



Amoco Cadiz, 40 years of change

Conclusions of the forum held on 16th March 2018

The sinking of the *Amoco Cadiz* off the coast of Brittany in March 1978 was one of the worst oil spills France and the world have ever known. The sea and land, nature and men suffered gravely, despite their strong resilience. 40 years on, what is the legacy left by this disaster? To answer this question, Cedre and Océanopolis organised a day of discussions on 16th March 2018 in Brest entitled "*Amoco Cadiz, 40 years of change*".

Following an opening speech by Cedre's Chairman François Cuillandre, the Deputy Director of the Marine Environment Division of the International Maritime Organization (IMO), Patricia Charlebois, provided an overview of the global situation. Next, Vincent Bouvier, French Secretary-General for the Sea, walked us through the changes in the French spill response organisation. The day was then organised into four panel sessions on the following key issues: prevention, preparedness, ecological impacts and progress in restoration. The relevant contributions of the various guest specialists and partners provided a comprehensive review of the different aspects of the topics addressed and gave rise to fruitful discussions with a large and responsive audience.

What key ideas emerged from these presentations and discussions?

80% of world trade is carried by sea. To ensure shipping safety and security, IMO has been working since 1958 to establish international rules in this field. In terms of prevention and response, the most prominent such rules are the MARPOL Convention 73/78, the SOLAS Convention in 1974 and the OPRC Convention in 1990. Their effect is evident given the clear drop in the volumes of oil spilt at sea today compared to the 1970s. Through its 2018-2023 Strategic Plan, IMO will strive to integrate new and advancing technologies in the regulatory framework, enhance global facilitation of international trade, as well as to ensure regulatory effectiveness.

The French administrative and operational organisation –its original model of 'State action at sea' and its POLMAR organisation – has greatly evolved since the *Amoco Cadiz* disaster in 1978. Every major spill, the *Tanio* in 1980, the *Erika* in 1999 and the *Prestige* in 2002, has triggered advances rendering our organisation, although not infallible, at least far more efficient. One third of global maritime traffic passes

by the French coasts. Thanks to our operational preventive intervention system, we are able to prevent dozens of maritime disasters each year. This maritime safety chain must overcome the many difficulties that may be encountered at sea and must continue to be adapted to meet the new risks and in particular naval gigantism, new and multiple products transported, and the high intensity of maritime traffic. By nature, shipping traffic is not limited by national borders. It is therefore important to ensure better and ongoing integration of European and international cooperation.

In terms of prevention, it is clear that regulatory developments in terms of shipbuilding, ship control and maintenance, and the training of crews and port officers have had a visible effect on the drop in incidents and ship-source spills. The same can be said for traffic regulation and control. However, the increase and evolution of shipping traffic raises questions over the suitability of traffic separation schemes (TSS) in the current context. The major challenge in terms of safety and security lies in the systematic digitalisation of information exchanged between vessels and the shore.

In terms of preparedness, the revision of the national maritime pollution organisation, dubbed POLMAR, after each major spill and changes in incident management methods, following the French law of 2004 on the modernisation of civil protection, have considerably altered the overall strategy. Two other factors have had a significant influence: the type of pollutant spilt (light crude oil in the case of the *Amoco Cadiz*, then heavy refined oil during subsequent spills) and the reorganisation of State services. The second of these changes has led to a gradual decrease in the personnel in administrations able to be mobilised, a stronger involvement of local municipalities and the increased mobilisation of specialised contractors. The coastal communes integrated their shoreline pollution contingency plans (Infra-POLMAR) in their general local contingency plans ("*plan communal de sauvegarde*") and their staff are involved in the training courses and exercises organised by the State on an annual basis. Meanwhile, national stockpiles of response equipment and products have considerably evolved in both qualitative and quantitative terms.

Ecological impacts are determined more by the intrinsic characteristics of the pollutant and the spill conditions than by the quantity spilt. Modelling, experimentation in mesocosms and better knowledge of baseline conditions allow a more global approach to the ecosystem and a more accurate impact assessment. However, the tremendous pressure of public opinion in favour of very intensive clean-up lead to damage to the environment and contribute to coastal erosion, reinforcing the need to call on experts to support shoreline response operations. The emotional and cultural dimensions of large-scale impact on birdlife should not be underestimated. Furthermore, an appropriate waste storage, transport

and disposal chain must be set up at the very start of recovery operations at sea. This point has been the focus of many revisions to contingency plans.

The situation of public authorities in coastal areas, and in particular French communes, has brought attention to the importance of **addressing restoration**/compensation aspects from the very first hours of shoreline response. The administrative and financial management of compensation claims is a complex process and must be managed over time, both through amicable settlements and legal proceedings. The latter are necessary in the case of damages not covered by the international compensation system. Contact should be made with the civil liability insurance of the ship at fault (under the 1992 CLC Convention and the 1992 IOPC Fund Convention) as well as with expert bodies assessing compensation claims (ITOPF) or assisting municipalities (Cedre) to reduce the impact of clean-up operations, both in financial and ecological terms, as well as to optimise the processing and outcome of compensation claims.

These noteworthy changes should not obscure the fact that there is no such thing as zero risk. The collision on 6th January 2018 in the middle of the East China Sea between the oil tanker *MT Sanchi*, carrying 112,000 tonnes of condensates, and the bulk carrier *CF Crystal*, carrying 74,000 tonnes of cereal, serves as a cruel reminder. It is therefore important that we regularly reassess our organisation and our resources, as well as our capacity to efficiently handle the next incident by integrating in our approach issues such as spills of so-called light oil, chemical spills, naval gigantism and the increasing occupation of maritime areas.