2nd February, Session II:  
RoRo/RoPax and Container Shipping  
Motorways of the sea in practice.  

“Feeder and Intra-Europe Motorway of the Sea requirements of Deep-Sea Container Lines”.

Presentation by:  
Tonny D. Paulsen,  
Partner and Managing Director  
Unifeeder A/S, Denmark  
www.unifeeder.com
Good afternoon Ladies and Gentlemen – and Mr. Chairman!

I am delighted to be here today and wish to express my appreciation for the invitation.

It is, indeed, a great pleasure for me to participate, and I have been asked to speak on the subject:

"Feeder and Intra-Europe Motorway of the Sea. Requirements of Deep-Sea Container Lines"

In the endeavour to give you the widest possible picture, allow me also to include a few remarks and views relating to the transport buyers in Intra-European Door-to-Door Services.

Based on our long-time experience in feeder and short-sea services to and from the Nordic countries, as well as the Baltic countries, and Russia, I am very much looking forward to share some of our views with you, but before doing so, I would like to give you “the headlines” of my papers:
OVERHEAD 2

- 2006 – A year with growing volumes.
- Introduction to Unifeeder.
- Feeder and short-sea service between the North European hubs and the Nordic countries, the Baltic states, and Russia.
- Present requirements and demands being placed by the deep-sea lines with regard to feeder services.
- Present requirements and demands being placed by the transport buyers with regard to Inter-Europe short-sea services.
- Sufficient capacity at the hubs?

OVERHEAD 3

- Motorways of the Baltic Sea.
- **In the future:**
  - Cargo growth.
  - Container shipping outlook.
  - Capacity at container terminals.
  - Bottlenecks.
  - Solutions.
The year 2006 has been a good year for the container business in our part of the world in terms of volumes.

Again this year most of the carriers, terminals, and others were taken by surprise with regard to the extremely increasing volumes from 10% up to 50%. The latter figure goes for container cargo into Russia.

A substantial growth, full utilization, and a steady cargo-flow throughput are being reported by most lines and terminals.

This has again resulted in a significant pressure on the resources, and despite the fact that all parties concerned have done their utmost, we have experienced an increased idle time both at the major hubs on the Continent, and for example in St. Petersburg.

Will we ever learn from history? Apparently not, as it would seem that we have over the past 2 years experienced the same challenges! It is, of course, easier and considerably faster to build new vessels rather than establishing new ports or enlarging the container terminals.

The increasing globalization and liberalization of the world trade support this development, and the trend is not very likely to change over the years to come.
In the feeder service it is still the import from China, which is a driving factor behind the present development.

OVERHEAD 5

It is noteworthy that the volume of imports from China hold an increased share of the market, and even more so, when compared with the growth during the period from 2002-2005.

This significant growth is further supported by exports from India and South America into Europe and fuelled with an increasing buying power in Europe – and above all in Russia.

It may seem rather strange to be looking into export figures for locations like China, India, and South America, but the feeder volumes in our part of the world originating from these countries are actually holding a significant share of the feeder cargo - also in our area.

So in terms of volumes it has been “a good year” - yes, in fact, one of the best, we have ever seen!

There is nothing like “a free lunch”, and therefore I will just take the liberty of making a brief introduction of our company Unifeeder A/S in Denmark.
Since 1977 we are operating a container feeder service, which over the years has developed into covering most Northern European countries with the main focus placed on the Nordic countries, the Baltic States, and Russia.

In 2006 our vessels had around 8,000 port calls – and in many of these ports different terminals were actually being served.

By the end of 2006 Unifeeder operated 42 modern container vessels, most of which are sailing under EU flag. Volumes are varying from one vessel of 350 teu up to the larger vessels of 900 teu, of which we have 5 vessels.

The majority of our vessels are ice-strengthened and have a service speed lying between 15 and 18 knots. The total container capacity is 27,797 teu with a DWAT of 329,729.

