Naturskyddsföreningen
i Stockholms län

Sustainable Transport Solutions in the Baltic Sea Area II

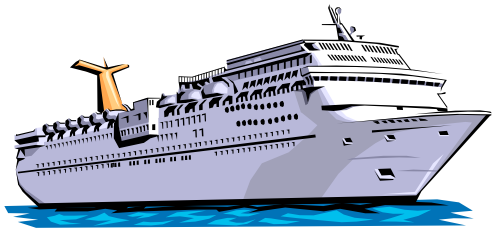
– focus on maritime transport

Suomi

Sverige

Rossia

EU



Eesti

Danmark

Lietuva

Latvijâ

Deutschland

Polska

Second international NGO conference in Stockholm
5-6 October 2001

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Foreword

In 1999, the Stockholm regional branch of the Swedish Society for Nature Conservation held a conference on Sustainable Transport Solutions in the Baltic Region - focusing on maritime transport.

Over 2 days, environmental NGO representatives from around the Baltic Sea discussed developments in the transport sector in the Baltic Sea Area, its impact on the environment and potential solutions. This first conference discussed a common approach to maritime transport issues among environmental NGOs around the Baltic Sea.

In order to broaden the dialogue, the Swedish Society for Nature Conservation held a second international conference on this theme in 2001. Representatives from all stakeholder groups in the Baltic region, and from the rest of the EU, were invited. Environmental networks like the Swedish NGO Secretariat on Acid Rain, the European Federation for Transport and Environment, Coalition Clean Baltic and the CEE Bankwatch Network participated at the conference. In addition, it was well attended by a wide range of stakeholders: governmental representatives (regional, national and European), representatives of port authorities, politicians, maritime authorities, representative of shipowners organisations, and maritime consultants.

The conference was based on a series of roundtable discussions, which focused on measures to guarantee sustainable development of the transport sector in the Baltic Sea area over the long term. This documentation describes the presentations in broad outline.

The conference took place 5-6 October 2001 in Stockholm, Sweden.

Thanks go to the Swedish Environmental Protection Agency for providing conference facilities.

The County Council of Stockholm, the Swedish NGO Secretariat on Acid Rain and the Swedish Society for Nature Conservation generously contributed financially to the seminar.

Stockholm, May 2002

Susanne Ortmanns
Project officer

Magnus Nilsson
Chairman

Stockholm regional branch of the Swedish Society for Nature Conservation

NGO-reports on maritime transport development within the BSA

Russia, Green World - Vladimir Zimin

There is an increasing maritime activity in the Baltic Sea Area:

- New ports on the northern coast (Primorsk) and on the southern coast (Batareynaya bay and Ust-Luga) are now under construction in the Russian part of the Gulf of Finland.
- A special terminal in Lomonosov (St. Petersburg close environs) for bitumen transportation is planned for construction.

Also, a lot of new ports are planned for construction on the coast of the Gulf of Finland in the neighbouring countries. The realisation of these plans will stimulate more intensive shipping. Significant risks for the environment are connected with oil travelling to and from Russia. Russian export constitutes a large portion of the oil transportation in the Baltic Sea.

Some of the potential dangers

- Oil terminal in the Batareynaya bay will be constructed as close as 12 km from the Leningrad nuclear power plant (LNPP). There exists a potential danger of oil spills near the LNPP's water-intake facilities, thus increasing the possibility of accidents.
- There is a potential danger of fouling for fishnets and other equipment with crude oil or oil products.
- There is a potential danger of a loss for near shore commercial fishing, which is a primary source of income for the aboriginal people.
- Oil contamination of the coastal waters will lead to low biological productivity; self-purification ability of the marine coastal ecosystems will decline significantly.
- There is an immediate threat for fish populations in the sea. Coastal marine areas near the prospective ports are famous for their spawning sites of baltic herring, pike perch and many other valuable fish species.
- Probable incidents with pipelines, oil storage and tankers can bring disorder and damage to the near shore resort businesses of sport fishing and sailing.
- Oil spills will bring the threat to migrating birds in the wetland nature reserves "*Lebyazhy*" "*Kurgalsky*" and "*Beryozovy islands*," which are listed in the International Ramsar Convention.
- A bitumen terminal is planned for construction in Lomonosov (close to St. Petersburg) near the Menshikov Palace. The XVIII century Menshikov Palace – with its excellent park and canal, which combines and connects the ensemble with the Gulf of Finland – is famous as one of UNESCO 500 most valuable memorials of the world cultural heritage. However, there is considerable pressure from the local administration to realise interests of Swedish company "Nynas AB", which will finance the project to supply bitumen to Russia via this terminal.

Anthropogenic contamination is a threat to life not only for marine plants and animals but to human life too. It destroys biotic mechanisms of environmental regulation.
Only untroubled ecosystems can sustain their biodiversity and provide self-purification both natural waters and seacoast.

Estonia, Estonian Green Movement - Valdur Lahtvee,

Estonia has developed a sustainable transport policy, but it is not adopted yet. There is increasing oil transportation from Russia to the West, through Estonian ports. The port of Muuga, west of Tallinn has a turnaround of 8 million tons/year, maximum capacity has been reached already and the port plans to expand. Russia is even planning its own harbours in order to handle the increasing volumes. There are economic incentives to direct the transit flow through Russian harbours instead of Estonian harbours.
Soon oil handling will start from the harbour of Paldiski. AS Lonessa has started construction of a new terminal and storage capacities in Muuga. There are more harbour-related projects that have significant reverse environmental effects e.g. the deep-water harbour on Saarema. The Environmental Impact Assessment law has been adopted and hopefully it will ensure the environmental impact assessment of projects, but it is not sure that assessments will be taken into account.
Railway transport was privatised recently. Transport by rail is increasing, mostly transit. Upgrading is under way, tracks improvement etc. to secure smooth oil-transit and increase in volumes. At the same time public and passenger rail transport has declined. In some remote parts of Estonia the consequence of stopped parliamentary subsidies, caused of privatisation, meant the lines closed down. Busses replaced them, but the new system does not work and there is some hope that there will be some subsidies for rail transport again.

