
6.1	-	-	-	-	-
6.2	-	-	-	-	-
7	139	-	139	93.1	-
8	-	-	-	-	-
9	-	-	-	-	-
Totalt	**139**	**10**	**149**	**100**	**-**

Travemünde

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	24	2	26	0.2	-
2*	190	0	190	1.6	-
2.1	55	11	66	0.6	-
2.2	204	28	232	1.9	-
2.3	11	74	85	0.7	-
3	2 216	1 635	3 851	31.7	-
4.1	66	37	102	0.8	-
4.2	8	0	8	0.1	-
4.3	2	24	26	0.2	-
5.1	68	2 395	2 463	20.3	-
5.2	54	9	63	0.5	-
6.1	386	384	770	6.3	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	1 686	842	2 528	20.8	-
9	1 104	630	1 734	14.3	-
Totalt	**6 076**	**6 070**	**12 146**	**100**	**-**

Swinoujscie

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	128	6	134	3.2	-
2*	2	5	7	0.2	-
2.1	-	-	-	-	-
2.2	8	8	17	0.4	-
2.3	14	1	15	0.4	-
3	663	999	1 661	39.9	-
4.1	10	2	13	0.3	-
4.2	-	-	-	-	-
4.3	42	191	234	5.6	-
5.1	-	485	485	11.6	-
5.2	-	45	45	1.1	-
6.1	111	134	246	5.9	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	735	224	960	23.1	-
9	47	299	346	8.3	-
Totalt	**1 761**	**2 401**	**4 161**	**100**	**-**

Vasa

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	277	-	277	9.1	-
2.1	-	-	-	-	-
2.2	220	-	220	7.2	-
2.3	-	-	-	-	-
3	29	-	29	1.0	-
4.1	260	-	260	8.5	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	1 441	554	1 995	65.1	-
5.2	-	-	-	-	-
6.1	-	34	34	1.1	-
6.2	-	-	-	-	-
7	5	-	5	0.0	-
8	4	-	4	0.1	-
9	175	70	245	8.0	-
Totalt	**2 412**	**658**	**3 070**	**100**	**-**

* Quantities are presented for Class 2 in cases where the subclasses are not known.

