

## WATERY ASSETS

RIVER TRANSPORTATION IS ABOUT TO EXPERIENCE A NEW PEAK IN EUROPE. FOR GOOD REASON: IT IS RELIABLE AND CHEAPER.

By Marton Radkai

In the noisy, bustling world of mobility, the river barge stands out like a king at a commoner's wedding. The steady, powerful progress of these large, sleek vessels always exudes a sense of grandeur and dignity spiced with a touch of exoticism. Beyond their romantic image, however, barges are an integral part of Europe's critical transport infrastructure and play an important role in the economy. And that role is growing thanks to certain unique qualities.

"When your crew is good, with people who know their work, then life on a barge is great," says Rudi Driesser. "It's not like being a truck driver, where you are alone." Driesser is captain on the "Zugersee," a tanker owned by the shipping company Befrag AG in Biersfelden, Switzerland. However, at the same time, Driesser explains that the nature of working on a barge has changed much from the idyllic images of yesteryear. "The romanticism is gone, things have gotten more hectic," he says. "You get into port, the ship is emptied, filled up, and off you go again."

Regardless of how things have changed, though, safety remains one very important aspect. The pace of the vessels results in very few severe accidents with loss of life. But collisions or groundings do



**“When your crew is good, with people who know their work, then life on a barge is great. It's not like being a truck driver, where you are alone.”**

Rudi Driesser, Captain on the "Zugersee," a tanker owned by the shipping company Befrag AG in Biersfelden/Switzerland

happen, and when they do, the claims can run into high figures. In March 2007, for example, the "MS Excelsior" was traveling downstream on the Rhine when it lost 32 containers. Traffic on the river, one of the main transport waterways in Europe, had to be stopped for over five days while the drifting containers were hunted down and raised from the murky depths. No one was hurt, but at least one container carrying hazardous substances leaked its load into the river. The financial damage was over one million euros for salvage operations and to pay for the delays of the estimated 500 ships that could not continue their journey.

There were lessons learned for everyone concerned. Ever since, the weight of containers is measured more carefully and fines are imposed for infractions. But the private sector also got involved, since it was faced with a large invoice and some cases of legal fuzziness. "Another good initiative to identify and correct on-board security deficits in time is the damage prevention inspection, the IVR, developed by insurers and ship owners associations from different European countries," says Sven Gerhard, Chief Underwriting Office Marine Hull at Allianz Global Corporate & Specialty (AGCS). The German

Photos: C.L. Claire/APIX Ltd. (1), AGCS (1)



Modern ship canal lift in Lower Saxony, Germany: this cargo ship is on its way on the river Elbe.

## GOOD REASONS FOR WATERWAY TRANSPORTATION

Even the smallest Péniche can load the capacity of 14 trucks. Plus: Five liters of fuel last 500 kilometers per ton in a ship compared to only 100 kilometers per ton in a truck

### Spits - Péniche:

length 38.50 m/width 5.05 m/draft 2.20 m/loading capacity 350 t



### Tank ship:

length 110 m/width 11.40 m/draft 3.50 m/loading capacity 3,000 t



### Container ship:

length 110 m/width 11.40 m/draft 3 m/loading capacity 200 TEU\*



### Push convoy (with 4 barges):

length 193 m/width 22.80 m/draft 2.50/ 3.70 m/loading capacity 11,000 t

\* TEU=Twenty-foot Equivalent Unit Source: INE

Federal Water and Shipping Administration also set about elaborating a compilation of the existing salvage capacities in the event of another accident.

### SAFE AND CONVENIENT

The other aspect making barges more attractive these days is convenience, especially for transporting certain types of goods. Ever since the boom in container shipping, for instance, inland waterways in Europe have attracted more attention in the world of logistics. Each year, about 500 million tons of goods, mostly agricultural products, building materials, coal, chemicals and petroleum products, are carried by several classes of barges that can suit various types of waterways. They range from the agile SPITS barges which can carry 14 truckloads of material, to the behemoth Ro-Ro (roll-on/roll-off) vessels and JOWI class container barges that can do the work of 470 trucks.