Russia-Kaliningrad, Ecodefense - Pavel Malychev

The ice-free port of Kaliningrad consists of three parts: a river harbour, commercial harbour and fishing harbour. The commercial harbour is the main source of pollution. The pollution situation has improved in the years from 1995 to 1999 and about a 50% reduction of discharge has been achieved. The port has insufficient facilities to treat wastewater; 20-40% of waste water goes directly into the river.
In September 2001 it was decided to set up a drilling platform 25 km from the coast and close to the Kuranian split national park. Construction of the platform is planned for 2003; land-based infrastructure will be built in 2002. Cost: 180 million USD.

Poland, Green Federation - Piotr Gruszka

There are two seaports in Poland: Gdansk/Gdynia and Swinoujscie. In Swinoujscie a new oil terminal has now been completed. The construction is not in agreement with Polish law, but the terminal was nevertheless completed. It will lead to increased sea transport in the area. Transport of nuclear material through Swinoujscie Port, bound for the Czech Republic, is especially worrying. The valuable bird estuaries in Vistula and Odra rivers are endangered by all these new activities and it is crucial to achieve coastal zone in management; in both coastal zones and wetland areas, in co-operation with Germany and Russia.

Germany, Greenpeace - Christian Bussau

In spring 2001 the biggest oil accident in Danish history happened in the *Kadettrinne*. 3000 tonnes of oil were disgorged from the *Baltic Carrier* into the Baltic Sea. In that area similar incidents often happen. There is a traffic separation scheme for the Kadettrinne (much like traffic lanes), and Greenpeace set up an observation scheme in order to monitor whether ships behave according to the rules or not. Even the Danish government observed the area during a number of weeks.
The results of a four-week observation period: 1 ship aground, 200 ships not going according to the rules: they go on the wrong side of the route and/or cross the route in a wrong way (shortest instead of safest route). Ships in that area are mainly oil tankers and ferries.
Experience from the observation period shows the need for traffic control. It was obvious that ships behaved better when observation vessels were visibly operating in the Kadettrinne. One important improvement would be the early introduction of the Automatic Identification System (planned for 2008) both on vessels and on land-based points. Mandatory pilotage in the Kadettrinne would improve the situation a lot, but the countries have not been able to agree on it so far.

Sweden, Swedish Society for Nature Conservation - Susanne Ortmanns

The latest project of the port of Stockholm and the Swedish Maritime Administration is to establish a new fairway in the Stockholm archipelago in order to allow even bigger vessels – mostly cruising vessels – to call at the port of Stockholm. Creating the new fairway would require the destruction by explosives of smaller islands and underwater rocks, and environmental NGO's and even fishermen's organisations are strongly opposed to the project. The Stockholm archipelago is a very sensitive and unique area, proposed as a World Heritage Site. It would be fatal to adapt these sensitive areas to bigger and bigger vessels instead of adapting vessel size to the conditions in the archipelago.

How do instruments like TINA and ISPA affect maritime transport in the BSA?

Peep Mardiste, CEE Bankwatch and Friends of the Earth-Estonia

What are the financial instruments shifting transport trends in EU accession countries?

Almost all of the countries of Central and Eastern Europe (CEE) are doing attempts to reach EU membership in coming years. Virtually all of the development decisions that are taken in these countries are directly or indirectly influenced by the policies and visions of the European Union. There are many ways how EU is influencing development patterns in candidate countries.

(a) Policies and plans

First of all there are EU policies that candidate countries are asked to overtake. In transport sector the key concept (besides EU Common Transport Policy indeed) for infrastructure development is the one of Trans-European Networks (TENs). TENs cover only the current member states of the EU and therefore the European Commission decided to draw separate plan of needed transport infrastructure for the candidate countries. This policy initiative was called TINA (stands for "Transport Infrastructure Needs Assessment for countries of Central and Eastern Europe").

TINA is an initiative by the European Commission. The idea behind the study was to define corridors and projects for expansion of the Trans-European Networks in candidate countries. TINA final report was released 2 years ago, in October 1999. Time horizon set for achievement of the networks was decided to be 2015 (from 7 years in Cyprus to 29 years in Bulgaria). Estimated total cost of constructing the network is 91 billion Euro (of this 3 billion for seaports, including ports in Black Sea and Mediterranean). Financing is expected to come from EU grants (Phare programme, ISPA pre-accession fund), loans and from multilateral banks, applicant country budgets and private sector investments.

Planned TINA network investments in EU accession countries

Roads	18,683 km
Railway lines	20,924 km
Inland waterways	4,052 km
Airports	40
Seaports	20
River ports	58
Terminals	86

Majority of investments are planned for road construction (33 billion Euro is the region) and railways (24 billion Euro). Investment needs of other transport infrastructure (such as airports and seaports) is expected to be much smaller.

Planned investments into transport infrastructure according to TINA (million Euro)

	Roads	**Rail**	**Seaports**
Estonia	290	259	43
Latvia	376	942	569
Lithuania	517	1,317	396
Poland	17,550	14,612	716
TOTAL	18,733	17,130	1,724

Total investment into seaports is expected to be 2.4 billion Euro, out of which 1.6 billion in the Baltic Sea Area.

Planned TINA investments for seaports in the Baltic Sea Area (million Euro)

Estonia (Tallinn, Paldiski)	38
Latvia (Riga, Liepaja, Ventspils)	550
Lithuania (Klaipeda)	588
Poland (Gdansk, Gdynia)	447
TOTAL	1,623

(b) Financing of the policies
For financing of the EU transport policy visions in the accession countries there are several financial mechanisms. There are of course multilateral banks entirely or partly controlled by the EU that are providing loans for transport infrastructure developments: namely the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD).

A much more attractive for the Governments of the candidate countries are indeed grants from the EU. There is special pre-accession financial mechanism ISPA (Instrument for Structural Policies for Pre-Accession) which is providing money for both transport and environmental infrastructure projects in EU applicant countries. It is currently budgeted for period of 2000-2006 and 520 million Euro a year had been earmarked for transport infrastructure projects.

There is however no way to finance port construction and shipping projects from ISPA. But still there is direct link between the projects financed by ISPA pre-accession fund and the situation with the maritime transport in the Baltic Sea Area. Majority of the ISPA funds are directed towards upgrading and construction of the road and railway infrastructure. Such infrastructure is very often providing links to the major ports of Estonia, Latvia, Lithuania and Poland. Financing of the transport infrastructure projects with ISPA money is largely based on priority project lists set by TINA.

