

# THE TIERED RESPONSE PHILOSOPHY - WILL IT ALWAYS WORK?<sup>1</sup>

Christopher Miles  
Oil Spill Response Limited  
Lower William Street  
Southampton, England SO14 5QE

**ABSTRACT:** *The industry philosophy regarding oil spills is to adopt the tiered approach, but will this always be possible? In this paper the author will be examining the required criteria, advantages and possible pitfalls of establishing a Regional Tier 2 response capability to improve the effectiveness of industry response to pollution incidents. In many regions of Oil Industry activity throughout the globe "Mutual Aid" agreements exist between operating companies. Can these not be seen as accomplishing the same thing? But how are the procedures for notification and mobilization established between the authorities, and who is responsible for training and maintenance? Will the response team be ad-hoc or dedicated, from the operating companies experienced at Tier 1 level or from Nationals? There may be legislation from the National Governments concerned with incidents in their national waters. This means the effectiveness of a tier 1 response must not be compromised by removing resources. Response strategies must be considered as neighbouring countries may have differing policies on matters such as dispersant usage. These differences may extend to political disputes and embargoes creating problems in logistics and response management. The range of activities undertaken by the member companies may extend from on-shore "upstream" refining and pipelines in environmentally sensitive areas, to offshore exploration in areas of poor access. Are the oil types similar, and will the risk of third party incidents be covered? There are numerous factors to be considered whilst establishing a cross border Tier 2 service. For those of us used to working in regions of established oil activity, the logistical and diplomatic hurdles can prove to be greater than the operational ones we are used to solving.*

## Discussion

**2 Tiers or 3?** The 3 tiers of response are well established and familiar to most people throughout the industry, or at least 2 of the tiers are. A Tier 1 response may be considered as one where local resources and workforce have been capable of responding to the incident effectively, without further outside assistance. During a Tier 3 incident all available assistance may be called upon, through Industry or Governments. Between these two levels of response lies a Tier 2 incident, which may call upon Regional resources defined in Mutual Aid Agreements, or the response of a dedicated Tier 2 Base.

Without any legislative driving force there has always been a local Tier 1 capability on-shore and offshore, in ports and terminals around the world. Some of these stockpiles have been no more than spill kits and absorbents requiring little maintenance

and training, hardly providing sufficient cover for the most likely operational incidents. In recent years legislation in many countries, such as the ratification of the OPRC Convention, has led to all oil handling facilities and ports holding their own tier 1 stocks and having personnel trained for the most likely forms of response.

At the other end of the spectrum some form of national or international response was seen even before the introduction of industry backed tier 3 response bases such as those seen in Southampton and Singapore. Such response was with the assistance of the armed forces, but primarily managed by national and local government departments as was seen in the Torrey Canyon and Amoco Cadiz incidents in the 60's and 70's.

**Is there a place for Tier 2?** Industry need and good sense has always brought about Tier 1 and Tier 3 response in some shape or form. How does Tier 2 fit in the grey area in between, should it be regarded as a robust form of Tier 1, or just as an attempt to delay the onset of Tier 3? What are the hurdles to be overcome in the establishment of Tier 2, and in what areas of the world would there be particular benefit from such bases?

**Benefits of Tier 2.** In some of the more remote and inaccessible areas of industry exploration and production, some form of Tier 2 is essential due to the response time for Tier 3. No matter how rapid the arrival of personnel and equipment to the nearest suitable airport, progress from that point on is often out of the hands of the responders or industry. Customs, diplomatic or logistical delays are quite likely to play a large part in the success or failure of a timely Tier 3. It is therefore essential to have prepared for this delay by installing a regional Tier 2.

What constitutes such a response base depends entirely on the region and the variety of activities there. In some regions there is a vast quantity of equipment available, well maintained and ready for use. "Mutual Aid" agreements between the companies are commonly in place although often not tested and exercised to the extent they should be. The logistical arrangements for mobilising these stockpiles must be thoroughly tested, as these procedures may be of benefit in the onset of Tier 3. Shared availability of suitable vessels, aircraft for aerial surveillance and helicopters for the transport of equipment to areas of difficult access, are just some of such examples.

A response is not just about mobilisation of equipment. The most important resource is that of trained and experienced personnel. There are not many companies capable of supplying sufficient personnel to respond to an incident escalating from Tier 1 to Tier 2, especially if the incident involves other issues and emergencies. Many specialist duties need to be covered in the event of a tier 2 or 3 incident. Interpreters will be needed for incoming response personnel and customs and government

liaison officers to ease the crossing of national borders. Welfare officers will be required for the wellbeing and safety of the added number of workers in remote areas, providing them with lodgings, food, protective clothing and medical advice. Logistics experts for the transportation of equipment to areas off the usual routes, ensuring the supply of sufficient fuels, cargo handling equipment, storage areas and maintenance arrangements, etc.

There can also be a great financial benefit from a Regional Tier 2 centre, in the form of cost saving on equipment purchase and the establishment of the necessary logistics and command centres. A shared resource brings emergency response more in the public view, therefore highlighting the responsible attitude of industry to the local environment. There will be increased confidence in the reliability of equipment and response capability due to maintenance procedures and a more established full time team. The base will also have the opportunity to evolve into a regional centre for training and consultancy services, providing a cost-effective option for drills and exercises.

**Hurdles to overcome.** The setting up of a mutual aid agreement or a shared resource Tier 2 Base will have a number of hurdles to be overcome. Combining equipment stockpiles may not be the answer if the operations are not compatible. This may be because of oil type, location of operations and forms of strategy. In all parts of the world neighbouring governments have differing views and policies on the use of dispersant and the types of dispersant on their approval list.

There may also be logistical problems in the movement of equipment across borders, and its use in territorial waters. The response teams will have to have all the necessary visas and medical precautions already in place, and aircraft prior permission to enter airspace for surveillance or cargo movement.

Will the team be full time or ad-hoc. For day to day matters such as equipment maintenance a few well-trained individuals will be sufficient. Each participating company must then have a number of identified personnel to call upon to form a response. Who will be called upon to provide labour in the event of shoreline impact, and under what Health and Safety Regulations will they be working – Industry or that of the national Governments. Call out, notifications and mobilisation procedures

between all the companies must be co-ordinated and tested regularly, with all the key personnel having nominated alternates for those times they are unavailable.

What will the effect be on the participants during a response? When equipment and personnel are in use, how does this effect the operations of the other members? Of course their cover is compromised which may effect them depending upon legislative demands, but certain vital equipment such as aircraft and stand by vessels may be called upon for logistical assistance during the response.

## Conclusion

### Advantages and disadvantages of Tier 2 versus mutual aid.

A Mutual Aid Agreement can never be considered as anything other than the potential for combining resources in the event of an incident. If equipment is required on site as Tier 1 then it is unlikely that it is available to be deployed elsewhere without operations ceasing. However logistical equipment, vessels, aircraft, and unessential personnel are more likely to be available for release without immediate impact.

A formally established Regional Tier 2 Base gives the confidence of a guaranteed response, where local logistics and procedures can be exercised. Personnel from all the participating companies can become familiar with the necessary procedures, and contribute to equipment maintenance, training and exercises. The Base will be seen as Industry's commitment to the local environment and people.

## Biography

The author has been working in Tier 3 response world-wide for a decade. He has experience establishing Tier 2 inland pipeline response in 2 continents, setting up a National U.K. based Tier 2 network, and a cross border response capability in Africa.

---

<sup>1</sup> **Disclaimer:** The opinions and views expressed in this paper are solely those of the author and do not necessarily represent the views of any other party.