

THE TANKER OWNERS' PERSPECTIVE ON OIL SPILL RESPONSE

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INTRODUCTION

The occurrence of major oil spills with costly and far-reaching effects has created the need for cooperation between different countries, and between government and industry. The aim of this paper is to review, from a shipping perspective, the role of industry in dealing with oil pollution incidents arising from the transportation of oil. In this context, the shipping community is represented by the ship owners and operators, including some of the major oil companies. The wider oil industry also has a separate involvement as owners of oil tanker cargoes and as oil importers.

Oil spill preparedness and response are separate, but inextricably linked issues and in an ideal world both preparation and response aspects are given equal weight. In reality, however, preparedness activity often is compromised in countries with more pressing demands on finite funds and resources. Thus oil spill response alone must serve as the way of dealing with spills in countries that remain comparatively ill-prepared.

Given the unpredictability of oil spills from tankers and other ships, governments have largely accepted the need to take charge of the response to major shipping incidents. A review of oil spill response arrangements in 141 countries worldwide carried out by ITOPF (1996a) established that governments have accepted the primary role of dealing with ship-source oil pollution in well over 100 countries; the opposite approach, of an active industry-led response, prevails in about 15 countries.

Oil spills that affect coastal communities are often complex and only governments have the authority to resolve contentious issues and implement an agreed policy for spill response. Most governments have recognised that to rely on ship/cargo owners to deal with pollution incidents would be both impractical and unsatisfactory since a large percentage of the ships adjacent to their coasts are in transit to a destination in another country.

The opposite approach is an industry-led response whereby the spiller plans and conducts all aspects of spill response. This approach is adopted, for example, in the USA, Canada, Australia, South Korea and Japan, where, for reasons of geography, most ships in their waters are approaching or leaving a domestic port. The government then focuses primarily on monitoring and regulatory enforcement. One consequence of this arrangement is a tendency toward polarisation between those perceived to be wholly responsible for providing resources and conducting the clean-up, and those solely exercising authority.

Venezuela is probably the country with the closest collaboration between industry and government in spill response arrangements. The responsibility for combating all oil spills on water in designated zones is allocated to one of three different oil companies. Such close integration was facilitated by the circumstance that until recently the whole oil industry was state-owned. However, with several foreign oil companies having been recently invited to participate in oil exploration and production in new areas, the system is under review and may change. It remains to be seen whether, in the event of a major incident for which the state-owned industry has no liability, the current industry-led response persists or whether government will take the lead.

In the wake of the *Torrey Canyon* incident in 1969, governments largely accepted the need for their active participation in responding to major oil spills. At this time it was also recognised that an efficient mechanism was required for ensuring the reimbursement of reasonable costs incurred in the course of controlling oil spills. Compensation is provided by way of shipping insurance in the case of the Civil Liability Convention, and through oil importers' contributions under the terms of the Fund Convention.

Since 1972, The International Tanker Owners Pollution Federation (ITOPF) has been active in promoting effective spill response in all countries. By attending oil spills on-site on behalf of tanker owners, pollution insurers, and the IOPC Fund, ITOPF has encouraged a consistent approach to spill control within the context of the principles contained in the international oil pollution compensation arrangements.

FRAMEWORK FOR INTERNATIONAL COOPERATION

The International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990 (OPRC 90), was developed under the auspices of IMO and came into force in May 1995. The Convention draws attention to the special needs of developing countries, particularly small island states, and calls for cooperation between governments and the oil and shipping industries. Next to the obligation of underwriting the costs of oil spills, the main role of industry in spill response is to provide expertise and equipment, as noted in Resolution 5 of the OPRC Convention (IMO, 1991).

It is logical that the development of oil spill response capabilities will be related to the likelihood of spills occurring, as well as to the damage that might ensue. A risk analysis is usually the first step in the process of selecting resources and deciding where personnel, equipment and materials should be based. Records of past spills have proved useful in identifying high risk areas.

An analysis by ITOPF (1996b) of oil spill risks in the 13 different Regional Seas Areas designated by the United Nations Environment Programme (UNEP), shows that high risk areas are found where a high oil transportation volume coincides with dense traffic and/or other navigational hazards such as shallow water, bad weather and severe sea conditions. Notable high risk areas include the Bosphorus and Malacca/Singapore Straits, Mediterranean and Caribbean Seas, South Africa and South Korea/Japan. In the Mediterranean and Caribbean Seas many of the countries exposed to a high risk have limited spill response capabilities.