So there is direct link between EU policy documents (TINA) and financing (ISPA). It means that once the original policy and plan is supporting unsustainable transport trends the financing follows the same path. Unfortunately it seems to be the case. TINA has been heavily criticised by NGOs because it exports the old philosophy of car-dominated transport system from the EU to the Central and Eastern Europe. By year 2003 the guidelines of the Trans-European Networks will be reviewed. Hopefully the critical review of the TINA will be done soon, too. If we miss more time it might be soon too late already to start making shift towards sustainable transport in the future EU member states.

What are environmental impacts of such financial instruments?
Both the visions of TINA and investments by ISPA are having more indirect influence to the shipping situation in the Baltic Sea. TINA is listing 8 ports In East and South coasts of the Baltic Sea as key infrastructure for investments. At the same time ISPA is not providing any financing for the port construction projects.

Yet the policies of the European Union are having major influence for our sea. The still prevailing philosophy of car-based societies, increasing consumption and economic growth are having negative influence to the state of the environment in the Baltic Sea Area.

From one hand even the EU is starting to realise need for more sustainable transport systems. Both 6th Environmental Action Plan and Sustainable Development Strategy that was adopted in Göteborg Summit include some positive thinking. The new White Paper on the Common Transport Policy until 2010 was released on September 12, 2001 and it is for the first time placing users' needs at the heart of its strategy and proposing 60 or so measures to meet this challenge. On September 15, 2001 the joint informal council of transport and environment ministers of the EU was discussing topic of integrating the transport and environment policies.

But despite the new thinking slowly making its way to official documents the reality remains unchanged. Kinds of the projects that EU pre-accession funds are supporting (in transport, environment and agriculture sectors) show that new EU rhetoric has not changed daily practices.

What does it mean for the Baltic Sea?
The more money is invested into road and rail networks in the Baltic States and Poland the more traffic of goods we will see in the Baltic Sea. Better road and rail networks will not decrease volume of goods transported by ships in the Baltic Sea - it will most probably just increase the total volume of trade. Although the investments into railways are considered environmental, the selection of the rail lines where main investment go indicate the

will of more oil transport. In Baltic States passenger rail services are close to collapse. With support of the EU financial instruments (such as ISPA), but also with Multilateral Development Banks (such as EIB and EBRD) our Governments are investing into those rail lines capable for transporting Russian oil to our seaports. Clear example is Estonia where most of rail investments are done in Tallinn-Narva lane, which is main transit route for Russian oil to Port of Muuga. Unfortunately the way ISPA was sent up does not allow financing public transport projects although there is urgent need for investment into public transport schemes in all ex-Soviet Baltic Sea states.

Volume of oil handling in ports of the Baltic Sea continues to increase rapidly. It is clearly a danger for the Baltic Sea. We have seen the number of accidents with tankers increasing, too. Yet we are investing into expansions of the oil handling facilities and networks (including new facilities under construction in Russia such as Primorsk and Ust-Luuga). That is definitely not aiming towards finding sustainable transport solutions nor helping to meet people's need for sustainable mobility.

BirdLife International published a study in May 2001 on impacts of planned TINA networks on IBAs (*International Bird Areas*). As the major outcome the BirdLife stated that as average 21% of the most valuable bird areas situated in the EU accession countries are potentially affected by the TINA transport network. Around the Baltic Sea the most problematic situation with bird areas being threatened by transport developments is in Lithuania and Poland. Yet this study looked only at IBAs - once we would include other valuable habitats (incl. potential Natura 2000 areas) the picture will be much worse.

Number of IBAs (*International Bird Area*) potentially affected by TINA networks

Estonia	0%
Latvia	3.5%
Lithuania	22.9%
Poland	29.9%

What can NGOs do about it?
We should participate, participate and participate. We should be active. Possible future membership in the European Union will re-shape our entire countries - our economies, our social structures. Too much is in stake and we must use the challenge.

In Baltic Sea and shipping issues we, the NGOs of the Baltic States and Poland are increasingly facing with new type of confrontation. It is private sector and private investors shuffling money for port constructions, oil transit and shipping. We don't have yet enough experience and power to challenge private investments. Assistance from Finnish, Swedish, Danish and German NGOs on working against damaging private sector investments around the Baltic Sea is very much needed.

If the financing from the European Union or from some of the multilateral financial institutions is involved in maritime projects, we have at least minimal chances for involvement and influence. No matter how difficult the Brussels bureaucracy is we can still handle it. But more and more decisions on infrastructure investments are taken by powerful private companies (often multilateral ones) and civil society is less and less able to raise its concerns. The NGO community can't be very effective in a globalising world without international co-operation and networking. I think that international NGO networks such as Coalition Clean Baltic here in our region are a good model for such co-operation.

By Peep Mardiste

Does economic growth depend on transportation growth?

Ton Sledsens, European Federation for Transport and Environment (T&E)

The presentation was based on a report by *The Standing Advisory Committee on Trunk Road Assessment* (SACTRA) and a new campaign launched by the T&E titled "Jobs or Roads?". It focused around four main questions:

- Do transport improvements lead to economic growth?
- Is it possible to decouple economic growth from transport growth?
- Is economic impact fully incorporated in cost-benefit-analyses (CBA)?
- Should review/assessment methods change?

Do transport improvements lead to economic growth?

In order to answer that question we need to define transport improvements. Ton Sledsens defined them as a reduction in the generalised cost of transport. This reduction can be achieved by investment in additions extensions and improvements rather than new projects, by replacements of existing infrastructure, better infrastructure management, changes in money cost (i.e. tolls, parking etc.) and reductions in road capacity.

In their report the SACTRA concludes that the stated relationship between transport investment and economic growth proved inconclusive both in theory and in practice. It also concluded that theoretical effects can exist, but are not guaranteed, and that any contribution to economic growth of a mature market is likely to be modest.

Is it possible to decouple economic growth from transport growth?

There are currently large differences between countries in Europe regarding the amount of transport needed to produce a given economic output/growth.

The conclusion is that it is possible to decouple economic growth from transport growth, because achieving more with less transport is in effect beneficial for both the market and the environment.

Are economic impacts fully incorporated in CBAs?

The answer is: No, they are not. Why?

There are several reasons:

1. Land use responses are not included and perfect markets do not exist. Current CBAs do not include externalities such as pollution and congestion and as a result they do not give a good result or a clear and complete picture of the situation.
2. There are spatial distribution effects not accounted for in CBAs. For example the negative effect of infrastructure investment on local producers as external producers gain access to local markets.