As we carry a good deal of chilled as well as frozen cargo in our trade, there is also a high emphasis laid on reefer containers, and the total number of reefer points in the company’s fleet are 5,052.
During the summer of 2006 DynaLiners published a survey of common feeder lines, and on this occasion we were honoured with the position of being the No. 4 in the world – as well as the position as No. 1 on the North European continental feeder market!

Our turnover was around 300 million euro in 2006, and the volume carried reached 1,425,000 teu.

We are operating our business from 7 offices in 5 different countries, thus employing a staff of 200. Moreover we are operating through agents in various countries.

The next subject on my list of headlines is: “Feeder and short-sea services between North European hubs and the Nordic countries, the Baltic countries, and Russia”.

In the Nordic countries it has always been a tradition to carry the greatest part of the overseas cargo via the major transhipment ports on the Continent, and therefore, there are some extremely close ties to Hamburg and Bremerhaven in particular.

The yearly container volume to and from our area is estimated to be around 6.5 million teu.
Those volumes can be roughly split-up with 25% to and from Rotterdam/Antwerp and 75% to and from Hamburg and/or Bremerhaven.

The service pattern and the inter-connection of the feeder network are very comprehensive with several daily sailing to and from the major ports like Gothenburg, Helsinki, and Kotka – and with very frequent sailings to and from the minor outports.

According to the official schedules a number of around 50 individual operators are serving our area, and “Fairplay” just recently worked out the following breakdown of the market shares as follows:
OVERHEAD 10

Deep-sea lines including the deep-sea lines’ own feeder services

<table>
<thead>
<tr>
<th>Line</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAERSK</td>
<td>13.7%</td>
</tr>
<tr>
<td>CMA/CGM</td>
<td>1.1%</td>
</tr>
<tr>
<td>MSC</td>
<td>0.5%</td>
</tr>
<tr>
<td>OOCL</td>
<td>0.5%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15.8%</strong></td>
</tr>
</tbody>
</table>

Common feeder services

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIFEEDER:</td>
<td>16.8%</td>
</tr>
<tr>
<td>DELPHIS/TEAM LINES:</td>
<td>11.5%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>28.3%</strong></td>
</tr>
<tr>
<td><strong>ALL OTHERS</strong></td>
<td><strong>55.9%</strong></td>
</tr>
</tbody>
</table>

- so in fact very widely spread!
The feeder market in the Nordic countries also distinguishes itself by serving many smaller ports thus giving a lot of options.

My statement is that no other area in the world is given such a complete and comprehensive coverage and variety of first class services.

My conclusion is that the container distribution network is very well developed and properly prepared to meet the challenges of the future.

OVERHEAD 12

The customer base for feeder services is the deep-sea lines, and Unifeeder considers the relations to be more like a partnership, where we are being a part of the deep-sea lines’ transport chain.

This means that we have to understand and accept our position as a reliable and humble sub-contractor.
The deep-sea lines have 2 options:

1. To make use of the services offered by the common feeder carriers.

2. To establish own dedicated feeder services.

3. Or a combination of both.

In the Nordic countries with many smaller ports, the deep-sea lines have been in favour of using the existing network of common feeders.

Only Maersk Line has for years split up their feeder business between “own feeder business“ and “common feeders”.

However, the booming market and volumes to Russia have encouraged several deep-sea lines to establish own feeder services either by putting in own tonnage and/or by arrangement of slot-exchange.

The consolidation among the deep-sea carriers has also supported the above mentioned trend.
However, the increased volume has also improved the competitive position of the common feeders by optimizing the schedule, and high utilization of tonnage and employment of a much larger tonnage.

The market seems in balance with a feeder volume divided with around 20% into deep-sea feeders and 80% into common feeders. For some ports, like for instance St. Petersburg, the ratio is more favourable for the deep-sea line feeders.

We still believe that if common feeders can operate better, wiser and cheaper – and provide a better service – they will also be able to regain the volumes lost.

