Blue Speeds for Shipping

Monday, June 5 2023 - Club de l’Étoile, Paris
IFAW regularly organises events known as “Club ifaw”, which aim to bring together a community of actors sharing values and a collective conscience around the protection of animals, their environment and better coexistence between animals and people. The objective is to exchange, debate, be inspired and propose concrete and sustainable solutions in order to bring animal welfare and protection into countries’ policy and action from a societal, environmental and economic standpoint. 

The 2023 edition was dedicated to the “Blue Speeds for Shipping” campaign, which advocates for ship speed reduction, a realistic and effective solution to make the ocean safer for marine animals.

After a few words of introduction from the Director of IFAW France, David Germain-Robin, the evening began with a screening of an excerpt from the Emmy Award-winning documentary “Sonic Sea” which focuses on the impact of noise pollution caused by shipping on marine mammals and explores the simple solutions that can be adopted to reduce noise pollution paving the way for a better future for marine biodiversity.

The film screening was followed by a roundtable moderated by Mathieu Vidard, from France Inter radio station, with three speakers:

- Olivier Adam - Scientist expert in bioacoustics and professor at Sorbonne University;
- Antoine Person - Deputy Director of the shipping company Louis Dreyfus Armateurs;
- Aurore Morin - Blue Speeds campaign manager at IFAW.

Watch the excerpt by scanning the QR code on the left.
The discussion began with the reactions of the three speakers to the Sonic Sea excerpt. Olivier Adam recalled the event at the origin of the film: the mass stranding of about twenty cetaceans in the Bahamas in March 2000, of which one of the causes identified was the use of military sonar by the US Navy. This led to a lawsuit against the US Navy which in turn led to the recognition that the use of their sonar could affect the health of marine mammals. Olivier Adam stressed the importance of documentaries such as Sonic Sea to educate people about the impact of human activities on marine animals.

Aurore Morin then confirmed that this film is a great vehicle for raising awareness among the general public, who are often unaware of what happens underwater, and it thus plays a key role in effectively highlighting the issue of underwater noise pollution.

Antoine Person admitted that the film had not taught him anything new, thus underlining that the shipping industry is perfectly aware of the problem. He recalled that underwater noise has long been a concern for the merchant navy, in particular for ferries which have an obligation to meet silence requirements for the comfort of passengers. Unfortunately, the welfare of marine animals is only seen as a side benefit.

Mathieu Vidard then questioned Olivier Adam on the size of the scientific community working on the problem of underwater noise worldwide. Olivier Adam indicated that this science was relatively recent, and that it had started to really develop in the 2000s. More and more studies are being carried out, in particular on cetaceans for which humans have more natural empathy than with seabed fish or squid. However, research is difficult because multiple cetacean species exist and they react differently to noise. Olivier Adam recalled that the consequences of noise for these animals were not known, ranging from simple inconvenience to strandings, including changes in behaviour, disrupting communication or even stopping carrying out vital activities.

On the other hand, more and more scientific institutions are continuously recording sounds, which has the advantage of highlighting those produced by human activities. For example, scientists studied the risks of maritime traffic for cetaceans in the Port of Boston about thirty years ago. Hydrophones were installed to analyse the sounds emitted by whales present in the area, which allowed ships to avoid these whales.

Mathieu Vidard then questioned Antoine Person on the awareness of Louis Dreyfus Armateurs around this issue. Between the early 1990s and the mid-2010s, the shipowner undertook seismic research, a very noisy activity: sound is sent into the water using air guns to study how it is reflected by the seabed and thus determine the probability of finding oil or gas in the seabed. This activity can be heard 700 kilometers away. A protocol was then put in place with marine mammal watchers on board ships, who stop seismic research operations if they spot cetaceans in the area.