Should review/assessment methods change?

Yes, but how?

There should be an earlier examination of rationale for proposed projects. Further, wider economic impact assessments are necessary. Standard economic impact reports should be conducted on all proposed projects to identify winner and losers, and medium to long-term effects among other issues.

Conclusions:

In order to reach a sensible decision-making process for infrastructure investments the myth needs to be rejected that infrastructure building is unconditionally beneficial to economic growth and employment. There is no unbreakable link between transport and GDP growth.

It may in fact be beneficial from an economic perspective to break the link and do more with less transport.

Infrastructure decision-making needs to be improved by asking the right questions.

Infrastructure building is not always good.

Discussion:

It seems the ideas presented are gaining ground in political circles within the EU but have not yet filtered down to a national governmental level.

Digest by Beatrice Crona

Sustainable harbours – do they exist?

Gerli Koppel, Maritime Department of Ministry of Transport

The coastline of Estonia is approximately 3780 km long and it is dotted with more than 100 ports and harbours. Approximately 30 of them are to smaller or bigger extent involved in international cargo or passenger trade. There is a port register established within the Estonian Maritime Administration, where exact information is registered on basis of port passport of each port and harbour. Port passport is issued by a relevant committee and it means that port is open for safe maritime traffic i.e port meets all legal acts requirements valid in Estonia. Issuing these passports is currently an ongoing process.
In general Estonian ports can be divided into following groups

1. State owned ports
2. Municipal ports
3. Private ports that can be divided into

3.1 shares hold by the state
3.2 shares hold by private persons

Estonia's Resources as a Transit Bridge will expire
Transit services are a profitable export sector for Estonia and their further development is therefore of top priority in Estonia`s economic developments. Transit traffic and related activities make up about 12% of GDP. Approximately 85% of transit trade through Estonia is handled by 4 harbours of the Port of Tallinn Ltd. Major cargo article in the transit trade is liquid bulk. Approximately 81% Estonia`s export and 25% of Estonia`s import are transported by sea. Approximately 95 percent of transit trade and majority of import and export freight traffic is carried through Estonian ports; of which the biggest part falls on the Port of Tallinn Ltd. The transport of passengers and tourist services are also carried out mainly through the passenger terminals of the Port of Tallinn. Since major part of international freight transport and transit falls on railway, the limited capacity of railway routes and border stations, the technological backwardness of railway infrastructure and rolling stock accompanied by the problems connected with the speed of connection, safety and environmental protection have become the major problems. The inadequate co-ordination of railway development process, especially with port industry is also one of the shortcomings today. International railway transport is mostly engaged in transporting oil products and other bulky goods; the share of expensive goods is small.

Now few words about Russian-Baltic port
Liquid fuels form 98% Russian Baltic port goods turnover. In spite of that the port is still a ship repair port, but due to purchasing Klaipeda Repair Yard it is possible to transfer some of repair orders and production to Lithuania. When the extent of repair works decrease, goods transport and processing will be developed on vacant facilities. We do not exclude the possibility that in future we will handle containers and develop small distribution centres instead of great volumes (liquid fuel). Because we do have port, railway, roads and this is all situated rather favourably.

From the point of view of environment protection the following factors are taken into consideration in Russian-Baltic port:

1. Repair Yard/port has an environment protection entity ÖKO Llc at which disposal are pollution combating vessels, waste utilisation service and other pollution combating equipment. The port has experience on combating little pollution and it also has a functioning Damage Waste Liquidation Plan (an inevitable part of Port Rules)
2. The Concern Baltic Ship Repair Yard has started to introduce international environment standard ISO 14001:1996.

Transport Development Plan 1999-2006 was prepared by the Ministry of Transport and Communications and strategic part consists of five parts that can be viewed as different decision-making levels.

It defines main strategic objectives and strategic restrictions for achieving these objectives. It becomes clear that state cannot afford the development of the transport sector from a purely economic perspective. Economic development is a priority, but not at any cost. The adjustment of transport fiscal policy to rules of "user pays" and "polluter pays" principles, as applied in EU is extremely important.

Estonian Shipping Policy 2001-2004 foresees the development of a well-working system for rescue and marine protection detection. Also, that Ministry of Environment and Ministry of Transport and Communications guarantees the observation of obligations resulting from Baltic Strategy adopted by HELCOM in 1996. Same

ministries are also responsible for guaranteeing the observation of requirements of Directive 2000/59/EC of European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues.

Well functioning waste receipt order is such that it is useful for captain to hand waste over in port not to take it into sea to get rid of them there. Estonia supports HELCOM proposal to introduce in the Baltic Sea States the order that no additional pollution due for handing over waste will be introduced in ports, or else it may happen that captains leave waste on board to avoid additional costs. In ports it should be indicated that general dues cover already pollution due. In that case captain will be interested in handing over all waste, for general fee shall be paid anyway. The practice of ports that have already introduced such order shows its effectiveness.

Last September there was the biggest pollution during the recent years in the port of Muuga near Tallinn. The pollution was caused by the oil tanker ALAMBRA built in 1977, flying under the Maltese flag. During the loading there was a leak of 250 tons of heavy fuel because of the corrosive damages in the bottom of tanker. The owner did not co-operate in the process of fighting the pollution but instead was trying to hide the leak and threatened to leave the tanker unmanned. That pollution damaged very badly our nature and recovery takes long time and is very expensive. In consequence of that pollution Estonia put in order its scheme of response to accidents. Salvage, search and rescue arrangement and marine pollution detection and disposal tasks were placed as a responsibility of a single authority - Estonian Boarder Guard.

Estonia is very concerned about increased maritime traffic in the Baltic Sea and in the Finnish Gulf and increased threat in that region. The sensitivity of the marine environment of the Baltic Sea and the relative seclusion of the sea results dangerous and hazardous substances, when introduced, to remain into the sea for a long time. It is important to intensify co-operation between the Baltic Sea states at sea in ensuring the maritime safety and in combating pollution and also in shoreline clean-up co-operation.

One of the efficient means to prevent marine pollution and to ensure maritime safety is an intensified Port State Control. In October 2000 Paris MOU Secretariat invited Estonian Maritime Administration to submit a document on qualitative criteria for adherence to the Paris MOU and in May 2001 Estonia became a Co-operating Member of the Paris Memorandum of Understanding on Port State Control.