However, we often doubt, whether the deep-sea lines are able to make the right calculations or not, mind bearing all the unforeseen additional costs, but that’s another story!

The requirements and demands, as well as the expectations from the deep-sea lines to the feeders are:

- Competitive rates.
- Sufficient capacity and frequency.
- Great flexibility.
- Reliable and comprehensive network.
- IT and EDI capabilities.
A complete and full-scale outsourcing of the feeder arrangements have not been done by the deep-sea lines yet, but like for instance in the motor car industry, it is expected to happen sooner or later. The transport industry as such is, however, rather conservative in this respect.

It also looks, as if the deep-sea lines are very reluctant to entrust common feeders with their total volume over larger geographical areas, and this is also why a Pan-European feeder line (as we know them in Asia) is not very likely to gain a firm foothold.

So there is still room for improvements and an innovative approach – or rather fresh thinking!

There is a huge market for Inter-European Short-Sea Door-to-Door business, which is dominated by land transportation.

Many areas in Europe are surrounded by the sea, and a lot of open waters make seaborne transportation easy, and please also bear in mind that in reality vessels are the most environmentally friendly and the safest mode of transportation.
The awareness among the transport buyers concerning short-sea possibilities appears to be stronger now than ever before – in particular due to political statements, congestion on the roads, road tolls, environmental reasons, and – in fact – an improved quality and image in the short-sea industry.

Also the availability of many container types – even pallet-wide containers – has made its contribution to a better standing, and the increased number of service providers (both short-sea carriers and deep-sea carriers) are also widening their services.

Therefore, we will see a great potential for Intra-Europe door-to-door services, which can stand alone – or like in our case – in combination with feeder services.

In particular high-frequency services are essential in order to compete with overland transportation.

OVERHEAD 15

The requirements and demands from the transport buyers are:
• High frequency.
• Punctuality (just on time).
• Appropriate container type.
• Competitive rates.
• Sufficient capacity.
• IT and EDI capabilities.
• Single document.

In our area we have also seen several NVOCC and forwarding companies being more and more interested in those intermodale seaborne services, even though some forwarders do have their own land-based services!

We have a dedicated division responsible for this activity, thus ensuring that it is not being put in the shade of our feeder activity.

OVERHEAD 16

We operate in 14 countries, and in 2006 a volume of more than 70,000 teu was reached, and the forecast for 2007 also seems rather good!

The consolidation among short-sea carriers might also lead to an improved quality and a wider service supply.
The next subject on my list of headlines is:
“Sufficient capacity at the hubs”

OVERHEAD 17

As mentioned earlier Unifeeder experienced a capacity problem during 2006 in most of the hubs as a consequence of the growth in volumes.

Most of the hubs are doing a great job, but with a rate of utilization close to 90%, it is not an easy task.

In particular it makes things more difficult, when the deep-sea lines get delayed – and on top of that it also seems that at some hubs deep-sea vessels are getting a higher preference that for instance feeder vessels.

I can give you an example from last week, where one of our 700 teu vessels waited 5 days at one of the hubs on the continent before it could be operated.

Such a delay will, of course, not only harm, but will damage a feeder schedule completely! But in fact there were no resources available at all ...
At the terminals in the Nordic countries and the Baltic states, the availability of resources are better, even if there are congestions from time to time.

In particular in St. Petersburg the growth in volumes has been extensive, and during certain periods last year a volume rise of more than 50% was registered, with which the terminals did not manage to cope very well.

Recently a number of 13 container vessels were waiting on the roads at St. Petersburg.

Allow me, however, to stress once again that here at Unifeeder we feel that the Russian authorities, terminal operators, and all parties involved are doing a very great job, but the huge volumes and the comprehensive customs procedures are not making things very easy.

OVERHEAD 18

From our point of view the most serious concern for our entire trade is the capacity at the hubs and some of the minor terminals, as well as the insufficient capacity of the access roads to and from ports – and for the latter I am, of course, primarily referring to the Nordic and Baltic countries.
More to follow on this particular subject under the item: “In the future”.

