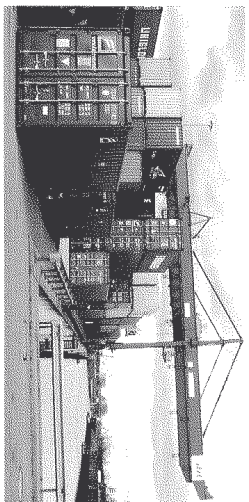


Trimodal port set for next phase

The success of Duisburg is explained by shrewd planning and heavy investment in intermodal connections, writes **Benedict Young**



Duisburg's box volumes are expected to see double-digit growth for the next five years

DUISBURG HAS SEEN tremendous growth in container volumes over the last few years, to the extent that in 2005 it narrowly missed becoming the first inland port to enter the Top 100 container ports by a mere 20,000TEU.

The location of the port at the convergence of the Rhine and Ruhr rivers, the autobahns and railways provided ideal preconditions for developing a trimodal port. In 1998, containers accounted for 6% of the port's volumes, while today they are above 30%. The port handled around 800,000TEU in 2006, and expects double-digit growth in the next five years.

In the last seven years, 50

major companies have set up logistics operations in the port.

In order to become one of Europe's leading logistics sites, the port authority, Duisport, set out to become a more market-oriented body, according to CEO Erich Staake.

He explains: "We had to create a business model that would be more attractive to the shippers, logistics service providers, deepsea carriers, and all the operators in the port. We wanted to offer something complementary to our existing customers' activities. As well as creating a sales and marketing organisation in the intermodal business, we had to offer physical activities to improve the

optimisation process."

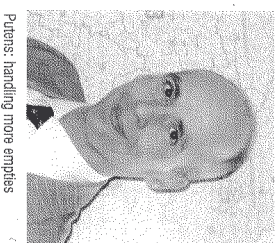
An example of this was the formation of Duisburg Rail, which the port authority established after Deutsche Bahn eliminated single wagon and short distance services. Duisburg Rail operates as a regional rail company in a 100km radius of the port.

"Our competition is the truck and no other rail company," says Staake. "The assumption was to build this rail company on a very lean basis, with 12 locomotives and 35 people. And that's good enough – it doesn't have to

become a huge company."

In the last seven years, the port has increased its own rail network from 110km to 190km, investing €100m. Rail is the fastest growing mode in Duisburg, increasing by 20% in 2005 compared with only a 5% increase in waterborne volumes. Rail grew by 300% between 2002 and 2006 and there are now 20 operators serving the port.

NYK was one of the first major companies to set up a logistics hub in Duisburg, and it now operates a dedicated train service, in partnership with



Piers: handling more empties

Railchem, to its Ceres terminal in Amsterdam.

Expansion of Duisburg's

container terminal capacity has focused on its Logport development. The port acquired the former steel production site – which has road, rail and water access – from Thyssen Krupp in 1998. Logport's first terminal, DIT, is currently operating at around 60% of capacity after four years of operation, and there is further space for development on the site.

Until recently, DIT has used straddle carriers for horizontal transport, but these are being phased out and replaced with reachstackers. DIT already has one loaded reachstacker and is ordering another.

"Reachstackers offer higher stacking and faster truck turnaround times," says DIT MD Bernd Pürens. Another reason for choosing reachstackers is the large volume of empty containers handled at the terminal.

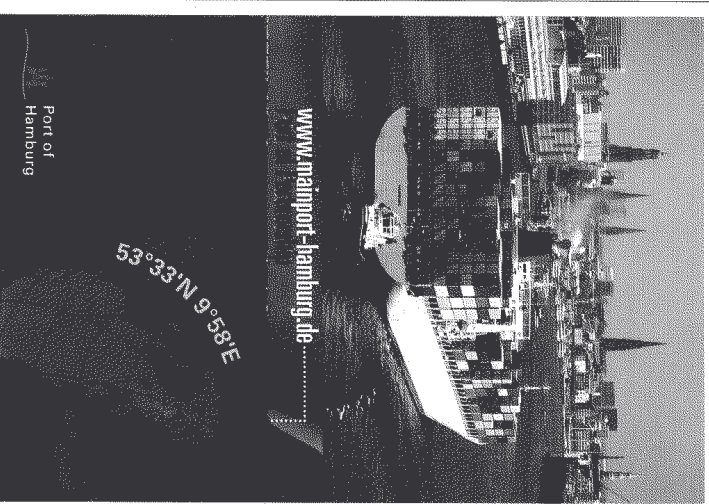
Pürens explains: "Empty containers can be stacked more densely with reachstackers. Empties are arriving from the seaports by barge and going to Switzerland and eastern Europe by train. A lot of exports are being generated from eastern Europe and so they need empties. The deepsea carriers need to use inland terminals for storing empties because of congestion in seaports, and there is space available on trains to transport them."