The use of Automatic Identification System (AIS) in beginning of 1 July 2002 is one of the important means to monitor sea traffic and for example in the case of oil pollution to find a ship responsible for oil spill. Estonia finds it necessary to establish a common AIS monitoring system covering the Baltic Sea based on the exchange of AIS data between the states around the Baltic Sea in order to improve safety in the Baltic area and to provide reliable statistics on ship’s traffic in the Baltic Sea.

Estonia fully supports the establishment of the deep-water route in the eastern part of the Gulf of Finland, as proposed in IMO by Russia following the construction of the new oil terminal in Primorsk.

Finland, Russia and Estonia are about to conclude the Memorandum of Understanding on strengthening the co-operation to further enhance the maritime safety in the Gulf of Finland. The aim of the Memorandum is to develop the existing VTS systems as well as a regional Vessel Traffic Management and Information System (VTMIS) for the Gulf of Finland, which will be based on adjusted Traffic Separation Scheme (TSS). The Gulf of Finland VTMIS service includes also the Automatic Identification System (AIS). By the aid of VTMIS system it is possible to monitor ships and to exchange ships’ traffic information between Estonia, Finland and Russia. The aim is to submit an application for the VTMIS system to the IMO in 2002 and to have the Traffic Separation Scheme adopted by 2004.

In April 2001 IMO’s Marine Environmental Protection Committee at its 46 session passed a number of amendments to the MARPOL 73/78 Convention in order to speed up the phasing out of single-hull tankers. According to regulation 13G of Annex I to MARPOL 73/78 oil tankers of 20 000 tons dead-weight and above built in 1973 to 1981 or later, which does not comply with the requirements for new oil tankers as defined in Regulation 1(26) of annex I of MARPOL 73/78 are to be phased out from 2003 to 2007 unless such tankers comply with the double hull or equivalent design requirements of Regulation 13F of Annex I of the MARPOL 73/78.

Tankers of 5000 tons dead-weight and above built in 1973 to 1989 or later, which complies or does not comply with the requirements for new oil tankers as defined in Regulation 1(26) of Annex I of MARPOL 73/78 are to be

phased out from 2003 to 2015 unless such tankers comply with the double hull or equivalent design requirements of Regulation 13F of Annex I of the MARPOL 73/78.

Estonian side will not make use of the possibility to relax the above-mentioned time-schedule and is planning to not allow single hull oil tankers of 30 years and over after its date of delivery to enter into our ports or internal waters after the anniversary of the date of delivery of the ship in the year specified in regulation 13G of Annex I of MARPOL 73/78.

In the EU there is prepared similar draft council regulation Erika I, the purpose of which is to establish an accelerated phasing-in scheme for the application of the double hull or equivalent design requirements of the MARPOL 73/78 Convention to single hull oil tankers. According to this draft regulation Member States shall not allow single hull oil tankers of 30 years and over after its date of delivery to enter into their ports or internal waters from 2003, unless such tankers comply with the double hull or equivalent design requirements of Regulation 13F of Annex I of MARPOL 1973/78 Convention. In the following years the requirement will progressively stricken as for example in 2006 the Member States shall not allow single hull oil tankers of 26 years and over after its date of delivery to enter into their ports or internal waters, unless such tankers comply with the double hull or equivalent design requirements of Regulation 13F of Annex I of MARPOL 1973/78 Convention. The process of phasing out single hull oil tankers will be carried out by the year 2015.

Estonian side fully supports the suggestion that for the purpose of transporting and discharging oil in the Baltic Sea states only oil tankers, which have either been built or modified, in accordance with the schedule of Regulation 13G(4), to comply with the requirements of Regulation 13 F of Annex I of MARPOL 73/78 can be used.

Transit oil constitutes significant part of the overall cargo turnover transported through Estonian ports. Also a lot of oil tankers call annually at Estonian ports. Therefore we are vitally interested in safe navigation of tankers in the coastal waters of Estonia.

Estonia is planning seriously to take earlier steps before 2003 in the matters of single hull oil tankers. According to our opinion the navigational dues collected by state should be higher to single hull tankers than that for the double hull tankers. At the moment we are seriously considering on the ground of the analysis of the tankers called at the ports of the Port of Tallinn the possibility to raise the navigational dues from 10 up to 100 per cent to single hull oil tankers depending on their age. The number of single hull oil tankers of 15 years and over constitutes 20,56 per cent of the total number of oil tankers and 68,73 per cent of the total number of single hull oil tankers called at the Port of Tallinn up to 31 July in 2001.
In calculating the navigational dues the following coefficients compared to dues in force are considered to apply to single hull oil tankers differentiated in the structure of 16-20 years, 21-25 years and 26 years and older:

Years over the date of delivery	**Coefficient**
0-15	1.0
16-20	1.1
21-25	1.5
26 and over	2.0

The entrance of the single hull oil tankers of 30 years and over after its date of delivery to the ports of Estonia should be prohibited unless such tankers comply with the double hull or equivalent design requirements of Regulation 13F of Annex I of the MARPOL 73/78.

By Gerli Koppel

Workshops, session I

Smart logistic systems – how to guarantee that goods travel the environmentally least harmful way?

Presentation: Anders Sjöbris, Mariterm and Niklas Bengtsson, The Institute of Shipping Analysis

Environment and transport chains

It is complicated to calculate the environmental impact of transport chains. Example: the emission costs (CO_2, NO_X, CO, HC/VOC, PM, SO_X) for 500 km transport using SIKA's (Swedish Institute for Transport and Communication Analysis) figures for four modes: semi-trailer truck, RoRo (1 semi-trailer on roll on - roll off cargo vessel), LoLo (30 tonne pulp transport with exhaust gas cleaning on a lift on - lift off cargo vessel), ULCC (30 ton on a 350 000 dwt ultra large crude carrier):

	SEK	CO_2	NO_X	SO_2	PM	CO	HC/VOC		Fuel
Truck	974	455	4	0,000001	0,1	0,4	0,2	kg	175 litres
RORO	2693	868	15	11	0.3	2	0,7	kg	271 kg
LOLO	529	232	0,4	1,4	0,2	0,2	0,2	kg	72 kg
ULCC	141	33	0,9	0,5	0,04	0,1	0,03	kg	10 kg

Shipping development is driven by criteria for high effectiveness; the goal is not so much good environmental performance.

