

Towards a Tier 3 Infrastructure for Oiled Wildlife ResponsePaul Kelway¹, Rob Holland², Saskia Sessions¹, Hugo Nijkamp¹¹Sea Alarm Foundation, Rue du Cyprès 7-B10, 1000 Brussels, Belgium²Oil Spill Response Ltd, Lower William Street, Southampton, SO14 5QE UK**ABSTRACT 299764:**

With increased international shipping, offshore oil exploration, and interest in remote regions and challenging environments, there is growing recognition within government and industry of the need to improve global oiled wildlife preparedness as part of oil spill prevention and response planning. In early 2012, an international gathering of industry, government and non-governmental stakeholders gave their support to further integrate oiled wildlife planning and to develop a Tier 3 wildlife response capacity; currently the biggest gap in wildlife preparedness. The Tier 3 system will utilise the expertise and track record of the world's leading oiled wildlife response organisations. Since 2012, discussions have continued and a process for developing and implementing a global oiled wildlife response system has been established and will be initiated in late 2014. This paper will explain the steps towards developing a multi-stakeholder global infrastructure for wildlife preparedness and share updates on the timeline and progress of the project to date.

INTRODUCTION:

Over the last two decades there has been a steadily growing interest in and acceptance of oiled wildlife preparedness and response by government and industry as an integral component of oil spill planning and response (Nijkamp, 2007). Whilst methodologies and expertise have advanced and formal delivery structures developed in certain regions and countries (Newman *et al.*, 2003), there remains a significant gap between the global preparedness for oil spill response and the preparedness for oiled wildlife response (White and White, 2007). This gap was formally acknowledged by a gathering of leading industry, inter-governmental and non-governmental organisations during a meeting at the Interspill Conference in 2012. Subsequently, following an invitation from the oil industry, a group of leading oiled wildlife response organisations developed a proposal for the concept of a global oiled wildlife response system. Funding has now been awarded to the project by the Oil Spill Response Joint Industry Project (OSR-JIP) for initial development of the system, starting in 2014. This paper provides a background to the project as well as an overview of the concept of the system and an outline to the steps involved in its development.

DISCUSSION:

Background

Planning for and responding to wildlife affected by oil spills is a relatively new endeavour which has improved significantly in the last 50 years, most notably in the last 20 years following legislative changes in the aftermath of the 1989 Exxon Valdez oil spill (Newman *et al.*, 2003). Historically, oiled wildlife response - which includes the rehabilitation of affected wildlife - has been largely carried out by non-governmental organisations (NGOs). Due to increased experience and improved techniques, as well as improved funding mechanisms and legislative support, many wildlife response organisations have become much more proficient and professional in the last two decades. “Legislation has provided the financial and legal infrastructure necessary to conduct quality wildlife care which has unquestionably improved from an animal husbandry, biomedical care, and release rate perspective over the past 50 years” (Newman *et al.*, 2003).

Furthermore, effective regional and national models of multi-stakeholder systems for the delivery of oiled wildlife preparedness and response now exist. These include California’s Oiled Wildlife Care Network (Mazet *et al.*, 1999), New Zealand’s National Oiled Wildlife Response Team (Morgan *et al.*, 2009) and a European network of marine oiled wildlife responders (Nijkamp, 2006). In both California and in New Zealand the structure of these systems involves a lead organisation serving in a formal capacity as the administrator or coordinator of a broader network of resources, operating on behalf of and reporting to the relevant state or national government agency or department. These wildlife response resources operate within the context of formal government frameworks for oil spill preparedness to ensure oiled wildlife planning is fully integrated within oil spill contingency plans.

However, in spite of these developments, oiled wildlife preparedness on a global scale lags far behind other aspects of oil spill planning and response and has not been universally accepted and embraced worldwide as an integral part of emergency and environmental planning activities by government and industry (White and White, 2007). Without sufficient funding, wildlife response organisations have struggled to build momentum for developing formal collaborations and agreed global standards. In spite of willingness amongst oiled wildlife response organisations to collaborate and provide multi-lateral support, initiatives such as the International Alliance of Oiled Wildlife Responders (Nijkamp, 2006) have struggled to maintain momentum without support from beyond the oiled wildlife community. In turn, this lack of structure has, in part, prevented industry and government from embracing effective oiled wildlife preparedness efforts worldwide (White and White, 2007).