This is how Louis Dreyfus Armateurs became aware of the issue, but this is not necessarily the case for all shipowners. However, Antoine Person highlighted that this awareness was beginning to spread. The main classification societies, responsible for applying the technical norms and standards during the construction of a ship and throughout its operating life, make it possible to measure the noise emitted by a ship. Although Louis Dreyfus Armateurs no longer carries out seismic research activities, the shipowner is now working, among other things, on offshore wind power by laying underwater cables between the wind turbines and ensuring the equipment is in good condition when it is mounted. New technologies, such as bubble curtains, are put in place to reduce the noise impact of these activities.
Antoine Person added that today’s world fleet has around 75,000 ships, two thirds of which are bulk carriers and tankers, on which no noise reduction efforts have been made. Their lifespan, as well as container ships’, is 20 to 25 years. The other categories of vessels work less and therefore have a longer lifespan, so small service vessels can sail for 40 to 50 years.

Mathieu Vidard then questioned Aurélie Morin about existing solutions to reduce the noise emitted by maritime traffic. There are two categories of solutions: technical solutions such as the retrofitting of existing ships (hulls and propellers in particular), or the installation of innovative equipment during the construction of new ships to make them quieter. However, these solutions are achievable in the medium to long term and require substantial financial investments.

The second category of solutions is operational and involves the modification of shipping lanes in order to avoid sensitive areas where marine animals are present, or the reduction of ship speeds. These operational solutions have the advantage of being achievable in the short term without significant financial investment.

As for shipowners, Antoine Person considers that it is necessary to act on both the engines and the propellers. Engines are mostly welded on the frames, which produces a lot of noise during their operation. Insulating rotating machinery when constructing the ship, in particular the main engines and generators, by fixing them on rubber pads for example, would considerably reduce the noise emitted by the ship, but this remains expensive.

Regarding the existing fleet, Antoine Person insisted on the fact that it is necessary to fight against speed, which is complete heresy according to him. He explains that shipowners go fast for two reasons: first, the financial immobilisation of the goods on board the ship costs more than the fuel price because the transport is financed by the bank, bringing them interest. Secondly, the international port system is such that the authorisation to unload the ship is only received when it arrives at the port. Each ship thus takes its place in the queue when it arrives, which seems inconsistent at a time when ships can be tracked in real time. In addition, shipowners are better paid while waiting for the ship to be unloaded than while sailing, so the wait is not disadvantageous for them.

Antoine Person recalled that the International Maritime Organisation (IMO) has decided to implement a carbon intensity index that will force most ships to slow down to reach a target of 40% fewer emissions.
Mathieu Vidard then asked Aurore Morin what the “Blue Speeds” initiative proposed by IFAW involved. She said the measure would consist of setting a speed ceiling to 75% of the maximum ship design speed, which is the speed at which a ship is initially designed to travel.

This represents a 5 to 10% speed reduction, depending on the ship type. In this highly competitive sector, IFAW believes that this measure must be made mandatory for it to be effective, particularly to avoid a distortion of competition.

The idea would be to impose this speed ceiling on ships as a condition of entry into the ports of European Union Member States for all voyages to or from the European Economic Area.

As Mathieu said, this would make sense if all the stakeholders applied it equally. Aurore Morin added that IFAW was trying to get as much support as possible for this initiative from shipowners. The NGO aims to organise a roundtable with representatives of the maritime sector in October 2023 to discuss the subject of speed reduction and secure their support for the Blue Speeds initiative. IFAW is also working with European institutions to encourage them to adopt legislation to implement a speed limit of 75% of the maximum ship design speed as a condition of entry into Member State ports.

Some directorates of the European Commission indicated their openness to the idea, and a European working group on underwater noise (TG Noise) has recently set noise thresholds not to be exceeded. A Commission guidance document for Member States providing guidance on how to apply these thresholds could include the implementation of ship speed reduction.

Antoine Person reacted by confirming that Louis Dreyfus Armateurs was perfectly on board with the idea of reducing ship speed. He said that it usually is the customers who are opposed to it, since it means that they will have to pay more for their transport as the delays will be longer. The shipowner is thus placed in a delicate position. On the other hand, the additional cost of this measure would not be so significant if all the stakeholders applied it equally.

Aurore Morin added that a change of mentality was needed on a societal level: the power lies in the hands of consumers, and if a sufficient number of people agree to wait a little longer to obtain their products, it will help protect the ocean and its inhabitants. IFAW published a petition to support the Blue Speeds initiative, which ultimately comes down to agreeing to wait that little bit longer.
Illustration of the Blue Speeds roundtable by Fanny Didou