To have an index that also reflects environmental performance would be helpful. Ships' environmental index (machinery emissions data) PLUS an index based on performance (load capacity speed) PLUS an index based on running conditions (speed/power rate) PLUS evaluated environmental cost for a specific transport (evaluation of environmental effect) = developed index for transport systems.

How to achieve better transport?

There are four tools to achieve better transports:

1. *Environmental friendly credits*, e.g.:
   NO_X and S discount 0,9 SEK/GT (of the Swedish Maritime Administration) gave some result (about 1500 out of 3500 vessels calling at Swedish ports have switched to low sulphur fuel).
2. *Taxation*
   In Sweden today: Sea transport 25,60 SEK/ton, rail 5,45 SEK/ton, truck 20,19 SEK/ton
3. *Law*
   E.g. introduce legal measures for abating SO_X emissions within the EU
4. *Investments in infrastructure*

Possibilities for future sea transport

The potential is very good. Shipping is close to fulfilling the "Good environmental choice" ("Bra Miljöval") standard, shaped and controlled by the Swedish Society for Nature Conservation, but the standard is expensive to apply to and therefore is so far an objective more than an incentive. It could be worthwhile to further develop the coastal shipping system by improving short sea shipping infrastructure. The advantages over road and even rail transport would be:

- Natural infrastructure that does not wear out
- No barriers
- Marginal land take and land use
- Very low noise
- Added transport capacity

The state is responsible for investments in infrastructure. What investments are needed?
In a model system with 6 ships and 13 ports, 1.5 billions SEK needs to be invested and 500 million SEK in operation costs per annum. A bridge takes 3.5 billions SEK.

Why is nothing happening?

Ship owners cannot afford the investments because the risk is too high if financed on commercial ground.

Future for sea transport

- Introduce fully automatic ship handling systems, no staff in the ports. Mechanised transfer between land and terminal in a simple berth & terminal
- Improve integration with road and rail
- Vessel call at port at every hour of the day, port services must be available 24 hours a day so that ships do not have to wait.

Future infrastructure priorities

Inland waterways have to be improved; many locks are quite old and therefor small. Projects in Europe: Locks in Trollhätten Canal, lake Vänern, Sweden, Södertälje Canal and Lock, Sweden, Elbe-Lübeck-Kanal, Germany, Saimaa Canal, Lake Saimaa, Finland.

Questions

What about indirect land use?
Shouldn't we make the land transport as short as possible?
The direct trucks take more land if you compare the whole chain.

Discussion

It is hard to compare different modes of transport because of no data available. Eurostat is responsible in EU and it asks the shipping companies for data. Environmental certifications will hopefully give more data because the transport buyers ask for more data for their EMAS and ISO 14001 systems.
Environmental certifications might be a 5th tool when awareness rises (for tool 1-4, see "How to achieve better transport"). Voluntary agreements might be a 6th tool when ports and companies (operators) co-operate. A 7th tool is consumer awareness. Consumers start to demand another transport mode.

Digest by Erik Stigell

Air pollution – could advantageously be reduced by introducing fairway and harbour dues in (northern) Europe

Presentation: Nicola Robinson, EU Commission, DG Environment and Stefan Lemieszewski, Swedish Maritime Administration

Preliminary projections presented by Nicola Robinson of the EU Commission's environment directorate general showed that the emissions of sulphur and nitrogen oxides from such sources are probably much larger than had previously been thought – the reason being the increase in sea transport that had taken place since 1990, the year so far used for all emission calculations.
According to one scenario the emissions of sulphur dioxide from ships in international trade in European waters might well be greater in 2010 than the total from land in all EU countries that year. But that would assume a high rate of growth for sea transport – 3 per cent per annum up to 2010 – and fulfilment by all the member countries of their commitments under the directive on national ceilings for emissions, which has just been adopted. The emissions of nitrogen oxides from ships would under the same scenario be equal to about 80 per cent of those from sources on land.
Under a scenario assuming a more moderate rate of growth – 1.5 per cent per annum – ships' emissions would still be considerable and could amount to about three-quarters of those of sulphur dioxide from land sources, and 60 per cent of nitrogen oxides.
To obtain more exact figures, the Commission is paying for a detailed inventory of the emissions from shipping in the year 2000, which is hoped to be ready by next spring (2002). This will serve as a basis for the development of a Commission policy on ships' emissions. A so-called communication, proposing a strategy for reducing those emissions, is expected from the Commission next year.
Among the likely proposals, according to Robinson, will be some sort of regulatory measures to limit the sulphur content of fuel oil. There will also be a detailed examination of the possibilities of using economic incentives, especially for dealing with the emissions of nitrogen oxides. Voluntary and operational measures will also be considered.
The Swedish system, with environmentally differentiated fairway and harbour dues, which has been in operation since 1998 and has proved successful, was described by Stefan Lemieszewski of the Maritime Administration. There are however obstacles to the introduction of this kind of incentive generally in the EU. Not all countries charge fairway dues – the cost of fairway maintenance in those cases being paid by all tax payers.

Moreover any decision involving common taxation within the EU requires unanimity among the member states when it comes to voting in the Council.
"Fair pricing" – to make each mode pay its costs – which is being increasingly suggested, may be a means of overcoming the first obstacle. It was for instance recently brought up in a paper from the Commission on infrastructure charging generally, and could lead to all member states introducing fairway dues.
As regards the need for unanimity, new figures on current and future emissions may make it apparent to decision makers that action is needed, and that it makes sense to invest in relatively cheap abatement measures at sea instead of imposing even more stringent – and more expensive – requirements on land-based sources.

By Per Elvingson (digest from Acid News No. 4, December 2001)

The problem of alien species in the Baltic Sea

Presentation: Piotr Gruszka, Green Federation in Poland and Johan Gråberg, Swedish Maritime Administration

Introduction (Gunnar Norén, Coalition Clean Baltic)

Goals for the workshop:

- To identify possible effective actions (measures and regulations) to reduce risks for introduction of alien species in ballast water to the Baltic Sea.
- To find out ways how NGO´s in best possible way can support/propose introduction of regulations etc., to minimise risk for introduction of alien species to the Baltic Sea.

