

## EDITORIAL



Dear readers,



Welcome to the very first edition of our newsletter "The Bridge". As is well known, new years bring changes. And even if the old proverb says that "change is the only constant", it is nevertheless true that some changes

are easier than others. For example, it was an easy decision to only publish "The Bridge" digitally from now on. Did you know that ten litres of water are required to produce a single sheet of paper? Add to this the many production steps for shipment and transport, and the consequent impact on the environment. So at this point, we wanted to make a positive contribution and act more sustainably. But thanks to digitalisation, you will not have to do without "The Bridge". Full to the brim with interesting ar-

ticles, it will be delivered to you once every three months as usual – only not to your letter box, but to your email inbox.

Less easy were the changes that started off 2017 for us. Apart from some personnel-related changes (see p. 16), we will also have to say good-bye to our BEK-vessels within the first quarter of this year. The ongoing crisis in global shipping has affected RHL as much as others. But there are a few early signs of a positive development, and we hope that 2017 will finally be the year of market changes; we all deserve a positive trend after eight tough years.

The "Seekuh" (German for "manatee"), a waste collection vessel, is a main focus of this issue, and so is a special toilet-related project in India. And whoever has visited the German North Sea island of Heligoland (54° 10.7'N, 07° 53.4'E) will know them – the so-called "Börteboote" transfer boats; it is hard to believe that a farewell from them is near. The series about Hamburg's twin cities, however, remains in place and invites us on a trip to Dresden. The namesake of

M/V "RHL Dresden" is a city of great history, tradition and striking architecture – but read for yourselves.

So now that the – western and Asian – year has changed, we hope that 2017 will be healthy and successful for all of you. My wishes for the shipping industry are a more stable demand and higher freight rates. In China, 2017 is the year of the fire rooster. According to Chinese mythology, the year of the rooster is an opportunity for rethinking problems of the previous year and finding a solution. This means that a lot can be achieved commercially in 2017, but we have to be prepared to work hard for it and make use of the energy and dedication typical for the rooster.

Hamburger Lloyd is ready, and in a good position to get started – so let's do it! In this spirit we would like to wish you Xīnnián hǎo, or a happy New Year!

Cordially yours,

Hauke Pane

## The waste collection vessel "Seekuh"

### From the idea to the finished ship

We illustrated the problem of plastic waste in the 11<sup>th</sup> edition of this newsletter. Over the past years, an encouragingly large number of worried and interested people has been trying to find possibilities of removing plastic waste from our rivers and seas.

In the following article, we would like to introduce one of the practical methods to you.

After all, the oceans are supposed to be host to almost 5,000 billion plastic particles, from minuscule ones only visible under the microscope, up to sneakers, rubber ducks and plastic bags. Moreover, 4.8 to 12.7 million tons of plastics are added to this amount every year – with a hefty upward trend. This mixture swims on and under the water's surface like a kind of thin "rubbish soup", poisoning mussels and other organ-

isms, and obstructing the digestive organs of turtles and water fowl.

In order to minimise the effects on the eco system, the rubbish is not collected at high seas but in coastal waters. The most promising programmes are those off China and Indonesia, because these countries have booming economies and plastic production industries. *continued on page 2*

Both countries are known to be the world's largest producers of plastic waste, and their produce often ends up in the seas. The European Union follows in a distant 18<sup>th</sup> place, while the USA, astonishingly, comes 21<sup>st</sup>.

It is here that Günther Bonin and "One Earth – One Ocean", the organisation he founded, want to cast their nets. A sailing trip took him through a sea of plastics off the North American Pacific coast in 2009, but he had no professional knowledge of marine science or plastic refuse then. "When I found out afterwards that nobody is in charge of oceanic waste collection, it sort of clicked with me", the owner of an IT company remembers. After this trip, he started working on ways to fish plastic waste from the water, and founded "One Earth – One Ocean" in 2011. Bonin called the first project and smallest unit "Seehamster" (Sea Hamster). A prototype started collecting plastic from inland waters and seas such as the Baltic as early as 2012. The construction is a small catamaran with two hulls of four metres length each; not much more than swimming cylinders. A frame with 1 cm-mesh netting is suspended between them. The "Seehamster" vessels of this design have an electric propulsion system, but can also be towed by other boats. Likewise, they can be anchored in a river estuary and collect plastic waste that drifts past. 2015 saw the third generation of "Seehamster" vessels going into operation.

The "Seekuh" (Manatee), that was named in



Source: Frank Brodmerkel/OEEO

September 2016 in Kiel (Germany) as the world's first certified waste collection vessel, is one size larger. "This working vessel is to go on tour in 2017 and 2018, to be tested in different waters", Bonin explains. The "Seekuh" is a catamaran, exactly like the "Seehamster" vessels. Its hulls, however, are twelve metres long and ten metres apart. Two 2.5 cm-mesh nets are suspended between them and extend three to four metres into the water. The "Seekuh" has two kinds of propulsion, which are conventional in the prototype, but it is entirely possible that these crafts will be solar or wind powered in the future. With up to two knots, the working vessel's is about as fast as a person walking. This low speed is not only energy-efficient, it also gives larger marine animals the chance to dodge the craft, while small organisms can pass through the mesh.

