

A modular approach to exercising tiered wildlife response as a means to developing genuine preparedness

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Introduction

Over the course of the last three years an international consortium of wildlife ecology, welfare and response organisations has been developing systems and standards to aid in the effective deployment of international wildlife response resources in the wake of major oil spills. This initiative – known as the Global Oiled Wildlife Response System (GOWRS) Project – has been funded by the oil industry, first via the International Association of Oil & Gas Producers (IOGP) / IPIECA Oil Spill Response Joint Industry Project (OSR-JIP) and, more recently, by the shareholders of Oil Spill Response Limited (OSRL). Its ultimate goal is to improve the integration of oiled wildlife preparedness with existing government and industry emergency planning and response systems.

To date, the project outputs have included standard operating procedures for the mobilisation of wildlife response organisations, internationally agreed principles in animal care and guidance material to help improve the preparedness of oil industry and other stakeholders (Kelway et al, 2017). These outputs provide practical tools and guidance that help inform the implementation of good practice as defined in the IOGP-IPIECA Good Practice Guide on Wildlife Response Preparedness (IOGP-IPIECA, 2014) and the technical support document on Key Principles for the Protection, Care and Rehabilitation of Oiled Wildlife (IOGP-IPIECA, 2017).

Recognising that the key to unlocking genuine preparedness in any spill response discipline is an effective exercise programme to test, learn and refine response procedures, the GOWRS project – with the help of its Industry Advisory Group¹ - created a series of recommendations on how to develop appropriate and effective oiled wildlife response exercises. Furthermore, a modular exercises concept was produced to aid oil companies and other stakeholders with integrating wildlife response into their existing exercise programmes. The aim is to encourage industry and government to design and deploy exercises in a way that maximises learning opportunities and stimulates further discussion with and engagement of all key stakeholders via a series of progressive steps.

This paper provides an overview of the GOWRS exercise good practice recommendations and the modular exercises model, placing these in the broader context of new good practice guidance on oil spill response exercises, which were also developed as part of the OSR-JIP (IOGP-IPIECA, 2014). In doing so, the authors and project partners hope to stimulate a greater appetite for regular wildlife response exercises by industry and other stakeholders.

Main Results

Relevant good practice guidance from a Joint Industry Project

A number of outputs from the IOGP-IPIECA Joint Industry Project are of particular relevance to a discussion on oiled wildlife response exercises. These include new good practice guidance on tiered preparedness and response – which introduces an evolved tiered model based around 15 core response

¹ The Industry Advisory Group is made up of oil industry representatives charged with oiled wildlife response oversight for their respective organisations.

2018 Interspill Conference

capabilities (IOGP-IPIECA, 2015) – as well as guidance on oil spill exercises (IOGP-IPIECA, 2014). Regarding the development of an effective exercise programme, this guidance document lays out the categories and types of exercise that are recommended for achieving specific response objectives (Table 1).

Table 1: Categories of oil spill exercises (IOGP-IPIECA, 2014). The ideal exercise programme would be multi-annual, linked to a training programme and include an optimal mix of the above activities in order to meet pre-agreed objectives

<p>Discussion-based activities:</p> <ul style="list-style-type: none">• Seminar (1–2 hours)• Workshop (2–8 hours)• Tabletop (2–4 hours) <p>Operations-based activities:</p> <ul style="list-style-type: none">• Drill (4–8 hours)• Functional exercise (4–8 hours)• Full-scale exercise (8–72 hours)
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Application of good practice guidance to wildlife preparedness and response

While the above categories of oil spill exercises can be effectively applied to oiled wildlife response, one of the principle challenges with exercising oiled wildlife response is that planning and capability vary considerably around the globe and can be extremely limited (and sometimes non-existent). For many countries or regions, it remains a relatively new topic and a large gap has traditionally existed between the level of preparedness for oil spill response and that for oiled wildlife response.

For the oil industry to address this gap successfully, the challenge is threefold. First, the local resources on which an oiled wildlife response depends heavily, are often poorly or not developed at all. They may exist (e.g. ministries that have wildlife responsibilities, NGOs with animal/wildlife care skills), but may not be aligned for working together as part of an emergency response, and often lack the oil spill or oiled wildlife backgrounds and skills. Secondly, historically-speaking there has been no formal structure for how international resources can be mobilised by industry (or governments), and to what standards they should operate. Defining this structure has therefore been a primary focus of the initial phases of the industry-funded GOWRS Project, as described above. Third, in many instances oil companies have yet to define overall (corporate) wildlife response objectives and determine how these apply in a given operational location. A tiered response can be challenged if local, national and international resources have not been properly integrated and operationally tested in relation to a defined strategy. Such efforts are therefore a natural complement to the considerable outputs of the GOWRS project and a logical next step on the preparedness journey.