The introduction of alien species to the Baltic Sea is a growing problem. Coalition Clean Baltic (CCB) has raised the question about which measures that could be taken in order to reduce the risks.

Examples from the work on the Great Lakes, USA, can be used in our region. In United States Regulations there are detailed instructions on how to deal with ballast water etc. Any vessel that has been to a foreign port outside of the Exclusive Economic Zone (EEZ) of either Canada or the United States, and enters the Snell Lock on the St.Lawrence, regardless of other stops has to follow these regulations. They might present a model that could be used for the Baltic Sea. Core regulations:

- exchange beyond the EEZ, in a depth exceeding 2000 meters so that the resulting ballast water has a minimum salinity of 30 parts per thousand or;
- retain the vessel's ballast water on board the vessel in which case the ballast tank may be sealed at Snell Lock or;
- use an alternative environmentally effective sound method of ballast water management that has been approved in advance by U.S. Coast Guard Headquarters

Presentation 1 (Piotr Gruszka)
The introduction of alien species is today recognised as a big threat to biological diversity. Shipping is the traditional way of introducing alien species. The introduction of alien species has increased in accordance with the increased traffic on the Baltic Sea. A lot of different species can be introduced at the same time by one ship. An organism's survival and reproduction depends then on different factors like temperature, salinity etc. Species from warmer areas can for example find their home close to nuclear power plants where the temperature is higher.

But it is not only the maritime transports that are responsible for the problem. Some species are introduced intentional for other reasons (for example as food for other species).

Ballast water is a big problem. A modern ship can have 100 tons of ballast water. A lot of sediments can be found in the bottom of the tank.

Presentation 2 (Johan Gråberg)
It is estimated that an introduction is made every 9th week. We have faster and bigger ships today, which increases possibilities for alien species to survive during the travels. The introduction can be a threat to biodiversity, fishing, health etc. and the costs has not yet been calculated around the Baltic Sea.

Solutions
Ballast water exchange:

- Sequential method
- Flow-through method
- The Brazilian dilution method

Interim solutions
Ballast water treatment:
- Mechanical (filtration)
- Physical (UV, heat, electricity)
- Chemical (peroxide, pH, chlorination)

One important question is how effective should the treatment be? What is realistic? A standard needs to be developed.

Most countries have their own regulations, often based on the guidelines from IMO on ballast water exchange. These guidelines cannot be implemented in the North Sea and Baltic Sea.
There are no international regulations yet.

IMO is now working towards an international mandatory regulation (hopefully finished in 2003). A new convention is underway:
Tier 1:
- Ballast water management plan
- Ballast water record book
- Ballast water management
- Sediment management

Tier 2:
- Special requirements in certain areas

The IMO-convention gives opportunities for regional co-operation. The Baltic Sea Area needs regional regulations for how to treat ballast water. The focus must be on ships coming from outside the European region. HELCOM should play a more active roll in this work, and the Swedish government could initiate such proposals to HELCOM.

Digest by AnnaKarin Lissel

Workshops, session II

Instruments for fighting oil pollution

Presentations: Valdur Lahtvee, Coalition Clean Baltic and Jonas Ebbesson, lawyer form the University of Stockholm

Valdur Lahtvee reported on a HELCOM meeting (10 September 2001) in Copenhagen, about the increase in maritime transport and risks for the safety of the marine environment. HELCOM adopted a new package of measures on the Safety of Navigation and Emergency Capacity in the Baltic Sea Area.
In the last decade maritime transportation has been growing steadily, reflecting the intensified co-operation in the Baltic Sea region and a prospering economy. Oil transportation, for example, is estimated to double, compared to 1995.
Some important results from the HELCOM meeting:

- PSSA (Particularly Sensitive Sea Area): by 2003 HELCOM investigates the benefits from designating parts of the Baltic Sea area as a PSSA. PSSA's must be accepted by the IMO.
    - The concept PSSA: coastal states can take action outside their territorial sea
- Routeing
    - Extending the deep-water route East of Gedser. New traffic separation schemes and deep-water route in the Gulf of Finland as well as future proposals for amending the traffic separation scheme off the island of Gotland
- Pilotage
    - The Baltic Sea States will intensify the use of pilots in some high-risk areas
    - No (!) agreement on mandatory pilotage because of reservations from Poland, Russia
- AIS monitoring system (Automatic identification system)
    - Land-based AIS monitoring systems will be installed to regularly monitor maritime traffic. Denmark and Germany will establish a 24-hours AIS-based monitoring for the *Kadettrinne*.
- Single-hull oil tankers
    - The Baltic Sea states will refrain from making use of any exemption and relaxation provisions to phase out single hull oil tankers at the earliest date possible under the IMO regime. This means, that single hull oil tankers will be phased out between 2003-2015, depending on the age and type of the vessel.
- Emergency measures
    - The Baltic Sea states will intensify the co-operation on adequate emergency capacity (fire fighting, emergency lightering and towing capacities)

Jonas Ebbesson:
From a juridical perspective the international law prescribes what states must do to protect the environment and what states may do in addition to complying with the law.

It's not possible to prevent vessels from coming into the Baltic Sea because the Sound is international water, but all vessels calling on a Baltic port could be subject for legal action from the states around the Baltic Sea, the states could go further than the IMO. They could also go together and bring more far-reaching proposals/regulations to the IMO. To agree on routing measures would also be an important step.

Only two areas in the world have so far been established as PSSA. There are a lot of reasons to establish the whole Baltic Sea or parts of it as PSSA. The concept of PSSAs is not about protection, but about giving coastal states the possibility to take action outside their territorial sea, like introducing routing measures etc.

Question: why isn't it possible to introduce mandatory pilotage for the Kadettrinne?
It is in international waters and is therefor regulated by the IMO.

If the Baltic States would not any longer allow certain sub-standard ships to enter their ports, they would need a common understanding about that to avoid that the vessels easily go to another port.

Mandatory bilge water samples would make it possible to compare oil spills with the samples and get proof for from what vessels the oil came.