Evolving perspectives in industry and government:

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Over the past 20 years the oil industry has increasingly engaged oiled wildlife response organisations as service providers of oiled wildlife planning, training and response expertise. This has largely been driven by regulatory requirements such as the U.S. Oil Pollution Act of 1990, which established new requirements and responsibilities with respect to natural resource damage in the event of oil pollution incidents (U.S. Fish and Wildlife Service, 2013). In the United States, the development of agreed best practices for oiled wildlife rehabilitation have also allowed government and industry to assess oiled wildlife response resources and to formally engage organisations in the provision of contractual services as part of their legal responsibilities (U.S. Fish and Wildlife Service, 2003). These developments reflect a general trend amongst non-profit organisations to actively embrace the marketing of their expertise and services as part of their organisational model, both in an effort to generate income and to further deliver on their mission. Concurrently, the private and public sectors have been more willing to engage in formal collaborations and partnerships with non-profit charitable organisations to further shared social and environmental goals (Salamon, 2010).

Recognition of and support for oiled wildlife preparedness has also increased globally within the oil industry in recent years and the development of Volume 13 of IPIECA's Report Series on Oil Spill Planning and Response provided a global standard regarding oiled wildlife preparedness (IPIECA, 2013). This guide has been used by industry and governments alike as a benchmark for their own planning initiatives, further reiterating the message that oiled wildlife planning and response should be integrated into oil spill planning activities. One example is the recent adoption by the Helsinki Commission (HELCOM) of a formal recommendation for Contracting States in the Baltic Sea to integrate oiled wildlife response planning into oil spill contingency plans, based on the IPIECA guidelines (HELCOM Ministerial, 2010).

Further industry acceptance and support for oiled wildlife preparedness has occurred through the work of the Sea Alarm Foundation and their formal partnership with Oil Spill Response Limited (OSRL), the oil industry's largest provider of Tier 3 preparedness and response services (Holland *et al.*, 2008). Through this partnership, OSRL's members have access to Sea Alarm personnel 24/7 to serve in an advisory capacity on oiled wildlife issues. Preparedness has also been improved as a result of the development of country wildlife response profiles and dedicated oiled wildlife response plans for exploration and production operations in a variety of countries (Nijkamp, 2006). Sea Alarm has also helped to initiate and implement a number of major European initiatives regarding oiled wildlife planning and has successfully engaged government, industry and NGOs in supporting more regular and effective multi-stakeholder dialogue and collaboration. This has included work with the European Regional Seas Agreements and has led to the formal adoption of oiled wildlife planning in the Baltic Sea, as mentioned above, as well as in the North Sea and Mediterranean Sea (Nijkamp and Sessions, 2011).

Towards a global oiled wildlife response system:

An established worldwide system of cascading resources within three defined tiers of operation is currently in place as part of a global approach to oil spill preparedness. This system allows for local and national resources to be augmented by international resources, including

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personnel, equipment and additional organisations, which can be deployed as needed and integrated within a standard incident management system (IPIECA, 2007). While the definition of tiers differs within oiled wildlife response and the potential for wildlife impact does not necessarily correlate with the amount of oil spilled, it has been suggested that the tiered approach has great relevance to the discussion of improved oiled wildlife preparedness (White and White, 2007).

Given the huge disparities in oiled wildlife preparedness around the world – including a lack of Tier 1 and Tier 2 resources in most countries as well as an absence of wildlife response plans - it could be argued that the need for a global Tier 3 system for oiled wildlife response is even greater than for oil spill clean up. The establishment of a formal relationship between Sea Alarm and OSRL in 2005 could be considered the first step towards inclusion of oiled wildlife at this level (Holland *et al.*, 2008). However, the resources available to industry members have been limited and while members can gain access to oiled wildlife response organisations through Sea Alarm, this access is based on availability of these groups with no expectation of assured response and no agreed service delivery level. As such, the current system remains *ad hoc* and out of step with the standard operating procedures and good practice approach that is inherent to oil spill preparedness and response. This disparity between global oil spill preparedness and oiled wildlife preparedness represents an exposure to oil and gas companies who are increasingly looking to implement improved global safety and preparedness standards across their entire operations (Rogers, 2011).