The dependence of the GOWRS project on exercises

Exercises provide unique opportunities not only to explore gaps in the preparedness levels of Tier 2 and Tier 3 responses, but also for bringing the essential Tier 2 and Tier 3 parties together under mock circumstances. From the perspective of wildlife response organisations that are recognised by the oil industry as quality Tier 3 resources (currently working together under the GOWRS project), the industry can overestimate the effectiveness of mobilised international responders, who may find out that local resources are not pre-identified or prepared, and therefore not ready to provide the key resources that are needed to achieve the objectives of the response, especially during those critical early hours.

Most of the industry's recent and current wildlife exercises are only testing the 24/7 access to Tier 3 wildlife resources (limited to the GOWRS project partners), in an attempt to assure that international experts can be mobilised. However, without efforts by oil companies and governments to realistically

2018 Interspill Conference

assess current preparedness levels in a country or region and to set wildlife response and preparedness objectives accordingly, the GOWRS Project's achievements in defining a Tier 3 infrastructure will have nowhere to land and will therefore be of limited operational value.

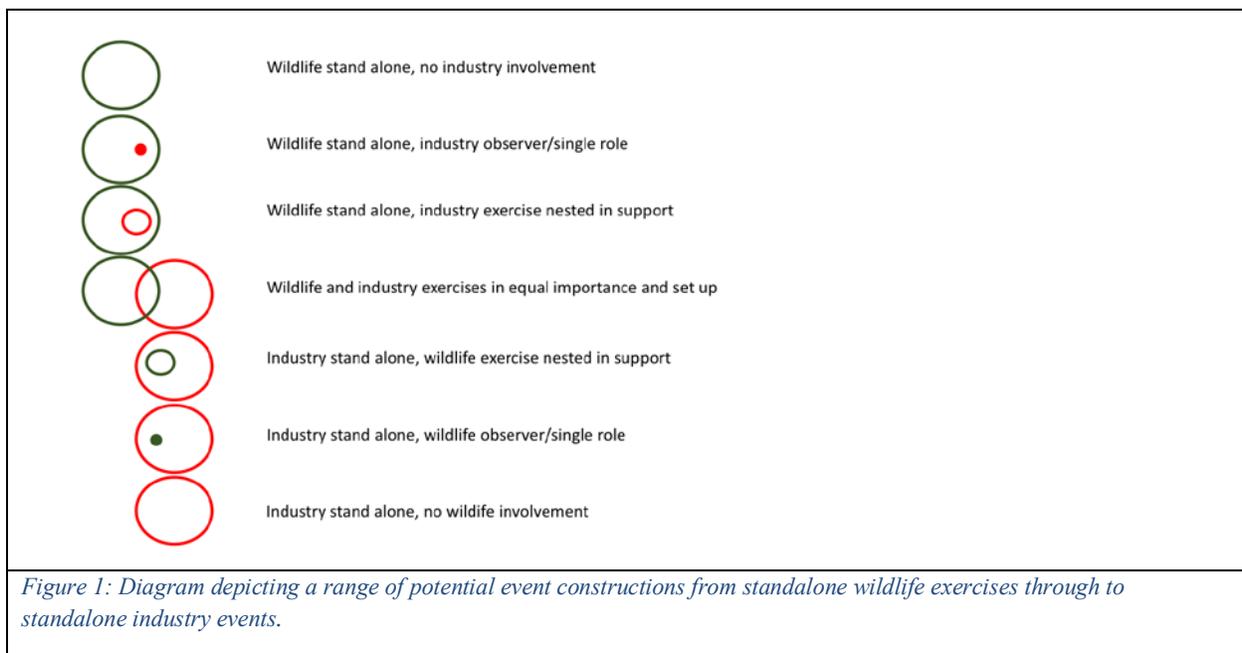
How exercises could become an engine towards industry wildlife response preparedness

What is needed is a more realistic approach in which exercise objectives for wildlife response are developed based on an understanding and appreciation for the level of preparedness within the company and country in question, and an exploration of how international resources would integrate and perform in such a case. The aim of such efforts should be to optimise learning in a way that tests assumptions and facilitates genuine progression on the preparedness journey.

Recommendations for wildlife response exercises

To exercise oiled wildlife response in a meaningful way, exercise design should aim to test the assumptions in the whole chain from notification and mobilisation, to the integration and deployment of Tier 2 and Tier 3 resources onsite. In other words, good exercise planning and design should challenge the critical assumptions regarding wildlife response capabilities and effectiveness and identify gaps and obstacles that can be prioritised and remedied before the next incident. Undertaking oiled wildlife response exercises in their own right is of critical importance (see Figure 1). The majority of exercises, at most, have a small wildlife exercise component (green dot in Figure 1) nested as a supporting act in a larger oil spill response exercise (see the red circles in Figure 1).

It is important that companies additionally start to explore more wildlife-biased exercises. As Figure 1 demonstrates, industry emergency response managers and exercise planners could consider a mix of standalone wildlife response exercises and integrated, larger events. Depending on the exercise type, different combinations of stakeholders from industry, government and non-governmental organisations can be invited to attend as participants or observers.