Some solutions

- Agree upon stricter rules than IMO regulations within the Baltic Sea Area

    - Possible if ALL the Baltic Sea states agree upon it
- Implementation and enforcement of existing international anti-pollution standards
    - Through stricter port state control
    - Co-operation among the Baltic Sea states
- PSSA would be a good legislative instrument for further action
    - Designate (parts of) the Baltic Sea Area as PSSA

Digest by AnnaKarin Lissel

Strategic Environmental Assessment of ports and port/city development

Presentation: Joanna Dickinson, Swedish Environmental Protection Agency

There is a need for Strategic Environmental Assessment (SEA) on the infrastructure planning level.
Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA) are different. EIA is project specific, and it is applied when the decision to build has already been made. Goal of a SEA is to sketch the big picture. A decision has not been made yet, and the overview the SEA is supposed to offer shall help the decision makers. Different alternatives to solve a problem and their impacts are investigated. The procedure will give better transparency to projects.

In 2001 a new EU directive on SEA (which could be seen as an assessments of effects of certain plans and programmes on the environment) was adopted. It shall be implemented in national law in 2004. SEA can highlight environmental impact of different possible alternatives, help generate alternatives to consider in the planning, increase transparency and increase public participation. There is a great need to integrate environmental assessments on a strategic level in the planning of transport infrastructure.

<u>How does the directive apply to port infrastructure?</u>
- Alternative locations should be investigated.
- Other options that could serve the same purpose must be highlighted, as diverting vessels to other ports with sufficient capacity, or more efficiency in the distribution of good and logistics.
- Environmental effects of investments in road and railway infrastructure connecting to ports need to be assessed.

<u>Steps to take in SEA</u>
- Screening – is SEA necessary? What is the aim of the plan and what problems does it aim to solve
- Scooping – which environmental aspects should be covered
- Screening of environmental and other objectives on national/regional level
- Constraints in time and space
- Identifying strategic choices
- Description of alternative measure strategies
- Environmental impacts of different measure strategies
- Consultation and participation
- Review and final analysis
- Remaining environmental problems that haven't been solved
- Suggestions on how to deal with these
- Analyse uncertainties
- Inform about the decision
- Monitoring

There is a need for a national co-ordinating agency for SEA of transport projects, if of no other reason than that it would remove conflicts of interest for locally controversial projects.
The final decisions on a projects to be or not to be will always made by politicians. More transparency and information will help to make good decisions, but it won't stop bad decisions. But – bad decisions will be more embarrassing.

Digest by Stephanos Anastasiadis

NGO Stockholm Declaration

Adopted at the second conference on
Sustainable Transport Solutions in the Baltic Sea Area
- focus on Maritime Transport
on 6 October 2001 in Stockholm, Sweden

Preamble:

The Baltic Sea is the world's second largest body of brackish water, with a unique mixture of marine, freshwater and brackish-water organisms. The Baltic Sea is particularly sensitive to environmental perturbation, because the turnover time for the water in this semi-enclosed sea is as long as 30 years. In the northwestern part of the Baltic Sea Area soils, forests, groundwater and surface water are especially sensitive to acid deposition.
Environmentally sound and sustainable maritime transport systems are a necessary basis for the development of the Baltic region. In the last decade maritime transport has been growing steadily, reflecting the intensified co-operation in the Baltic Sea region and a prospering economy. The trade and exchange of goods between eastern and western Europe is increasing tremendously. The large goods exchange within the Baltic region and between the region and the rest of Europe, which is at present largely based upon heavy lorries and a system of highways, means that the new openness and integration of East and West increases the risk of environmental damage. Increasing emissions of pollutants from sea, air and land contribute to air and water pollution and destruction of important areas for recreation and biodiversity.

The participants of this conference, representing environmental NGOs around the Baltic Sea,
International organisations
Coalition Clean Baltic
WWF Baltic Programme

National organisations
Swedish Society for Nature Conservation
Swedish Society for Nature Conservation, Stockholm regional branch
Green Federation, Poland
Friends of the Earth, Estonia
BUND Germany, working group for coastal and marine affairs
Ecodefense-Kaliningrad, Russia
Green World, Russia

advocate:
1. Basic transport issues

- introduce strategies to abate air pollution e.g. environmentally differentiated fairway and/or harbour dues in all Baltic Sea nations and seaports. Preferably this should be decided within EU, alternatively agreed upon by the states around the Baltic Sea;
- impose a ban on the sale and use of marine fuels having over 1.0 % sulphur content not later than 2005;
- impose a ban on environmentally harmful anti-fouling paints (e.g. Tri-Butyltin) not later than 2003;
- take measures to prevent alien species from entering the Baltic Sea by following the guidelines set out in the annex of IMO Resolution A.868(20) and introducing them into national legislation not later than 2005;

- apply Strategic Environmental Assessment (SEA) when planning new seaports to minimise the negative effects on land, including the consequences of traffic to and from the port, as well as on the marine environment, not later than 2004.

2. Illegal oil discharges

- introduce tougher national legislation to prosecute against and impose heavy fines on owners of vessels that illegally dump oil and oily water. Baltic countries should also co-ordinate and standardise their procedures for prosecution of offenders.
- implement the HELCOM "Baltic Strategy" for reducing discharges of waste from vessels, including establishment of reception facilities for oil in every port of the Baltic Sea and adoption of the "no-special-fee" system for handling wastes.

3. Precautionary safety measures

- phase out single-hull oil tankers not later than 2008;
- impose mandatory pilotage in Kadetrenden, "Route T" and "The Sound" not later than 2003;
- increase marine emergency capacities (fire-fighting, towing, lightering) not later than 2005;
- improve routeing, e.g. by shifting routes further seawards and by establishment of traffic separation schemes and a deep water route in the Gulf of Finland;
- establish land-based monitoring radar systems as soon as possible, but not later than 2003, supported by automatic identification system (AIS).

4. Dealing with accidents

- develop and implement an international emergency plan for all the Baltic Sea involving appropriate staff and vessels, co-ordinated by an international control centre, not later than 2005;
- establish a network of "ports of refuge" for ships in distress not later than 2005.

5. PSSA

- apply for Particularly Sensitive Sea Area (PSSA) status for all the Baltic Sea at the International Maritime Organization (IMO) taking into account the HELCOM network of marine protected areas (Baltic Sea Protected Areas, BSPAs). This will e.g. enable introduction of routeing measures that minimise negative impacts of illegal oil discharges on environmentally sensitive areas and seabirds.

We believe that a PSSA status for the Baltic Sea would combine the measures proposed above with the urgent need to protect our marine environment. By following-up the work of HELCOM, IMO and EC we are hoping to contribute to this process.