Industry has widely embraced the idea of an integrated approach to oil spill preparedness and response. The idea is reflected in the 'tiered response' concept which creates the possibility for escalating a response by calling on supplementary resources. Basic Tier 1 spill response capabilities at different oil-handling installations complement each other, as well as those of government, and can be combined to give a joint capability for dealing with even the largest oil spills.

Industry arrangements for supplementing local and national response capabilities are referred to as cooperatives or stockpiles (Tier 3). Large stockpiles are usually intended for use within groups of countries or particular regions, such as the Clean Caribbean Cooperative (CCC) and East Asia Response

Limited (EARL). There are variations, with Oil Spill Response Limited (OSRL) being available to operate globally, while the Australian Marine Oil Spill Centre (AMOSC) is an industry stockpile primarily intended for national use. The members of major stockpiles have favoured establishing teams of trained personnel to maintain and operate the equipment. In the case of Petroleum Association of Japan (PAJ), stockpiled equipment is maintained by contractors, but users of the equipment have to provide their own operators. The PAJ arrangement also involves the maintenance of five identical equipment depots located along the Gulf-Japan tanker routes, in addition to six stockpiles located within Japan.

Countries with industry cooperatives or stockpiles located nearby have tended to rely on those services in preference to their own government tier 2 and tier 3 capabilities. In the longer term this may result in some of the duplicative investment being reduced through the scaling down of existing government stockpiles and more reliance being placed on industry. Whether such a trend is healthy depends on local circumstances and to what extent available industry equipment is adequate, well-located and continues to be maintained. More importantly, governments taking this route will have less control over the choice of equipment and its availability in the event of a spill.

Through the industry stockpiles and cooperatives, experience of spills may be retained in a central and focused organisation, from which knowledge and information can be disseminated to the wider industry. The teams maintaining most of the largest stockpiles, for example OSRL, EARL, CCC and AMOSC, run extensive training programmes designed for different operator and management levels. The managers of tier 3 stockpiles are participating in mobilisation exercises whereby equipment is airlifted to the site in order to test response times, customs clearance procedures, logistics support and other practical arrangements. Training activities such as these occupy maintenance staff between call-outs and the revenue gained helps offset stockpile/cooperative members' costs of purchasing and maintaining specialised equipment.

Training and exercise programmes have even more relevance in the 1990's with the great increase in the turnover of people in the spill response sphere. The trend is particularly noticeable in government circles with the establishment or expansion of environmental conservation departments and agencies in many countries. Amongst oil companies, the management implications of handling major oil spill incidents are the focus for most training activity. A realistic appreciation of oil spill clean-up options and their

limitations in relation to the characteristics and fate of spilled oil must remain an objective of fundamental importance for training courses at all levels.

Resolution 9 of the OPRC Convention calls for cooperation between countries and the technical advisers to the ship owners' insurers, in order to promote exchange of information and effective oil spill response (IMO, 1991). The shipping industry continues to provide the services of ITOPF, which makes technical advice available at the scene of oil spills in the context of the oil spill scenario and whatever national arrangements are in place in the country concerned.

Given the widespread preoccupation with specialised equipment, it is often forgotten that successful oil spill response is primarily dependent on a realistic attitude and basic organisation. Such commodities are not necessarily in short supply in developing countries, and much can be achieved using non-specialised local resources. Numerous oil spills in South Korea and occasional incidents in remote locations elsewhere have clearly demonstrated the effectiveness of manual clean-up of polluted shorelines without the use of specialised equipment. A large capacity for self-help and for making effective use of available resources also is especially prevalent in isolated communities, such as those of small islands.

A good example illustrating these points is provided by an incident in Mozambique attended by ITOPF staff in April 1992. A substantial spill of Heavy Fuel Oil from the tanker KATINA P contaminated sandy beaches and mangroves near the capital, Maputo. The UK Overseas Development Administration funded a team of operators with equipment from OSRL to be flown out to Maputo, but without making an evaluation of local conditions. As a result, the selected equipment proved to be of little use, because of a lack of logistical support and other local circumstances, including extremely shallow water in Maputo Bay. No offshore response was feasible and most of the equipment was therefore returned, although some boom and a number of operators were retained to assist with shoreline clean-up. Despite a complete lack of specialised local resources, such as clean-up equipment, trained personnel, and contingency plans, it proved possible to organise an effective response using a labour force of 500 casual workers and standard road maintenance machinery.