A further boost to inland waterway shipping is coming from the combined need to reduce fossil fuel consumption and emissions. With a barge, five liters of fuel will carry one ton for 500 kilometers, 333 kilometers in a train and 100 kilometers in a truck, according to the professional organization Inland Navigation Europe (INE). Needless to add, recent spikes in fuel prices are also giving barges a boost. While there are only about 37,000 kilo-

meters of inland waterways in Europe—compared with nearly 5 million kilometers of tarred roads—its roads are strategically located and run from the North Sea to the Black Sea and the Baltic to the Mediterranean.

### EU SUPPORTS WATERWAY TRANSPORT

The European Union has also recognized the importance of river transportation. A 2001 white paper entitled “European Transport Policy for 2010: Time to decide” generated a number of initiatives, notably the EU’s own NAIADES action program in 2006. It aims at “promoting and strengthening the competitive position of inland waterway transport by enhancing its integration into multi-nodal supply chains.”

Focus is on the infrastructure of ports and waterways, improving the image of this form of transport and promoting it as an area of economic growth, job creation and sustainable development. For Sven Gerhard, head of Marine Hull insurance at Allianz Global Corporate & Specialty (AGCS), having well-trained personnel is also crucial for safety as well: “The expectations of returns demand better capacity utilization of the ships, and operators will be sailing more and longer.” More traffic also means more risk, and since many barges are either owner-operated or run by small and medium size com-



Inland waterways are well suited for transporting containers. Modern vessels have an average container capacity of 200 TEU.



For crews on inland vessels, the work is just as hard as it is for “blue-water” sailors on large oceangoing container ships.

panies, accidents could mean bankruptcy. Furthermore the values of ships are on the upswing. Tank ship owners are also faced with the issue that European law is demanding dangerous goods to be carried only by double-hulled tankers by 2012. This is a rather costly prospect for ship owners, since retooling a tanker can cost up to 2.5 million euros. Currently, 15 percent of the AGCS Marine Hull Insurance premium income comes from European brown water business. The most common events that need coverage are engine failures and collisions with other ships, wharves and locks. For insurance companies, higher-value tonnage will also increase the values at risk. “The new ship-building boom is a very good opportunity for us,” says Gerhard, “in addition, the banks will be demanding excellent insurance coverage from a top-rated company, particularly for new vessels they put their capital in.” The marine insurance offered by AGCS includes everything from liability, hull loss, salvaging and protection and indemnity insurance, all the way to coverage for the captain’s car on the ship. There is also a hotline set up to enable quick communication of any event.

Modernizing hulls and other ship infrastructure is a major financial burden for owners. But when it comes to improving the ships’ carbon footprints, the segment is very enthusiastic, as evidenced by the 2007/2008 annual

report of the European Barge Union (EBU). It called for immediate implementation of a number of emissions-reducing measures, such as use of low-sulfur diesel, state-of-the-art propulsion engines, Selective Catalytic Reduction (SCR) and particle filters. Funding for the program comes from a variety of grants and subsidies, but particularly from the Innovation Fund supplied by the Commission, member states and the industry.

### RELIABLE TRANSPORT AND DELIVERY

Navigating rivers and canals has a long history in Europe, and after a period of stagnation it has started making a comeback, there is no doubt. The only perceived drawback is slowness, but according to the INE, this is even an asset offering “buffer stock storage combined with prompt delivery times.” As shipping on the inland waterways becomes more integrated and denser, though, it will also become more risky proposal and accidents like that of the HM Excelsior could happen again. ■

▶ **SVEN GERHARD**  
AGCS Marine, Chief Underwriting Office Hamburg  
sven.gerhard@allianz.com

 [www.inlandnavigation.org](http://www.inlandnavigation.org)  
<http://ec.europa.eu/transport/iw/>