At the Interspill Conference in London in 2012, representatives from some of the world's most professional oiled wildlife response organisations met representatives of the International Maritime Organization (IMO), the International Oil Pollution Compensation Funds (IOPC Funds), the International Tanker Owners Pollution Federation (ITOPF), IPIECA, OSRL, and a number of major oil companies (including ExxonMobil, BP and Chevron) to discuss the issue of oiled wildlife preparedness. Recognizing the current gap in wildlife preparedness, the need for further integration and the development of a more robust infrastructure for the provision of oiled wildlife services, the assembled group voiced their collective moral and financial support for the development of a global oiled wildlife response system (GOWRS, or 'global system'). This global system was envisaged to provide professional Tier 3 oiled wildlife emergency response services across the globe to both industry and government clients alike and to integrate oiled wildlife more fully into oil spill contingency planning.

As a first step, oil industry representatives at the meeting (ExxonMobil, BP, Chevron, and later also Shell and Total) invited the wildlife response community to present a proposal (via a Terms of Reference) for a multi-year project that would include both short and long term activities associated with the development of a global system for oiled wildlife response. While it was recognized that the oil industry need for the service was a significant driver for the development of the system, representatives of shipping and inter-governmental organisations reiterated that oil spill preparedness is ultimately the responsibility of governments and that the system must be able to accommodate different systems and approaches to preparedness and response. As such, the global system should also be able to serve as a resource to government and the shipping industry as well as to the oil industry.

A proposal was developed in different stages throughout 2012 and early 2013 by a group of leading oiled wildlife response organisations (see Box 1), selected due to their established track record of involvement with international oiled wildlife response. This proposal was presented to the OSRL Board in March 2013 and a modified version in June 2013. At the latter meeting, the OSRL Board verbally committed to long-term support of the GOWRS once built, whilst in the short term (two years) they felt development costs should be supported more globally via the OSR-JIP, formed by the International Association of Oil and Gas Producers (OGP) and managed on their behalf by IPIECA (OGP, 2014).

In September 2013 the OSR-JIP agreed to support the short-term continuation of the programme by providing a budget for the period to end December 2013. In the framework of this short project, a GOWRS workshop was organised in Belgium in October 2013 and attended by representatives of the wildlife organisations and by representatives of OSRL. During the three-day workshop, the group discussed the outline of a Standard Operating Procedure (SOP) for their collective mobilisation, response and preparedness needs (in terms of animal standards, equipment, facilities, functions/skills, training and governance). The workshop envisaged a multi-year engagement with the oil industry based on the outcomes developed in the course of 2014 and 2015.

In December 2013, representatives from the wildlife consortium presented the proposed work plan to a meeting of the OSR-JIP in Houston and initial project funding was awarded to begin the first year of a two-year development process for the system.

A global network as delivery model:

One of the key discussions during the 2013 workshop in Belgium was the question of how to set up the GOWRS so that it would be recognized by the oil industry. One suggestion was to use an oil spill response organisation (OSRO) model, taking examples from existing Global Response Network (GRN) members. However, in setting up the GOWRS as an 'OSRO for wildlife,' two main differences with the traditional OSRO model would need to be taken into account.

Firstly, the GOWRS would operate as an OSRO for wildlife but would comprise of a network of individual organisations (many of whom would also have regional relationships and contracts with existing OSRO's) using a single SOP for collective Tier 3 operational activities. The available wildlife experts therefore are not employees of this OSRO, but are employees of individual GOWRS network organisations. The on-site services of the GOWRS experts as a team however should not differ from what would be expected from a mobilised spill response team such as assured response times, agreed operational standards and compliance with health and safety requirements.