On deck there is a small structure in which

a scientist examines the trash with an infrared spectrometer, in order to find out which type of plastic the "Seekuh" is currently collecting. If this concept proves successful the crew could become unnecessary, and not one, but a large number of "Seekuh" vessels could automatically navigate coast lines and collect rubbish. Günther Bonin especially has Guanabara Bay – the bay off Rio de Janeiro – in mind, because around 150 tons of plastic waste are washed from there into the open Atlantic every day. Since they can only collect around two to three tons of plastic per trip, a noticeable effect will only be achieved with a larger number of these working vessels.

When a net is full, the "Seekuh" attaches buoys to it, transmits the position to a control centre and leaves the whole thing there, floating in the water. A further cata-



Source: Frank Brodmerkel/OEEO

maran – named “Seefarmer” for obvious reasons – then proceeds to that position: “It reaps the harvest and brings it to the barn”, Bonin explains. This “barn” is not located ashore but on the water; it is called “Seeelefant” (elephant seal) – a tank vessel with a double hull, as is the standard for this type of ship today. On board, the collected rubbish is sorted and subsequently heated to several hundred degrees centigrade. Thereby the mass is liquefied and can be converted to sulphur-free fuel oil, which is stored in the tanks on board. 20 to 30 percent of the produced fuel is consumed by the vessel for its own operation, the rest is sold to

vessels crossing its path; the proceeds help fund part of the project. The chemical process also yields bituminous coal, however, which later has to be disposed of ashore.

Günther Bonin has calculated that two employees can collect 200 tons of plastic waste and bring it to the “Seeelefant” on a single day. Because he can sell a ton of plastics for 100 Euros even today, his initiative may eventually pay off. Martin Thiel, a German marine biologist, nevertheless firmly believes that waste collection has to be made unnecessary in the long run and says: “We simply need to block the sources

and prevent the uncontrolled stream of plastics into the environment and finally the oceans. Above all, that would be a lot cheaper.” Bonin has an idea for that approach, too: “We could of course pay the people in South East Asia a small amount for every kilogram of plastic waste that they give us, and which consequently does not end up in the seas”, he muses. That would be cheaper and more effective than any collecting initiative at sea. 

Sources:  
• [www.Spektrum.de](http://www.Spektrum.de)  
• [www.OneEarth-OneOcean.com](http://www.OneEarth-OneOcean.com)  
• [www.gruenewellepr.de](http://www.gruenewellepr.de)

# Courageous commitment at sea

## Tanker Captain is First Woman to Receive IMO’s ‘Exceptional Bravery at Sea’ Award

**Captain Radhika Menon has become the first woman to receive the prestigious IMO Award for Exceptional Bravery at Sea for her role in the dramatic heavy seas rescue of seven fishermen from a sinking fishing boat in the Bay of Bengal.**

Captain Menon, Master of the oil products tanker Sampurna Swarajya, was presented the award on 22 November 2016 during a ceremony at the 97<sup>th</sup> session of the Maritime Safety Committee held at IMO headquarters in London. She is the first female captain in the Indian Merchant Navy and

the first female to receive the IMO Award for Exceptional Bravery at Sea.

Captain Menon says she was “just doing her job” when she led the rescue operation to save the crew of the Durgamma in June 2015.

According to the IMO, Captain Menon ordered the rescue operation after spotting the Durgamma adrift in severe weather off Gopalpur, India. Despite wave heights of more than 25 feet, torrential rain, and winds of 60 knots, Captain Meno and her

crew used the ship’s pilot ladder to get the seven men to safety on board the deck of the tanker.

“It is every seafarer’s and Master’s solemn duty and obligation to save souls in distress at sea. I just did what a seafarer should do for a fellow soul in distress at sea. Yes, it was an instant decision, but not without assessing the risks involved. I just did my duty,” said Captain Radhika Menon, Master of the oil products tanker Sampurna Swarajya.

Captain Menon began her seafaring career as a radio officer and rose through the ranks of deck officer before being appointed as Master of the Sampurna Swarajya.

Captain Menon was nominated for the Bravery Award by the Government of India. This year, the IMO received 23 nominations from nine Member States. Additional Certificates of Commendation and Letters of Commendation were also distributed to those individuals and crews.

The 1999-built Sampurna Swarajya is an Indian-flagged oil products tanker of 32,950 dwt. 

Source:  
<https://gcaptain.com/tanker-captain-first-woman-receive-imos-exceptional-bravery-sea-award/>



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<https://commons.wikimedia.org/w/index.php?curid=4920392>