DISCUSSION

The OPRC Convention contains the essence of sound preparedness and effective response activity and reflects the consensus of the 90 countries attending the diplomatic conference at which the Convention was adopted. Since the conference in 1990, however, only one-third of those attending countries subsequently have ratified the Convention, including little more than a dozen developing nations:

OPRC 90 - Contracting States as at 1 November 1996

Argentina	Greece	Senegal
Australia	Iceland	Seychelles
Canada	Japan	Spain
Denmark	Liberia	Sweden
Egypt	Marshall Islands	Switzerland
El Salvador	Mexico	Tonga
Finland	Netherlands	Tunisia
France	Nigeria	United States
Germany	Norway	Uruguay
Georgia	Pakistan	Venezuela

The reasons most countries have not subscribed to the OPRC 90 formula for improving oil spill response capabilities are many and varied. For some countries, the risk of a major oil spill is small and the need to allocate effort and scant resources to dealing with a hypothetical spill will be less significant than other, more pressing priorities. The analysis of oil spill risks for different regions of the world confirms that many such developing countries are faced with minimal risks of major oil spills occurring.

Many believe that the risk of spills from passing tankers creates severe spill response problems in developing countries but experience does not bear this out. The system in force on behalf of the shipping community, coupled with a government-led response, has proved effective. In countries where the concepts of the OPRC Convention have not been embraced, the focus for improvement should lie in

creating a framework for spill response, in making use of available resources, and in facilitating imports of supplementary expertise and equipment.

Successful oil spill response is primarily dependent on a realistic attitude and a good basic organisation. Experience has proved that it is possible to respond effectively to oil spills in any country, prepared or not, particularly when the government authorities concerned are willing to accept assistance from outside the country. A developing country may use existing non-specialised resources, and the assistance may simply take the form of advice on-site at the time of the incident. Occasionally it is appropriate to arrange for the provision of specialised equipment for oil spill control from abroad. However, assistance must be tailored to local conditions and needs; automatically importing foreign response teams and specialised equipment is often the wrong remedy, generating more problems than solutions.

The best place to improve oil spill response capabilities is in those countries that face significant risk and are committed to developing the basic elements of spill management and control. The essential steps are the designation of a competent government authority and the development of a national contingency plan and response arrangements. Once these tasks are achieved, industry has a wider role to play as provider of equipment and other services. Exactly what form the industry contribution should take varies from one country to another and no universal prescriptive formula can be applied.

However, the costs of establishing tier 1 capabilities has been, and should continue to be, borne by the industry operators of oil handling facilities. Whilst industry also has a role in establishing and maintaining equipment and materials for larger oil spills, it is arguable whether existing resources are significantly deficient or ill-placed. As a matter of fact, a lack of specialised spill response resources is not usually the limiting factor in effective spill response. The tiered response concept helps to ensure that adequate supplies of equipment will be available. The focus for improvement should lie in creating a framework for spill response, in making use of available resources and, where appropriate, in facilitating imports of appropriate supplementary expertise and equipment; all of which points are contained in the OPRC Convention.

CONCLUSIONS

Government and the shipping & oil industries have invested heavily in creating and maintaining expensive oil spill response systems against a background of decreasing numbers of intermediate and major oil spills worldwide. This situation has generated a re-appraisal of the optimum level of oil spill preparedness and how it should be funded.

The International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990 (OPRC Convention), defines the basic elements for cooperation between government and industry in generating improvements in developing countries.

Areas of cooperation between government and industry cover both oil spill preparedness and response. The development of oil spill preparedness should reflect the degree of pollution risk. Analysis shows that most major incidents occur close to ships' destinations and that comparatively few developing countries are in high risk areas. Preparedness is often compromised through shortage of funds, and an unplanned response must then serve as the way of dealing with spills. Current international systems in place for providing compensation incorporate procedures for dealing effectively with oil spills in a variety of situations, including the passing tanker scenario.

In addition to underwriting the costs of oil spills, industry has a role in maintaining trained personnel and stocks of equipment, but a realistic limit must be placed on such provisions. The focus for improvement should lie in creating a framework for spill response, in making use of existing resources and in ensuring supplementary expertise and equipment are available; all of which initiatives are contained in the OPRC Convention. A sustained commitment is required from both government and industry to support appropriate improvements in oil spill preparedness and response.

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