Furthermore, the GOWRS would not need its own logistics and administrative framework or its own client membership (including membership fees and service level agreements) provided it can make use of the logistics and administrative services of existing

OSROs who can mobilise the GOWRS for their own members. The financial support to the individual GOWRS members would ideally be channelled through one of the existing OSROs as part of the service level agreement of that OSRO with its client-members. If that cannot be organised, the GOWRS would need its own service level agreement and its own industry client membership. In either approach, the GOWRS would require its own internal governance system to ensure transparency, accountability, and effective administration and strategic development of the network.

The development of strategic alliances and networks is a broadly accepted model within the business sector (Mowery *et al.*, 1996, as cited by Bendell *et al.*, 2010). Within the global airline industry the alliance model has become prevalent within the internationalized market of air travel. Such strategic alliances allow airlines to expand their reach at a number of levels from passenger transfers and code sharing to joint ventures (Tugores-García, 2008). They also serve to standardize practices and provide opportunities for individual companies to learn and improve their own systems and level of development as well as helping to provide economies of scale and scope. According to Tugores-García (2008), “Global Airline Alliances can be a forum for sharing practices and technologies that have proved to be more successful in the managerial and operational sphere, for the generation and discussion of new improvements, and the understanding of the preferences of customers from different backgrounds.”

Multi-stakeholder alliances that include non-governmental entities have also become increasingly common in recent years, particularly in the search for innovative and sustainable solutions to social and environmental issues (Bendell *et al.*, 2010). Relevant examples of such multi-stakeholder collaboration exist in a variety of fields and industries. In the United Kingdom, the government’s responsibility for search and rescue on land and sea is organised collaboratively with a number of leading non-governmental organisations, including the Royal National Lifeboat Institution (RNLI), a voluntary organisation maintained entirely by charitable contributions (RNLI, 2014). The RNLI operates and maintains lifeboats and crews around the entire coast of the UK and Northern Ireland as part of its mission to save lives at sea (RNLI, 2014) and serves as part of the United Kingdom’s Search and Rescue (UK SAR) Strategic Committee and UK SAR Operators Group (Queen’s Printer and Controller, 2008). Similarly, in both California and New Zealand, where oiled wildlife preparedness is a formal component of oil spill contingency planning, responsibility for wildlife response is devolved to public university institutions that take responsibility for the delivery and maintenance of oiled wildlife preparedness through a broader network of non-governmental organisations (Mazet *et al.*, 1999).

A network approach to developing a global Tier 3 oiled wildlife capability takes into consideration and utilizes the existing expertise within leading oiled wildlife response organisations. As such, rather than creating a new entity, such as an OSRO, to serve this need, the network model requires only the investment in building the infrastructure for the system and defining the expectations for service providers and users of the service. Similarly to the airline alliance model, while formal relationships between groups exist given the benefits this provides,

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each organisation remains an individual entity responsible for its own financial and strategic management. As such, each organisation also serves as an individual resource (and choice) for the contracting of Tier 1 and Tier 2 services and there will continue to be competition amongst organisations within the network at these levels. Rather than being a closed system, the network also has the potential to accept new members as service providers. Over time the ongoing development of the network allows for improved standards and the development of Tier 1 and Tier 2 capacity as well as a broader range of technical skills and expertise. Furthermore, it provides increased revenue generating opportunities to the very organisations that have pioneered the field of oiled wildlife response and also ensures that good practice in animal care and response remain at the heart of service delivery.

Recent oil spills of national significance have shown that, while legislative frameworks may exist for a formal response to the incident and the recovery of costs through a responsible party, the public strongly desire to be involved in and to aid this effort. This involvement can include, but is not limited to, volunteering as well as monetary, personnel or equipment donations. This interest has been heightened through the prevalence of mobile communication and social media as witnessed in the public response to the Hebei Spirit oil spill in South Korea in 2007 (Hur, 2012).