Åbo

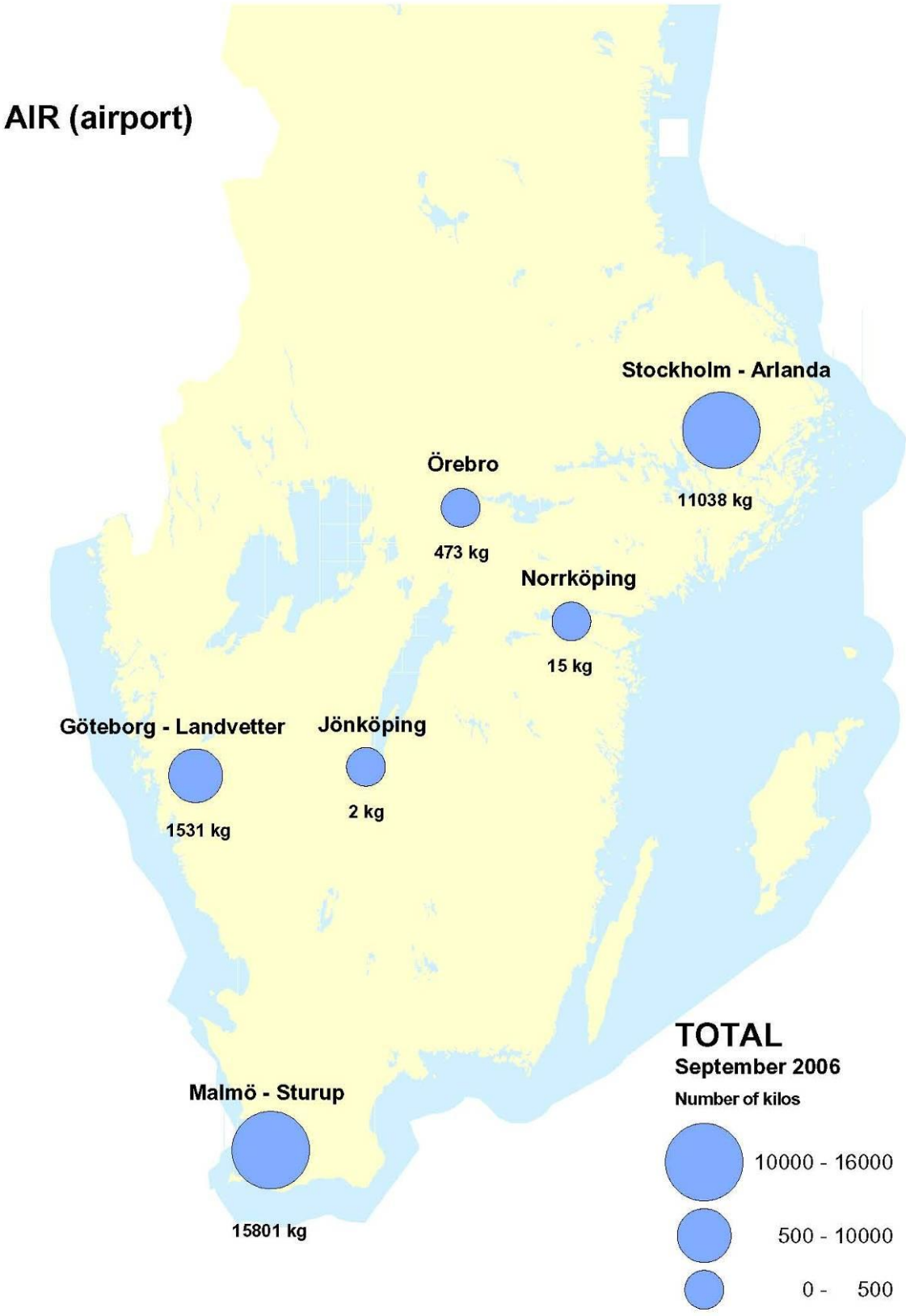
Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	1 248	1	1 248	13.5	-
2*	9	70	79	0.9	-
2.1	-	2	2	0.0	-
2.2	187	78	266	2.9	-
2.3	-	-	-	-	-
3	819	1 001	1 821	19.7	-
4.1	30	5	35	0.4	-
4.2	-	0	0	0.0	-
4.3	0	-	0	0.0	-
5.1	1	1 367	1 369	14.8	-
5.2	-	0	0	0.0	-
6.1	0	1 352	1 352	14.7	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	203	1 748	1 951	21.1	-
9	412	696	1 108	12.0	-
Totalt	**2 908**	**6 321**	**9 230**	**100**	**-**

Århus

Class	Loaded tonnes	Unloaded tonnes	Totalt tonnes	%	Transit tonnes
1	-	-	-	-	-
2*	-	-	-	-	-
2.1	-	0	0	0.0	-
2.2	-	15	15	1.5	-
2.3	-	2	2	0.2	-
3	-	844	844	82.6	-
4.1	-	-	-	-	-
4.2	-	-	-	-	-
4.3	-	-	-	-	-
5.1	-	66	66	6.5	-
5.2	-	-	-	-	-
6.1	10	-	10	1.0	-
6.2	-	-	-	-	-
7	-	-	-	-	-
8	19	36	55	5.4	-
9	-	29	29	2.9	-
Totalt	**29**	**993**	**1 022**	**100**	**-**

***** Quantities are presented for Class 2 in cases where the subclasses are not known.

APPENDIX V MAPS AND TABLES FOR AIR TRANSPORT


AIR (airport)
Stockholm - Arlanda
11038 kg
Örebro
473 kg
Norrköping
15 kg
Göteborg - Landvetter
1531 kg
Jönköping
2 kg
Malmö - Sturup
15801 kg
TOTAL
September 2006
Number of kilos
10000 - 16000
500 - 10000
0 - 500