**Motorways of the Sea**

**OVERHEAD 19**

“Motorways of the Sea” – what a fine expression!

Promoting the motorways of the sea has become the declared aim of the European Union, since these corridors were integrated into the Trans-European network.

The corridor in our area has, of course, been given the name: *The Baltic Motorway of the Sea*.

This motorway connects the EU member states in the Baltic region to those of Central and Western Europe, and includes also a small part of the North Sea.

The fairways into the Baltic Sea and surrounding waters are extremely busy, but there is still plenty of room and space for much more, so as a matter of fact *the Baltic Motorway* already exists.

The cargo-flow is already concentrated on certain main lanes and to and from the so-called A-ports (plus 1.5 million tons).
The logistic systems are properly established and supported by a strong and innovative transport industry, which has also invested heavily – in particular in Finland (Gateway to Russia).

Most of the container terminals and ports have tried to follow the development. Initiatives have been taken and investments made in cranes, handling equipment, etc., but the process of expanding quay-sides, fairways etc., will take some time, even if the funds are already available.

*The Baltic Sea Motorway task-force* has taken all the necessary steps and has also supported various initiatives. This task-force also maintains close contact with all stakeholders for further and future initiatives.

As late as on Tuesday this week I attended a meeting at *the Danish Shortsea Promotion Centre*, where representatives from the Danish Ministry of Transport and the Danish Maritime Administration made a presentation of the various possibilities within the framework of “Motorways of the Sea” in relation to TEN and MARCO POLO.

At the same time they urged the industry to play a more active role in the future.
The main topics were:

- Further expansion of the Trans-European network.
- Focus on expansion of infrastructure and facilities.
- Further integration of short-sea shipping in the logistic chain.
- Gain commercial and public advantages.

In Denmark we have a long-lasting and open dialog as well as an excellent co-operation with the authorities, which is also highly appreciated by the industry.

OVERHEAD 20

Whether the future lies in the motorways of the sea can be discussed, but no doubt the financial means to support the project have been very helpful – however, only as long as this does not lead to a distortion of competition!

IN THE FUTURE

Container Growth

So now to the future!
How will the feeder operators in our area look upon the future seen in a 2-5 years’ perspective and a 5-10 years’ perspective?

Let us first of all go through the expected cargo growth:

There may well be very little doubt that the growth will continue, but will it slow down or speed up?

On a global scale Drewry Shipping Consultants recently forecasted the potential growth - from 2006-2016 - with an annual volume of 127.8 million teu up to 279,1 million teu, and thus a global growth amounting to 118.4%.

The most important cargo-flow in containers to Europe, namely from Asia, has been estimated to raise from 15.8 million teu up to 34.9 million teu over the period 2006-2016.

The volumes to Northern Europe have been estimated to raise from 10.6 million teu to 19.1 million teu from 2006-2016 corresponding to 80%.
Another research company forecasted for the areas served by Unifeeder including Poland a growth of 100% over the period 2006-2015 ending up with an annual volume of 13 million teu - and the main-driver is again the containers to and from Russia.

So with regard to volumes we are rather optimistic and confident and feel ourselves to be on the safe side, at least considered in a 2-5 years’ perspective, just as we are also very confident in a 10 years’ perspective.

**Container Shipping Outlook**

How do the carriers foresee their ability to accommodate those rapidly increasing volumes?

The container shipping lines seem to be well prepared to meet this challenge.

The capacity of the cellular container fleet will be increased significantly, but I cannot give you the exact figures.
However the total cellular container fleet will increase by around 1,500 new-building during 2007 followed by more or less the same number in 2008, and ordered for delivery in 2009 are so far around 1,100 vessels.

Additional orders will no doubt be signed, so perhaps the number of new buildings delivered in 2010 will correspond more or less to the numbers for 2008 and 2009.

OVERHEAD 24

In the feeder segments up to 3,000 teu the new-building orders also seem to be adequate.