The wildlife response effort is often a point of focus for public interest and engagement in the incident response as well as being an area in which the public may have the potential to become involved, either as previously trained or convergent volunteers. In California, the Oiled Wildlife Care Network includes established non-governmental organisations with relevant wildlife expertise. This in turn has allowed for the development of a more robust volunteer program that is built upon the existing volunteer training programs of member organisations (Ziccardi et al., 2011). In this regard, a network approach to wildlife response preparedness can increase the number of points of entry for the public before, during and after a response, and maximize the potential for effective training and retention of volunteers in the long-term. Furthermore, such programs provide an excellent opportunity for pro-active communication with and involvement of the general public in oil spill preparedness and response while also ensuring that adherence to safety and response standards remain of paramount importance.

Project aims and approach:

The GOWRS project aims at the following objectives:

1. Create a project of the duration of two years in which a group of leading wildlife response organisations (See Box 1) could work with representatives of the oil industry to design a global response system that will meet the requirements of both the industry and the wildlife response community.
2. Provide associated organisations with financial resources (in the form of a consultancy fee for days spent on the project) to provide their considerable inputs to (1).

3. Respond to any incident during the project time, albeit still on a voluntary basis, using the tools and deliveries that have already been developed and agreed by the time of the incident, if any.

Box 1: The organisations participating in the GOWRS project
<p>Africa</p> <ul style="list-style-type: none"> • SANCCOB, South Africa <p>Europe</p> <ul style="list-style-type: none"> • ProBird, Germany • Sea Alarm Foundation, Belgium • Wildlife Rescue Centre Ostend, Belgium • Royal Society for the Prevention of Cruelty to Animals (RSPCA), UK <p>Oceania</p> <ul style="list-style-type: none"> • Wildbase, Massey University, New Zealand <p>South America</p> <ul style="list-style-type: none"> • Aiuká, Brazil <p>North America</p> <ul style="list-style-type: none"> • Focus Wildlife, U.S. • International Bird Rescue, U.S. • Oiled Wildlife Care Network (OWCN), Wildlife Health Center, University of California, Davis, U.S. • Tri-State Bird Rescue & Research, Inc., U.S.

Why a two year project?

The original GOWRS proposal was informed by a series of interviews with each of the oiled wildlife response organisations. While all organisations expressed interest in developing closer relationships with the oil industry for purposes of response and preparedness, many also requested further information and a better understanding of the framework for implementation and operation of the system. Given the different regional and national frameworks for their

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activities the group recognized that individual relationships and contracts are already in place with both government and industry. It is important therefore that the development of formal collaboration does not negatively impact the sustainability of individual organisations. The two-year program of activities and deliverables will involve wildlife response organisations in creating the foundation of the GOWRS in close cooperation with the oil industry, thus allowing for maximal exchange potential, and therefore a design of the GOWRS that would consider existing structures and resources, and fit the maximum of interests.

Project description:

The two-year system development plan is built around six core areas of activity:

1. Governance
2. Operational system
3. Animal standards
4. Readiness
5. Outreach & Education
6. Wildlife response plans

The two-year project will initiate the development of guidelines and tools mainly in areas 2, 3 and 4, which are principal deliveries of the project. These deliverables together will describe the core meaning of what the global system should become. The project will engage the wildlife organisations on a consultancy basis. In this way, each organisation can prioritise the project and expand their individual capacity over the duration of the development phase.

The organisation's leading subject matter experts will jointly develop key deliveries as part of working groups, ensuring the system is informed by best global knowledge and practices while also providing an opportunity for further buy-in and ownership by wildlife response groups and the oil industry.

The two-year program will culminate in the formal establishment of a global system in which oiled wildlife response organisations work to a standard operating procedure in accordance with agreed shared standards. At this point a clear roadmap will be in place for the operation and further development of the system for the next five years, in line with industry service level agreements.

Overview of activities 2014/2015:

A series of activities in each of the key activity areas has been defined for 2014 and 2015, with progress on the work plan to be reported to the OSR-JIP towards the end of 2014 and a further budget requested for continued development of the system in 2015. It is hoped that the system will be in a first phase of active operation by 2016. Progress towards this goal will be communicated as part of the development project:

Governance: Activities within the Governance band will provide the administrative and financial structure for cooperation both on the short term (project duration) and the long term.