Tables for airports

Jönköping

Class	Total (kg)	%
1	-	-
2.1	-	-
2.2	2	100
2.3	-	-
3	-	-
4.1	-	-
4.2	-	-
4.3	-	-
5.1	-	-
5.2	-	-
6.1	-	-
6.2	-	-
7	-	-
8	-	-
9	-	-
Total	**2**	**100**

Göteborg - Landvetter

Class	Total (kg)	%
1	31	2.0
2.1	-	-
2.2	43	2.8
2.3	-	-
3	86	5.6
4.1	25	1.6
4.2	-	-
4.3	-	-
5.1	-	-
5.2	-	-
6.1	9	0.6
6.2	-	-
7	-*	0.7
8	177	11.6
9	1 150	75.1
Total	**1 531**	**100**

* Total activity for class 7 was 1 689 GBq and number of packages 38.

Malmö-Sturup

Class	Total (kg)	%
1	-	-
2.1	-	-
2.2	30	0.2
2.3	-	-
3	1 012	6.4
4.1	-	-
4.2	-	-
4.3	-	-
5.1	-	-
5.2	-	-
6.1	45	0.3
6.2	-	-
7	-*	-
8	4 153	26.3
9	10 560	66.8
Total	**15 801**	**100**

* Total activity for class 7 was 95 GBq and number of packages 37.

Norrköping

Class	Total (kg)	%
1	1	6.7
2.1	-	-
2.2	-	-
2.3	-	-
3	3	20.0
4.1	-	-
4.2	-	-
4.3	-	-
5.1	-	-
5.2	-	-
6.1	-	-
6.2	-	-
7	-*	-
8	-	-
9	10	66.7
Total	**15**	**100**

* Total activity for class 7 was 81 GBq and number of packages one.

Stockholm-Arlanda

Class	Total (kg)	%
1	359	3.3
2.1	2	0.0
2.2	464	4.2
2.3	-	-
3	1 178	10.7
4.1	395	3.6
4.2	181	1.6
4.3	-	-
5.1	1	0.0
5.2	4	0.0
6.1	3	0.0
6.2	2	0.0
7	-*	2.2
8	348	3.15
9	7 864	71.3
Total	**11 038**	**100**

* Total activity for class 7 was 1 343 GBq and number of packages 132.

Örebro

Class	Total (kg)	%
1	-	-
2.1	-	-
2.2	-	-
2.3	-	-
3	22	4.7
4.1	-	-
4.2	-	-
4.3	-	-
5.1	-	-
5.2	-	-
6.1	3	0.6
6.2	-	-
7	-*	-
8	68	14.5
9	380	80.3
Total	**473**	**100**

* Total activity for class 7 was 56 GBq and number of packages 29.

DaGoB publication series

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In order for municipalities to be able to plan their work in the safety field, a survey of the risks for accidents in the municipality must be available. The knowledge required by the municipality includes accurate and up-to-date knowledge about the amounts of dangerous goods that are transported, and the transport routes that are used. As a part of DaGoB project, Statistics Sweden (SCB) has carried out a survey of the transport of dangerous goods in Sweden during September 2006. The survey has been commissioned by the Swedish Rescue Services Agency. The survey covers transport by road, rail, sea and air. The survey has been extended in the case of sea transport to show the ports in the Baltic region from which dangerous goods are transported to Sweden, and to which dangerous goods are transported from Sweden. Information has been collected by questionnaires posted to participants and from databases held by companies and authorities. Participation in the survey has been on a voluntary basis.

The results are presented in maps and tables. The maps show only tendencies of how transport takes place; they are not to be regarded as “absolute truth”. The results are affected by a number of observational uncertainties and assumptions. One such is the fact that not all companies that transport dangerous goods have participated in the investigation. Seasonal variations may also have affected the result. The results provide an image of the transport flows for a single month, September 2006, and they cannot be scaled up to give annual figures.

This report is part of the Safe and Reliable Transport Chains of Dangerous Goods in the Baltic Sea Region –project. The project aims at improving the co-operations between public and private stakeholders related to DG transport in the BSR by connecting the stakeholders on different levels, providing up to date information on cargo flows, supply chain efficiency and risks related to DG transport.

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