The figures for new-buildings of this size may only be taken as a guideline, but to the best of our knowledge they could be as follows:

<table>
<thead>
<tr>
<th>TEU</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 650</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>651 – 900</td>
<td>42</td>
<td>21</td>
</tr>
<tr>
<td>901 – 1,300</td>
<td>110</td>
<td>65</td>
</tr>
<tr>
<td>1,301 – 2,000</td>
<td>115</td>
<td>110</td>
</tr>
<tr>
<td>2,001 – 3,000</td>
<td>180</td>
<td>140</td>
</tr>
</tbody>
</table>
For The feeder tonnage to and from the Baltic we expect a firm market situation due to the high specification and quality of this tonnage, but we reckon with sufficient delivery to cover the requirements of the market.

Capacity at Container Terminals

OVERHEAD 25

Lloyd’s List on Friday, January 26th, had a feature on container terminals and focused in particular on the top-twenty European ports.

Most of them reported high growth figures and seemed to be rather satisfied and expressed optimism for the future.

Many of the ports also made comments and even statements for their future plans including some TEU figures for their long-term investments.

Based on the figures mentioned and figures from the researchers, the big hubs on the Continent and in the UK will increase the total capacity by more than 25 million teu during the next 10 years.
In the Baltic and Nordic countries they are have great plans in ports and at terminals like: Helsinki, Kotka, Hamina, St. Petersburg, Gdynia/Gdansk, Gothenburg, and Aarhus.

Also in the 3 Baltic States we will see investments made in order to be able to cope with these volumes. So a lot of planning has been made, but will the capacity be available in time?

In the Nordic and Baltic countries (except Russia) it is very likely that investments made will cover the demand.

However, at the hubs we are more doubtful mind bearing some figures, which I saw quite recently, namely:
OVERHEAD 26

Study/Survey - North-West Europe Ports
*Includes Gothenburg and Aarhus.

<table>
<thead>
<tr>
<th>Confirmed Capacity only (Million TEU)</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>49.1</td>
<td>66.2</td>
<td>68.9</td>
</tr>
<tr>
<td>Demand</td>
<td>38.1</td>
<td>51.7</td>
<td>60.3</td>
</tr>
<tr>
<td>Average Utilization</td>
<td>77.6%</td>
<td>78.1%</td>
<td><strong>87.5%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Confirmed + Unconfirmed Capacity</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>49.1</td>
<td>70.8</td>
<td>76.8</td>
</tr>
<tr>
<td>Demand</td>
<td>38.1</td>
<td>51.7</td>
<td>60.3</td>
</tr>
<tr>
<td>Average Utilization</td>
<td>77.6%</td>
<td>73.1%</td>
<td><strong>78.5%</strong></td>
</tr>
</tbody>
</table>

The figures mentioned under “Average Utilization” are very, very high, especially mind-bearing that the vessels are normally not arriving “like beads on a string” due to a lot of unforeseen circumstances.
Bottlenecks

OVERHEAD 27

From a feeder and short-sea perspective we are very concerned about one major obstacle, namely:

- Insufficient capacity in ports and at terminals, and in particular at the hubs on the Continent and Russia.

Therefore, we fear that this situation can turn out to be a major challenge and even perhaps a threat for the seamless distribution system of deep-sea and short-sea containers.

Solutions

In the future we see the following solutions for the challenges in our area:
OVERHEAD 28

- Employment of a much larger tonnage.
- Fixed slots/windows in ports and at terminals.
- Long-term co-operation agreements with major customers.
- IT and EDI integration with major customers.
- In-sourcing of the entire logistics and distribution operation with major customers.

In particular we attach great importance to IT and EDI, which is why we have also decided to make investments in a completely new system having all the necessary facilities.

OVERHEAD 29

Shipping is not always as easy as one might think!

Many thanks for your attention!

Tonny D. Paulsen
Unifeeder A/S, Denmark