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Because on the short term the GOWRS is not a formal institution, the participating organisations agreed that Sea Alarm is in a good position to provide an interim solution due to its existing relationship with OSRL. As such, Sea Alarm will help to facilitate the two-year project and provide administrative support. Concurrently, the group of organisations needs to develop an interim structure that allows for representatives of each organisation to help steer the initiative in a way that provides transparency to the decision-making process and accountability to the collective group. In the longer term, the GOWRS may develop its own formal structures and this collective representative body may evolve into a secretariat or governing council, which would include formal mechanisms for admitting additional organisations to the system. The groups also recognized the need for a project coordinator in the short and long term to help facilitate the project development. The coordinator would help to drive the project, working on behalf of and reporting to the group as a whole.

Operational System: The primary objective is the development of a high quality Standard Operating Procedure (SOP) for an on-the-ground wildlife response. This SOP would define the details of how a Tier 3 team for wildlife response could be mobilised by the oil industry, and the operational guidance of that team in the period between arriving in country and their demobilisation (e.g. objectives, internal decision making, connection to the incident management system, communication protocols, etc.). Activities in this area will develop recommendations for roles and responsibilities of a Tier 3 team, the expert qualification of each role/responsibility in the team, and the Tier 3 equipment the team would need at their disposal to be successful. These recommendations will be passed on to the working group for Readiness. Once defined, the SOP will be tested via a series of multi-annual exercises and drills.

Animal Standards: This working group will collect and analyse existing animal treatment protocols and define principles of oiled wildlife rehabilitation, considering different animal groups including seabirds, marine mammals, and marine turtles. The working group will specifically look at the science behind these principles and cement the basis for well-developed professional and high standard methodologies for future wildlife responses. The delivery of this group will be a set of broad animal standard guidelines representing best practice that can be adopted for use in an industry demanded response event.

Readiness: This working group will look strategically at the long term requirements of expanding capabilities and capacity within an oil industry context (global Tier 3 system), but also at an in-country level (Tier 1 and 2 capacity with local NGOs, governments). The working group will define training needs, develop guidelines for wildlife response exercises and drills, equipment packages (at various tier levels), and guidelines for facility set-up. The main deliveries will be standard training modules that can be used to train and qualify hands-on responders and response managers (strengthening the global Tier 3 capabilities and capacity), and an accredited competency system that is globally recognised by the oil industry.

Education and Outreach: Education and outreach activities will be undertaken to raise the profile of oiled wildlife response and preparedness at a global level, and gain support for its professional development via the oil spill response community, international governmental

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organisations, shipping industry and governments, via Regional Agreements for example. New advocacy activities will raise the profile of the GOWRS, and will try to encourage and initiate training and workshop activities on each continent in the framework of capacity building.

Wildlife Response Plans: In the course of the project, the oil industry and governments will continue to request the development of high standard wildlife response plans. The development of such plans as part of oil spill contingency planning activities is integral to effective oiled wildlife preparedness. A new OGP-IECA Good Practice Guide will outline the benchmark for successful oiled wildlife preparedness while individual oiled wildlife response organisations can be engaged by companies wishing to develop site-specific plans for their operations.

CONCLUSION:

The recognition of the need for a Tier 3 global system for oiled wildlife preparedness and response, as well as the recent approval of funding by the international oil industry for an initial development phase for the project, represents a significant milestone in the field of oiled wildlife response. This milestone is the culmination of developments in wildlife response and rehabilitation methodologies in recent decades brought about through the pioneering efforts of wildlife response organisations including those participating in this project, as well as the growing support for and investment in formal arrangements for the integration of wildlife response into existing oil spill planning activities. While there is still a significant way to go to achieving the level of global readiness currently in place for other oil spill response activities, the global infrastructure currently being developed provides a firm foundation for the continued improvement of global oiled wildlife preparedness in the years to come.

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