"It is also more expensive to hold containers in the seaports. Problems at Rotterdam's ECT are such that it won't accept empties, but DIT is able to handle the empties because there is lots of space available here. We expect to continue to have high levels of empties and we welcome this."

Duisport is currently constructing a quay adjacent to DIT's 350-metre quayline. There is also space to construct an additional container storage yard behind. It is not yet known if this will form an extension to DIT or whether another terminal operator will be introduced.

"We want to get this extension," says Pürens. "In 2006, we handled 140,000TEU, and we expect to do 200,000TEU this year and 250,000TEU in 2008. Within 10 years it could be 600,000TEU, so we need to take the new space."

DIT operates one quayside gantry crane, and expects to introduce a second unit as volumes increase. The terminal has two gantry cranes for rail handling, and a third will be required in two years. There are currently six railway tracks in the terminal that Pürens says are fully utilised. He plans to build an additional six tracks in the centre of the terminal near to an area for block stacking empties. In anticipation of increasing activity at Logport, Duisport is constructing a new access road that will bypass the residential area originally built for the Thyssen Krupp steel workers. Duisport is also planning Logport 2, and has earmarked the MHD Südrain site for the development.



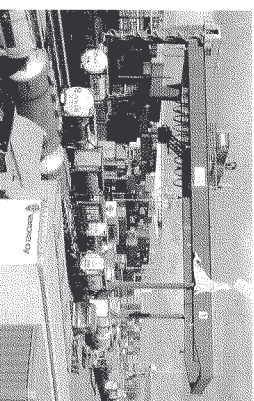
Logport construction is expected to expand the container handling area by 50% by 2010 the port's container handling area will expand by at least 50%, and capacity will double. He believes changing the configurations of the supply chain, and greater concentration on the hinterland are the only means of alleviating congestion at seaports.

"The most important point for us is to attract big players in the shipper field," he says. "Now we are concentrating more on the deepsea carriers. We are very close to completing a big project that we are developing with some important shipping lines. The better they understand the hinterland and focus on processing, rather than the transshipment operations in their ports, the better they can be prepared for the future." ■

Duss makes most of space

While Logport has the benefit of space, the other three container terminals have more limited scope for expansion.

At the Duss road/rail terminal, the maximum stacking height is two-high, while trailers and swapboodies – representing 15% and 20% of the terminal's volumes respectively – cannot be stacked at all.

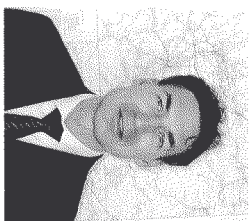


Three more tracks will be operating at Duss rail terminal by September

"Storage is one of the key questions," says the terminal's MD, Hans Pieper. "We can offer our service 24 hours a day, but the trucks are not driving 24 hours a day. We can store a certain percentage of each train in the terminal, and if the storage is full, we cannot operate more trains."

Like the rest of the port, Duss has seen tremendous growth. In 2005 it handled 180,000 units, compared with 130,000 the previous year.

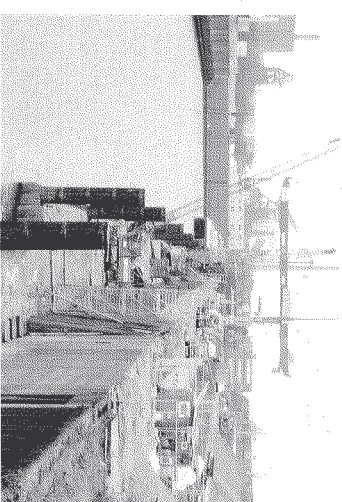
"The 2006 volumes remained static because we had already exceeded the terminal's theoretical capacity of 130,000 units," says Pieper. Duss recently added a third rail handling crane with a wider span, and by September this year three additional railway tracks will be in operation, providing a capacity of 220,000 units or 396,000TEU.



Pieper: storage is the major concern for Duss

Pieper adds: "We are looking forward to a second phase of expansion, which will mean a further railway track and 1.5ha more area, but then we are finished here with the capacity."

To plug the capacity gap, Duss is planning a new terminal on a nearby site owned by its parent company Deutsche Bahn, which is scheduled to come into operation in 2011, with an annual capacity of 220,000 units. The facility is intended purely for gateway traffic, to connect the seaports of Rotterdam and Antwerp with the rest of Europe by rail.



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