During the second phase of the GOWRS project (2017-18) a main objective set by the project team and its industry advisory group was to encourage oil companies to consider an integrated Tier 1/Tier 3

2018 Interspill Conference

wildlife response component in company exercises as well standalone wildlife exercise events. These events would provide an opportunity to apply the draft Tier 3 response procedures and standards from the project to a given operational location. In doing so, the project partners (wildlife response organisations) could test and refine these procedures within a safe environment (i.e. before a real incident) and provide an opportunity for oil companies to explore the integration of international wildlife response resources with their own company procedures, response team structures and preparedness programmes, as well as with local response resources.

To support this, a series of good practice recommendations were drafted during Phase I of the GOWRS Project (2015-16) to help oil companies with the development of appropriate oiled wildlife response exercises. With the aim to further unblock any barriers for exercise planners and designers, the GOWRS project team also developed a modular concept for wildlife exercise design. This approach introduces various modules covering different aspects of wildlife response (as complementary to and in support of, the GOWRS-developed procedure for Tier 3 involvement) that require critical industry-testing.

GOWRS modular exercises concept

The modular exercises concept was developed as a way to build momentum around industry wildlife response exercises by demonstrating that a realistic, bite-sized approach based around a series of progressive modules could effectively improve preparedness over time. By taking a modular approach, the key phases and aspects of a Tier 3 incident could be broken down in a way that demystifies the process and optimises learning and testing of key aspects and interactions.

The starting point for the modules concept is to understand how the Tier 3 response procedures (output from the GOWRS Project) fit within the broader operational context of a wildlife response. The end user of wildlife response resources (a potential ‘Responsible Party’ in an incident) must understand how the various elements of the response (i.e. different stakeholders and different tiers) interact with one another throughout the process - from notification through to assessment and deployment - as well as their own responsibilities as the spiller.

For the purposes of exercises, the series of steps and phases at the Tier 1/Tier 2 and Tier 3 levels can be organised into a series of modules (see Table 1) that allow the grouping of related tasks for training and testing purposes during exercises. Each module focusses on specific response objectives for that particular phase or aspect of the response.

Table 2: The five exercises modules developed during the GOWRS Project Phase II (2017-18). Each module focusses on a different aspect or phase of the response and has specific and relevant objectives that have been developed accordingly and would, where possible, involve key stakeholders/actors for that phase.

Module 1	Initiating the Wildlife Branch
Module 2	Tier 3 notification & deployment
Module 3	Tier 3 assessment & planning
Module 4	Tier 1 & 2 activation & deployment (including training/capacity building)
Module 5	Establishing full wildlife operations (field and/or facility activities)

Depending on the level of company experience and preparedness, as well as the exercise programme objectives, the GOWRS Exercise Modules can be applied individually or in combination as an orienting principle. The modules allow for greater focus and prioritisation when designing a multi-year programme of exercise events (Table 3): supporting the ongoing development of wildlife response preparedness over time, from awareness through to operational competency.

2018 Interspill Conference

Table 3: Example of a wildlife exercise programme using the recommended types of oil spill exercises (IOGP-IPIECA, 2014).

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| <ol style="list-style-type: none">1) Seminar: Introduce oiled wildlife response and current challenges and capabilities based on the tiered model. Explore implications for company procedures.2) Workshop: Develop/update company objectives and procedures to integrate and operationalise oiled wildlife response.3) Drills: Test key elements of the company procedures for wildlife response.4) Table-Top, Functional or Full-Scale Exercises: Practice and test procedures in scenario-driven events with key stakeholders from tiers 1-3. |
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Conclusion

This paper has provided an introduction to the guidance on good practice in wildlife response exercises developed as part of the multi-year, oil industry-funded GOWRS Project. As well as a list of specific recommendations - developed based on the considerable international experience of the GOWRS Project Partners - a modular exercises concept was developed to help facilitate progression on the preparedness journey by industry and government stakeholders. The hope, and the intent, is that these outputs lead to the oil industry carrying out additional wildlife response exercises both as standalone events as well as integrated into larger oil spill exercises. These activities serve as an important complement to the considerable outputs of the GOWRS Project and a necessary next step in the development of tiered preparedness for oiled wildlife response.

Acknowledgements

The authors wish to thank the other representatives of the GOWRS Steering Group and working groups, Danene Birtell, Barbara Callahan, B. Louise Chilvers, Adam Grogan, Sascha Regmann, Valeria Ruoppolo, Richard Thompson, Stephen van der Spuy, Claude Velter and Michael Ziccardi², as well as the Industry Advisory Group for their invaluable input to the GOWRS project and its deliverables.

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²Organisations from left to right: Tri-State Bird Rescue & Research Inc., International Bird Rescue, Wildbase at Massey University, RSPCA, PRO Bird, Aiuká, SANCCOB, Wildlife Rescue Centre Ostend & Wildlife Health Center at University of California, Davis.